SPECIAL SUBJECT

R&V

EDITION 2025

SD/SW CADETS' HAND BOOK
NATIONAL CADET CORPS

National Cadet Corps

Published By: The Director General, National Cadets Corps
Delhi-110030

सत्यमेव जयते

CONSTITUTION OF INDIA

PREAMBLE

WE, THE PEOPLE OF INDIA, HAVING
solemnly resolved to constitute India into
a sovereign socialist secular democratic republic
and to secure to all its citizens :

JUSTICE,
Social, Economic And Political; LIBERTY
of thought, expression, belief, faith and worship;

EQUALITY
of status and of opportunity; and to promote among them all

FRATERNITY
assuring the dignity of the individual and
the [unity and integrity of the nation];

IN OUR CONSTITUENT ASSEMBLY
this twenty-sixth day of november, 1949, do
HEREBY ADOPT, ENACT AND GIVE TO
OURSELVES THIS CONSTITUTION.

NATIONAL ANTHEM

Jana-Gana-Mana-Adhinayak Jaya He

Bharat-bhagya-vidhata

Punjab-Sindhu-Gujrat-Maratha

Dravid-Utkal-Banga

Vindhya-Himachal-Yamuna-Ganga-

uchchala-jaladhi-taranga

Tava Subha name jage,

tava subha asisa mage, gahe tava jaya-gatha.

Jana-gana-mangala-dayaka

jaya he Bharata-bhagya-vidhata

Jaya he, Jaya he, Jaya he, jaya jaya jaya jaya he.

FOREWORD

It gives me immense pleasure and pride to present the Revised NCC Précis of Common and Special Subjects, 2025 Edition, marking the culmination of a protracted effort mounted for the purpose for more than two years. This achievement has only been made possible through the collective and whole-hearted effort of all stakeholders, comprising the Directorates, the Board of Officers for revision and for printing, & my staff. Your contribution in bringing the project to fruition merits highest appreciation.

The revision was aimed at structuring and updating the syllabus to reflect contemporary thought & realities, as also equip cadets with skills to apply their NCC training in real-life situations. The challenge was to simultaneously keep the language simple for easy comprehension, avoiding too much jargon or pedantry. Endeavour was also to make the presentation interesting and the layout reader-friendly, enabling cadets to engage with each topic meaningfully even through self-study. I extend my sincere appreciation to the entire team for successfully achieving these objectives in their entirety.

This endeavour also aligns the NCC syllabus with tenets of *Vikasit Bharat* for the youth, familiarising NCC cadets with history, geo-strategy, and contemporary technological advances, while remaining rooted in our cultural heritage and ethos. I am sanguine that this vision will be carried forward by present and future generations of cadets, ensuring strong foundations for a robust nation, enabled and ready to achieve greater heights and our rightful place on the global stage.

GOD bless and JAI HIND

Director General,
National Cadet Corps

MASTER INDEX: SPECIAL SUBJECT R&V (SD / SW)

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SUMMARY				
SUBJECT	**1st Yr**	**2nd Yr**	**3rd Yr**	**Total**
Theory	16	14	15	45
Practical	9	14	13	36
Total	25	28	28	81

ORGANISATION

1

SECTION & CHAPTER INDEX: ORGANISATION

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ORGANISATION

CHAPTER I: ORGANISATION AND FUNCTIONING OF REMOUNT AND VETERINARY CORPS

TEACHING INSTRUCTIONS

Code	:	**ORG – 1**
Period	:	**One (01)**
Type	:	**Tutorial Discussion**
Year	:	**1st Year SD/ SW**
Conducting Officer	:	**Officer /JCO**
Training Aids	:	**Black board and chalk.**

Time Plan

- **Introduction : 05 Mins**
- **Brief History, Organization and Role of RVC : 30 Mins**
- **Conclusion : 05 Mins**

INTRODUCTION

1. As a cadet of R&V NCC the knowledge of Remount and Veterinary Corps (RVC) and its functioning is essential.

PREVIEW	LEARNING OBJECTIVES
The lecture will be conducted in following parts:- ➢ Part I: Brief History and Organization ➢ Part II: Various Establishments of Remount and Veterinary Corps (RVC) ➢ Part III: Role of RVC.	➢ To acquaint the cadets with brief history of RVC, its organization and role.

PART I: BRIEF HISTORY AND ORGANIZATION

2. **History**. The growing interest of the British in Indian politics, after the battle of Plassey in 1757, involved them in many wars. This necessitated maintenance of a strong cavalry arm. But the horses were not easily available due to uncertain conditions. A Board for breeding horses locally was, therefore, formed in 1779 as “Stud Department”. The present day RVC evolved out of this Board. As a result, this year was unanimously adopted as the birth year of RVC. Though the corps was raised in 1779, the Army Veterinary Corps was officially established on 14 Dec 1920.

PART II: VARIOUS ESTABLISHMENTS OF REMOUNT AND VETERINARY CORPS

3. RVC has following establishments:-

(a) R&V Directorate, New Delhi.

(b) RVC Centre and College (RVC C&C), Meerut with following faculties:-

(i) Dog Breeding and Training Faculty (DTF).

(ii) Veterinary Training Faculty (VTF).

(iii) Equitation and Animal Management Faculty (E&AMF).

(iv) HQ and Training Depot.

(c) Equine breeding Studs (EBS) at Hissar, Haryana and Babugarh, UP.

(d) Remount Training School & Depots (RTS&D) at Saharanpur, UP and Hempur, Uttrakhand.

(e) Central Military Veterinary Laboratory (CMVL), Meerut.

(f) Military Veterinary Hospitals (MVH).

(g) Mobile Field Veterinary Hospitals (MFVH).

(h) Advance Field Veterinary Hospitals (AFVH).

(j) Army Dog Units (ADU).

(k) R&V Regt and Sqn, NCC.

4. The Broad organization of **R&V Regiment and R&V Sqn** in NCC is as follows:-

S No	Authorisation	R&V Regt	R&V Sqns
(a)	Total No of Units	05	15
(b)	Horses / Mules	26 (22 Horses + 04 Mules/ Ponies)	13 (11 Horses + 02 Mules/ Ponies)
(c)	Auth Cadet Strength	320 SD/SW Cadets	200 SD/SW Cadets

PART III: ROLE OF REMOUNT AND VETERINARY CORPS

5. Specified roles of RVC are as listed below:-

(a) Functions under QMG's Branch at Army HQ. DG RVS is responsible for rendering technical advice to QMG on R&V Matters.

(b) Breeding, purchase, procurement and training of all army animals including dogs and provision of such animals in required strength to meet the full authorization of defence services.

(c) Rearing, maintaining, training and issuing all animals to animal holding units and holding their reserves.

(d) Veterinary care of all army animals and other defence establishments.

(e) Casting and disposal of surplus and culled animals.

(f) Collection and disposal of captured animals.

(g) Compilation and maintenance of statistical information about source and availability of all type of animals within and outside the country.

(h) R&V planning during peace and war.

(j) General administration and technical control of R&V units and establishments.

(k) Evacuation and treatment of sick animals.

(l) Investigation and control of diseases. Preventing infectious, contagious diseases and diseases of zoonotic importance.

(m) Conduct of various veterinary specific professional courses.

(n) Training personnel of all trades of the RVC.

CONCLUSION

6. The organization of RVC is structured in a manner to provide R&V services to all elements of Armed forces. The functioning of RVC has been explained in a manner to show the interrelationship of various establishments.

ASSESSMENT EXERCISES

1. RVC was raised in which year?

(a) 1979
(b) 1779
(c) 1857
(d) 1940

2. RVC is headed by an officer of the rank of?

(a) Maj Gen
(b) Col
(c) Brig
(d) Lt Gen

3. The responsibilities of RVC are?

(a) Breeding and training of Equines
(b) Breeding and training of Dogs for the Army
(c) Provide animals to the Animal Transport (AT) Units
(d) Provide horses to the President's Body Guard
(e) All of these
(f) None of these

4. The sanctioned cadet strength of an RV NCC Sqn is?

(a) 140
(b) 180
(c) 160
(d) 200

5. The sanctioned cadet strength of an RV NCC Regt is?

(a) 140
(b) 160
(c) 320
(d) 200

6. The Equine Breeding Studs of the Indian Army are at?

(a) Saharanpur and Hempur
(b) Babugarh and Hissar
(c) Hempur & Meerut
(d) Hisar and Saharanpur

7. The Remount Training Schools and Depots of the Indian Army are at?

(a) Saharanpur and Hempur
(b) Babugarh and Hissar
(c) Hempur & Meerut
(d) Hisar and Saharanpur

8. The Officers and men of RVC are trained at?

(a) EBS
(b) RVC Centre and College
(c) RTS & Ds
(d) None of these

9. The 'R' in RVC stands for?

(a) Renown
(b) Remount
(c) Resource
(d) Reserve

10. RVC stands for?

(a) Remount Veterinary Corps
(b) Regiment and Veterinary Corps
(c) Remount and Veteran Cadets
(d) Rifle and Veterinary Corps

11. EBS stands for?

(a) Equestrian Branding Store
(b) Equestrian Breeding Stud
(c) Equine Branding Station
(d) Equine Breeding Studs

12. CMVL stands for?

(a) Central Mobile Veterinary Laboratory
(b) Central Military Veterinary Laboratory
(c) Central Missionary Veterinary Laboratory
(d) Central Mandatory Veterinary Laboratory

13. AFVH stands for?

(a) Adult and Foal Veterinary Hospital
(b) Advance Field Veterinary Hospital
(c) Associated Field Veterinary Hospital
(d) Available Foal Veterinary Hospital

14. ADU means?

(a) Animal drug unit
(b) Adult drug unit
(c) Adult dog unit
(d) Army dog unit

15. CMVL is located at?

(a) Hissar
(b) Babugarh
(c) New Delhi
(d) Meerut

16. The motto of RVC is?

(a) Unity and Discipline
(b) Unity and Diversity
(c) Service to animals is our duty
(d) Service to animals is service to God

17. VTF stands for?

(a) Veterinary Training Facility
(b) Veterinary Training Farm
(c) Veterinary Training Faculty
(d) Veterinary Teaching Faculty

18. The number of regiments in RVC are?

(a) 05
(b) 13
(c) 23
(d) 14

19. RVC has ____ squadron NCC units?

(a) 03
(b) 15
(c) 23
(d) 14

20. Full form of MFVH is?

(a) Military Field Veterinary Hospital
(b) Military Forensic Veterinary Hospital
(c) Mobile Field Veterinary Hospital
(d) Mobile Forensic Veterinary Hospital

21. In which year was the Stud Department formed, marking the birth of RVC?

(a) 1757
(b) 1779
(c) 1920
(d) 1857

22. When was the Army Veterinary Corps officially established?

(a) 14 August 1947
(b) 26 January 1950
(c) 14 December 1920
(d) 10 October 1930

23. Where is the RVC Centre and College located?

(a) New Delhi
(b) Hissar
(c) Meerut
(d) Saharanpur

24. Under which branch does RVC function at Army HQ?

(a) AG Branch
(b) QMG's Branch
(c) MS Branch
(d) DGAFMS Branch

Short Answer Questions

1. In which year was the "Stud Department" formed, marking the birth year of the RVC?

2. What is the official date of establishment of the Army Veterinary Corps?

3. Name the two Equine Breeding Studs (EBS) of RVC and their locations.

4. Under which branch of the Army HQ does the RVC function?

5. What is the total number of R&V Squadrons authorized under NCC?

Long Answer Questions

1. Discuss the historical background that led to the formation of the RVC.

2. Describe the major establishments of the RVC and their functions.

3. Explain the role and responsibilities of the RVC in the Indian Army.

4. How is the RVC Centre and College structured, and what are its key faculties?

5. What is the organizational structure of R&V Regiments and Squadrons under NCC, and what resources are authorized to them?

ANIMAL MANAGEMENT

2

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ANIMAL MANAGEMENT

CHAPTER I: INTRODUCTION TO HORSE AND BODY PARTS OF A HORSE

TEACHING INSTRUCTIONS

Code	:	**AM-1**
Period	:	**Two (01+01)**
Type	:	**Tutorial Discussion & Practical**
Year	:	**1st Year SD/ SW**
Conducting Officer	:	**PI Staff**
Training Aids	:	**Black board and chalk.**

Time Plan

- **Introduction : 05 Mins**
- **Acquaintance with Horse and Body Parts of a Horse : 30 Mins**
- **Conclusion : 05 Mins**

INTRODUCTION

1. Horse management or horse mastership is the science of the care of the horse under all conditions, in the field or in the stables.

PREVIEW	LEARNING OBJECTIVES
The lecture will be conducted in following parts:- ➢ Part I: Acquaintance with the Horse. ➢ Part II: Body Parts of the Horse.	➢ To acquaint the cadets with a horse and body parts of a horse.

PART I: ACQUAINTANCE WITH THE HORSE

2. Horse management or horse mastership is the science of the care of the horse under all conditions, in the field or in the stables. It aims at continuously keeping the largest possible number of horses fit for work and reducing inefficiency to a minimum by the prevention of accidents and illnesses.

3. The importance of being a good horse master should be impressed upon every rider. He should be taught to look upon his horse as his best friend, to understand it, to take pride in its appearance and to look after its wants before his own.

4. He should receive instruction in:-

(a) Temperament of the Horse.

(b) Watering.

(c) Feeding.

(d) Bedding.

(e) Grooming: General, equipment and usage.

(f) Shoeing.

(g) Care of the horse when at work, in stables, in transit or on march.

(h) The prevention and cure of minor ailments.

(j) The fitting and care of saddlery and harness.

(k) Management of horses in Nuclear, Biological and Chemical environment.

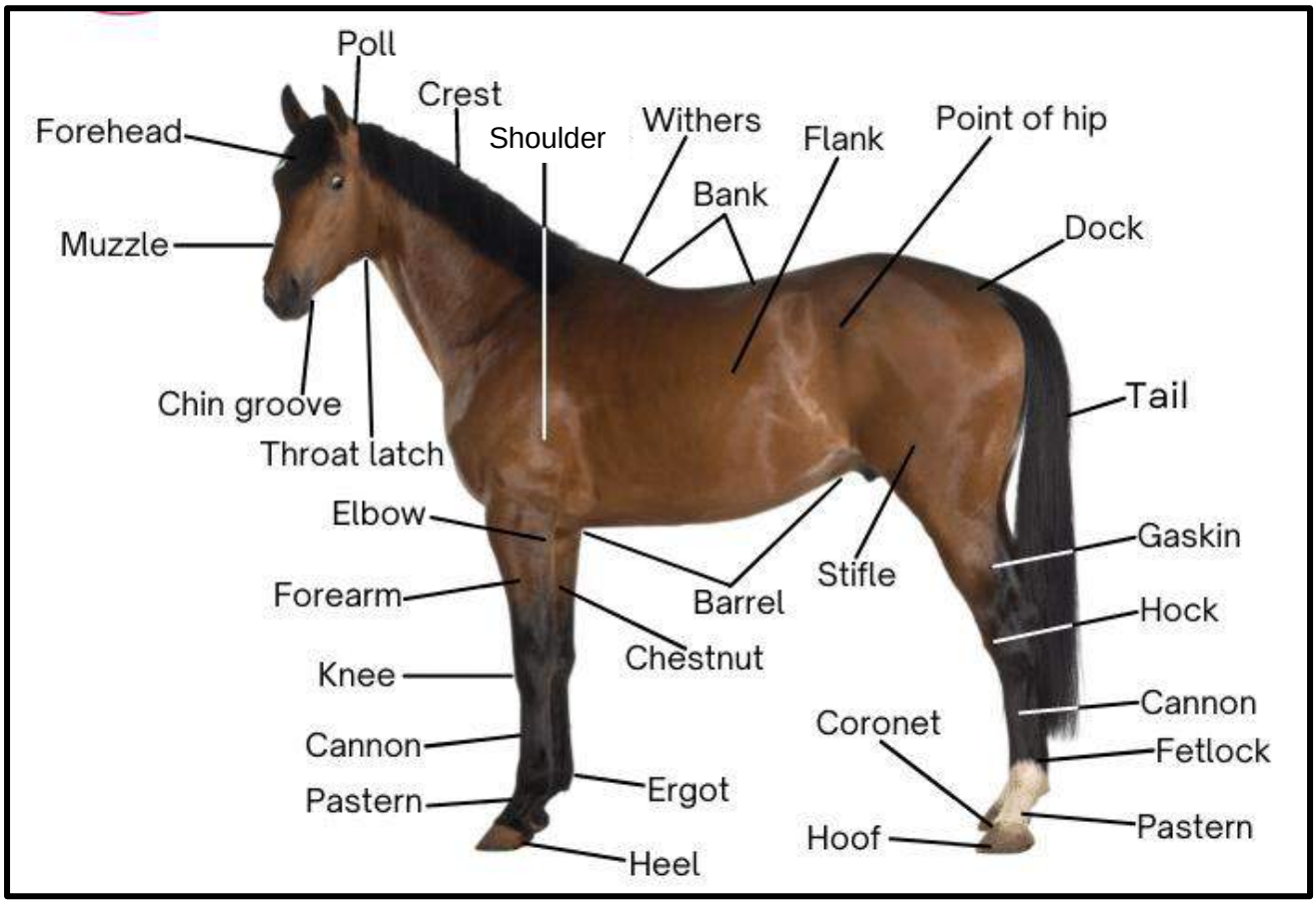
FACTS ABOUT HORSES

- Horses have a very good memory.
- Training a horse requires skill, patience, and careful handling.
- Horses have a pack instinct.
- Horses can hear very high pitches.
- Horses also have a good sense of smell.

5. A horse and rider work as a combination and best output from the horse is possible if due attention is given to the horses' management by the rider. With thorough knowledge of various problems associated with management, they can be anticipated, avoided and best results achieved.

6. Good horse management consists of paying attention to a number of details. The neglect of any of these details may result in loss of efficiency and affect the health and comfort of the animals. Watering, feeding and grooming should be carried out on a system understood by all and discipline must be sufficiently high to ensure that all duties are performed in a thorough manner even during the absence of officers or supervisory staff.

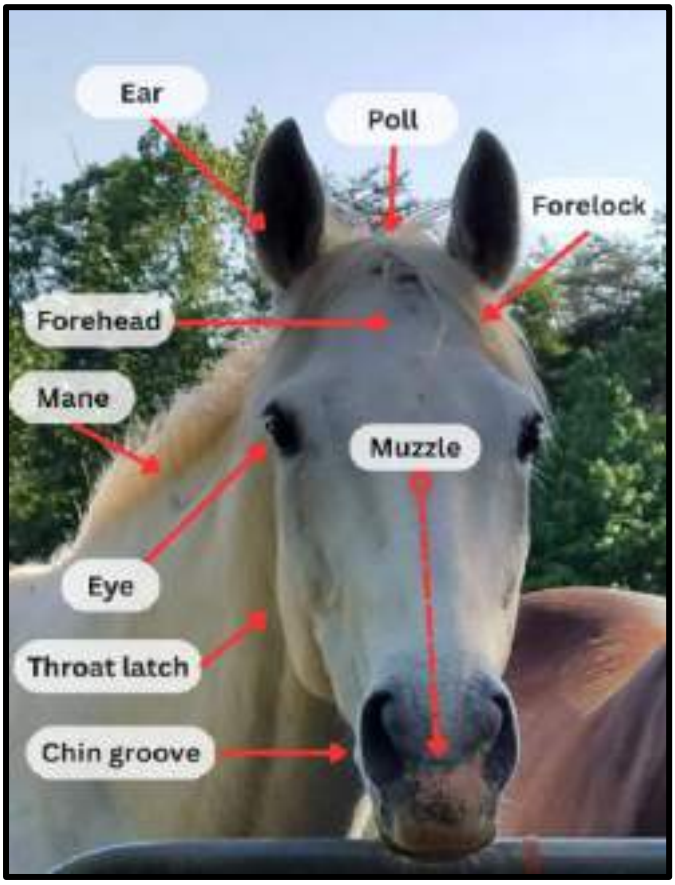
PART II: BODY PARTS OF THE HORSE



7. Understanding the horse's anatomy can help you train him better and prevent injuries that stem from a horse's activities. Equestrians should be familiar with the parts of a horse to recognize aches and pains in horses or why they may not be performing as well as usual.

8. It's helpful to understand the horse to prevent injuries and train it discerningly. With a basic knowledge of a horse's parts and their purpose, you'll know where it should develop strength when training so your horse can perform his best.

9. **Parts of Horse's Head**.



(a) **Poll.** The poll is a bony protrusion located right behind the horse's ears, where the bridle begins. It's the highest point on the horse's head.

(b) **Ears**. A horse's ears are very flexible and mobile. Horses move their ears to communicate their emotional state or listen intently. A horse is relaxed when his ears sag, angry or fearful when ears are laid back flat and paying attention up front or behind when ears are pointed forward or swivelled toward the back. Horses can move their ears one at a time to amplify particular noises and hear a wider range of frequencies.

(c) **Forehead**. Horses' foreheads can have unique markings, like a blaze or a star, that distinguish them from other horses.

(d) **Forelock**. The forelock is the tuft of hair that makes bangs on the horse's forehead. The forelock is more than a feature for some horses–long forelocks protect from weather and insects.

(e) **Eyes**. Healthy horses have bright and animated eyes, and dull eyes could be a sign of illness. They absorb light better than ours do, so they can see well in the dark. Horses' eyes are also positioned slightly to the sides of the head so they can see forward and backward and for better vision while grazing. Their only two blind spots are directly behind and in front of them.

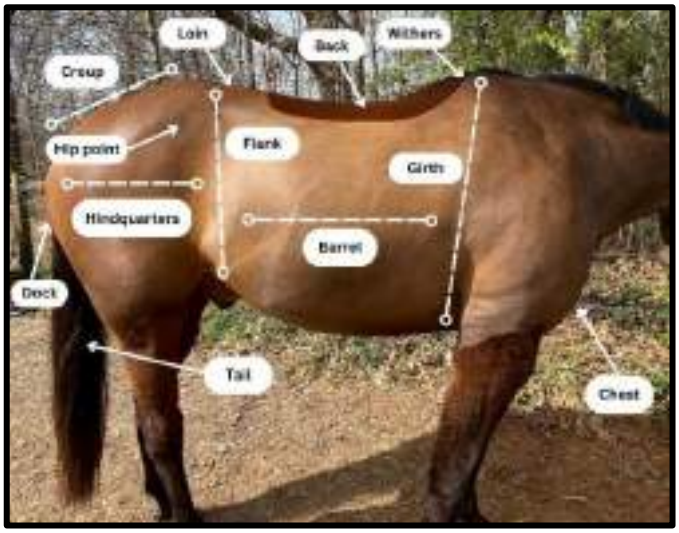
(f) **Muzzle**. The muzzle includes a horse's mouth, lips, nose, nostrils, and chin. The mouth and nostrils are very mobile. Horses only breathe through their noses and not their mouths, so the nostrils are large and flexible.

(g) **Throat latch**. The throat latch is located where the jaw and windpipe intersect. The part of a bridle that shares this name sits on the jaw above the throat latch.

(h) **Crest**. The crest is the top line of the neck.

(j) **Mane**. Mane is the hair that extends down a horse's neck. It's a beautiful feature that also protects against weather and insects. A shiny mane is a sign of good health.

10. <u>Parts of a Horse's Body</u>.



(a) **<u>Withers</u>**. The withers is the point at the base of the neck, before the back. The height of a horse is measured from the point of withers using a measuring stick. Earlier the horses used to be measured by the width of a hand (roughly 4 inches).

(b) **<u>Back</u>**. The back extends from the withers to the loin and is the deep curve in the middle of the horse, where the saddle is placed.

(c) **<u>Loin</u>**. The loin sits between a horse's back and rear end (croup), directly behind the saddle.

(d) **<u>Croup</u>**. The croup is the horse's rump. It should be oval-shaped and slope gently.

(e) **<u>Point of hip</u>**. The hip points stick out at the top sides of the horse's rear end. These are the joints that enable the horse to move his hind legs.

(f) **<u>Dock</u>**. The dock sits at the very back of the horse below the croup. The tail extends from the dock, and the muscles and vertebrae surrounding the dock move the tail.

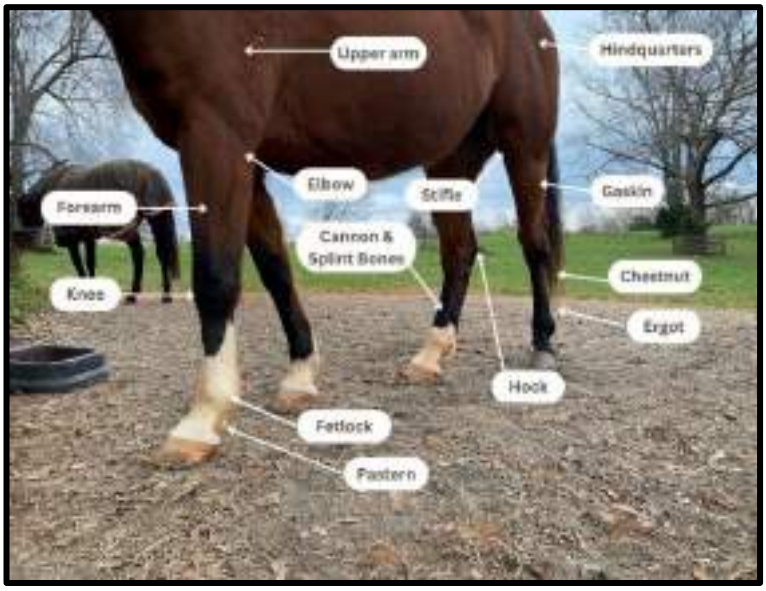
(g) **<u>Tail</u>**. The tail is the hair that extends from the dock at the end of a horse. A horse's tail is an extension of its spine that helps steer and balance the horse and serves as a means of communication and a tool to swat away insects.

(h) **<u>Barrel</u>**. The barrel is the centre section of the horse, from the forequarters to the hindquarters. The barrel includes the back, loin, and torso and encases the ribcage and organs.

(j) **<u>Flank</u>**. A horse's flank is a slender portion that makes a dent between the barrel and the hindquarters. The dent should not look pinched because a "shallow" flank indicates weaknesses in conformation.

(k) **<u>Girth</u>**. The girth extends from the withers to the barrel and contains the ribcage. The "girth" of a saddle gets its name from the part of the horse it fastens around.

11. Parts of a Horse's Legs.



(a) **Shoulder**. A horse's shoulders run from its withers to its elbow on either side.

(b) **Upper Arm**. The upper arm includes the horse's humerus which extends from the shoulder to the elbow joint. The upper arm is short but strong. It supports the horse's weight, absorbs shock, and moves the knee up and down.

(c) **Elbow**. The elbow joint, directly below the horse's shoulder and above its forearm, helps with flexion and tension of the front limbs.

(d) **Forearm**. The forearm is the longest part of a horse's front limbs. Horses with long forearms make great jumpers.

(e) **Carpus**. The carpus is the horse's knee, made of several bones joined together.

(f) **Hindquarters**. A horse's hindquarters include the hips and thighs and act as a motor that propels the horse forward. The hindquarters are the source of the horse's power but bear less weight than the forequarters. Strong hindquarters give horses strength for collection.

(g) **Stifle**. The stifle joint bends the hind limbs forward. The stifle connects the large bone coming from the hip to the large bone of the horse's hock.

(h) **Gaskin**. The gaskin is the largest muscle on a horse's hind leg. It's located right beneath the hindquarters and functions similarly to a human calf. It works in tandem with the hindquarters to propel the horse forward.

(j) **Hock**. Horse's hock carries the horse's weight and pushes the leg off the ground. Large, strong hocks are good at absorbing impact and making a horse's movements efficient.

(k) **Ergot**. An ergot is a small callous-like growth on the rear fetlock (the protruding joint at the base of the cannon bone). The reason why horses get ergots is not certain, but they are normal and harmless.

(l) **Cannon and Splint Bone**. The cannon bone is the large metacarpal below the knee (front) or the hock (back), and the splint bone is the small, bony pencil-like structure behind the cannon bone. These bones resemble the bones in our hands. Because this part of the horse's leg contains no muscle but several sensitive tendons and ligaments.

(m) **Chestnut**. A chestnut is a large callous found on any or all of a horse's limbs above the knee or below the hock. It can be peeled off but is completely harmless, like an ergot.

(n) **Fetlock**. The fetlock is the protruding joint at the base of the cannon bone that carries a horse's weight. Active horses are prone to injuring this joint.

(o) **Pastern**. The pastern is the angled portion of a horse's leg, right above the hoof. The pastern acts like a pillow for the heel that provides cushion and support between the hooves and the weight of the horse. The length and angle of a pastern influences a horse's gait.

12. Parts of Hoof.

(a) **Coronet**. The coronet band is the line below the pastern that separates the hoof and the leg. This band produces the hoof wall and can be a sign of health or disease in a horse. A healthy cornet band is smooth and dry.

(b) **Heel**. The heel of a horse and a proper heel angle are essential for balance. The heel is soft and has elasticity so it can expand when pressure is applied as a horse moves.

(c) **Frog**. The frog is tissue on the bottom of the hoof in a V-shape that is responsive and flexible to give bounce and absorb shock as the horse walks and runs.

(d) **Toe**. Horses do have toes, but only one on each hoof. The toe at the front of the hoof helps support the horse's weight, give it leverage, and maintain its balance, just like the great toe on a human foot.

CONCLUSION

13. Acquaintance with the horse and understanding the parts of the horse will help the rider cadets understanding importance of training and apply the skills at various levels during advanced training.

ASSESSMENT EXERCISES

1. What is the main aim of horse management?

(a) Increasing horse population
(b) Making horses jump higher
(c) Keeping horses fit and reducing inefficiency
(d) Training horses for circus acts

2. Watering is to be done in horses?

(a) After feeding
(b) Before feeding
(c) Along with feeding
(d) Doesn't matter

3. Stifle joint in a horse is found in?

(a) Fore limb of the horse
(b) Vertebral column of the horse
(c) Skull of the horse
(d) Hind limb of the horse

4. Which of the following is not included in horse management training?

(a) Feeding
(b) Grooming
(c) Whipping
(d) Shoeing

5. Proper horse management helps to?

(a) Increase food consumption
(b) Win races
(c) Avoid problems and get best results
(d) Prevent human injury only

6. Neglecting any part of horse management can result in?

(a) Higher speed
(b) Better appetite
(c) Loss of efficiency and poor health
(d) Longer naps

7. Good horse management requires attention to?

(a) Feeding
(b) Watering and grooming
(c) Rest alone
(d) All of the above

8. What is the poll in a horse?

(a) Tip of the tail
(b) Area behind ears, highest point on head
(c) Centre of the back
(d) Nose bridge

9. What do a horse's ears primarily indicate to a rider?

(a) Temperature
(b) Mood and attention
(c) Fatigue
(d) Digestion issues

10. Which part is responsible for allowing the horse to breathe?

(a) Eyes
(b) Mouth
(c) Nostrils
(d) Mane

11. Which part of the head helps protect from weather and insects?

(a) Muzzle
(b) Mane
(c) Forelock
(d) Crest

12. From where is a horse's height measured?

(a) Mane
(b) Withers
(c) Croup
(d) Barrel

13. Which part of the horse’s body includes the ribcage and organs?

(a) Barrel
(b) Croup
(c) Girth
(d) Flank

14. What is a “shallow” flank often a sign of?

(a) Good stamina
(b) Weakness in conformation
(c) Overfeeding
(d) Strong hindquarters

15. The girth is associated with?

(a) Forelock hair
(b) Eye movement
(c) Ribcage and saddle fastening
(d) Tail support

16. What part of the leg acts like a human calf?

(a) Stifle
(b) Gaskin
(c) Cannon
(d) Fetlock

17. The hock is important because it?

(a) Filters blood
(b) Holds saddle
(c) Bears weight and enables leg push
(d) Helps digestion

18. What is the V-shaped tissue on the bottom of a hoof called?

(a) Heel
(b) Frog
(c) Toe
(d) Cannon

19. The forelock is located?

(a) Between the ears
(b) On the tail
(c) Under the jaw
(d) Near the hooves

20. The barrel of the horse refers to?

(a) The tail
(b) The ribcage and abdomen
(c) The neck
(d) The hoof

21. The withers are found?

(a) At the base of the tail
(b) Between the ears
(c) At the top of the shoulders
(d) Under the belly

22. The crest of the horse is part of the?

(a) Mane
(b) Hoof
(c) Tail
(d) Eye

23. The cannon bone is located in the?

(a) Head
(b) Neck
(c) Lower leg
(d) Abdomen

24. The fetlock joint is found?

(a) Between the hoof and cannon bone
(b) In the tail
(c) In the ear
(d) On the back

25. The croup is the?

(a) Front leg
(b) Top of the hindquarters
(c) Belly
(d) Jaw

26. The muzzle includes?

(a) Eyes and ears
(b) Nostrils and mouth
(c) Tail and hooves
(d) Mane and crest

27. The flank is located?

(a) Between the front legs
(b) Behind the ears
(c) Between the ribs and hind legs
(d) Under the jaw

Short Questions

1. What is horse management?

2. Why should a rider treat his horse as a best friend?

3. What does grooming include?

4. What is the role of the poll in a horse's head?

5. What does the frog in a horse’s hoof do?

Long Questions

1. Explain the objectives of horse management and how it helps reduce inefficiency.

2. Describe the qualities and responsibilities of a good horse master as mentioned in the text.

3. List the key areas in which a rider should be instructed to ensure proper horse care.

4. How does understanding horse anatomy contribute to better training and injury prevention?

5. Discuss the importance of discipline and attention to detail in maintaining horse health and efficiency.

ANIMAL MANAGEMENT

CHAPTER II: BREEDS OF HORSES AND CLASS OF EQUINES IN INDIAN ARMY

TEACHING INSTRUCTIONS

Code	:	**AM-2**
Period	:	**One (01)**
Type	:	**Tutorial Discussion**
Year	:	**1st Year SD/ SW**
Conducting Officer	:	**PI Staff**
Training Aids	:	**Black board and chalk.**

Time Plan

- **Introduction : 05 Mins**
- **Breeds of Horses and Class of Equines in the Indian Army : 30 Mins**
- **Conclusion : 05 Mins**

INTRODUCTION

1. Horses have played a vital role in human history, from transportation and farming to war and sport. Across the world, different regions have developed their own horse breeds, each suited to their environment and purpose. These breeds vary in size, strength, speed, and appearance. As a cadet of NCC the knowledge of breeds of horse is important during various events like commissioning of horses, making of their history sheets, breeding records and other pedigree related data compilation.

PREVIEW	LEARNING OBJECTIVES
The lecture will be conducted in following parts:- ➢ Part I: Different Breeds of Horses. ➢ Part II: Class of Equines in the Indian Army.	➢ To acquaint the cadets with different breeds of the horses.

PART I: BREEDS OF HORSES

➢ The indigenous breeds of horses/ponies include Marwari, Kathiawari, Manipuri, Spiti, Bhutia and Zanskari.

➢ The exotic breeds of horses introduced in India include English thoroughbred, Hanoverian, Arab, Polish, Selle Francais and Halflinger.

➢ The Arab, the first to be introduced, is believed to have contributed substantially for the evolution of Kathiawari, Marwari, Sindhi and Manipuri horses.

2. **Sporting Horse Breeds**. Sporting horse breeds have evolved through selective breeding, where humans have intentionally bred horses for specific athletic traits and characteristics. This process, often referred to as artificial selection, has led to the development of distinct breeds known for their performance in various equestrian sports.

3. **Evolution of Modern Sporting Breeds**.

(a) **Warmbloods**. Many modern sport horse breeds, like the Hanoverian, Dutch Warmblood, and Selle Français, are warmbloods. These breeds were developed by crossing native mares with stallions from established European bloodlines. They were originally bred to refine cavalry and farm horses, but have evolved into versatile horses suitable for various equestrian sports.

Hanoverian

Selle

(b) **Thoroughbreds.** They are renowned for their racing prowess, are the result of cross-breeding between Arab, Turk, and Barb horses with native English stock. The General Stud Book, established in 1791, played a crucial role in defining the standard for Thoroughbred breeding and racing qualities.

Arab

Thoroughbred

(c) **Other Sporting Breeds**. Breeds like the Irish Sport Horse, the American Warmblood, and the Danish Warmblood have also emerged through selective breeding, often combining different bloodlines to create horses with specific athletic aptitudes.

4. **Indian Breeds of Horses**.

(a) **Marwari Horses.** The Marwari breed is derived from the Marwar region of the Rajasthan. - the natural habitat of the breed. The Marwari horses are reared mainly for riding and sports and no attempts are being made to prepare them as thoroughbred race animals. The predominant body colour is brown where as other body colours are roan, chestnut, white and black with white patches. The Marwari horses are longer and taller than Kathiawari horses.

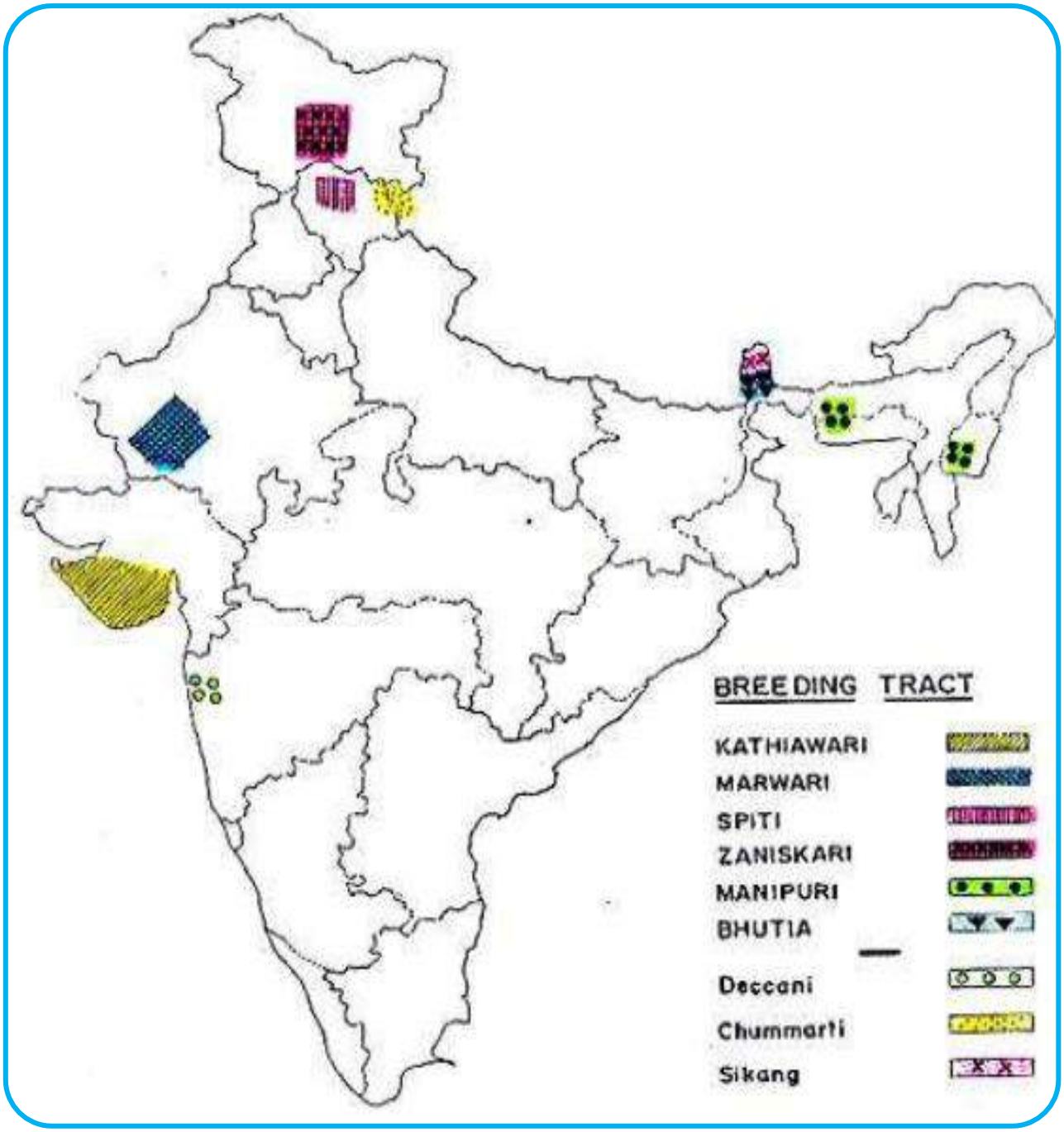
(b) **Kathiawari Horses.** The breeding tract of the breed is Saurashtra province of Gujarat. The most prominent body colour in Kathiawari horses is chestnut followed by bay (body chestnut, foreleg up to knee and fetlock are black, Keshwali black, Hairs of tail and neck are black), grey (complete white colour) and dun (light chestnut).

(c) **Spiti Horses**. The Spiti horses are distributed in Spiti valley and adjoining areas of Kullu and Kinnaur divisions of Himachal Pradesh. These horses are smaller in height. The Spiti ponies have two strains, Spiti pure and Konimare. The Konimare ponies are comparatively taller. They are capable of thriving in cold regions under adverse conditions of scarcity of food, low temperature and long journeys at high altitude. The Spiti horses are used for riding and as pack animals. The predominant body colour is grey (complete white) followed by black, black flay bone (white body with black patches), brown and bay.

(d) **Zanskari Horses.** Zanskari horses are native of Zanskar region of Leh and Laddakh area of Jammu and Kashmir. The predominant body colour is grey followed by black and copper. The horses are known for their ability to work, run adequately and carry loads at high altitude.

(e) **Manipuri Horses.** Manipuri breed of ponies is one of the purest and prestigious breed of equines of India. It is a strong and hardy breed and has very good adaptability to extreme geo-climatic conditions. It is one of the well-known breeds of India and has been claimed as the oldest polo pony. They are found in Manipur and Assam, and are similar to the south-east Asian type pony. The breed is available in 14 different colours viz Bay, Black, Gray, Mora white, Leiphon white, Sinai White, Stocking, liver chestnut, Roan, light gray, Reddish brown and dark bay.

(f) **Bhutia.** Bhutia ponies are distributed in Sikkim and Darjeeling. They are usually grey or bay coloured and similar to the Tibetan pony.



PART II : CLASS OF EQUINES IN INDIAN ARMY

5. The horses and mules in Indian Army are classified depending on the height and body size as under:-

(a) **Horses**. These are divided into three categories:-

(i) **Ride Class A**. 15 hands (152.5 cms) and above.

(ii) **Ride Class B**. 14 hands 2 inches (147.3 cms) to 15 hands (152.4 cms).

(iii) **Pony**. 13 hands (132 cms) to 14 hands 2 inches (147.3 cms).

(b) **Mules**. In the Army, we have two types of mules:-

(i) **Mules Mountain Artillery (MA)**. Height is 14 hands (142.2 cms) to 14 hands 3 inches (148.9 cms), girth 64 inches (162.7 cms), shank 17.8 cm, and load carrying capacity 145 Kgs (320 lbs).

(ii) **Mules General Service (GS)**. They are 13 hands (132 cms) to 14 hands (142.2 cms) in height, girth 145 cm, shank 14.7 cm. Load carrying capacity is 72.5 Kgs (162 lbs)

CONCLUSION

6. In conclusion, the diverse breeds of Indian horses exemplify the rich tapestry of the country's equine heritage. From the resilient Marwari and Kathiawari horses of the arid Rajasthan and Gujarat regions to the agile Manipuri Pony of the north-eastern hills, each breed showcases unique adaptations to its environment and historical significance. These indigenous breeds have not only played pivotal roles in warfare, agriculture, and cultural traditions but also embody the deep connection between humans and horses in India's history. Conservation efforts and a renewed appreciation for these breeds are essential to preserving this invaluable aspect of India's cultural and natural heritage.

ASSESSMENT EXERCISES

1. Which one of the following is not a breed of horse?

(a) Thoroughbred
(b) Longhorn
(c) Arabian
(d) Marwari

2. Which of the following is an Indian horse breed?

(a) Arabian
(b) Thoroughbred
(c) Kathiawari
(d) Connemara

3. Horse breed best known for its use in horse racing is?

(a) Thoroughbred
(b) Polish
(c) Marwari
(d) Kathiawari

4. The exotic breed of horse is?

(a) Spiti
(b) Bhutia
(c) Arab
(d) Zanskari

5. Indian breed horse from Kullu & Kinnaur (Himachal Pradesh)?

(a) Spiti
(b) Zanskari
(c) Marwari
(d) Bhutia

6. Indian breed horse from Leh & Laddakh (Jammu and Kashmir)?

(a) Spiti
(b) Zanskari
(c) Marwari
(d) Bhutia

7. Indian breed horse from Sikkim and Darjeeling?

(a) Spiti
(b) Zanskari
(c) Marwari
(d) Bhutia

8. Indian breed horse from Manipur and Assam?

(a) Spiti
(b) Zanskari
(c) Marwari
(d) Manipuri

9. What is the process called where horses are bred intentionally for athletic traits?

(a) Genetic mutation
(b) Selective training
(c) Artificial selection
(d) Spontaneous breeding

10. Warmbloods are a result of crossing native mares with stallions from?

(a) American deserts
(b) Mongolian lines
(c) European bloodlines
(d) Arabian herds

11. Which of the following is a warm blood sporting breed?

(a) Marwari
(b) Thoroughbred
(c) Hanoverian
(d) Spiti

12. The General Stud Book, established in 1791, was important for which breed?

(a) Dutch Warmblood
(b) Irish Sport Horse
(c) Thoroughbred
(d) Manipuri

13. The primary goal of modern sport horse breeding is to produce horses suitable for?

(a) Jungle survival
(b) Decorative purposes
(c) Equestrian sports
(d) Agriculture

14. Which of the following is not a sporting horse breed mentioned?

(a) Dutch Warmblood
(b) Selle Français
(c) Zanskari
(d) American Warmblood

15. The Marwari horse originates from?

(a) Gujarat
(b) Saurashtra
(c) Rajasthan
(d) Manipur

16. What is the most common body colour of the Marwari horse?

(a) Chestnut
(b) Bay
(c) Roan
(d) Brown

17. The Marwari horse is primarily reared for?

(a) Racing
(b) Agriculture
(c) Riding and sports
(d) Circus acts

18. Compared to Kathiawari horses, Marwari horses are?

(a) Smaller and lighter
(b) Heavier but shorter
(c) Longer and taller
(d) Shorter and thinner

19. The breeding tract of Kathiawari horses is?

(a) Manipur
(b) Spiti Valley
(c) Saurashtra (Gujarat)
(d) Rajasthan

20. A 'Bay' coloured Kathiawari horse has black?

(a) Eyes only
(b) Mane and tail
(c) Forelegs up to knee and fetlocks
(d) Chest and belly

21. Spiti horses are distributed in?

(a) Assam and Manipur
(b) Leh and Ladakh
(c) Kullu, Kinnaur, and Spiti Valley
(d) Darjeeling and Sikkim

22. The Spiti horse is particularly known for thriving in?

(a) Deserts
(b) Rainforests
(c) Cold, high-altitude conditions
(d) Coastal plains

23. The Zanskari horse is native to which region?

(a) Himachal Pradesh
(b) Gujarat
(c) Leh and Ladakh
(d) Assam

24. Zanskari horses are known for?

(a) Circus tricks
(b) Farm ploughing
(c) Load carrying and endurance at altitude
(d) Speed in short races

25. The Manipuri horse is considered the oldest breed used in?

(a) Bull racing
(b) Polo
(c) Long-distance trekking
(d) War ceremonies

26. Manipuri horses are mainly found in?

(a) Manipur and Rajasthan
(b) Manipur and Assam
(c) Sikkim and Bhutan
(d) Kashmir and Himachal Pradesh

27. Bhutia ponies resemble which other regional pony?

(a) Manipuri
(b) Marwari
(c) Tibetan
(d) Zanskari

28. What type of horses are classified as 'Ride Class A' in the Indian Army?

(a) Below 13 hands
(b) 13 to 14 hands
(c) 14 hands 2 inches to 15 hands
(d) 15 hands (152.5 cm) and above

29. Horses classified as 'Pony' in the Indian Army fall within which height range?

(a) 12 to 13 hands
(b) 13 to 14 hands 2 inches
(c) 14 to 15 hands
(d) 15 to 16 hands

30. What is the load-carrying capacity of Mules Mountain Artillery (MA)?

(a) 100 kg
(b) 72.5 kg
(c) 145 kg
(d) 200 kg

31. Mules General Service (GS) have a height range of?

(a) 12–13 hands
(b) 13–14 hands
(c) 14–15 hands
(d) 15–16 hands

32. Which breed is known for inward-turning ear tips?

(a) Bhutia
(b) Marwari
(c) Spiti
(d) Zanskari

33. Which Indian breed is often confused with Marwari due to similar features?

(a) Kathiawari
(b) Manipuri
(c) Zanskari
(d) Bhutia

34. Which pony breed is adapted to hilly terrain and cold climate?

(a) Manipuri
(b) Bhutia
(c) Spiti
(d) Zanskari

35. Which breed is most commonly used in ceremonial parades in India?

(a) Zanskari
(b) Thoroughbred
(c) Marwari
(d) Spiti

36. Which horse breed is native to the Saurashtra region of Gujarat?

(a) Marwari
(b) Kathiawari
(c) Spiti
(d) Manipuri

37. Which breed is known for its resilience and ability to survive on sparse feed?

(a) Zanskari
(b) Spiti
(c) Marwari
(d) Bhutia

Short Answer Questions

1. What is artificial selection in horse breeding?

2. Name two warmblood sport horse breeds.

3. Which stud book was established in 1791 for Thoroughbreds?

4. What is the predominant body colour of Marwari horses?

5. Which Indian horse breed is known as the oldest polo pony?

Long Answer Questions

1. Describe the development and characteristics of warmblood sporting horse breeds.

2. Explain the origin and breeding history of Thoroughbred horses.

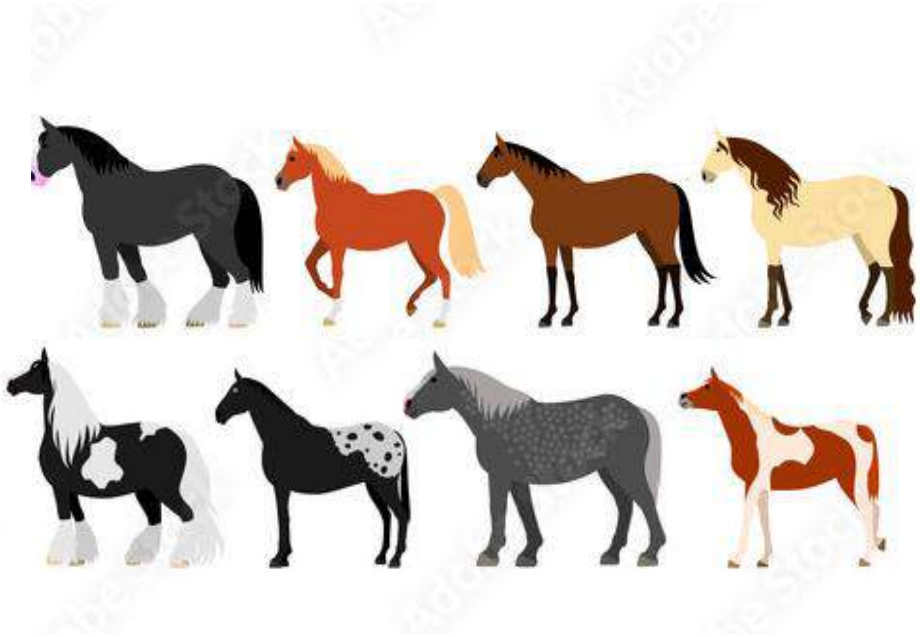
3. Compare Marwari and Kathiawari horses in terms of physical traits and body colours.

4. Discuss the distribution and adaptability of Spiti and Zanskari horses in high-altitude regions.

5. How are horses and mules classified in the Indian Army based on height and load capacity?

ANIMAL MANAGEMENT (SD/SW)

CHAPTER III: COLOURS OF HORSES



TEACHING INSTRUCTIONS

Code	**:**	**AM-3**
Period	**:**	**One (01)**
Type	**:**	**Tutorial Discussion**
Year	**:**	**1st Year SD/ SW**
Conducting Officer	**:**	**ANO**
Training Aids	**:**	**Black board and chalk.**
Time Plan		
• **Introduction**	**:**	**05 Mins**
• **Different Colours of Horses**	**:**	**30 Mins**
• **Conclusion**	**:**	**05 Mins**

INTRODUCTION

1. Horses come in a wide variety of beautiful colours and patterns. These colours are determined by their **genes** and can change slightly with age, season, or even sun exposure. The colour of a horse includes its **coat**, as well as features like the **mane**, **tail**, and **skin**.

PREVIEW

The lecture will be conducted in the one part:-

- Part I: Different Colours of Horses.

LEARNING OBJECTIVES

- To acquaint the cadets with colours of horses.

COLOUR OF A HORSE

- **Colour**. Simply the coat colour of the horse
- **Colour Pattern**. The way the colour/colours are laid out or designed on the coat of the horse
- **Markings**. Terms used to define or describe white places on face and legs of the horse Colour
- **Colour Pattern & Markings**. Especially when used in combination, they can serve to describe a horse or identify a specific horse

PART I: DIFFERENT COLOURS OF HORSES

2. **Colours of Horses.**

S No	Colour	Picture
(a)	**Bay**. Bay varies considerably in shade from dull red approaching brown, to a yellowish colour approaching chestnut, but it can be distinguished from the chestnut by the fact that the bay has a black mane and tail and almost invariably has black on the limbs and tips of the ears	
(b)	**Dark Bay**. Brownish overall appearance, but mahogany bay is not as dark as dark bay. Bay markings appear in some parts of the coat e.g. bay-brown.	

S No	Colour	Picture
(c)	**Dun**. The body coat is of a cream colour, with black mane and tail. When the term "Isabella" is used in German it usually refers to a body coat of cream and yellow, with mane and tail of the same cream or yellow colour	
(d)	**Red Dun**. This horse is a dun, but with reddish/ chestnut highlights. It has a dorsal stripe down the middle of the back, and the legs are darker than the body colour	
(e)	**Roan**. Permanent colour with a mixture of white hairs and one or two other colours of hairs in the coat.	
(f)	**Grey**. Where the body coat is a varying mosaic of black and white hairs, with the skin black. With increasing age the coat grows lighter in colour. The flea-bitten grey may contain three colours or two basic colours and should be so described. A pure white is exceptional	
(g)	**Chestnut**. A Chestnut can be any shade of red with no black points like the bay. There are many variations in the colour. Think of the different colours a penny can be, from brand new to very old and tarnished, Chestnuts can come in all of these colours. A Chestnut with a light-coloured mane while, almost white is said to be a Chestnut with a flaxen mane and tail. A very dark Chestnut, one the colour of a very tarnished penny, is called a 'Liver Chestnut' and they too can have flaxen manes and tails, a very eye-catching combination	
(h)	**Black**. Where black pigment is general throughout the coat, limbs, mane and tail, with no pattern factor present other than white markings	

S No	Colour	Picture
(j)	**Piebald**. The body coat consists of large irregular patches of black and white. The line of demarcation between the two colours is generally well defined	
(k)	**Skewbald**. The body consists of large irregular patches of white and of any definite colour except black. The line of demarcation between the colours is generally well-defined	
(l)	**Palomino**. The body coat is a newly-minted gold coin colour (lighter or darker shades are permissible) with a white mane and tail.	
(m)	**Appaloosa**. Body colour is grey, covered with a mosaic of black or brown spots	

IMPORTANCE OF COLOUR

- People use colours and markings to identify individual horses.
- Some breed associations prefer or require horses to be certain colours for registration into the association and discriminate against other colours.
- Horses come in several basic body colours and there are several variations of each basic colour.
- The five basic body colours include black, bay, brown, chestnut, and gray.

ASSESSMENT EXERCISES

1. A horse with varying mosaic of black and white hairs on its skin coat with black skin would be called of _____ colour?

(a) Bay
(b) Grey
(c) Chestnut
(d) Roan

2. A horse whose body coat consists of large irregular patches of white and black is referred to be of _____ colour?

(a) Skewbald
(b) Roan
(c) Palomino
(d) Piebald

3. A horse whose body coat consists of large irregular patches of white and any colour other than black is referred to be of _____ colour?

(a) Skewbald
(b) Roan
(c) Palomino
(d) Piebald

4. Body coat consists of large irregular patches of white and any other colour other than black?

(a) Piebald
(b) Skewbald
(c) Roan
(d) Grey

5. The hair and skin are white in colour in?

(a) White
(b) Roan
(c) Grey
(d) Palomino

6. Golden yellow body coating with yellow to golden yellow mane and tail?

(a) White
(b) Roan
(c) Grey
(d) Palomino

7. What distinguishes a bay horse from a chestnut?

(a) White mane and tail
(b) Black mane, tail, and black on limbs
(c) Flea bitten pattern
(d) Mixture of white hairs in coat

8. Which coat colour varies from dull red to yellowish but always includes black on the mane and tail?

(a) Chestnut
(b) Bay
(c) Palomino
(d) Dun

9. What colour is described as having a cream body with a black mane and tail?

(a) Palomino
(b) Isabella
(c) Dun
(d) Roan

10. Which type of dun has reddish or chestnut highlights and a dorsal stripe?

(a) Yellow Dun
(b) Red Dun
(c) Isabella
(d) Grey Dun

11. What is the distinguishing feature of a roan horse?

(a) Uniform black coat
(b) Mixture of white and colored hairs
(c) Golden body with white mane and tail
(d) Black mane and tail with cream body

12. A grey horse gets lighter with?

(a) Exercise
(b) Diet
(c) Age
(d) Temperature

13. What does "flea bitten grey" refer to?

(a) White coat with pink skin
(b) Grey coat with tiny brown/black spots
(c) Brown with white patches
(d) Grey with red tint

14. Which of the following horse coat colors contains no black points?

(a) Bay
(b) Chestnut
(c) Dun
(d) Dark Bay

15. A chestnut horse with a very light mane and tail is called?

(a) Red Dun
(b) Flaxen Chestnut
(c) Liver Bay
(d) Isabella

16. A very dark chestnut horse may be referred to as?

(a) Mahogany Bay
(b) Liver Chestnut
(c) Dark Dun
(d) Black Roan

17. A horse with black pigment throughout its entire coat and no pattern is?

(a) Dark Bay
(b) Black
(c) Blue Roan
(d) Chestnut

18. A horse described as piebald has what colour pattern?

(a) White and chestnut
(b) Black and white
(c) Brown and white
(d) Grey and white

19. What is the main difference between piebald and skewbald?

(a) Mane colour
(b) Presence of dorsal stripe
(c) Black vs. non-black patches
(d) Presence of white hair mixture

20. Which term describes large white patches with any other colour except black?

(a) Piebald
(b) Roan
(c) Skewbald
(d) Fleabitten

21. The coat colour of a palomino is typically described as?

(a) Reddish brown
(b) Mahogany
(c) Golden with white mane and tail
(d) White and black mosaic

22. What colour is typically associated with a newly-minted gold coin?

(a) Dun
(b) Bay
(c) Palomino
(d) Isabella

23. Which coat has a mosaic of black or brown spots over a grey base?

(a) Roan
(b) Appaloosa
(c) Skewbald
(d) Fleabitten

24. What colour is referred to as "Isabella" in German?

(a) Cream body with black mane and tail
(b) Cream-yellow body with same colour mane and tail
(c) Golden coat with white mane
(d) Red-brown body with white legs

25. Which horse coat becomes lighter with age?

(a) Chestnut
(b) Bay
(c) Grey
(d) Black

26. What is characteristic of a dark bay horse?

(a) Black mane, light brown body
(b) Brownish coat, not as dark as mahogany
(c) Completely black body
(d) Cream body with red legs

27. A light bay horse will appear?

(a) Yellow with a black mane
(b) Pale brownish with light red tinge
(c) Grey with red spots
(d) White with dark brown patches

28. Which horse colour has well-defined large patches of black and white?

(a) Skewbald
(b) Roan
(c) Piebald
(d) Appaloosa

29. A skewbald horse will have white and _____ colour?

(a) Grey
(b) Black
(c) Any colour except black
(d) Yellow

Short Answer Questions

1. What key feature distinguishes a bay horse from a chestnut horse?

2. What is the primary difference between a piebald and a skewbald horse?

3. Which horse coat colour is characterized by a mixture of white hairs with one or two other colors throughout the coat?

4. What colour is a Palomino horse's mane and tail?

5. What coat colour does a horse have if it appears completely black with no pattern, except for white markings?

Long Answer Questions

1. Describe the characteristics and variations of the bay coat colour in horses, including its subtypes like dark bay and light bay.

2. Compare and contrast the chestnut and black coat colors in horses, including their unique variations.

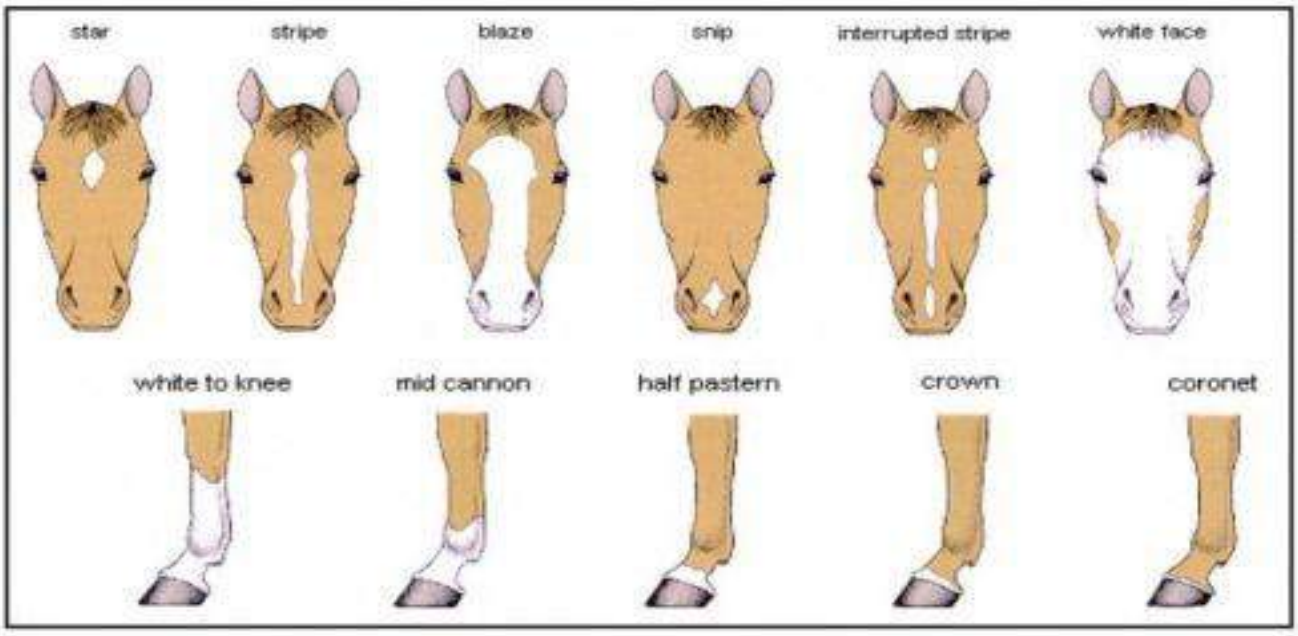
3. Explain the features and visual appearance of dun and red dun horses, including specific markings and colour highlights.

4. Discuss the differences between roan, grey, and appaloosa horse coat patterns, focusing on how they change or remain consistent with age.

5. Define and differentiate piebald, skewbald, and palomino coat patterns in horses, including their colour combinations and common identifying features.

ANIMAL MANAGEMENT

CHAPTER IV: IDENTIFICATION OF HORSES



TEACHING INSTRUCTIONS

Code	:	**AM-4**
Period	:	**Two (01+01)**
Type	:	**Tutorial Discussion & Practical**
Year	:	**1st Year SD/ SW**
Conducting Officer	:	**Officer**
Training Aids	:	**Black board and chalk.**

Time Plan

- **Introduction : 05 Mins**
- **Identification of Horses : 30 Mins**
- **Conclusion : 05 Mins**

INTRODUCTION

1. Identifying a horse is required for recognizing and recording its **physical features**, **colour** and **markings or documents** to distinguish it from other horses. Proper identification is important for **ownership**, **breeding**, **competition**, **veterinary care**, and **security**. It helps ensure that the right horse is being treated, trained, or registered.

PREVIEW	LEARNING OBJECTIVES
The lecture will be conducted in following parts:- ➢ Part I: Identification of horses. Conclusion.	➢ To acquaint the cadets about identification of horses.

PART I: IDENTIFICATION OF HORSES

2. Horses can be identified by the following:-

(a) Color and markings (such as white patches on the face or legs).

(b) Height and build.

(c) Breed and age.

(d) Application of microchips and branding.

(e) Registration of the horses.

3. By carefully observing and recording these details, horse owners, vets, and trainers keep accurate records and ensure the well-being of each horse.

4. **Facial Markings of Horse**. Facial markings are distinctive white areas on an otherwise dark coat, help identify individual horses and are present at birth, not changing over their lifetime. Common markings include stars, snips, blazes, stripes, and various leg markings.

S No	Facial Mark	Description
(a)		**Snip.** A white mark on the muzzle, between the nostrils.

S No	Facial Mark	Description
(b)		**Star.** A white marking on the forehead, between or above the eyes.
(c)		**Stripe.** A narrow white strip that runs down the middle of a horse's face.
(d)		**Bald Face.** A very wide blaze, extending to or past the eyes.

S No	Facial Mark	Description
(e)		**Blaze.** A wide white stripe running down the face from the forehead to the muzzle.
(f)		**Broken Stripe.** A stripe that is not straight or continuous.

5. **Leg Markings**. The outline of markings found on horses' legs are described as under:-

(a) **Coronet Band**. White coat just above the hoof, around the coronary band and usually no more than 2.5 cm above the hoof.

(b) **Pastern**. White marking that extends above the top of the hoof but stops below the fetlock.

(c) **Fetlock**. White marking that extends over the fetlock, occasionally called a “boot”.

(d) **Sock**. White marking that extends higher than the fetlock but not as high as the knee or hock.

(e) **Stocking**. White marking that extends at least to the bottom of the knee or hock, sometimes higher.

(f) **Partial or Half Pastern**. White marking which includes only half the pastern above the coronet.

(a) (b) (c) (d) (e) (f)

Leg Markings of a Horse

6. **Brandings**. Branding in horses is a traditional method of permanent identification, achieved by creating a lasting mark on the skin through either hot or freeze branding used to identify. The army horses are branded on left shoulder and left thigh.

(a) **Left Shoulder**. Arrow with Place of Birth

(b) **Left Thigh**. Father's Name

CONCLUSION

7. Identifying horses accurately is essential for effective management, breeding, and health care. Understanding key features such as breed characteristics, markings, and conformation helps in proper classification and record-keeping. This knowledge ensures better handling, enhances safety, and supports the preservation of valuable genetic traits across various horse breeds.

ASSESSMENT EXERCISES

1. Which of the following is not a common method of identifying a horse?

(a) Eye colour
(b) Color and markings
(c) Breed and age
(d) Microchipping

2. Which identification method is considered advanced?

(a) Coat colour
(b) Microchip
(c) Face marking
(d) Height

3. A star on a horse refers to?

(a) White hairs scattered across the back
(b) A white marking on the forehead
(c) A brand on the shoulder
(d) A white spot on the muzzle

4. What is a snip in horse facial markings?

(a) A wide stripe across the face
(b) A small white mark on the muzzle
(c) A white ring around the eye
(d) A broken stripe

5. A stripe on a horse is defined as?

(a) A wide band across the belly
(b) A narrow white line down the face
(c) A dark stripe on the back
(d) A patch over one eye

6. A blaze refers to?

(a) A brand mark
(b) A white patch near the ear
(c) A wide white stripe from forehead to muzzle
(d) A red patch on the leg

7. A bald face is characterized by?

(a) No white markings
(b) A very wide blaze extending to or past the eyes
(c) White patch on the chest
(d) A faint line over the nose

8. A broken stripe means?

(a) A stripe that ends at the eye
(b) A stripe with a gap or not continuous
(c) A white mark in the mane
(d) A scarred stripe

9. A sock marking goes?

(a) Above the knee
(b) Slightly higher than fetlock
(c) Only to the hoof
(d) To the tip of the ear

10. A stocking is a white marking that?

(a) Extends halfway up the leg
(b) Stops just below the fetlock
(c) Reaches to the knee or hock
(d) Is found on the mane

11. The fetlock marking is sometimes referred to as?

(a) Glove
(b) Sock
(c) Boot
(d) Patch

12. Which of the following is the tallest leg marking?

(a) Pastern
(b) Sock
(c) Fetlock
(d) Stocking

13. Branding is used for?

(a) Aesthetic purposes
(b) Coat colour improvement
(c) Permanent identification
(d) Racing performance

14. What are the two types of branding used on horses?

(a) Dry and wet branding
(b) Tattoo and sticker branding
(c) Hot and freeze branding
(d) Ink and chalk branding

15. On army horses, what is found on the left shoulder?

(a) Owner's initials
(b) Arrow with place of birth
(c) Horse's name
(d) Breed name

16. On army horses, what is branded on the left thigh?

(a) Date of birth
(b) Brand logo
(c) Father’s name
(d) Name of rider

17. What does freeze branding involve?

(a) Painting the horse
(b) Shaving a stripe
(c) Using extreme cold to create a permanent mark
(d) Temporary stickers

18. The use of branding on horses is primarily for?

(a) Decorative purposes
(b) Show classification
(c) Ownership and origin identification
(d) Reducing coat temperature

19. A star marking is located on the?

(a) Muzzle
(b) Forehead
(c) Cheek
(d) Neck

20. A snip is found on the?

(a) Forehead
(b) Neck
(c) Muzzle
(d) Ear

21. A blaze typically runs from?

(a) Ear to shoulder
(b) Forehead to muzzle
(c) Cheek to neck
(d) Mane to tail

22. A bald face marking may extend to.

(a) The ears
(b) The chest
(c) The eyes
(d) The legs

Short Answer Questions

1. How can horses be identified apart from their colour and markings?

2. What is a “snip” in horse facial markings?

3. Where is the branding mark placed on an army horse to show its father’s name?

4. What is the difference between a sock and a stocking leg marking?

5. Define “coronet band” in horse leg markings?

Long Answer Questions

1. Explain the importance of identification methods for horses and how they help horse owners, vets, and trainers?

2. Describe the different types of facial markings in horses with examples?

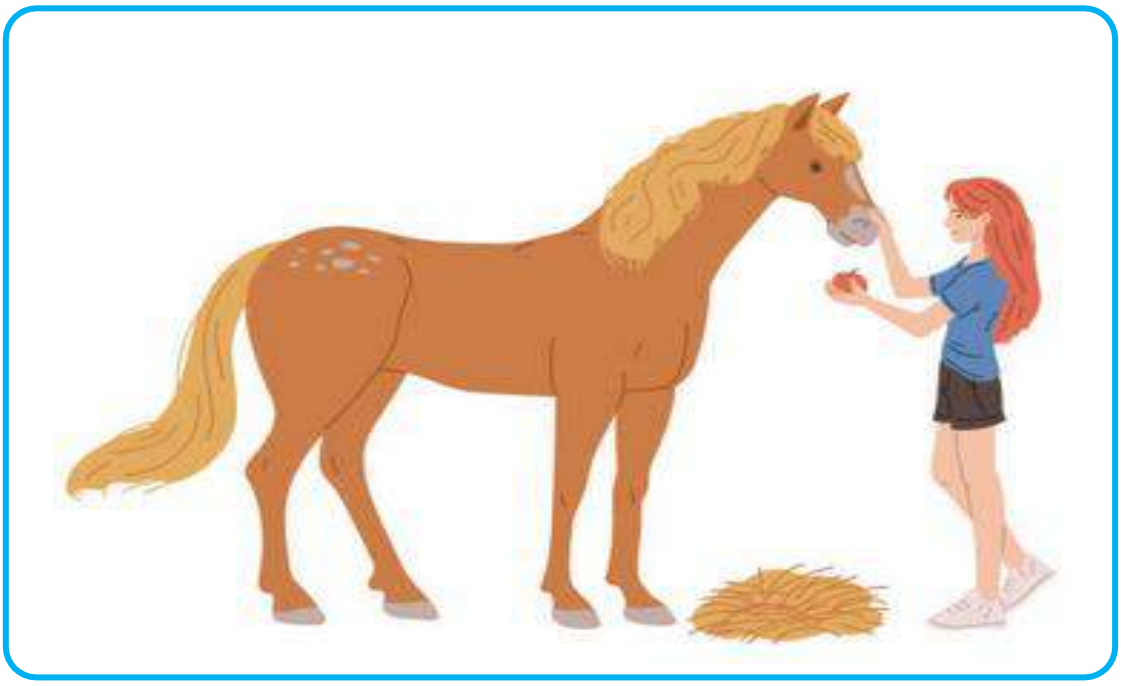
3. What are the various leg markings found on horses? Explain each briefly?

4. Discuss branding as a method of horse identification. How is it practiced in army horses?

5. Compare traditional methods of identifying horses with advanced methods like microchips and registration papers?

ANIMAL MANAGEMENT

CHAPTER V: ROUTINE EQUINE MANAGEMENT



TEACHING INSTRUCTIONS

Code	**:**	**AM – 5**
Period	**:**	**Two (01+01)**
Type	**:**	**Tutorial Discussion & Practical**
Year	**:**	**1st Year SD/ SW**
Conducting Officer	**:**	**PI Staff**
Training Aids	**:**	**Black board and chalk.**
Time Plan		
• **Introduction**	**:**	**05 Mins**
• **Part I: Watering and feeding**	**:**	**20 Mins**
• **Part II: Grooming**	**:**	**10 Mins**
• **Conclusion**	**;**	**05 Mins**

INTRODUCTION

1. Watering, feeding and grooming to keep a horse in good health, obtain the best appearance, find hidden injuries and develop better understanding between man and animal. This is an important aspect of animal management to ensure fitness of the horses.

PREVIEW

The lecture will be conducted in following parts:-

- Part I: Watering and Feeding
- Part II: Grooming

LEARNING OBJECTIVES

- To acquaint the cadets with advantages of watering, feeding and grooming to keep a horse in good health, obtain the best appearance, find hidden injuries and develop an understanding between man and animal.

PART I: WATERING AND FEEDING

2. **Golden rules of Feeding and Watering**.

(a) Feed a fibre-based diet and only supplement it with hard feed if absolutely necessary.

(b) Always offer water before feeding.

(c) Feed at the same time every day.

(d) Make any changes to the horses' diet or routine gradually.

(e) Always feed good quality, clean food.

(f) Feed according to type, temperament and amount of work being done by the horse.

(g) Always leave at least an hour between feeding and riding.

(h) Feed little and often, subdividing the ration into several smaller feeds throughout the day.

FEEDING MANAGEMENT

- Quality feeds
- Balanced rations
- Most of the ration – Hay
- Free choice to Salt
- Monitor Teeth regularly
- Regular Exercise
- Feed as Individuals

(j) Feed chaff mixed with the hard food so that the horse has to chew every mouthful.

(k) Feed something succulent.

Watering

3. Horses drink approximately 25 to 55 litres of water per day depending on the weather, their diet and the level of work they are doing. Water is essential to maintain a horses' health and it is vital that horses should have access to fresh clean water at all times, in the stable and the field.

Water in the Stable

4. Water buckets in the stable should be made from plastic, rubber or polythene. The water should be changed frequently and the buckets kept clean. Where possible, the water buckets should be placed in the corner of the stable to prevent them being knocked over. Automatic drinking bowls are a good alternative to water buckets, although they can cause problems because some horses do not take to them and it is difficult to tell how much has been drunk. Buckets and automatic watering devices must be kept clean so that the water remains fresh.

Feeding

5. The three guiding rules of feeding are:-

(a) Feed after and not before watering.

(b) Feed in small quantities and often.

(c) Do not work horses immediately after a full feed.

6. All the horses should be fed at the same time; otherwise, those left without food are likely to kick or bite, disturb and injure others. Horse should be fed at least four times every twenty-four hours with grain and chaff and twice with hay. As horse has a very small stomach for his size, he cannot eatmuch at one time without impairing his digestion. He should, therefore be fed little and often. Four times a day is the minimum, five times is better. The horse has very large intestines; and bulk is therefore, a necessity in his food. A horse will thrive indefinitely on grass or hay if not worked too hard, but may not keep good condition. If deprived of hay, chaff or other bulky foods, however more grain may be given. Within limits, the harder horses work, the greater should be the proportion of grain to hay. If hard work is expected immediately after feeding, a half feed only should be given. Aggressive horses may be fastened short when they feed from mangers and when there is no partition between stall /standings.

7. A good guide to the distribution of feeds is to give first feed as early as possible, in any case before the horse goes out to work or exercise. It may be small one if the horses will not be out. The last feed should be as late as possible and should be about equal in size to the second feed, which should be larger than the first or third feed. Hay or chaff should be given with the second and fourth feeds, slightly larger proportion being given with or after the fourth feed and as late as possible when horses have been bedded down for the night.

8. The following are the various types of feeds of horses:-

(a) **Barley**. It is the main source of carbohydrates for horses. A good quality barley grain is entire with cover or hull intact and with characteristic grain colour. Cracked grain should be avoided as it is prone to develop molds and make it less palatable. It should be free of foreign material such as pieces of paper, wood. It should be free from insects and have minimal dust.

(b) **Gram**. Gram is the source of protein in the ration. It is fed soaked to allow for easy breakdown in the mouth. The gram can also be fed entire. To enhance the dietary benefits small quantityof gram can be soaked and allowed to sprout before feeding.

(c) **Bran**. Bran is the husk of grain obtained during its processing. Two main types of bran are wheat bran and rice bran. Wheat bran is the preferred choice of feed as rice bran is likely to spoil in heat and storage. Bran is useful for feeding purposes to give bulk however, does not have much nourishment in it. It may be mixed with the grain in any proportion one-tenth to one-half of the total feed. To prevent it from being blown out, it may be slightly damped just before being given. Bran mashes are most useful for keeping in order the digestion of horses in hard work and preventing themfrom digestive complications on off days when the diet requirement is less. To make a bran mash, place 1.125 gms to 1.350 gms of bran in a stable bucket and pour slowly over it enough boiling water to wet it thoroughly, stirring all the time. Then cover the bucket with a blanket, wrapping it well round the bucket so as to keep the heat in. Let it stand half an hour to three-quarters of an hour and feed when cool enough to eat. No grain or chaff should be mixed with the bran mash except a handful of grain for horses do not like to eat bran alone. The water should be boiling in order to cook the bran properly. Usually, the mash is given as the last feed in the evening and salt may be added to make it more palatable.

(d) **Hay**. It is primarily used as bedding and if properly utilized also supplements the diet. Chaff can be improvised out of hay by having a proportion of the hay cut up and mixed with the grain. Its action is to give bulk to the feed, make the horse eat slowly and masticate his food. Bedding provides comfort and warmth in winters. It also provides a firmfooting on slippery floors. Good hay should have the following qualities:-

(i) Small, flexible stems

(ii) Bright dark green colour, which indicates high protein and vitamin content. Browning of hay indicates a loss of nutrients.

(iii) Bad or unusual odor.

(iv) **No Molds**. Molds occur because of fungus, which grows if the hay has been packed without proper drying.

(e) **Salt**. Salt should be given to horses at a rate of 30 gms/day for each horse. It is especially valuable when no green forage is available. It can be dissolved in water (450 gms of salt to 4.546 Ltr) and mixed with the feed. In stables, rock salt should be kept in the manger of every horse.

9. **Other Feeds**.

(a) **Oats.** They are the best grain for horses, though maize and wheat can be useful substitutes/additives as part of the ration depending on cost effectiveness. Both maize and wheat are less palatable as compared to oats.

(b) **Green Forage**. Green forage, such as grass, oats, lucerne, berseem or maize, assists a horses' digestion and keeps his body coat in good order. In winter, carrots, turnips, or beetroot can be fed to replace green forage. Whenever opportunity offers, horses should be left for grazing.

(c) **Oil Supplements**. Adding oil to the horses' diet is a way of giving more energy without increasing the bulk of feed. For higher energy need of the horses used in sports, oil supplements the energy requirement.

10. The horse readily utilizes all kinds of oil; however, they may differ in palatability. Amount of oil that can be fed in the diet is up to 10% maximum of the total weight of the grain.

11. **Standard Daily Scale of Rations in Indian Army**.

S No	Animals	Gram Crushed in Kgs	Barley Crushed in Kgs	Bran inKgs	Salt in Kgs	Fodder/ Hay in Kgs	Hay for Bedding In Kgs
(a)	Rides,Cl A	1.360	2.040	1.130	0.030	9.070	1.360
(b)	Rides, Cl B	1.360	1.810	0.910	0.030	8.160	1.360
(c)	Mules Mountain Artillery	1.130	1.360	-	0.020	9.070	-
(d)	Mules General Service, Ponies	-	2.490	-	0.020	7.260	-

PART II: GROOMING

12. A horse in work must be groomed regularly to keep the pores of the skin open and free from scurf and dirt. Every horse should be groomed at least once a day. Without proper grooming the sweat glands cannot act efficiently, the horse's skin will become unhealthy and germs which can cause disease are likely to collect. Thorough grooming once a day will keep a horse in health, but to obtain the best appearance a horse should

be groomed twice a day. Hidden injuries are discovered while grooming and it develops better understanding between man and animal.

13. A horse should be groomed systematically, the objective being to clean the horse both thoroughly and quickly. Hard boots should always be worn and spurs should always be removed.

(a) The grooming equipment includes:-

(i) Dandy brush, for removing dry mud or dry sweat.

(ii) Body brush, for cleaning the horse.

(iii) Hoof pick.

(iv) Cloth sponge, for cleaning the horse's eyes, lips,nostrils and dock.

(v) Curry comb, for cleaning the body brush.

(vi) A water brush, for cleaning the feet, mane and tail.

(vii) A mane or tail comb.

(viii) A wisp, for massaging.

(ix) Rubber, for proper shine to the coat.

(b) **Dandy Brush**. These are made of stiff whisk fiber. It is too hard to use as a body brush and their use is limited to the removal of hard-caked dirt, rest of the grooming being performed with the body brush.

(c) **Body Brush**. Made of stout bristles of plastic or vegetable fiber and have a broad hand-loop of webbing across the back to prevent the brush slipping from the grasp. It is used to remove scurf and dirt from the coat.

(d) **Hoof Picker**. A flat iron hook made in 'S' shape with one end rounded to hold andother end to clean the central and lateral clefts of frog and sole.

(e) **Sponge**. It is commonly used during grooming for the eyes, lips, nostrils and dock. Though the convenience of sponges for this purpose is undoubted, they should invariably be prohibited on the appearance of any contagious disease, as they are one of the commonest channels by which infection can be spread.

(f) **Curry Combs**. It is used for cleaning the body brush. The service pattern of curry comb consists of several straight, blunt toothed blades in a metal back, with broad loop webbing for the purpose of securing it on the back of the hand. It is essential that the teeth should be smooth and blunt.

14. **Grooming Parade**. Schedule of grooming is as under.

S No	Activity	Duration
(a)	Brush massage	20 min
(b)	Hand massage	10 Min
(c)	Hoof Cleaning	05 Min
(d)	Nose, Eyes, Ear and Dock cleaning with duster	05 Min
(e)	Wiping and Patting the horse	05 Min
(f)	Cleaning the mane and tail	05 Min
(g)	Inspection	06 Min
(h)	Total	56 Min

CONCLUSION

15. Watering feeding and Grooming are essential and basic aspects of horse management and ensuring that these drills are followed in letter and spirit is of paramount to ensure fitness of the horses, keep a horse in good health, obtain the best appearance and improve their performance.

ASSESSMENT EXERCISES

1. Fiber is a?

(a) Simple carbohydrate
(b) Vitamin
(c) Mineral
(d) Complex carbohydrate

2. How much fats and oils do horses need in their diets?

(a) 12–14%
(b) 2–4%
(c) 20%
(d) 9%

3. A horse needs how much fiber in its diet?

(a) 20% of body weight
(b) 10% of body weight
(c) 2% of body weight
(d) 1% of body weight

4. Proteins helps repair?

(a) Skin
(b) Muscle
(c) Bone
(d) All of the above

5. Feeds high in proteins are?

(a) Alfalfa
(b) Grass
(c) Linseed
(d) Oats

6. What are the items included in the ration?

(a) Gram
(b) Barley
(c) Bran
(d) All the above

7. Salt to be included in the ration of Ride A horses in peace scale?

(a) 0.040 kg
(b) 0.050 kg
(c) 0.030 kg
(d) 0.020 kg

8. Salt to be included in the ration of Ride A horses in field scale?

(a) 0.040 kg
(b) 0.050 kg
(c) 0.030 kg
(d) 0.020 kg

9. The scale of Barley in Kgs for a Ride A horse in peace is?

(a) 2.040
(b) 1.130
(c) 1.360
(d) 0.0030

10. The scale of Bran in Kgs for a Ride A horse in peace is?

(a) 2.040
(b) 1.130
(c) 1.360
(d) 0.0030

11. The scale of Gram in Kgs for a Ride B horse in peace is?

(a) 1.810
(b) 0.910
(c) 1.360
(d) 0.0030

12. The scale of Bran in Kgs for a Ride B horse in peace is?

(a) 1.810
(b) 0.910
(c) 1.360
(d) 0.0030

13. The scale of Barley in Kgs for a Ride B horse in peace is?

(a) 1.810
(b) 0.910
(c) 1.360
(d) 0.0030

14. The scale of Salt in Kgs for a Ride B horse in peace is?

(a) 1.810
(b) 0.910
(c) 1.360
(d) 0.0030

15. Why is regular grooming important for a horse?

(a) To make the horse look pretty for competitions
(b) To maintain skin health, remove dirt, and improve circulation
(c) To keep the stable clean
(d) To change the horse's coat colour

16. Which grooming tool is used to remove mud, dirt, and loose hair from a horse's coat?

(a) Hoof pick
(b) Curry comb
(c) Mane comb
(d) Sweat scraper

17. What is the purpose of using a hoof pick during grooming?

(a) To clean the horse's teeth
(b) To remove dirt and debris from the hooves
(c) To trim the mane and tail
(d) To brush the coat

18. When is the best time to groom a horse?

(a) Only before a competition
(b) Before and after riding or exercise
(c) Once a month
(d) Only during winter

19. What is the function of a mane and tail brush?

(a) To clean the hooves
(b) To remove sweat from the horse's body
(c) To detangle and smooth the horse's mane and tail
(d) To remove loose fur from the coat

20. What is the recommended type of diet for horses?

(a) High protein, low fiber
(b) High fat, low carb
(c) Fiber-based with hard feed only if necessary
(d) All grains and no fiber

21. When should water be offered in relation to feeding?

(a) After feeding
(b) During feeding
(c) Before feeding
(d) Not necessary if the feed is moist

22. What is a golden rule regarding feeding time?

(a) Feed only when the horse is hungry
(b) Feed only once daily
(c) Feed at the same time every day
(d) Feed late at night only

23. How should changes to a horse's diet or routine be made?

(a) Suddenly to test digestion
(b) Gradually
(c) Weekly
(d) Only after a vet visit

24. Why should chaff be mixed with hard food?

(a) It tastes better
(b) It reduces dust
(c) It forces the horse to chew each mouthful
(d) It is colorful

25. What is a recommended water intake for horses per day?

(a) 10–20 liters
(b) 25–55 liters
(c) 70–100 liters
(d) 5–10 liters

26. One of the three guiding feeding rules is?

(a) Feed before watering
(b) Feed in large quantities
(c) Feed in small quantities and often
(d) Work horse right after feeding

27. Why should horses be fed at the same time?

(a) Helps horses sleep
(b) Prevents fighting and injuries
(c) Increases appetite
(d) Saves food

28. What is the main source of carbohydrates in horse feed?

(a) Hay
(b) Oats
(c) Barley
(d) Salt

29. Which feed provides protein and can be fed soaked or sprouted?

(a) Hay
(b) Bran
(c) Gram
(d) Oats

30. Which is not a good quality of hay?

(a) Bright dark green colour
(b) Small, flexible stems
(c) Browning and mold
(d) High protein content

31. Which feed is the best grain for horses overall?

(a) Barley
(b) Oats
(c) Maize
(d) Wheat

32. Up to what percentage of oil can be added to a horse's grain diet?

(a) 5%
(b) 10%
(c) 15%
(d) 20%

33. When should the last feed ideally be given?

(a) Just before work
(b) Midday
(c) As late as possible
(d) Early morning

34. Why is grooming important for a working horse?

(a) To keep the coat shiny only
(b) For decorative purposes
(c) Keeps skin healthy and detects injuries
(d) To prepare for competitions only

35. Which grooming tool is used to clean the horse’s eyes, nostrils, lips, and dock?

(a) Hoof pick
(b) Curry comb
(c) Sponge
(d) Mane comb

36. Which tool removes caked dirt but is too harsh for body brushing?

(a) Dandy brush
(b) Body brush
(c) Water brush
(d) Wisp

37. What is the purpose of the hoof pick?

(a) Massage the hooves
(b) Polish the hooves
(c) Clean clefts of frog and sole
(d) Clip the hooves

38. How long is a full grooming parade according to schedule?

(a) 30 minutes
(b) 45 minutes
(c) 56 minutes
(d) 1 hour 30 minutes

Short Answer Questions

1. State any two golden rules of feeding horses.

2. How much water does a horse drink daily on average?

3. What are two main types of bran used for horse feed?

4. Name any two grooming equipment used for cleaning a horse.

5. How often should a working horse be groomed?

Long Answer Questions

1. Explain the golden rules of feeding and watering horses.

2. Describe the different types of legume and grain-based feeds commonly given to horses.

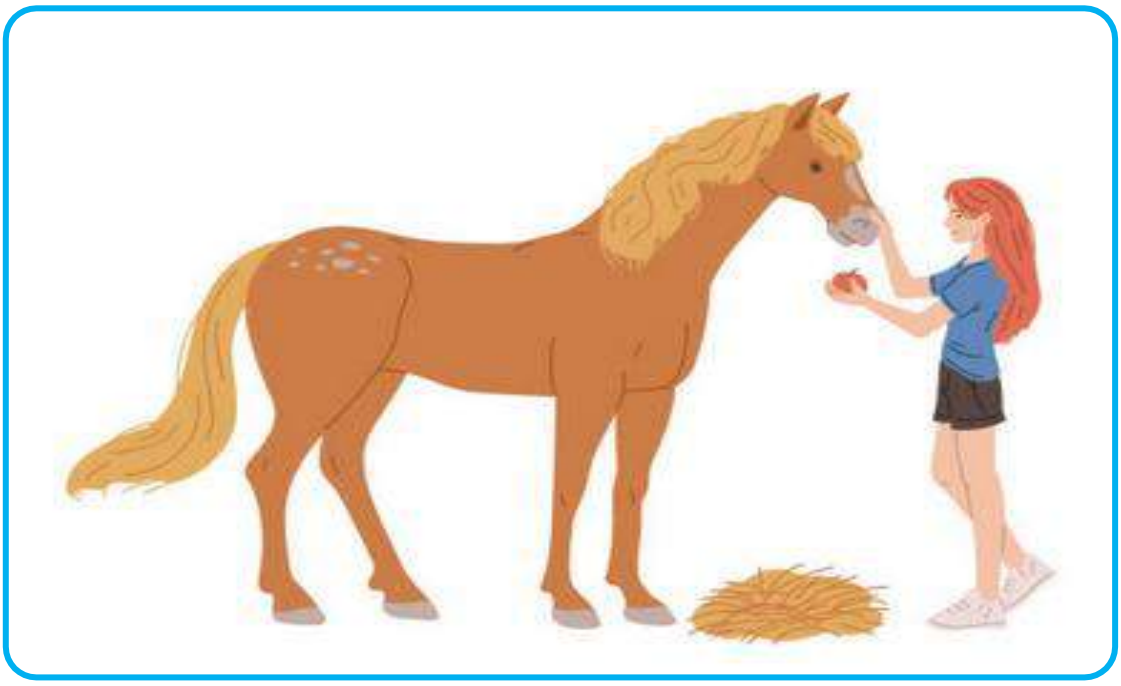
3. Discuss the importance of water management in stables and the advantages/disadvantages of automatic drinking bowls.

4. What are the standard daily rations of horses and mules? Explain with examples.

5. Explain the importance of grooming and describe the equipment and schedule followed in grooming a horse.

ANIMAL MANAGEMENT

CHAPTER VI: CLIPPING OF HORSES



TEACHING INSTRUCTIONS

Code	**:**	**AM-6**
Period	**:**	**Two (01+01)**
Type	**:**	**Tutorial Discussion & Practical**
Year	**:**	**2nd Year SD/ SW**
Conducting Officer	**:**	**PI Staff**
Training Aids	**:**	**Black board and chalk.**
Time Plan		
• **Introduction**	**:**	**05 Mins**
• **Clipping**	**:**	**30 Mins**
• **Conclusion**	**;**	**05 Mins**

INTRODUCTION

1. Clipping horses is a common practice that provides several benefits, including improved temperature regulation, increased comfort, and easier grooming. It also aids in hygiene and can be helpful for treating wounds or skin conditions. However, it's important to consider the horse's individual needs and the type of work it performs when deciding whether or not to clip.

PREVIEW	LEARNING OBJECTIVES
The lecture will be conducted in following parts:- ➢ Part I: Equipment and Preparation of Horse ➢ Part II: Clipping of Horse	➢ To acquaint the cadets with clipping of horses.

PART I: EQUIPMENT AND PREPARATION OF HORSE

2. **Clipping Machines**.

3. **Clipping**. Clipping is essential for horses required to work hard in the winter. A clipped horse is capable of agreater amount of work with less distress and is cleaned with much less effort than an unclipped horse. An unclipped horse, after sweating, takes a long time to dry and runs a great risk of catching a chill. Normally horses should first be clipped as soon as they have their winter coats; this usually occurs during October. After the first clipping the horse must be re-clipped from time to time according to the growth of the coat which varies considerably with individual horses. The later the firstclipping is carried out, the less often subsequent clipping will be necessary, as the hair grows less rapidly. A commanding officer can exercise his discretion regarding the clipping of horse's bodies. Clipping machines hand operated or machine driven are used for this purpose. Heels and manes are neatly trimmed with scissors.

PART II – CLIPPING OF HORSE

4. **Importance of Clipping.** Importance of clipping which are as under:-

(a) **Temperature Regulation**.

(i) **Preventing Overheating**. A thick winter coat can cause horses to overheat, especially during exercise or during warm weather. Clipping helps regulate body temperature by allowing heat to escape more easily.

(ii) **Drying Time**. Clipped horses dry faster after sweating, reducing the risk of chills and other health problems.

(b) **Comfort and Performance**.

(i) **Reduced Sweating**. Clipping minimizes sweat production making horses more comfortable and efficient during work.

(ii) **Improved Endurance**. Less sweating means horses can maintain their energy levels and endurance for longer periods.

(iii) **Reduced Risk of Heat-Related Issues**. Clipping can help prevent heat exhaustion and other heat-related problems.

(c) **Hygiene and Grooming**.

(i) **Easier Cleaning**. Clipping makes it easier to clean and groom the horse, reducing the accumulation of dirt, sweat, and parasites.

(ii) **Improved Skin Health**. Clipping can help prevent skin conditions like rain rot and fungal infections.

(iii) **Wound Care**. Clipping can make it easier to treat wounds andapply medications.

(d) **Aesthetics and Presentation**.

(i) **Neater Appearance**. Clipped horses often have a neater and more polished appearance, which can be advantageous for shows and competitions.

(e) **Other Benefits**.

(i) **Weight Management**. Clipping can help with weight loss by increasing calorie burn.

(ii) **Welfare**. Clipping can improve the welfare of horses by reducing discomfort and promoting hygiene.

5. The decision as to when to clip would be governed by under mentioned factors:-

(a) **Winter Work**. Horses engaged in regular work, particularly during the winter months, often benefit from clipping.

(b) **Show Preparation**. Clipping can be part of the preparation process for shows and competitions.

(c) **Individual Needs**. The decision to clip should be based on the individual horse's needs and the type of work it performs.

6. After clipping rugs are to be fitted specially in winter to protect against cold. The fitting of the rug is important. The neck opening should not be too large, or the rug will work back over the shoulders until the top is drawn tightly across the withers and may cause a sore from pressure.

7. There are several types of clipping on a horse, including:

(a) **Full Clip**. Removes hair from the entire body, including legs, head, and ears.

(b) **Hunter Clip**. Leaves hair on the legs and saddle area for warmth.

(c) **Blanket Clip**. Removes hair from the body while leaving a blanket of hair on the back.

(d) **Trace Clip**. Leaves hair on the back, shoulders, and legs.

(e) **Irish Clip**. Similar to the trace clip but with a more defined pattern.

(f) **Bib Clip**. Removes hair from the neck and chest area only.

CONCLUSION

7. In summary, horse clipping is a nuanced practice that balances the horse's comfort, health, and performance needs. Selecting the appropriate clip, be it a full clip, blanket clip, hunter clip, or trace clip—depends on factors such as the horse's workload, living conditions, and the climate. Each clip type serves a specific purpose, from aiding in weight management by increasing energy expenditure to enhancing performance by reducing sweating during intense activities.

ASSESSMENT EXERCISES

1. What is the primary reason for clipping a horse's coat?

(a) To change the horse's colour
(b) To help regulate body temperature and reduce sweating during work
(c) To make the horse look smaller
(d) To prevent the horse from growing a mane

2. When is the best time to clip a horse?

(a) In the middle of summer
(b) Before competitions only
(c) During colder months when the coat grows thicker
(d) Only when the horse is shedding naturally

3. What tool is commonly used for clipping a horse's hair?

(a) Scissors
(b) Shears
(c) Electric clippers
(d) Razor blades

4. How should a horse be prepared before clipping?

(a) Leave the coat dirty to make it easier to cut
(b) Wet the coat thoroughly
(c) Clean and dry the coat to prevent the clippers from getting clogged
(d) Apply oil to the entire coat

5. Why should a horse's coat be cleaned before clipping?

(a) To remove dirt and grease that could clog the clippers
(b) To make the horse look shinier
(c) To make the horse feel relaxed
(d) To ensure the coat stays long

6. What is the primary reason for clipping horses in winter?

(a) To make them look fancy
(b) To improve skin colour
(c) To reduce sweat and overheating during work
(d) To save feed

7. What is a major risk for unclipped horses after sweating in winter?

(a) Overeating
(b) Hoof infections
(c) Chills and health problems
(d) Skin darkening

8. When do horses usually develop their winter coat requiring the first clip?

(a) July
(b) October
(c) December
(d) March

9. What determines how often a horse must be re-clipped?

(a) Size of the horse
(b) Speed of coat growth
(c) Breed alone
(d) Color of the horse

10. What tool is generally used for clipping a horse's body?

(a) Curry comb
(b) Clippers (hand or machine-operated)
(c) Hoof pick
(d) Water brush

11. Which tool is used for trimming manes and heels?

(a) Clippers
(b) Shears
(c) Scissors
(d) Curry comb

12. Which of the following is a temperature regulation benefit of clipping?

(a) Hair growth stimulation
(b) Weight gain
(c) Preventing overheating
(d) Making coat shinier

13. Clipped horses dry faster after sweating, reducing the risk of:

(a) Dehydration
(b) Muscle cramps
(c) Catching a chill
(d) Hoof cracking

14. What is a comfort benefit of clipping?

(a) Better sleep
(b) Reduced sweating
(c) Faster hoof growth
(d) Higher appetite

15. How does clipping affect a horse's performance?

(a) It makes them heavier
(b) Improves endurance and energy conservation
(c) Increases fatigue
(d) Encourages laziness

16. How does clipping help in hygiene?

(a) Helps grow thicker coat
(b) Reduces the need for grooming
(c) Makes cleaning easier and prevents skin diseases
(d) Reduces feeding frequency

17. What skin conditions can be prevented by clipping?

(a) Sunburn
(b) Rain rot and fungal infections
(c) Itching
(d) Hair fall

18. Clipping helps in wound care by?

(a) Preventing bleeding
(b) Making it easier to apply medication
(c) Reducing pain
(d) Growing new skin

19. Which aesthetic benefit does clipping offer?

(a) Brighter eyes
(b) Neater and polished appearance
(c) Whiter teeth
(d) Faster mane growth

20. How does clipping help with weight management?

(a) Reduces feeding
(b) Increases energy usage and calorie burn
(c) Builds muscle mass
(d) Prevents weight loss

21. When is it recommended to clip horses doing winter work?

(a) After summer ends
(b) During summer only
(c) Before work starts in winter
(d) After competition

22. What is an important factor in deciding when to clip a horse?

(a) Horse's colour
(b) Rug brand
(c) Individual needs and workload
(d) Feed type

23. What is the role of clipping in show preparation?

(a) Disqualifies horses
(b) Makes them harder to clean
(c) Helps present a neater, well-groomed look
(d) Removes energy

24. Why are rugs important after clipping?

(a) They help the coat grow back
(b) Prevent overheating
(c) Protect the clipped horse from cold
(d) Keep the hooves dry

25. What can happen if the neck opening of a rug is too large?

(a) The rug will rip
(b) The rug will trap air
(c) The rug will move and cause pressure sores
(d) The rug will fall off completely

26. Which clip type is best for maximum body cooling during intense activity?

(a) Trace clip
(b) Blanket clip
(c) Full clip
(d) Mane clip

27. Clipping contributes to horse welfare by:

(a) Making horses eat more
(b) Causing less coat to grow
(c) Reducing discomfort and improving hygiene
(d) Saving grooming time

28. A hunter clip typically leaves which part of the horse unshaven?

(a) Entire body
(b) Just legs and saddle area
(c) Tail only
(d) Ears only

29. Why might some horses need to be clipped more often than others?

(a) They are younger
(b) Their coat grows faster
(c) They eat more
(d) They are smaller in size

30. What is the role of electric clippers in grooming?

(a) Used for hoof trimming
(b) Used for mane braiding
(c) Used for coat clipping
(d) Used for tail cleaning

31. What should be done after clipping to ensure horse comfort?

(a) Leave the horse outside
(b) Apply oil to the coat
(c) Use appropriate rugs for warmth
(d) Wash the horse with cold water

Short Answer Questions

1. Why is clipping considered essential for horses that work hard during winter?

2. When is the first clipping of a horse usually carried out, and why?

3. How does clipping help in maintaining hygiene and grooming of a horse?

4. Why should rugs be fitted after clipping, especially in winter?

5. Name any three common types of clipping patterns in horses.

Long Answer Questions

1. Explain how clipping helps in regulating the temperature of horses and preventing health risks.

2. Discuss the impact of clipping on comfort and performance of horses during work.

3. Describe the main factors that govern the decision of when a horse should be clipped.

4. Explain the different types of clipping styles used on horses and the purpose of each.

5. Discuss the overall benefits of clipping in terms of temperature regulation, comfort, hygiene, aesthetics, and welfare.

ANIMAL MANAGEMENT

CHAPTER VII: STABLE VICES

TEACHING INSTRUCTIONS

Code	**:**	**AM - 07**
Period	**:**	**One (01)**
Type	**:**	**Tutorial Discussion**
Year	**:**	**2nd Year SD/ SW**
Conducting Officer	**:**	**ANO**
Training Aids	**:**	**Black board and chalk.**
Time Plan		
• **Introduction**	**:**	**05 Mins**
• **Stable vices**	**:**	**30 Mins**
• **Conclusion**	**:**	**05 Mins**

INTRODUCTION

1. Knowledge of stable vices of horses helps the student understand the methods to handle awkward horses and keep themselves safe from injury.

PREVIEW	LEARNING OBJECTIVES
The lecture will be conducted as follows:- ➢ Part I: Stable Vices and their management	➢ To acquaint the cadets with various vices in the horses.

PART I: STABLE VICES AND THEIR MANAGEMENT

2. Horses should be kept out of the stable as long as possible daily; for long bouts of work are a distinct preventive of stable tricks and vices, as well as beneficial to the general health and condition.

HORSE VICES

- ➢ Horses have individual characteristics and feelings.
- ➢ Likely to exhibit vices from time to time.
- ➢ Result of bad training or situational circumstances, not born with bad behaviour.
- ➢ Avoid these problems in the first place by providing regular, appropriate stimulation.

Weaving

3. It is a nervous habit acquired by horses of excitable temperament coupled with boredom and frustration in the stable. The horse shifts its weight from one foot to another, sometimes lifting each forefoot in turn as the body is swayed to the opposite side. A constantly weaving horse loses condition. The habit is difficult to remove and is highly imitable. It is advisable that a weaver should be kept apart, so that others are not disturbed, and do not learn from observation.

4. **Prevention**.

(a) It can be discouraged by installing a vertical bar above the stable door so that every time the horse rocks sideways he touches it.

(b) The horse‘s ration can be divided into many numbers of feeds of small quantity to keep him occupied in the stable.

Wind Sucking and Crib Biting

5. A wind-sucker is an animal that swallows air by arching its neck, drawing its head towards its chest, and giving a gulp. A crib biter achieves the same end but leans on or catches hold of the manger with the teeth to get firm hold and at the moment he gulps a characteristic '**grunt**' is emitted. Horses are prone to learn this habit from boredom and are incurable if set in for a long time. The effect of the constant pressure of the incisor teeth of the crib-biter against the manger or other hard objects, results in the front of the teeth of both the upper and lower jaw getting worn out, and in bad cases they may be down to the level of the gums. Indigestion and colic, frequently result from wind sucking and crib biting.

6. **Prevention**. To prevent horses indulging in them, the main cause i.e. boredom should be removed. A broad strap fitting tightly round the top of the neck, with a small wooden or rounded rubber gullet plate stitched on so that it projects on each side and sticks into the throat when the head is bent, will stop both windsuckers and crib biters habits. However, as the discomfort to the horse is immense, this application needs supervision.

Biting

7. A playful habit of snapping at the man while being groomed which some horses display may not be viciousness, but as the results are equally painful, it should not be encouraged by unnecessary tickling. A wicked biter, when being groomed or otherwise handled may be rendered safe for the time being by a thick wooden bit which prevents the teeth being closed.

8. **Prevention**. Putting on a nosebag is effective to prevent biting.

Tearing

9. Horses inside stables develop habit of tearing rugs due to boredom.

10. **Prevention**. This bad stable habit can be prevented using a stout leather guard fixed on the head collar. This should be of sole leather fastened to the back strap of the nose band and sufficiently deep to reach well below the level of the lips; this will render it impossible for the clothing to be reached by the teeth, and as it is permanently attached to the head collar, it is always inplace when required. Secondly loose-fitting clothing should be avoided.

Kicking

11. Kicking in the stable may be due to lack of work bad handling or presence of flies in the stables. It is more common in mares than in geldings. Some animals kick constantly in the dark, anda light in the stable keeps them quiet, but others will continue the habit despite every precaution.

Pawing

12. Pawing is a nuisance. The horse continuously paws at the floor and digs a hole that requires repair in stable. Pawing creates the possibility of leg injury. It can be a sign of frustration, impatience, anxiety, mental stress, physical discomfort, boredom, hunger, excess energy, isolation, or anticipation of a treat. Horses will generally start pawing out of boredom, impatience, or stress and once this habit is formed, it can be fairly hard to break.

GENERAL RECOMMENDATIONS

- Reduce time spent indoors by horse
- Keep horses in herds, not alone
- Provide a forage-based diet
- Use positive training methods

CONCLUSION

13. The knowledge of the vices will ensure safety and security of riders as well as the horses during dailymanagement.

ASSESSMENT EXERCISES

1. What are stable vices in horses?

(a) Natural behaviors that all horses exhibit
(b) Undesirable repetitive behaviors often caused by boredom or stress
(c) Temporary habits that disappear with time
(d) Diseases affecting the horse's hooves

2. Which of the following is a common stable vice in horses?

(a) Grazing
(b) Weaving
(c) Rolling
(d) Trotting

3. What is cribbing in horses?

(a) A type of bedding used in horse stalls
(b) Biting and swallowing large amounts of feed
(c) Chewing on a surface and sucking in air
(d) Kicking the stable walls

4. What is a major health risk associated with cribbing?

(a) Hoof infections
(b) Colic and dental wear
(c) Increased appetite
(d) Loss of vision

5. Which stable vice involves a horse shifting its weight from one front leg to the other repeatedly?

(a) Stall walking
(b) Kicking
(c) Weaving
(d) Windsucking

6. Why do horses develop stable vices?

(a) Due to boredom, stress, or lack of social interaction
(b) Because they are naturally aggressive animals
(c) As a way to improve their digestion
(d) Only when they are young and inexperienced

7. Which stable vice involves the horse repeatedly walking in circles inside the stall?

(a) Cribbing
(b) Stall walking
(c) Pacing
(d) Both B and C

8. What is the best way to prevent stable vices?

(a) Keeping horses in isolation
(b) Providing ample turnout, socialization, and mental stimulation
(c) Feeding less food to keep them occupied
(d) Using punishment to stop the behavior

9. Which stable vice can lead to damage to stable walls and potential leg injuries?

(a) Pawing and kicking
(b) Weaving
(c) Cribbing
(d) Windsucking

10. How can stable vices be managed or reduced?

(a) Increasing exercise and turnout time
(b) Providing toys and slow feeders
(c) Allowing social interaction with other horses
(d) All of the above

Short Questions

1. What is weaving in horses?

2. How does wind sucking harm a horse's digestion?

3. State one method to prevent crib biting.

4. Why do horses start tearing rugs in stables?

5. Which stable vice occurs more frequently in mares than in geldings?

Long Questions

1. Explain why keeping horses out of stables for long periods helps prevent stable vices and improves health.

2. Describe the causes, symptoms, and prevention of weaving in horses.

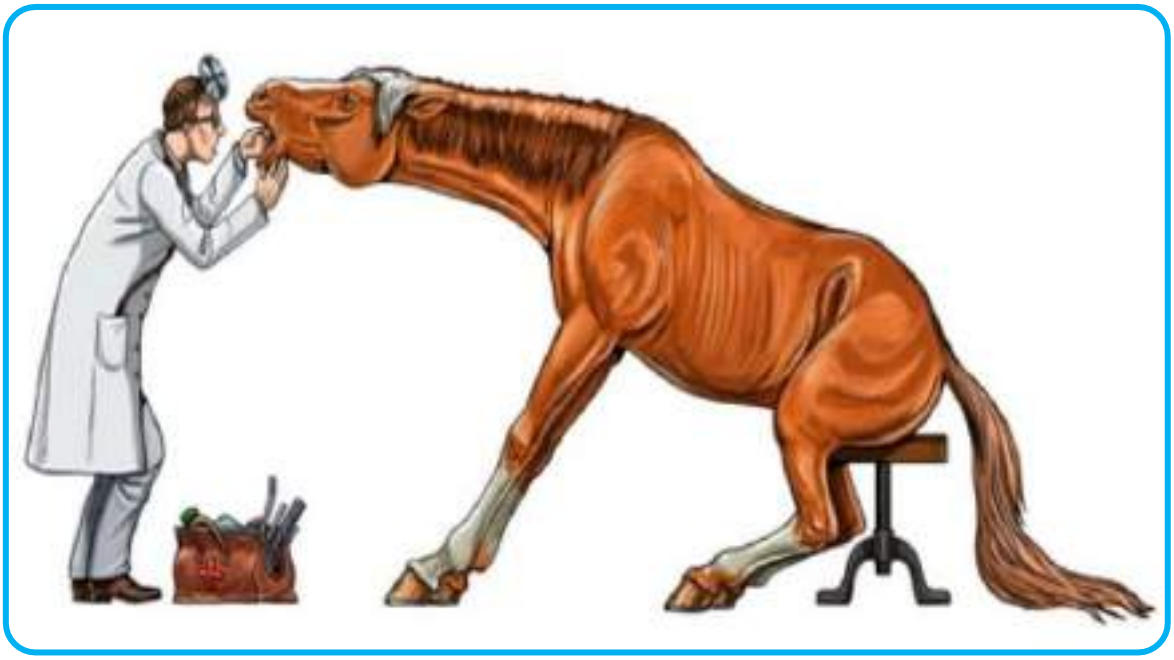
3. Discuss wind sucking and crib biting in detail, including their effects on teeth and digestion.

4. Explain the preventive measures for biting and tearing habits in stabled horses.

5. What are the causes of kicking in stables and how can this behaviour be controlled?

ANIMAL MANAGEMENT

CHAPTER VIII: AILMENTS OF HORSES



TEACHING INSTRUCTIONS

Code	:	**AM – 08**
Period	:	**Three (02+01)**
Type	:	**Tutorial Discussion & Practical**
Year	:	**3rd Year SD/ SW**
Conducting Officer	:	**Officer / NA Vet**
Training Aids	:	**Black board and chalk.**
Time Plan		
• **Introduction**	:	**05 mins**
• **Ailments of Horses**	:	**70 mins**
• **Conclusion**	:	**05 mins**

INTRODUCTION

1. Knowledge of minor ailments of Horses and their management helps students to manage emergency cases and provide immediate first aid.

PREVIEW	LEARNING OBJECTIVES
The lecture will be conducted as follows:- ➢ Part I: Various minor Ailments of Horses and their Management	➢ To acquaint the cadets with minor ailments of horses and their management.

PART I: MINOR AILMENTS AND MANAGEMENT

2. Many minor ailments can be avoided by good animal management and horsemanship. This can only be ensured if the rider makes himself/herself acquainted with the causes, symptoms and treatments of common minor ailments which are described as under.

3. **Ailment or Injury**. Their symptoms, causes and treatment are tabulated below:-

(a)	**Brushing**	**Symptoms** Wounds on inside of fetlock. **Causes** (i) Careless riding. (ii) Faulty action/ gait (iii) Bad shoeing (clinches of shoe projecting) (iv) Fatigue and loss of condition. **Treatment** See wounds, remove cause ifdue to bad shoeing and puton anti-brushing boot.
(b)	**Colic**	**Symptoms** Horse is restless or unusually dull, looks around at his flanks, tries to lie down and roll; stamps with fore or hind legs; kicks at his belly. **Causes** (i) Mismanagement of feeding & watering. (ii) Swallowing sand either in drinking water or feed. **Treatment** Walk horse around, withhold feed, allow free access to water. Animals suspected of colic should be immediatelyreported to the Veterinaryofficer.

(c)	**Coughs and Colds**	**Symptoms** Coughing and discharge from nose and eyes. **Causes** (i) Sudden changes of temperature. (ii) Draughts when heated or damp stables. (iii) Badly ventilated / damp stables. **Treatment** Consider contagious, isolate, treat as fever.
(d)	**Debility**	**Brief** It is weakness of one or more systems of the body. Results in loss in weight and condition. **Causes** (i) Unbalanced diet. (ii) Insufficient rations. (iii) Bad feeding. (iv) Over work. (v) Old age. (vi) Bad animal management. (vii) Worms. (viii) Irregular molars. (ix) After effects of some disease e.g. surra. (x) Bad or oily water found in some parts of the country. **Symptoms** (i) Loss of body weight and sheen of the coat. (ii) Flesh becomes thin over the ribs. (iii) Pronounced showing up of the backbone. (iv) Animal cannot do normal duties and is liable to fall and sustain injuries. **Treatment** Rest and Careful supervision of feeding.
(e)	**Diarrhea**	**Cause** (i) Overwork. (ii) Unsuitable food. (ii) Exposure. **Treatment** Give dry bran; keep body warm; reduce work if overwork is cause of ailment.
(f)	**Discharge from Nostrils Eyes or Mouth**	**Symptoms** Running nose with discharge form one or both nostrils **Treatment** Isolate and obtain veterinary advice. Great care should be exercised in cases where thereis a discharge from the nostrils, as the disease may be glanders, which is contagious and communicable to man.

(g)	**Exhaustion**	**Symptoms** Horse lies down; disinclined to feed although unusually thirsty; sometimes considerable sweating although body is cold. **Treatment** Keep body warm with rugs and bandages, feed in small quantities and often with warm bran mashes.
(h)	**Fever**	**Symptoms** Temperature over 100.2 F; off its feed and dull. **Treatment** Isolate; cool with the bath, bandages etc. Keep water always available for horse to drink and change it frequently; give plenty of fresh air
(j)	**Galls**	**Symptoms** (i) Any injury inflicted by harness and saddlery and its parts including load is termed as a gall. These injuries are due to a certain definite cause and hence can be obviated by removing the cause itself. (ii) The skin is rubbed and the upper layers removed exposing sensitive parts. **Treatment** (i) These injuries are due to a certain definite cause and hence can be obviated by removing the cause itself. (ii) Soothe the exposed sensitive tissues and assist healing of the skin, mild antiseptic ointments
(k)	**Girth galls**	**Symptoms** Abrasion or swelling **Causes** (i) Hard condition of girth. (ii) Girth-tied too loose (iii) Girth- tied too tight (swelling). **Treatment** Abrasion - See wounds. Swelling - Massage, hot water fomentations.
(l)	**Kick Injury**	**Causes** (i) Horses restive just before feed time (ii) Colic nights. (iii) Mares in season. (iv) Irritation caused by flies. (v) Work in the ranks. **Treatment** (i) See wounds (ii) Isolate and obtain veterinary advice as soon as possible. (iii) If an isolated case, apply tincture of iodine to affected part.
Note: A fractured bone should be suspected inthe case of kicks on the inside of the forearm or thigh, even though no sign of such isapparent. Stop work and do not allow horses to lie down.		

(m)	**Lameness**	**Symptoms** Lameness may be defined as departure from normal gait, mostly due to pain, caused in the foot, limb or trunk. **Causes** (i) Violence eg kicking or hitting. (ii) Slipping. (iii) Accidents. (iv) Faulty shoeing. (v) Rough going. (vi) Disease of bone. (vii) Rheumatism. (viii) Bad riding. (ix) Tiredness and swelling of tendons due to overwork. **Treatment** Keep the animal tied and give complete rest. If lameness is due to recent injury, apply cold fomentation preferably with ice. Obtain veterinary advice as early as possible.
(n)	**Mange**	**Symptoms** Marked skin irritation, horse rubshimself against any available object. **Treatment** Isolate and obtain veterinary adviceas soon as possible.
(o)	**Overreach**	**Symptoms** Wound on back tendon or heel of fore-leg. **Causes** Inner edge of toe of hind feet kicks ortreads on foreleg; caused while jumping; pulling up suddenly;galloping into deep ground; weakness.
(p)	**Ringworm**	**Symptoms** Hair falls out in circular patches. **Causes** (i) Direct or indirect contact with infected animals. (ii) Contaminated/infected grooming equipment and rugs. (iii) Exposure to infected animal. (iv) Overcrowding and poor stabling conditions. **Prevention and Treatment** (i) Isolate and seek veterinary advice. (ii) Disinfect in contact rugs, grooming equipment and tack. (iii) Disinfection of stables housing the infected animals. (iv) Provide good stabling conditions, well-lit and well-ventilated stables. (v) Prevent overcrowding. (vi) Proper and timely clipping and grooming of animals.

(q)	**Rope Gall or Rope Burns**	**Symptoms** Wound in hollow between heel and fetlock **Causes** Long tying rope over which horse gets his foot entangled. **Prevention and Treatment** (i) Proper harnessing of stabled horses. (ii) Cleaning with mild antiseptic (iii) Applying antiseptic ointment.
(r)	**Sore Backs and Saddle Galls**	**Symptoms** Abrasion or swelling. **Causes** Friction or pressure caused by loose riding or badly fitting saddlery. **Treatment** Abrasion – See wounds Swelling – Bath with salt and water.
(s)	**Sprained Tendons**	**Cause** Bad riding/ training/ overwork Working horse without proper fitnessSymptom Soft swelling in the tendon area, usually in the forelegs **Treatment** Stand in cold water (running if possible)or bandage loosely with linen bandage which should be kept continually wet.
(t)	**Thrush**	**Symptoms** Foul discharge from cleft of frog. **Causes** (i) Not picking out feet regularly. (ii) Dirty bedding. (iii) Bad standings. (iv) Diseased frog. (v) Want of frog pressure. **Treatment** Remove cause, clean frog and put / thrush powder.
(u)	**Treads**	**Symptoms** Wound on outside of coronet or,sometimes, above fetlock on hind legs. **Causes** Bad riding / training **Treatment** See wounds
(v)	**Wounds**	**Treatment** (i) Clean the general area of wound of dirt (ii) Cold water fomentation on and around the wound area if the woundis closed and fresh (iv) Antiseptic solution (v) A tourniquet to stop bleeding

CONCLUSION

4. The knowledge of minor ailments and their treatment during daily management will ensure well-being as well as enhanced performance of the Horses.

ASSESSMENT EXERCISES

1. What is the most common symptom of thrush in horses?

(a) Lameness in the front legs
(b) A foul-smelling black discharge from the hoof
(c) Loss of appetite
(d) Excessive sweating

2. What is a common treatment for minor cuts and abrasions on a horse?

(a) Rubbing alcohol and sand
(b) Cleaning with antiseptic and applying a wound dressing
(c) Covering with a thick layer of mud
(d) Ignoring it, as horses heal naturally

3. What is the main cause of horses developing girth galls?

(a) Excessive jumping
(b) An ill-fitting saddle or girth rubbing against the skin
(c) Eating too much grain
(d) Too much exposure to the sun

4. What is the symptom of a horse suffering from a mild colic episode?

(a) Rolling violently and excessive sweating
(b) Increased appetite
(c) Lifting the tail and whinnying
(d) Moving in circles continuously

5. How can you help prevent sweet itch in horses?

(a) Reducing exercise
(b) Keeping horses inside 24/7
(c) Using fly rugs, insect repellents, and stable management
(d) Feeding extra hay

6. What should be done if a horse has a swollen leg with no obvious injury?

(a) Ignore it; it will go away on its own
(b) Apply cold therapy and monitor for improvement
(c) Continue exercising the horse at full intensity
(d) Bandage the whole body

7. What is a key sign of dehydration in horses?

(a) Bright pink gums
(b) A slow skin pinch test response and dry mucous membranes
(c) Increased energy levels
(d) Excessive tail swishing

8. What is the most common sign of a horse with a hoof abscess?

(a) Sudden, severe lameness
(b) Weight loss
(c) Constant chewing on wood
(d) Frequent rolling

9. What is a common symptom of conjunctivitis in horses?

(a) Cloudy hooves
(b) Swollen, red, and watery eyes
(c) Loss of mane and tail hair
(d) Weight gain

10. What is the best way to manage a minor case of heat exhaustion in horses?

(a) Give the horse a large grain meal
(b) Move the horse to shade, offer water, and cool with cold hosing
(c) Make the horse gallop to circulate blood
(d) Apply a thick blanket to retain heat

11. What is the best first aid for a minor hoof crack?

(a) Apply hoof oil and ignore it
(b) Trim and stabilize the hoof
(c) Soak the hoof in warm water
(d) Wrap the entire hoof in duct tape

12. What is the most common cause of mild lameness in horses?

(a) Overeating hay
(b) Minor hoof bruises, abscesses, or strains
(c) Drinking too much water
(d) Sleeping too much

13. The other name for laminitis is?

(a) Keratoma
(b) Founder
(c) Pyramidal Disease
(d) Quittor

14. Thrush in horses is majorly due to?

(a) Fungus
(b) Bacteria
(c) Virus
(d) Protozoa

15. What is a common symptom of brushing?

(a) Swollen joints
(b) Wounds on inside of fetlock
(c) Discharge from eyes
(d) Rough coat

16. Which of the following is NOT a cause of brushing?

(a) Faulty gait
(b) Fatigue
(c) Balanced diet
(d) Bad shoeing

17. A common cause of colic in horses is?

(a) Excess grooming
(b) Mismanagement of feeding and watering
(c) Riding on hard surfaces
(d) Over-vaccination

18. One of the key signs of colic is?

(a) Fever
(b) Excessive urination
(c) Looking at flanks and rolling
(d) Sneezing

19. Coughs and colds in horses are often caused by?

(a) Rough terrain
(b) Exposure to sun
(c) Draughts and damp stables
(d) Excess exercise

20. What is the first step in treating a horse with fever?

(a) Apply shoeing
(b) Withhold water
(c) Isolate the horse
(d) Increase workload

21. Debility in horses is commonly due to?

(a) Proper grooming
(b) Balanced diet
(c) Worms and overwork
(d) Overfeeding

22. A horse suffering from debility will show?

(a) Shiny, smooth coat
(b) Strong gait
(c) Loss of body weight and visible backbone
(d) Increased appetite

23. A typical symptom of diarrhea in horses includes?

(a) Sneezing
(b) Wounds on fetlock
(c) Loose stools
(d) Nasal discharge

24. Discharge from nostrils may indicate?

(a) Exhaustion
(b) Glanders
(c) Colic
(d) Mange

25. A gall is caused by?

(a) Virus
(b) Faulty training
(c) Injury from saddlery or harness
(d) Low temperature

26. A girth gall may be caused by?

(a) Cold weather
(b) Overfeeding
(c) Loose or tight girths
(d) Dry skin

27. Lameness is best defined as?

(a) Sneezing with fever
(b) Change in gait due to pain
(c) Refusal to eat
(d) Sudden weight gain

28. A primary treatment for early lameness is?

(a) Cold fomentation
(b) Extra feed
(c) Increased training
(d) Removing tail bandages

29. A horse with mange will show?

(a) Bloody nose
(b) Muscle spasms
(c) Skin irritation and rubbing
(d) Stiff legs

30. Overreach injuries occur where?

(a) Neck
(b) Back
(c) Heel or back tendon of foreleg
(d) Eyes

31. Ringworm is typically identified by?

(a) Swollen legs
(b) Discharge from nose
(c) Circular hair loss
(d) Limping

32. To prevent ringworm spread, one must?

(a) Feed more grains
(b) Use antiseptics on all horses
(c) Disinfect grooming equipment and stables
(d) Add salt to water

33. Rope gall is caused by?

(a) Bad water
(b) Loose girths
(c) Entanglement with long tying rope
(d) Excess training

34. What is a sign of thrush in horses?

(a) Hair loss
(b) Discharge from eyes
(c) Foul smell from frog area
(d) Fever

35. What is a common symptom of brushing?

(a) Swollen joints
(b) Wounds on inside of fetlock
(c) Discharge from eyes
(d) Rough coat

Short Questions

1. What is the main symptom of colic in horses?

2. Mention two causes of debility in horses.
3. What should be the immediate treatment for diarrhea in horses?
4. Which condition is characterized by foul discharge from the cleft of the frog?
5. Why should discharge from nostrils be handled with caution?

Long Questions

1. Explain the causes, symptoms, and treatment of brushing in horses.
2. Describe colic in horses – its symptoms, causes, and management.
3. Discuss the causes, symptoms, and treatment of debility in horses.
4. Explain the prevention and treatment of ringworm in horses.
5. Define lameness in horses, state its main causes, and describe its treatment.

ANIMAL MANAGEMENT

CHAPTER IX: TRANSPORTATION OF HORSES

TEACHING INSTRUCTIONS

Code	:	**AM - 09**
Period	:	**Two (01+01)**
Type	:	**Tutorial Discussion & Practical**
Year	:	**2nd Year SD/ SW**
Conducting Officer	:	**JCO/ PI Staff**
Training Aids	:	**Black board and chalk.**
Time Plan		
• **Introduction**	:	**05 mins**
• **Transport of horses**	:	**30 mins**
• **Conclusion**	:	**05 mins**

INTRODUCTION

1. As a cadet of NCC the knowledge of methods of transportation of animals from one place to other during equestrian sports, or for any other purpose in vehicles, rail or aircrafts is very important. Transportation should be comfortable and animals should reach their destination with least stress and without any injury.

PREVIEW	LEARNING OBJECTIVES
The lecture will be conducted as follows:- ➢ Part I: Methods of Transportation of Animals	➢ To acquaint the cadets about methods of transportation of animals from one place to other during equestrian sports, or for any other purpose in vehicles, rail or aircrafts.

PART I: METHODS OF TRANSPORATION OF ANIMALS

2. Animals are transported from one place to other during equestrian sports, or for any other purpose in vehicles, rail or aircrafts. Transportation should be comfortable and animals should reach their destination with least stress and without any injury.

3. **Road Transportation**. This is the most convenient and easily available mode of transportation. A vehicle such as Lorry 3 Ton / 7 toner, loaded with heads on the left side, is used to carry up to 4-5 animals. In a civil hired transport, a maximum of 06 horses are loaded in a head-to-head tying system. Following precautions are necessitated while loading and transport of horses:-

(a) Before animals are loaded in the vehicle, a thorough inspection of the vehicle for soundness of its body structure should be carried out. Special emphasis should be given to the condition of the floor. It should not have any holes/ termite and weakened regions or any protrusions. Sides of the vehicle should not have any nut bolt ends/ nails. The floor should be cleaned and disinfected before loading.

(b) Plenty of hay bedding should be provided in the vehicle.

HISTORY OF TRANSPORTATION OF HORSES

- Moving horses from place to place is recorded to occur as far back in history as 3,500 years.
- At that time, horses were transported by sea
- The first accounts of horses being transported by land are in the 1770s.
- From about 1840 to the 1950s, the main mode of horse transport was by rail.
- The 1960s brought the “Jet Age,” with the first carriage of horses in a Boeing 707.

(c) Angle irons should be reinforced with padded *ballies*/ bamboos. Padding can be provided on the sides of the lorry so that animals are not injured due to kicking. The bamboo poles or wooden bar, fully padded, should be placed across the lorry, at the level of middle of chest, in the front, and slightly higher than level of breast of animal, on sides of the vehicle. Some of the bamboo poles or wooden bars, fully padded, are required to be used in between the animals.

(d) Load the animals from a bank or improvise a ramp with bales of hay. For animals that are inclined to rear up, a protective padded cover for the poll region must be made and fastened to the bridle/head collar.

(e) The legs should be protected from bruising and cuts by bandages; the same can be removed if the animal is quiet in the vehicle and reapplied before unloading. If traveling boots are available, they can be left applied in transit. Bamboo poles or wooden bar fully padded should be placed (across the lorry) in between each animal or if animal size is small, in between two animals.

(f) Shoes should be removed before loading to avoid slipping and injury due to kicking. Tail bandage should be applied to prevent its rubbing during journey.

(g) In case journey is of long duration, feeding of concentrate ration can be done in the nose bag and watering with the help of buckets. Animals nibble at hay during halts so hay is fed there itself in the lorry. During night halt the animals can be unloaded. Trouble creators or frisky animals may not be unloaded, but extra space in the lorry can be provided by removing the wooden bar or bamboo poles which are in between animals, since some of the other animals will be unloaded from the lorry.

(h) During the months of extreme summers tarpaulin from the roof of the lorry should not be folded. This is to protect the animals from direct sunlight. Watering should be carefully done to avoid any incident of dehydration and shock.

(j) Saddlery and ration can be kept at the rear end of the vehicle, or a separate vehicle may be detailed.

(k) Necessary fire precautions should be taken.

4. **Rail Transport**. For transportation of horses by railway, demand should be placed for container/ Horse Box/ VPUs well in advance with the railway authorities:-

(a) Before loading of these wagons or horse boxes they should be checked for safety, cleaned and fumigated to prevent chances of spread of infection or contagious disease. Plentyof hay bedding should be provided to avoid slipping of animals.

(b) Check approaches to the station, loading platform near wagon, lighting facility and holding area near the loading point.

(c) **Entraining**. The wagons are placed on the platform; the sides of the door are opened to form a bridge between platform and wagon. All shoes should be removed before loading. With troop horses, practice in entraining should be part of their normal training and be regularlycarried out. Horses should be led quietly into the wagons, a reliable one chosen to lead, and the man stepping in without looking back at the horse; if one goes in, the rest follow easily, though some will always jump in. The great thing is to take it all quietly and without upsetting animals by noise and violence. Keep troublesome ones till last and if need be, sedative can be used before loading.

(d) A padding may be improvised to be fitted on the head collar in the poll region of the horse for saving injury to the horses which tend to rear up.

(e) Watering: - Water may be given from buckets wherever train halts and time permits. In hot climate, watering becomes a matter of the greatest importance and advance information should always be sent to halting places, so that trains may be shunted at once to their proper sidings and near the water supply.

(f) Attendants must be warned against the danger of fire in hay from engine sparks. No smoking must be allowed.

5. **Air Transport**. Horse transportation by air needs careful and detailed planning. Following are the salient guidelines to follow:-

(a) Stalls are used to hold horses inside the aeroplane. There should be no free moving object/ fitting inside the stall. Horses should be made to stand facing forwards. This will help the horse to balance him during take-off and landing. Horses are likely to lean by bracing their rump against the back of the stall, especially during take-off.

(b) Each horse should have a handler traveling with it, these should be persons who normally look after the animal daily and know the individual animal's behaviour. A good handler will know when a horse is getting nervous and will give him hay or whatever he prefers to takehis mind off stress.

(c) Horses tend to kick during a flight, not out of panic but because they enjoy hearing the noise. To avoid this kicking noise, the area around horses in airplane needs padding. The inside of the aeroplane should be padded as far as possible by rubber matting /synthetic padding placed on the floor and sides.

(d) Provision must be made against the possibility of an animal going wild because of fear or discomfort during journey. Use of sedative is recommended. The veterinary

first aid box to cope with basic emergency treatment, especially containing sedative, disposable syringes and needles must be always at hand.

(e) Due to pressurized interior of the aircraft, horse loses a lot of fluids. It is recommendedto cover the horse with a light blanket to minimize these losses. The hydration status of the horses should be checked immediately on landing and necessary remedial measures taken by a veterinarian.

CONCLUSION

6. All the above methods will help the animals as well as the units to have a safe, comfortable and efficient transportation. It will also reduce the chances of injury and damage to life of horses as well ashandlers.

MANAGEMENT OF STRESS DURING TRANSPORTATION

- Teach or train the horse to load, unload and haul quietly.
- Select a van or trailer that suits your horse's size and temperament.
- Plan the route to minimize duration, along with any extremes in weather
- Ensure that the flooring remains non-slip for the entire trip.
- Ensure adequate ventilation in the transport vehicle
- Offer water every 4 to 6 hours, (or) every 3 to 4 hours in hot weather.

ASSESSMENT EXERCISES

1. What is the most important consideration when transporting horses by road?

(a) Speed of the vehicle
(b) Ventilation and temperature control
(c) Playing loud music to keep the horse calm
(d) Number of passengers in the vehicle

2. How often should horses be given rest during long road journeys?

(a) Every 2 hours
(b) Every 4–6 hours
(c) Once a day
(d) No rest is needed if they have enough space

3. What type of flooring is best for horse transport trailers?

(a) Smooth metal
(b) Slippery plastic
(c) Rubber mats with bedding
(d) Concrete

4. What is a key safety feature required for horse transport by rail?

(a) Open windows for fresh air
(b) Secure partitions and padded walls
(c) Free-roaming space in the carriage
(d) Noisy environment to reduce stress

5. When transporting horses by air, which document is usually required?

(a) A driver's license
(b) A flight ticket for the owner
(c) A health certificate and import/export permits
(d) A passport for the horse

6. How should horses be loaded onto a transport vehicle?

(a) Rushed quickly to avoid delays
(b) One at a time, calmly and carefully
(c) Pushed if they refuse to enter
(d) Tied before entering the vehicle

7. What is the main reason for using specially trained grooms when transporting horses by air?

(a) To clean the aircraft cabin
(b) To calm and care for the horses during the flight
(c) To check the aircraft fuel levels
(d) To train horses while in flight

8. What is the preferred way to secure a horse inside a trailer?

(a) Leaving them loose for natural movement
(b) Using short, non-restrictive ties
(c) Tying their head tightly to prevent movement
(d) Securing only their hind legs

9. Which of the following is a sign of transport stress in horses?

(a) Increased appetite
(b) Sweating and excessive yawning
(c) Sleeping while standing
(d) Silent and motionless behaviour

10. What is the advantage of using air transport for horses over road and rail?

(a) It is cheaper than road transport
(b) It reduces travel time and stress for the horse
(c) Horses get to roam freely during the flight
(d) It allows horses to interact with other animals

11. What is the most convenient mode of animal transportation mentioned?

(a) Air transport
(b) Rail transport
(c) Road transport
(d) Sea transport

12. What should be thoroughly checked before loading horses into a vehicle?

(a) Food and water containers
(b) Condition of vehicle's engine
(c) Soundness of body structure and floor
(d) Insurance papers

13. What is used for reinforcement of angle irons in a lorry?

(a) Metal rods
(b) Plastic pipes
(c) Padded ballies/bamboos
(d) Chains

14. What is the purpose of a padded cover for the poll region?

(a) Comfort
(b) Decoration
(c) Injury prevention when rearing
(d) Identification

15. What should be done to the vehicle floor before loading animals?

(a) Painted
(b) Waxed
(c) Cleaned and disinfected
(d) Carpeted

16. What should be applied to protect a horse's legs during transport?

(a) Oil
(b) Cooling gel
(c) Bandages or travel boots
(d) Paint

17. Why are shoes removed before loading horses?

(a) They are expensive
(b) For cleaning purposes
(c) To avoid slipping and injury due to kicking
(d) To allow hoof inspection

18. When can the wooden bars or poles between animals be removed during long road journeys?

(a) When animals are aggressive
(b) When other animals are unloaded
(c) During rainfall
(d) When sedatives are used

19. Where should saddlery and rations be kept during transport?

(a) On the roof
(b) In the front cabin
(c) Rear end of the vehicle or separate vehicle
(d) Along with the horses

20. Why should tarpaulin not be folded during extreme summers?

(a) It provides insulation
(b) To block wind
(c) To protect animals from sunlight
(d) For aesthetic reasons

21. Which precaution is specific to summer transport conditions?

(a) Extra hay bedding
(b) Use of heaters
(c) Avoiding dehydration and shock
(d) Wearing wool blankets

22. What is the purpose of hay bedding during rail transport?

(a) Warmth
(b) Feeding
(c) Comfort and to avoid slipping
(d) Fire prevention

23. How should troublesome horses be loaded into wagons?

(a) First
(b) Randomly
(c) Last
(d) Alongside mares

24. What might be used if a horse refuses to enter a wagon?

(a) Whip
(b) Loud noises
(c) Sedative
(d) Water spray

25. What must be strictly avoided in or near wagons with hay?

(a) Singing
(b) Flashlights
(c) Smoking
(d) Using cell phones

26. During rail transport, where should watering be arranged?

(a) At final destination
(b) On moving train
(c) At halting stations
(d) After unloading

27. What is used to prevent injury during horse air transport?

(a) Leather straps
(b) Chains
(c) Padding with rubber matting or synthetic material
(d) Sandbags

28. Which direction should horses face inside air stalls?

(a) Backward
(b) Toward window
(c) Forward
(d) Sideways

29. What special behaviour do horses show during flight?

(a) Sleeping
(b) Panic
(c) Kicking for fun
(d) Whinnying

30. Who should accompany horses during air travel?

(a) Airline staff
(b) Airport security
(c) Handlers familiar with the horses
(d) Veterinarians only

31. What causes fluid loss in horses during air travel?

(a) Vomiting
(b) Pressurized interior
(c) Cold air
(d) Excessive sweating

32. What must always be available during air transport for emergencies?

(a) Oxygen mask
(b) Fire extinguisher
(c) Veterinary first aid box
(d) Extra blankets

33. What helps reduce fluid loss during air travel?

(a) Wetting the horse
(b) Turning off cabin heat
(c) Covering with light blanket
(d) Feeding ice cubes

Short Questions

1. What precaution should be taken regarding the vehicle floor before loading horses for road transportation?

2. Why is it recommended to remove shoes from horses before loading them for transport?

3. During rail transport, what practice should troop horses be regularly trained for?

4. What causes fluid loss in horses during air transport?

5. Why is padding inside the transport vehicle important when moving horses by air?

Long Questions

1. Explain the precautions to be taken before and during road transportation of horses.

2. Describe the safety measures and loading procedure for transporting horses by rail.

3. Discuss the essential guidelines for transporting horses by air, including management of stress and safety.

4. Trace the historical development of horse transportation methods from ancient times to the jet age.

5. Why is planning and proper animal management crucial in horse transportation? Explain with examples from different modes of transport.

EQUITATION AND EQUESTRIAN SPORTS

3

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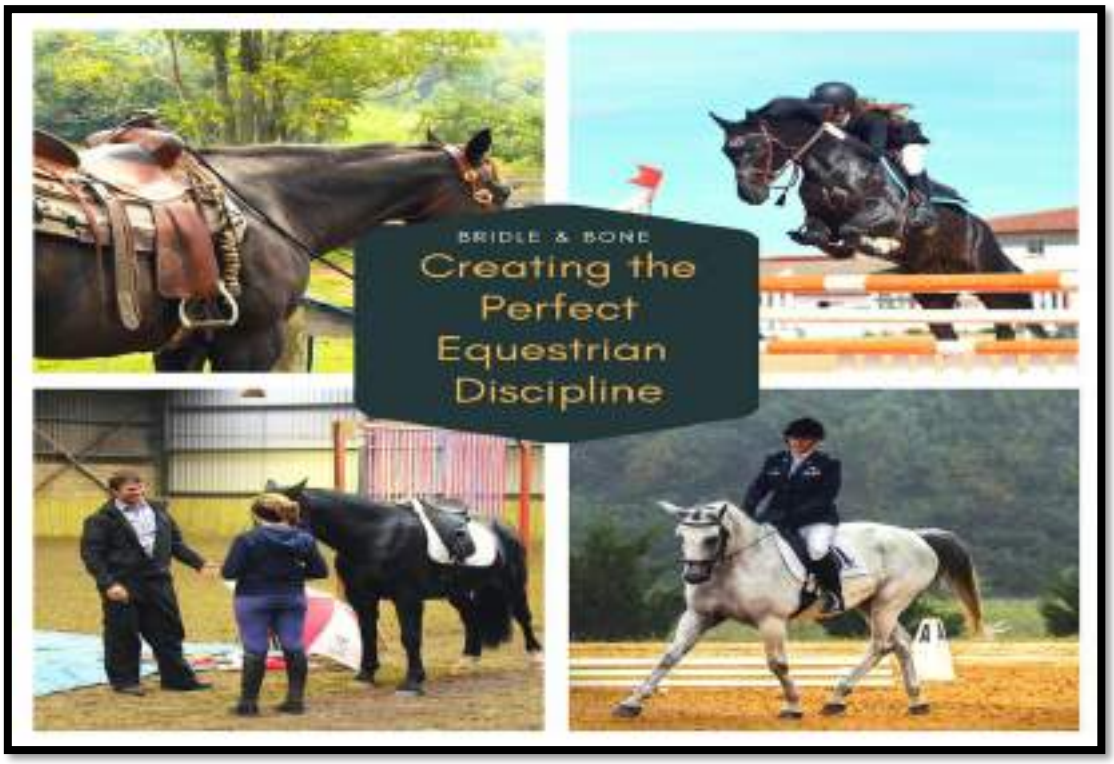
EQUITATION AND EQUESTRIAN SPORTS

CHAPTER I: RULES AND REGULATIONS OF EQUESTRIAN SPORTS



TEACHING INSTRUCTIONS

Code	**:**	**EQTN – 01**
Period	**:**	**One (01)**
Type	**:**	**Tutorial Discussion**
Year	**:**	**2nd Year SD/SW**
Conducting Officer	**:**	**Officer/ JCO**
Training Aids	**:**	**Black board and chalk.**

Time Plan

- **Introduction : 05 Mins**
- **Rules and Regulations of Equestrian Sports : 30 Mins**
- **Conclusion : 05 Mins**

INTRODUCTION

1. Knowledge of rules and regulation of the Equestrian events helps the competitors in better performance and they can keep themselves update for national as well as international events.

PREVIEW	LEARNINING OBJECTIVE
The lecture will be conducted in following parts:- ➢ Part I: Rules and regulations ➢ Part II: Application of rules and regulations	➢ To acquaint the cadets with rules and regulations of Equestrian Sports.

PART I: RULES & REGULATIONS

2. Equitation rules and regulations generally cover aspects like rider attire, horse equipment, course patterns, penalties for faults, and overall safety standards, with specific details varying depending on the discipline (e.g., hunter, jumper, dressage) and the governing organization running the competition; key points include:-

(a) **Rider Attire**.

(i) **Proper Riding Attire**. Wearing a fitted riding shirt, breeches, riding boots with a proper heel, and a certified riding helmet is mandatory.

(ii) **Protective Gear.** Depending on the level, additional protection like gloves, leg guards, and body protectors may be required.

(iii) **Appearance Standards.** Specific guidelines on the colour and style of clothing may be enforced depending on the class.

Riding Gear

(b) **Horse Equipment**.

(i) **Bit Selection.** Appropriate bits for the horse's level and training are required, with restrictions on overly harsh bits.

(ii) **Saddle and Bridle Fit.** Proper fit of the saddle and bridle to the horse is crucial.

(iii) **Stirrups**. Correct stirrup length is important for rider balance and control.

Importance of Equestrian Sports

- **Promotes Physical Fitness**
- **Teaches Discipline**
- **Cultural Heritage**:
- **Develops Responsibility**.
- **Enhances Mental Focus**:

(c) **Course Rules**.

(i) **Course Pattern.** A designated course with specific jumps and movements is laid out for riders to navigate.

(ii) **Penalties for Faults.** Points are deducted for knocking down jumps, refusals (horse stopping at a jump), exceeding the time allowed, or improper riding techniques.

(iii) **Judging Criteria.** Riders are judged on their ability to ride with a correct seat, effective aids, and proper horsemanship.

(iv) **Safety Regulations**. Horse inspection: Horses may be inspected before competition to ensure their fitness for the event.

(v) **Emergency Procedures**. Clear protocols for handling emergencies like falls or horse misbehaviour.

(vi) **Arena Safety.** Proper fencing and footing in the competition arena.

(d) **Specific Disciplines.**

(i) **Hunter Class**. Emphasis on a smooth, balanced ride with a consistent pace over a course with natural obstacles.

(ii) **Jumper Class**. Focus on clearing jumps at a higher speed with precision and accuracy.

(iii) **Dressage**. Precise execution of movements and gaits with a strong connection between horse and rider, judged on a detailed scoring system.

(e) **Important Considerations.**

(i) **Governing Body Rules**. Always consult the rules and regulations of the specific equestrian organization hosting the competition.

(ii) **Level of Competition**. Rules may vary depending on the rider's skill level and the class they are competing in.

(iii) **Veterinary Checks**. Horses may be subject to veterinary checks before and during competitions.

PART II: APPLICATION OF RULES AND REGULATIONS

3. Equitation as a subject encompasses both the rider's training and the development of the young horse. The two must be on similar lines so that when they are both trained, the horse knows what is required of him and the trained rider knows how to communicate his wishes to the horse. The subject also deals with the riding of difficult horses and the retraining of awkward horses of those that have been spoilt by bad handling.

4. The training of the rider aims at:-

(a) Giving him a well-balanced strong seat independent of the reins.

(b) Enable him able to apply the correct aids to ride and control the horse.

(c) Enable him able to ride cross-country with confidence and make him capable of covering long distances.

(d) Enable him a bold and skillful rider who can concentrate his attention on carrying out a task without spending any conscious efforts on riding and in controlling the horse.

(e) To train good instructors who should be able to conduct riding classes in their units.

(f) To ride and retrain awkward or spoilt horses.

5. Training of a horses aims at:-

(a) Making him well balanced i.e. his weight distributed equally over his body and light to rider’s aids.

(b) Making him physically fit, capable of work asked, without loss of condition.

(c) Training him to be steady and confident of his surroundings.

(d) Capable of being ridden at any pace either in the company of other horses or alone.

(e) Making him active on his legs and a good jumper over all kinds of obstacles.

(f) Unafraid of entering water.

(g) To stand still when being mounted.

(h) To be without stable vices, lead easily with hand and should have no problems while loading, unloading and while in journey.

CONCLUSION

6. Knowledge of rules and regulations of the Equestrian events helps the competitors in better performance, and they can keep themselves updated for national as well as international events.

ASSESSMENT EXERCISES

1. Which of the following is not an Olympic equestrian discipline?

(a) Show jumping
(b) Dressage
(c) Polo
(d) Eventing

2. Which of the following is not required during any equestrian competition?

(a) Dress Code
(b) Horse Welfare
(c) Safety Protocols
(d) None of the above

3. What is generally required for proper riding attire in equitation competitions?

(a) Casual jeans and sneakers
(b) Fitted riding shirt, breeches, boots with heel, and certified helmet
(c) Tank tops and shorts
(d) Tracksuit and running shoes

4. Which of the following is NOT typically considered protective gear in equitation?

(a) Gloves
(b) Leg guards
(c) Body protector
(d) Sunglasses

5. Why is saddling and bridle fit important?

(a) It enhances horse's appearance
(b) It helps with competition points
(c) It ensures proper control and comfort for the horse
(d) It increases horse speed

6. Which of the following actions results in a penalty during competition?

(a) Perfectly clearing a jump
(b) Exceeding allowed time
(c) Wearing gloves
(d) Riding on natural footing

7. What is a refusal in a jumping course?

(a) Horse skips a jump
(b) Horse runs faster
(c) Horse stops at a jump
(d) Rider dismounts

8. What is the focus of Jumper Class?

(a) Slow movements
(b) Harmony between horse and rider
(c) Fast, precise jumping
(d) Marching in formation

9. In Dressage, riders are judged based on?

(a) Speed and jump height
(b) Strength of horse
(c) Precise execution of movements and gaits
(d) Number of tricks performed

10. Before competitions, horses may be checked for?

(a) Breed papers
(b) Coat colour
(c) Fitness through veterinary checks
(d) Mane length

11. One goal of rider training is to develop a seat that is?

(a) Flexible and adjustable
(b) Strong and independent of the reins
(c) Low to the ground
(d) Always upright

12. Why must a rider apply correct aids?

(a) To win competitions
(b) To communicate effectively with the horse
(c) To look good on camera
(d) To pass exams

13. What type of riding must a trained rider be capable of?

(a) Indoor only
(b) Parade riding
(c) Cross-country and long distances
(d) Circus-style riding

14. An effective rider should be able to focus on tasks without?

(a) Help from a coach
(b) Conscious effort in riding or controlling the horse
(c) Watching the horse
(d) Moving too fast

15. What is the importance of instructor training for riders?

(a) To learn how to feed horses
(b) To become horse groomers
(c) To conduct riding classes in their units
(d) To open riding schools

16. What does it mean for a horse to be 'well balanced'?

(a) It has matching coat colors
(b) It stands still
(c) Its weight is equally distributed and responds lightly to aids
(d) It eats well

17. A physically fit horse should?

(a) Be sleepy
(b) Be ready to retire
(c) Perform tasks without losing condition
(d) Always run at full speed

18. What pace should a well-trained horse be able to handle?

(a) Only trot
(b) Only gallop
(c) Any pace, alone or in company
(d) Only walking with rider

19. Why should a horse be unafraid of entering water?

(a) For grooming
(b) For hydration
(c) For obstacle courses and field conditions
(d) To swim

20. A trained horse should be able to?

(a) Jump only indoors
(b) Stand still when being mounted
(c) Sleep with bridle on
(d) Refuse to walk with others

Short Questions

1. What is the mandatory headgear required for riders under equitation rules?

2. Name two types of classes or disciplines in equestrian sports.

3. Mention two penalties that riders may incur during a course.

4. What is the main goal of rider training in equitation?

5. State one important requirement in training a young horse for equitation.

Long Questions

1. Explain the key aspects covered under equitation rules and regulations for rider attire, horse equipment, and safety.

2. Describe the main objectives of rider training in equitation and their importance.

3. Discuss the essential principles in training a horse for equitation, including balance and confidence.

4. Compare the judging criteria and focus areas of Hunter, Jumper, and Dressage classes in equestrian sports.

5. Why is it important that the training of the rider and the training of the young horse follow similar lines? Explain with examples.

EQUITATION AND EQUESTRIAN SPORTS

CHAPTER II: HANDLING OF DISMOUNTED HORSE

TEACHING INSTRUCTIONS

Code	**:**	**EQTN – 02**
Period	**:**	**Two (01+01)**
Type	**:**	**Tutorial Discussion & Practical**
Year	**:**	**1st Year SD/SW**
Conducting Officer	**:**	**PI Staff**
Training Aids	**:**	**Black board and chalk.**

Time Plan

- **Introduction : 05 Mins**
- **Handling of Dismounted Horse : 30 Mins**
- **Conclusion : 05 Mins**

INTRODUCTION

1. Handling a horse requires knowledge, patience, and confidence to ensure the safety of both the handler and the animal. Horses are sensitive and intelligent creatures that respond to human behavior, making calm and consistent handling essential. Understanding equine behavior, body language, and proper techniques is crucial for tasks such as grooming, leading, tying, and medical care. Good handling builds trust between horse and handler, reduces stress, and prevents accidents. Whether for daily care or specialized training, learning the basics of horse handling is a fundamental skill for anyone involved in equine management or welfare.

FACTS HIGHLIGHTED	LEARNING OBJECTIVES
➢ Lead rope length ➢ Calm and confident demeanor ➢ Always lead from the left ➢ Avoid over-tension	➢ To acquaint the cadets with different breeds of horses of the horses.

PREVIEW	AIM
The lecture will be conducted as follows:- ➢ Part I: Handling the dismounted horse	➢ To acquaint the cadets about handling the dismounted horse.

PART I: HANDLING THE DISMOUNTED HORSE

2. **Stand attention with Your Horse.** The rider stands at attention as for foot drill, on the near side of the horse, his toes in line with the horse's fore feet. The left cheek rein is held in the **Right-Hand** near the ring, back of the hand to the right; hand as high as the shoulder, arm at full extent. If the cheek reins have been taken over the horse's head, the end will be held in the **Left-Hand**, which will hang down by the side without constraint. This is the position of ''attention with your horse''.

3. **Stand at Ease.** The **Right-Hand**-slides down the reins to the full extent of the arm, the end of the cheek reins being retained in the **Left-Hand**. The position of the rider's legs and feet is the same as in foot drill. If the cheek reins have not been taken over the horse's head, they will be held in the **Right-Hand** only, the left arm hanging by the rider's side.

4. **In Front of your Horses.** Rider takes a full pace forward with the right foot, turns to the right-about and takes one rein in each hand near the ring, still holding the horse's head. Hands and elbows to be as high as shoulders. This is the position in which a rider should stand when showing a horse for inspection.

5. **Off side stand to your Horse**. Rider takes a full pace forward with the left foot to the horse's off side, turning right-about, the **Left-Hand** holding the right rein near the ring back of the hand to the left, hand as high as the shoulder, the **Right-Hand** taking hold of the ends of the reins and hanging down by the side without constraint.

6. When leading through a narrow gate or doorway, the rider should move slowly, taking care that horse's hips clear the posts of the door. He should walk backwards, holding the head collar with both hands, one on either side of the horse's head.

CONCLUSION

7. Properly leading and handling a dismounted horse is a fundamental skill that plays a crucial role in ensuring both rider and horse safety. By using calm, confident techniques and understanding horse behaviour, handlers can build a strong bond with their horses. Effective ground control is essential for the horse's training and well-being, promoting a positive and safe environment for both horse and handler. The skills learned in leading can have far-reaching effects on a horse's performance, trust.

ASSESSMENT EXERCISES

1. In dismounted drill with the horse, at "in front of your horse," hand and elbow should be as high as the?

(a) Reins
(b) Shoulder
(c) Head
(d) Saddle

2. In dismounted drill with the horse, at "stand at ease," the end of the cheek rein should be retained in the?

(a) Right-Hand
(b) Left-Hand
(c) Both hands
(d) None of the above

3. Handling of a dismounted horse is called?

(a) Leading
(b) Walking
(c) Following
(d) Resting

4. In dismounted drill with the horse, at "attention," which cheek rein is held in the rider's hands?

(a) Left
(b) Right
(c) None
(d) Both

Short Questions

1. In the position of "attention with your horse," which rein is held in the right hand?

2. How does the rider move when taking the position "In front of your horses"?

3. What is the correct way to hold the reins when standing at ease?

4. Which foot is used first to move to the "Off side stand to your horse" position?

5. How should a rider lead a horse through a narrow gate or doorway?

Long Questions

1. Explain the correct position and hand placement for "attention with your horse."

2. Describe the steps involved in taking the position “In front of your horses” and its purpose.

3. Discuss the correct technique for standing at ease and how it differs from attention.

4. Explain the importance of proper handling techniques when leading a horse through confined spaces.

5. Why is learning proper leading and dismounted handling skills crucial for horse safety and training?

EQUITATION AND EQUESTRIAN SPORTS

CHAPTER III: MOUNTED DRILL

TEACHING INSTRUCTIONS

Code	:	**EQTN – 03**
Period	:	**Two (01+01)**
Type	:	**Tutorial Discussion & Practical**
Year	:	**1st Year SD/SW**
Conducting Officer	:	**PI Staff**
Training Aids	:	**Black board and chalk.**
Time Plan		
• **Introduction**	:	**05 Mins**
• **Mounted drill**	:	**30 Mins**
• **Conclusion**	:	**05 Mins**

INTRODUCTION

1. Knowledge of mounted and dismounted drill introduces the novice riders to basic riding

PREVIEW	LEARNING OBJECTIVE
The lecture will be conducted in following parts:- ➢ Part I: Mounted Drill	➢ To acquaint the cadets about procedure of mounted drills.

OBJECTIVE	RULES
➢ Develop Rider Skills ➢ Improve Horse Training ➢ Enhance Discipline ➢ Increase Confidence ➢ Build Bond	➢ Safety First ➢ Proper Mounting/Dismounting ➢ Clear Instructions ➢ Respect Personal Space ➢ Horse Positioning.

PART I: MOUNTED DRILL

Mounted with the Horse.

2. **Attention (reins in both hands)**. The seat should be in the centre of the saddle. The positions of the head, neck and body are the same as when dismounted. The arms should hang easily from the shoulders, upper arm perpendicular and lightly touching the sides. Hands slightly below the level of the elbows about four inches apart, wrists slightly bent, back of the hands outwards and slightly turned up, thumbs pointing obliquely across each other. Flat of the thighs and inside of the knees lightly pressed against the saddle, legs from the knees downwards slightly behind the perpendicular, toes at a natural angle, heels forced downwards and pressure of the stirrup iron on the sole of the boot. The horse should be at attention as well as the rider, that is, “collected".

3. On the command "sit-at-ease", the reins should be relaxed by dropping the left and on the front Arch of the saddle. The **Right Hand** should rest on the left, back upper-most.

4. In riding with the reins in one hand, the dis-engaging arms should hang easily from the shoulder, that hand holding the reins being opposite the canter of the body. In order to coordinate the natural aids properly rider must maintain the correct position in the saddle in correct position is described as under:-

(a) Sit comfortably on seat bones (ischia)in the deepest part of the saddle.

(b) Lower back is supple, supported without stiffness, and ready to move in the direction.

(c) Upper body is the comfortable, straight and free.

(d) Shoulders equally open and totally relaxed.

(e) Head is the held high and straight.

(f) Eyes are attentive to the direction.

(g) Arms and elbow bent, dropped naturally by side of the body.

(h) Wrists are held in line with forearms.

(j) Hands on the same line and forearms, held 4 to 5 inches apart.

(k) Thumbs and index fingers holding the reins firmly, the thumbnails facing up.

(l) Thighs dropped naturally and having a light contact with the saddle.

(m) Knees are in light contact with the saddle.

(n) Lower legs (calves) are in contact with the horse's barrel. The stirrup should be perpendicular to the ground.

(o) Ankles are relaxed and springy.

(p) Feet are at the girth, 4 to 6 inches behind.

(q) **Position in Stirrups**. Lightly holding each stirrup base by the balls of the feet, with more weight on the inside of the stirrup iron. Heels are lower than toes. each stirrup iron is almost perpendicular to the horse's body.

(r) **Without Stirrups**. Feet drop naturally by their own weight, the toes should be higher than the heels

5. Position out of the saddle this position is used to jumping and is called the forward seat or 2 points seat the difference between the normal and the jumping seat positions are in the seat, the upper body and the feet position in forward seat is as under:-

(a) It is slightly out of the saddle, but directly above feet.

(b) Upper body is comfortable tilted slightly forward.

(c) Ankle are flexed but are also relaxed and springy.

(d) Feet, at the girth more weight in the heels and heels stay directly under the seat.

6. While mounted rider can determine the proper position of his feet by glancing down at the knees, if toes can be seen, lower leg is too far forward.

7. **Holding the Reins**. The reins must be adjusted, forming a straight line from the bit to the hands. If the reins are slack or flap about, commands may not reach the horse's mouth, or they may confuse or hurt him in the form of brutal or awkward jerks. There are several ways to hold the reins.

8. Held separately one in each hand.

(a) The reins come into hands above the small finger.

(b) The reins come out of hands between the thumb and index finger.

(c) The free end of the reins with the buckle hangs to the right on the horse's shoulder.

9. Held in the **Left Hand**.

(a) The reins come into **Left Hand** each side of the small finger the left rein under it the right rein is above it.

(b) The reins come out of the hand together held between the thumb and index finger.

(c) The free end of the reins hangs to the right on the horse's shoulder.

10. Held in the **Right Hand**.

(a) The reins come into the **Right Hand** on each side of the index finger. The left rein between the thumb and index finger and the right rein between the index and the third finger.

(b) The reins come out of the hand together under the palm.

(c) The free end of the reins hangs to the right on the horse's shoulder.

CONCLUSION

11. Mounted drills are crucial for both horse and rider development. They enhance the rider's balance, control, and communication skills while improving the horse's obedience and response to commands. These drills not only ensure safety and discipline but also create a deeper bond between the horse and rider, leading to more efficient and enjoyable riding experiences. Regular practice of these drills is essential for the growth and success of any equestrian athlete.

ASSESSMENT EXERCISES

1. At mounted drill on horseback, when horse and rider are at attention, it is called?

(a) Collected
(b) Gathered
(c) Sit at ease
(d) Attention with your horse

2. At mounted drill on horseback, at attention, reins should be held in?

(a) Right Hand
(b) Left Hand
(c) Both hands
(d) Should not be held

3. What is the command after both rider and horse are at attention?

(a) Sit at ease
(b) Stand at ease
(c) Sitting at ease
(d) Standing at ease

4. The seat should be placed at?

(a) Centre of saddle
(b) Left to saddle
(c) Right to saddle
(d) Not to be placed

5. In dismounted drill with the horse, at "in front of your horse," hand and elbow should be high as?

(a) Reins
(b) As shoulder
(c) As head
(d) As saddle

6. Is a rearward diagonal movement with a two-beat rhythm but without a moment of suspension?

(a) Walk
(b) Halt
(c) Trot
(d) Reinbeck

7. What is the position the rider should stand in when showing a horse for inspection?

(a) Stand attention with your horse
(b) Stand at ease
(c) In front of your horse
(d) Offside stand of your horse

8. In the attention position, where should the rider's seat be placed?

(a) On the horse's neck
(b) At the back of the saddle
(c) In the center of the saddle
(d) Slightly behind the saddle

9. How should the rider's thighs and knees be positioned at attention?

(a) Pressed hard into the saddle
(b) Relaxed away from the saddle
(c) Lightly pressed against the saddle
(d) Hanging loosely

10. What direction should the thumbs point when holding the reins in both hands?

(a) Straight forward
(b) Backwards
(c) Obliquely across each other
(d) Downward

11. What is meant by the horse being "collected" during attention?

(a) The horse is standing still
(b) The horse is alert and responsive, like the rider
(c) The horse is grazing
(d) The horse is trotting freely

12. What happens during the "sit-at-ease" command?

(a) Rider tightens reins and leans forward
(b) Rider drops the left rein and rests hands on the saddle
(c) Rider dismounts
(d) Rider drops both reins and slouches

13. Where should the rider sit for correct position in the saddle?

(a) On the cantle
(b) In front of the saddle
(c) On the seat bones (ischia) in the deepest part
(d) On the saddle flap

14. How should the rider's wrists be held?

(a) Bent backwards
(b) Loose and floppy
(c) In line with the forearms
(d) Pointed outward

15. Where should the stirrup be in relation to the horse's body?

(a) Behind the girth
(b) Angled sideways
(c) Perpendicular to the ground and horse’s body
(d) At the back leg

16. When riding without stirrups, how should the rider’s feet be positioned?

(a) Pointed downward
(b) Hanging loosely without control
(c) Toes higher than heels
(d) Pressed forward

17. In the forward seat (2-point seat), how is the rider’s body positioned?

(a) Upright and rigid
(b) Slightly out of the saddle, directly above the feet
(c) Leaning far back
(d) Slumped forward

18. Where is the rider’s weight placed in a jumping seat?

(a) In the thighs
(b) In the back
(c) In the heels
(d) On the hands

19. Why must the reins form a straight line from the bit to the rider’s hands?

(a) For decorative purposes
(b) To show off hand position
(c) To ensure commands reach the horse clearly
(d) To keep reins from falling

20. In the method where reins are held separately (one in each hand), where do the reins enter the hands?

(a) Between the index and middle fingers
(b) Above the small finger
(c) Below the thumb
(d) From the wrist

21. When held in the left hand, how are the reins positioned in the hand?

(a) Both reins above the thumb
(b) Left rein under and right rein above the small finger
(c) Reins crossed over each other
(d) Hanging loosely from the palm

22. In the right-hand rein holding method, how does the right rein enter the hand?

(a) Between the thumb and index finger
(b) Above the small finger
(c) Between the index and third finger
(d) Directly into the palm

Short Questions

1. What is the correct position of the rider's heels when sitting at attention?

2. What command requires the reins to be relaxed and the right hand resting on the left?

3. In forward seat position, where should the rider's heels be relative to the seat?

4. How should the reins enter and leave the hands when held separately in both hands?

5. Why should the reins form a straight line from the bit to the rider's hands?

Long Questions

1. Describe the correct rider position in the saddle when mounted at attention, including leg, hand, and body posture.

2. Explain the differences between the normal riding seat and the forward (jumping) seat, including its purpose.

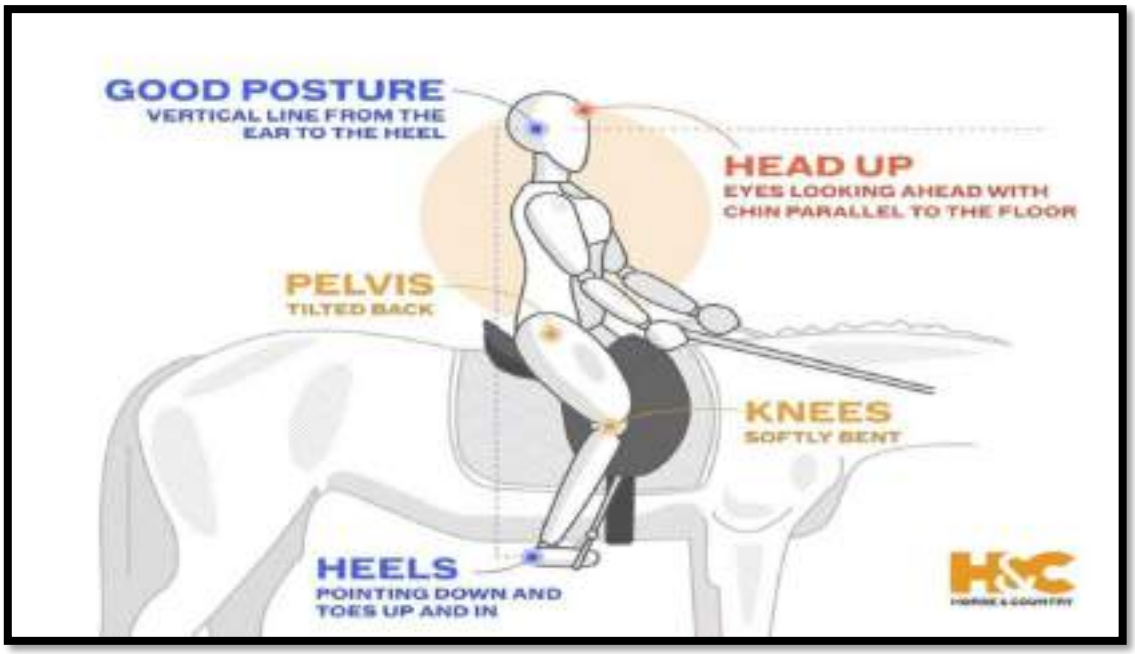
3. Discuss the correct methods of holding reins (in both hands, in the left hand, and in the right hand) and the importance of rein adjustment.

4. Why is correct body alignment and posture essential for effective communication with the horse during mounted drills?

5. Highlight the benefits of mounted drills for both the horse and the rider and explain how they form a foundation for advanced training.

EQUITATION AND EQUESTRIAN SPORTS

CHAPTER IV: BASIC SEAT AND POSTURE



TEACHING INSTRUCTIONS

Code	**:**	**EQTN – 04**
Period	**:**	**Two (01+01)**
Type	**:**	**Tutorial Discussion & Practical**
Year	**:**	**1st Year SD/ SW**
Conducting Officer	**:**	**Officer/ PI Staff**
Training Aids	**:**	**Black board and chalk.**
Time Plan		
➢ **Introduction**	**:**	**05 Mins**
➢ **Basic Seat & Posture**	**:**	**30 Mins**
➢ **Conclusion**	**:**	**05 Mins**

INTRODUCTION

1. Knowledge of basic seat and posture helps cadet grasp the instruction of the training and apply the aids to horses. If they understand the methods before advanced training, it helps in solid initial basic training.

PREVIEW

The lecture will be conducted as follows:-

- Part I: Basic Seat and postures

LEARNING OBJECTIVES

To acquaint the cadets with identification of horses.

OBJECTIVES

- Develop Rider Balance.
- Promote Effective Communication
- Ensure Rider Comfort
- Build Confidence
- Foundation for Advanced Skills

PART I: SEAT AND BASIC POSTURES

2. The principal natural aids are the seat, the hands, and the legs. The rider's voice and eyes are also considered natural aids.

The Seat

3. The seat has tremendous influence on the horse's balance, for e.g., leaning forward causes the horse to increase speed and leaning backwards causes the horse to slow down and increasing weight on the seat bone and stirrup iron on one side causes the horse to bear in that direction. Weight must always be oriented in the direction of your horse's motion. Proper use of the seat sets the rhythm of the pace and gives the impression of smoothness at the different gaits.

4. The term seat is used to refer to the distribution of the rider's weight on the buttocks and ischia, the seat bones. The seat has following influences on the horse's balance:-

(a) Leaning forward causes the horse to increase speed.

(b) Leaning backwards causes the horse to slow down.

(c) Increasing weight on the seat bone and stirrup iron on one side causes the horse to bear in that direction

The Hands

5. The hands act, resist, and yield through the reins to regulate horse's forward motion. The hands act to slow the speed, change the gaits downward, modify the horse's balance and give direction. They should always act without pulling. Hands act as follows:-

(a) By squeezing the fingers on the reins.

(b) By turning the wrists, fingernails up to increase the tension.

(c) By raising the wrist 2 to 3 inches, to increase the tension. Tension can be increased still further by leaning the upper body backwards.

6. These actions are the progressive steps to obtain obedience. They must be of brief duration and repeated if necessary.

7. The hands resist opposing any undesirable initiative taken by the horse. Their resistance should be equal to the horse but not greater. The hands resist by insisting (i.e., squeezing the fingers on the reins without pulling) until the horse has submitted.

8. The hands yield to reward obedience as soon as the horse has obeyed, without losing contact with the horse's mouth. Following actions are the progressive steps to reward obedience:-

(a) By lowering the wrists.

(b) By moving the wrists forward.

(c) By opening the fingers.

The Legs

9. The legs act, resist, and yield to produce and maintain the horse's forward motion – to change the gait (upwards) and increase the speed. They are also used to position the horse's hindquarters and engage his hind legs (cause him to bring his hind legs forward and directly under his body). They create and sustain impulsion, which is both the horse's attentiveness and the actual will or energy that makes him respond to the rider's commands. The legs act together at the girth, 4 to 6 inches behind – to drive the horse forward. The legs act individually behind the girth up to 8 to 10 inches behind while doing advanced movements to make the horse move his hindquarters. The following actions are the progressive steps to obtain obedience:-

(a) By squeezing and releasing the calves continuously.

(b) By squeezing and releasing the heels.

(c) By kicking with the heels.

10. The legs resist preventing or opposing a lateral displacement of the horse's haunches in the following way:

(a) By maintaining pressure with the calves or the heels.

(b) By kicking (only if necessary).

11. The legs yield to reward obedience in the following way:-

(a) By ceasing to act or resist.

(b) By lightening their pressure.

12. Legs should always stay in light contact with the horse's barrel, so that they are ready to act without startling the horse by a sudden movement. When training a horse, or riding an ill-trained horse, legs will have to act strongly to obtain obedience. As the horse progresses in training, he will become more sensitive to the aids and leg action can be gentler.

IMPORTANCE

- Balance and Stability
- Improved Communication
- Horse Comfort
- Prevents Injury
- Enhances Performance

The Voice

13. The rider's voice is an indispensable aid while teaching a young horse. The tone of voice creates confidence and respect:-

(a) A quiet voice calms the horse.

(b) A loud voice upsets the horse.

14. Words remind the horse what to do and it is most important not to confuse him. There must be a specific word to use all the time for each command. Words as 'walk', 'trot', 'canter' are used in the training of the horse and later the voice commands are replaced with leg and hand actions. Use of word commands when the horse is trained, conveys lack of security and confidence by the rider and therefore should be dispensed with.

The Eyes

15. The rider's eyes, attentive to the direction, initiate the use of the appropriate aids. A rider must always look in the direction in which the horse is to go. While jumping it is imperative the rider looks' up and away 'as looking down imbalances both the horse and rider.

RULES

- Neutral Spine
- Shoulders Back
- Elbows Soft
- Heels Down Light Contact with the Horse

The Artificial Aids

16. Artificial aids come in handy to reinforce the natural aids. The whip, the spurs, and the longer whip are artificial aids. They also include special equipment, such as the Champion, Gouge, draw reins, side reins, and martingales of any type. These artificial aids are very helpful only if their correct usage is known.

17. **The Whip**. The whip is very important in training when it is used to teach and reinforce the actions of the legs. It must be used with authority; never anger. The whip is used in the following ways:-

(a) Used on the shoulder or just behind the girth it stimulates a lazy horse.

(b) Used on the flanks, it extends the above action

(c) Used on the rump, it punishes disobedience.

18. **The Spurs**. The spurs reinforce the actions of the legs. They should come in contact with the horse's barrel only when the rider desires it and for the briefest duration.

19. **The Long Whip**. It is used for work with the lunge line. It is used for initiating desired response from the horse in absence of leg aids.

(a) Used towards the hindquarters, it creates and stimulates the forward motion.

(b) Used on the hind legs, it improves the engagement.

(c) Used towards front of the horse, it slows or stops him.

Accord of the Aids

20. The accord of the aids is the harmonious co-ordination of all the natural aids. Together, the seat, hands, and legs act, resist and yield to create regulate and facilitate the correct execution of the different movements demanded by the rider.

(a) The seat sets the rhythm of the gaits.

(b) The hands control the horse's forehand, i.e., **Left Leg** controls the horse's left foreleg, and **Right Hand** controls the horse's right hind leg.

(c) The legs create the impulsion and hands regulate it.

CONCLUSION

21. Knowledge of basic seat and posture helps student grasp the instructions of the training and apply the aids to horses. If they understand the methods before advanced training, it helps in solid initial basic training. The basic seat and posture are fundamental components of equestrian sports, serving as the foundation for better control, communication, and comfort for both the rider and the horse. Maintaining proper posture enhances balance, reduces fatigue, and improves overall riding performance, whether in training or competition. A rider's ability to position themselves correctly in the saddle is key to building a strong partnership with their horse, ensuring a safe and effective ride. By focusing on posture and seat, riders can achieve better results, reduce risk, and enjoy a more harmonious experience with their horse.

ASSESSMENT EXERCISES

1. Which one of the following is not an artificial aid?

(a) Voice
(b) Whip
(c) Spurs
(d) Legs

2. Which one of the following is not a natural aid?

(a) Reins
(b) Legs
(c) Seat
(d) Whip

3. Which of the following is a principal natural aid?

(a) Whip
(b) Saddle
(c) Seat
(d) Spurs

4. What happens when the rider leans forward?

(a) Horse slows down
(b) Horse turns right
(c) Horse increases speed
(d) Horse stands still

5. The distribution of a rider's weight on the buttocks and ischia refers to?

(a) Posture
(b) Seat
(c) Positioning
(d) Balance

6. Leaning backward with the seat causes the horse to?

(a) Move sideways
(b) Slow down
(c) Canter
(d) Jump

7. Increasing weight on one seat bone and stirrup causes the horse to?

(a) Rear
(b) Stop
(c) Bear in that direction
(d) Buck

8. Proper use of the seat helps to?

(a) Make horse halt suddenly
(b) Engage hind legs
(c) Set the rhythm of the pace
(d) Cue rein pressure

9. Which of the following is NOT a correct use of the hands?

(a) Squeezing the fingers
(b) Turning wrists upward
(c) Pulling hard
(d) Pulling hard

10. Which of the following increases tension through the reins?

(a) Lowering the wrist
(b) Opening the fingers
(c) Raising the wrist 2–3 inches
(d) Relaxing the shoulders

11. How do the hands resist?

(a) By opening fingers
(b) By squeezing the reins without pulling
(c) By pulling reins
(d) By dropping contact

12. Which of these is a way to yield with the hands to reward obedience?

(a) Squeezing harder
(b) Lifting the reins
(c) Lowering the wrists
(d) Turning wrists outward

13. The legs help engage the horse’s hind legs by?

(a) Squeezing the withers
(b) Positioning behind the girth
(c) Pulling reins
(d) Using the voice

14. How do legs act individually in advanced movements?

(a) At the withers
(b) On the forelegs
(c) 8–10 inches behind the girth
(d) On the shoulder

15. Which of the following is a progressive step to obtain obedience using legs?

(a) Lifting knees
(b) Kicking with the heels
(c) Turning hips
(d) Sitting back

16. The legs resist by?

(a) Releasing pressure
(b) Maintaining pressure with calves or heels
(c) Leaning forward
(d) Shouting

17. To reward obedience, the rider should?

(a) Press harder
(b) Lighten the leg pressure
(c) Shift weight to stirrups
(d) Squeeze with both knees

18. A quiet voice has what effect on a horse?

(a) Agitates it
(b) Calms it
(c) Makes it run faster
(d) Confuses it

19. Which voice command is commonly used during early training?

(a) Stand
(b) Jump
(c) Walk
(d) Whoa

20. Continued use of voice commands in trained horses implies?

(a) Effective riding
(b) Confident rider
(c) Insecure rider
(d) Lazy horse

21. Where should the rider look when jumping?

(a) At the horse’s feet
(b) Behind the jump
(c) Up and away
(d) Down at the reins

22. The rider's eyes initiate?

(a) Whip movement
(b) Use of appropriate aids
(c) Spur contact
(d) Head movement

23. Which of the following is an artificial aid?

(a) Rider's eyes
(b) Hands
(c) Spurs
(d) Voice

24. The whip used on the shoulder is to?

(a) Punish disobedience
(b) Stimulate a lazy horse
(c) Calm the horse
(d) Encourage walking

25. The spur should be used?

(a) Continuously
(b) Forcefully
(c) Briefly and intentionally
(d) With pulling

Short Questions

1. What are the principal natural aids in horse riding?

2. How does leaning forward with your seat affect the horse's speed?

3. Name two progressive steps by which hands act to regulate the horse's motion.

4. What is the main function of the rider's voice while training a young horse?

5. How do spurs function as artificial aids in horse riding?

Long Questions

1. Explain the role of the rider's seat in influencing the horse's balance and movement. Provide examples of its effects.

2. Describe in detail the actions of the hands in acting, resisting, and yielding while riding a horse.

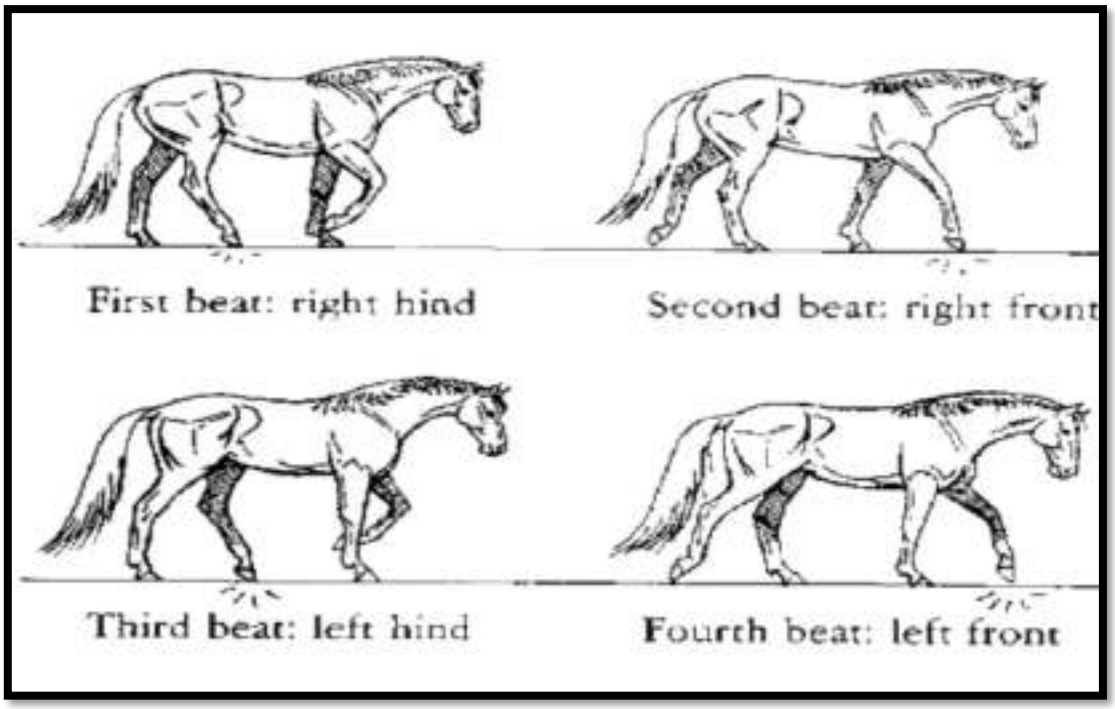
3. Discuss the importance of leg aids in maintaining forward motion, creating impulsion, and positioning the horse's hindquarters.

4. What is the purpose of artificial aids such as the whip, spurs, and long whip? How should they be used effectively?

5. Define "accord of the aids" and explain how seat, hands, and legs work in harmony for proper horse control.

EQUITATION AND EQUESTRIAN SPORTS

CHAPTER V: WALK



TEACHING INSTRUCTIONS

Code	:	**EQTN-5**
Period	:	**Two (01+01)**
Type	:	**Tutorial Discussion & Practical**
Year	:	**1st Year SD/ SW**
Conducting Officer	:	**PI Staff**
Training Aids	:	**Black board and chalk.**

Time Plan

- **Introduction : 05 Mins**
- **Walk-(Introduction to Walk & its Aids) : 30 Mins**
- **Conclusion : 05 Mins**

INTRODUCTION

1. Introduction to walk and its aids helps the trainee riders to understand pace of the horses as well as the application of word of command given by the instructor during the training.

PREVIEW	LEARNING OBJECTIVES
The lecture will be conducted in following parts:- ➢ Part I: Introduction to walk and its aids	➢ To acquaint the cadets with pace of the horses' Walk.

PART I: INTRODUCTION TO WALK AND ITS AIDS

2. **Walk**. The walk is a pace (movement) of four time. All the limbs move one after the other. Four distinct hoof beats are heard for every step as each foot in turn strikes the ground. In a stride, at least two legs are always on the ground simultaneously; so, the horse is never in suspension. A good walk has lively rhythmical steps, with the hind feet overlapping the imprints of the forefeet. The feet follow each other at an interval of about half the time occupied in taking one step. Horses usually commence a walk from any one fore leg. The walk is the least impulsive gait; it is most difficult to keep a continuous strong forward urge in the movement. This gait can, however, be advantageously used by the student in learning to have good seat, mounted exercises and how to use aids without undue stress to himself and his horse.

3. At the walk, the horse moves his entire body. His legs move forward by diagonals, one at a time. His spinal column moves from side to side like a snake in motion. His head and neck rock up and down and side to side for leverage, just as human beings move arms when walking. Rider action in walk are:-

(a) **Seat**. Relax and swing seat back and forth, one seat bone at a time, following the horse's motion.

(b) **Legs**. Continuously increase and decrease the pressure of the inner part of the calves, one after the other.

(c) **Hands**. Move continuously forwards and backward, left and right, following the horse's head.

4. Effects of the natural aids in walk

(a) **Seat**. Moves in unison with the horse and to set the rhythm for the gait.

(b) **Legs**. Maintain the forward motion.

(c) **Hands**. Allow the horse's head movements while maintaining contact.

IMPORTANCE OF THE WALK	OBJECTIVES OF THE WALK
➢ Fundamental Gait ➢ Warm-Up & Cool-Down. ➢ Safety ➢ Establishes Rhythm. ➢ Promotes Relaxation	➢ Develop Rider's Position ➢ Establish Rhythm and Relaxation. ➢ Teach Control and Aids ➢ Improve Horse's Flexibility ➢ Warm-Up and Cool-Down.

CONCLUSION

5. The walk is an essential gait in equestrian riding, forming the base for developing a rider's position, communication with the horse, and overall control. It plays a vital role in warming up and cooling down, establishing rhythm and relaxation, and enhancing the rider's balance and confidence. By using the correct aids and maintaining proper posture, riders can effectively guide the horse through the walk, ensuring smooth transitions to other gaits and improving performance. It's an indispensable element in both training and competition, providing the foundation for all other movements.

ASSESSMENT EXERCISES

1. Which one of the following is not an artificial aid?

(a) Voice
(b) Whip
(c) Spurs
(d) Legs

2. Which one of the following is not a natural aid?

(a) Reins
(b) Legs
(c) Seat
(d) Whip

3. Which of the following is a principal natural aid?

(a) Whip
(b) Saddle
(c) Seat
(d) Spurs

4. What happens when the rider leans forward?

(a) Horse slows down
(b) Horse turns right
(c) Horse increases speed
(d) Horse stands still

5. The distribution of a rider's weight on the buttocks and ischia refers to?

(a) Posture
(b) Seat
(c) Positioning
(d) Balance

6. Leaning backward with the seat causes the horse to?

(a) Move sideways
(b) Slow down
(c) Canter
(d) Jump

7. Increasing weight on one seat bone and stirrup causes the horse to?

(a) Rear
(b) Stop
(c) Bear in that direction
(d) Buck

8. Proper use of the seat helps to?

(a) Make horse halt suddenly
(b) Engage hind legs
(c) Set the rhythm of the pace
(d) Cue rein pressure

9. Which of the following is NOT a correct use of the hands?

(a) Squeezing the fingers
(b) Turning wrists upward
(c) Pulling hard
(d) Pulling hard

10. Which of the following increases tension through the reins?

(a) Lowering the wrist
(b) Opening the fingers
(c) Raising the wrist 2–3 inches
(d) Relaxing the shoulders

11. How do the hands resist?

(a) By opening fingers
(b) By squeezing the reins without pulling
(c) By pulling reins
(d) By dropping contact

12. Which of these is a way to yield with the hands to reward obedience?

(a) Squeezing harder
(b) Lifting the reins
(c) Lowering the wrists
(d) Turning wrists outward

13. The legs help engage the horse’s hind legs by?

(a) Squeezing the withers
(b) Positioning behind the girth
(c) Pulling reins
(d) Using the voice

14. How do legs act individually in advanced movements?

(a) At the withers
(b) On the forelegs
(c) 8–10 inches behind the girth
(d) On the shoulder

15. Which of the following is a progressive step to obtain obedience using legs?

(a) Lifting knees
(b) Kicking with the heels
(c) Turning hips
(d) Sitting back

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(b) Maintaining pressure with calves or heels
(c) Leaning forward
(d) Shouting

17. To reward obedience, the rider should?

(a) Press harder
(b) Lighten the leg pressure
(c) Shift weight to stirrups
(d) Squeeze with both knees

18. A quiet voice has what effect on a horse?

(a) Agitates it
(b) Calms it
(c) Makes it run faster
(d) Confuses it

19. Which voice command is commonly used during early training?

(a) Stand
(b) Jump
(c) Walk
(d) Whoa

20. Continued use of voice commands in trained horses implies?

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(c) Insecure rider
(d) Lazy horse

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(d) Down at the reins

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(a) Whip movement
(b) Use of appropriate aids
(c) Spur contact
(d) Head movement

23. Which of the following is an artificial aid?

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(b) Hands
(c) Spurs
(d) Voice

24. The whip used on the shoulder is to?

(a) Punish disobedience
(b) Stimulate a lazy horse
(c) Calm the horse
(d) Encourage walking

25. The spur should be used?

(a) Continuously
(b) Forcefully
(c) Briefly and intentionally
(d) With pulling

Short Questions

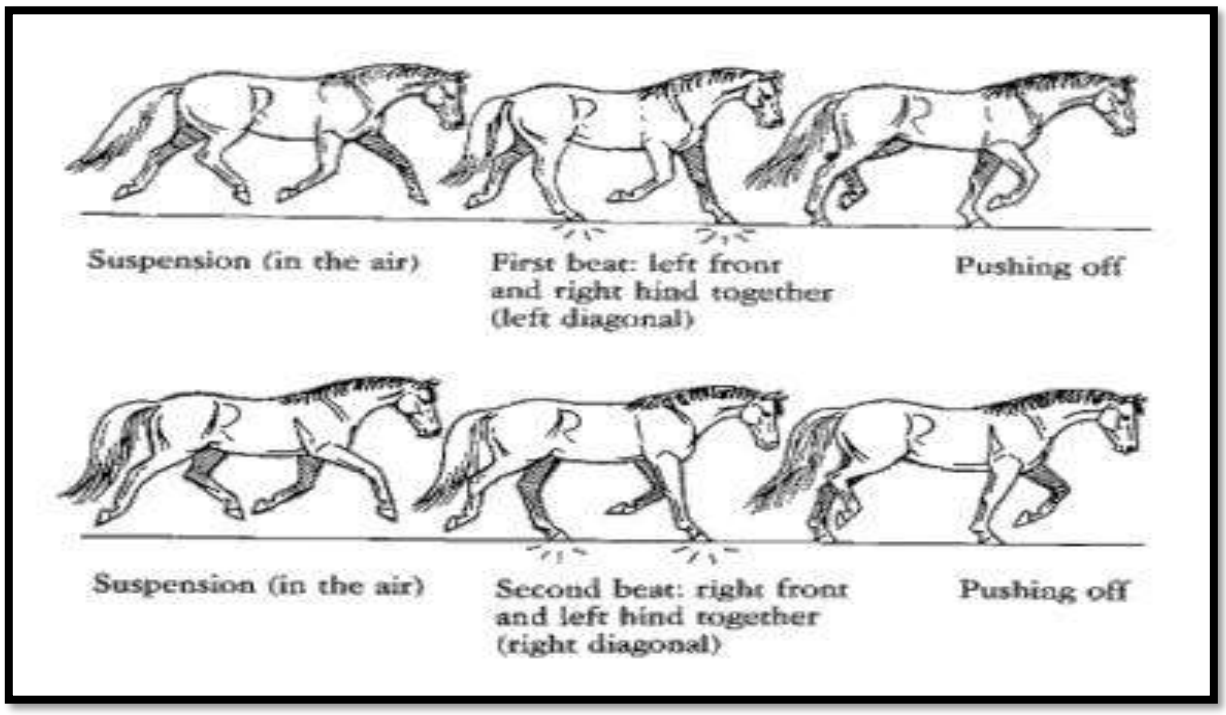
1. How many hoof beats are heard in one stride of the walk?
2. Why is the walk considered the least impulsive gait?
3. What is the correct seat action while riding at the walk?
4. How do the rider's hands act during the walk?
5. Name two key objectives of practicing the walk.

Long Questions

1. Define the walk as a gait and explain its main characteristics.
2. Describe in detail the rider's seat, leg, and hand actions during the walk.
3. Explain the role and effect of natural aids (seat, legs, hands) in maintaining a good walk.
4. Discuss the importance of the walk in horse training and riding.
5. Explain how the walk helps in developing rider's position, control, and horse's relaxation.

EQUITATION AND EQUESTRIAN SPORTS

CHAPTER VI: TROT



TEACHING INSTRUCTIONS

Code	**:**	**EQTN – 06**
Period	**:**	**Two (01+01)**
Type	**:**	**Tutorial Discussion & Practical**
Year	**:**	**2nd Year SD/ SW**
Conducting Officer	**:**	**PI Staff**
Training Aids	**:**	**Black board and chalk**

Time Plan

- **Introduction : 05 Mins**
- **Introduction to Trot, its Aids and Movements : 30 Mins**
- **Conclusion : 05 Mins**

INTRODUCTION

1. Introduction to trot, its aids and rising movements helps the trainee riders to understand pace of the horses as well as the application of word of command given by the instructor during the training.

PREVIEW	LEARNING OBJECTIVES
The lecture will be conducted as follows:- ➢ Part I: Introduction to Trot, its aids and movements	➢ To acquaint the cadets with the paces of a horse, introduction to Trot, its aids and rising movements. ➢ Develop Rider's Position ➢ Strengthen Horses' Muscles ➢ Refine Control and Aids ➢ Improve Coordination

PART I: TROT (AIDS, SYNCHRONISING OF RISING MOVEMENT & TROTTING WITH / WITHOUT RISING

2. The trot is pace of two times. It is a symmetrical diagonal movement wherein both the feet of a diagonal pair of legs strike the ground together with both feet of other i.e., supporting pair of legs in suspension. These diagonal pairs are:-

(a) Right Foreleg (RF) and Left Hind (LH) moving together with Left Foreleg (LF) and Right Hind (RH) bearing weight on ground known as the Right Diagonal.

(b) Left Foreleg (LF) and Right Hind (RH) moving together with Right Foreleg (RF) and Left Hind (LH) bearing weight on ground known as the Left Diagonal.

3. Since the diagonal pairs of legs move alternately, there is a moment of suspension after each stride, in which either of the pair is in air. The trot is more impulsive than the walk. It is the best gait for teaching the horse to balance itself, first on the lunging rein, later under the rider; learning to respond to the activating aids, becoming supple and using its back and hind quarters. It is the least fatiguing of the paces to a horse for going long distances at a fair rate of speed, because the fore and hind limbs have equal work to do. It is also easy for the horse to maintain his equilibrium, and there is little loss of power in keeping the centre of gravity level.

4. In the trot the rider either 'sits' in the saddle or 'rises' out of the saddle. The rider rises out of the seat and sits on one particular diagonal. Rising in the stirrup makes the movement easier for the rider and the horse.

5. In rising trot, the rider rises up on Right or the Left diagonal pair of legs. When the rider is rising on the Right diagonal, the seat and upper body rise when the horse's Right diagonal pair moves forwards and, in the air, and come down in the saddle when the horse's Right

diagonal is on the ground. Similarly rising on the Left Diagonal, the seat and upper body rise when the horse's Left diagonal moves forward in the air and come down into the saddle when the horse's Left diagonal moves backwards and on the ground.

6. When the rider rises on the Left diagonal, this diagonal pair works a little harder than the Right Diagonal because when the rider is seated and Left diagonal is on the ground, the horse exerts more effort to lift this diagonal because of his weight. As soon as horse lifts the Left diagonal, then the opposite diagonal i.e., the Right then carries weight. It is of utmost importance while riding in the trot to know what diagonal one is riding on because:-

(a) If a rider out of ignorance, carelessness, or comfort, always raises on the same diagonal that pair of legs would develop more than the other or may produce lameness in a particular diagonal.

(b) If the rider, when riding in a circle, say in the left (anti-clockwise) direction rises on the Left diagonal, the horse will continuously be moving towards the inside of this circle to balance himself as the Left diagonal becomes slightly off balance and therefore moves forward and to the left. As a result, this diagonal covers more ground and makes the horse move to the left. It is necessary for the rider to remember to rise on the Left diagonal while moving in a Right circle and Right diagonal when riding in a Left circle.

(c) While riding long distances, it is less fatiguing for the horse if the rider keeps changing the diagonals after some distance.

AIDS FOR THE TROT

- Leg Aids
- Seat Aids
- Rein Aids
- Voice Aids
- Hands

7. Use of the Natural aids at the Sitting Trot

(a) **Seat**. Pushes the two seat bones forward on every step.

(b) **Legs**. Continuously squeeze and release both calves simultaneously.

(c) **Hands**. Hands are still and at a fixed distance from the horse's mouth.

Influence of the Natural Aids at the Sitting Trot

8. At the trot the horse moves his legs by diagonal pairs. The gait has a springy action; the horse hops from one diagonal to the other. The spinal column moves slightly up and down. The head has no particular action.

(a) **Seat**. To sit comfortably without bouncing and to give rhythm to the gait.

(b) **Legs.** Squeeze the calves to keep the seat glued to the saddle, and to maintain the forward motion. Release to avoid fatigue, stiffness and to keep the horse attentive.

(c) **Hands.** At the trot, the horse does not need to rock his head for leverage, so the rider's hands remain still.

FACTS AND HIGHLIGHTS	
Speed.	8-12 miles per hour (13-19 km/h).
Types of Trot.	Two Types of Trot: working trot and extended trot.
Diagonal Gait.	Horse moves its front and opposite hind legs simultaneously.
Rising Trot Comfort.	Absorb the horse's motion.
Sitting Trot Challenge.	More challenging for beginners.

9. The springing action of the horse's trot causes the rider to bounce up and down. Rider must firmly push seat bones forward every beat when about to leave the saddle. Leg pressure increases when seat bones move forward and decreases when they move backwards.

Use of the Natural Aids at the Rising Trot

10. The rising trot is less tiring than the sitting trot for both horse and rider. Rider raises seat out of the saddle every other step.

(a) **Seat**. Lean slightly forward, closing hip angle. Lift up and down with rhythm and smoothness.

RULES FOR TROTTING

- Maintain Rhythm
- Posture
- Rising at the Right Time
- Control and Direction

(b) **Legs**. Rider releases legs when seat is rising out of the saddle, increasing the weight on the stirrups: squeeze them together when seat is coming down in contact with the saddle, lessening the weight on the stirrups.

(c) **Hands**. Hands are still at a fixed distance from the horse's mouth.

11. **Influence of Natural Aids in Trot**.

(a) **Seat.** To avoid sitting in one springing action out of two, which is less tiring for the rider and the horse's back.

(b) **Legs**. Release together to lessen the effect of the springing action, and to keep the horse attentive; squeeze together to control the weight of the upper body, so as not to come down heavily on the horse's back, and to maintain the forward motion.

(c) **Hands**. At the trot, the horse does not move his head, hands remain still.

Rising on the Correct Diagonal

12. A rider can rise on either the right or the left diagonal pair of legs. Tracking to the right, clockwise, rider rises on the left diagonal. Tracking to the left, counter clockwise, rider rises on the right diagonal. Rising on the right diagonal, seat and upper body rise when the horse's right diagonal moves forwards and come down into the saddle when the horse's right diagonal moves backwards. Rising on the left diagonal, seat and upper body rise, when the horse's

left diagonal moves forward and come down into the saddle when the horse's left diagonal moves backwards.

13. Leg pressure increases when rider comes down into the saddle and decreases when rider rises.

14. To determine whether a diagonal is forward or back, rider should glance at the point of horse's shoulder. Rider can clearly see if the horse's shoulder is moving forwards or backwards. When the horse's left shoulder is moving forwards, for example, the horse's left front foot is off the ground. When the left shoulder moves backwards, the horse's left front foot is on the ground.

15. There are two options to the rider to correct himself if rising on the wrong diagonal: -

(a) To sit down one extra step

(b) Stay up out of the saddle one extra step. This is preferable when riding a young horse and for new riders.

16. When rider becomes more experienced and relaxed, the motion of the two diagonals is felt in the lower legs. The rider should be able to sense a very slight outward motion in the calves, created by the diagonal pair of legs on its way back. When slight outwards motion is sensed with the **Left Leg** then the horse's left shoulder is moving backwards.

Importance of Rising on a Specific Diagonal

17. When the rider rises on the left diagonal, for example this diagonal exerts a little harder than the right. When the rider is seated and the left diagonal is on the ground, the horse must exert more effort to lift this diagonal because of the weight. As soon as he has lifted the left diagonal, the opposite diagonal, i.e., the right, carries the weight. The left diagonal becomes slightly off balance and moves more forward and to the left. As a result, this diagonal covers more ground and makes the horse bear slightly to the left. In a riding arena one way to prevent the horse from coming toward the centre would be to rise on the outside diagonal.

18. If a rider, out of ignorance, carelessness, or comfort, always rises on the same diagonal, that pair of legs would develop more than the other. When asked to canter, the horse would have a definite tendency to take the same lead always and to travel sideways.

19. When trotting long distance, rider should change diagonals from time to time so as not to tire one more than the other.

Synchronizing the Rising Movement in Trot

Rising Trot. The rider rises out of the saddle in time with the horse's diagonal leg movements. As the horse's outside front leg and inside hind leg move forward, the rider rises; when the opposite legs move forward, the rider sits back down.

Timing. Proper synchronization is key. The rising and sitting motions should be smooth and fluid, following the rhythm of the trot, without jerking or bouncing in the saddle.

Core Engagement. The rider needs to use their core muscles to push off slightly when rising and to sit back down without slouching or stiffening.

Without Rising. Sitting trot, or trotting without rising, involves staying seated in the saddle, following the horse's movement. This requires strong core muscles to absorb the motion of the trot, making it more challenging but important for developing balance and control.

CONCLUSION

20. The trot is a vital gait in equestrian riding, serving as both a foundational training tool for rider balance and communication and a means to develop the horse's strength and flexibility. By practicing rising and sitting trot, riders can improve their posture, timing, and coordination, setting the stage for more advanced skills. Understanding and mastering the trot are crucial for any equestrian, as it enhances control, rhythm, and overall performance in both training and competitions.

ASSESSMENT EXERCISES

1. The trot pace of the horse covers approximately?

(a) 6 km/hour
(b) 12 km/hour
(c) 14 km/hour
(d) 24 km/hour

2. The trot is a?

(a) 2-beat gait
(b) 3-beat gait
(c) 4-beat gait
(d) 4-beat gait with a period of suspension

3. Types of trot include?

(a) Working trot
(b) Lengthening of steps
(c) Collected trot
(d) Medium trot and extended trot
(e) All of the above

4. "The rising trot is less tiring than the sitting trot for both horse and rider." True or False?

(a) True
(b) False
(c) Neither true nor false
(d) Either true or false

5. How many beats are there in a trot?

(a) Four
(b) Two
(c) Three
(d) One

6. What type of leg movement characterizes the trot?

(a) Lateral movement
(b) Forelegs first, then hind legs
(c) Diagonal pairs moving together
(d) Hind legs only

7. In the Right Diagonal, which legs move together?

(a) Right foreleg and Left hind
(b) Left foreleg and Right foreleg
(c) Right hind and Right foreleg
(d) Left hind and Left foreleg

8. What is true about the trot compared to the walk?

(a) Less impulsive
(b) More impulsive
(c) Less balanced
(d) Involves no suspension

9. Why is the trot ideal for long distances?

(a) Uses only hind legs
(b) Distributes work equally between fore and hind legs
(c) Has less rhythm
(d) Involves swaying motion

10. What is the rider's position called when they rise and sit alternately in the trot?

(a) Posting
(b) Seated trot
(c) Rising trot
(d) Forward trot

11. Which of these happens in the rising trot?

(a) The rider stands continuously
(b) The rider rises with one diagonal pair and sits with the same
(c) The rider lifts both legs
(d) The rider leans back

12. Which diagonal works harder when a rider rises on the left diagonal?

(a) Right
(b) Left
(c) Both equally
(d) Depends on direction

13. Why is changing diagonals important during long rides?

(a) To practice leg pressure
(b) To reduce impulsion
(c) To avoid fatiguing one diagonal
(d) To change the gait

14. In sitting trot, what does the seat do?

(a) Remains still
(b) Pushes the seat bones forward with each step
(c) Rises with stirrups
(d) Leans back

15. What do the rider's hands do at the trot?

(a) Move up and down
(b) Remain still and maintain contact
(c) Pull backward
(d) Follow the head motion

16. What is the purpose of the rider's legs during sitting trot?

(a) Stay lifted
(b) Squeeze and release to maintain forward motion
(c) Move alternately
(d) Rest completely

17. In rising trot, when should the rider squeeze their legs?

(a) While rising
(b) While sitting down
(c) At the halt
(d) When walking

18. Why should hands remain still during trot?

(a) Horse needs leverage
(b) Horse's head does not move in trot
(c) To apply pressure
(d) To aid shoulder movement

19. How does the rider correct being on the wrong diagonal?

(a) Jump
(b) Sit or rise for one extra beat
(c) Halt and reset
(d) Change direction

20. How does a rider know which diagonal they're on?

(a) By looking at reins
(b) By glancing at the horse's shoulder
(c) Listening to the sound
(d) Feeling in the stirrups

21. What does the spinal column do during trot?

(a) Remains rigid
(b) Swings side to side
(c) Moves slightly up and down
(d) Bends forward

22. What part of the rider senses diagonal motion with experience?

(a) Hands
(b) Calves
(c) Shoulders
(d) Eyes

23. Why rise on the outside diagonal in a circle?

(a) Makes the ride bouncier
(b) Prevents imbalance and drifting
(c) Increases speed
(d) Decreases energy

24. What may happen if a rider always rises on the same diagonal?

(a) Horse gets used to it
(b) One diagonal becomes overdeveloped or lame
(c) It improves training
(d) The horse speeds up

25. What happens to leg pressure when the rider comes down into the saddle in trot?

(a) It decreases
(b) It increases
(c) It switches legs
(d) It disappears

26. Which of this best describes correct hand use at rising trot?

(a) Move with the body
(b) Stay still, fixed distance from horse’s mouth
(c) Pull gently every step
(d) Flick slightly with each beat

27. Why is the rising trot easier for beginners?

(a) It looks better
(b) It is less tiring and smoother
(c) Requires no leg action
(d) Uses only hands

28. What happens if a rider rides the wrong diagonal in a left circle?

(a) Horse moves outward
(b) Horse drifts inside the circle
(c) Horse halts
(d) Horse speeds up

29. What is the main role of the seat in trot?

(a) To push forward rhythmically
(b) To give rhythm and avoid bouncing
(c) To lift the reins
(d) To engage the horse's head

Short Questions

1. Define the trot.
2. Name the two types of trot.
3. What is the speed range of a trot?
4. Which diagonal should a rider rise on while riding in a left circle?
5. State any two natural aids used in rising trot.

Long Questions

1. Explain the importance of the trot in horse riding.
2. Describe the correct method of synchronizing the rising movement during the trot.
3. Discuss the significance of rising on the correct diagonal and its effects if ignored.
4. Differentiate between sitting trot and rising trot with reference to rider’s position and aids.
5. Explain the influence of natural aids at the trot (seat, legs, and hands) in detail.

EQUITATION AND EQUESTRIAN SPORTS

CHAPTER VII: BASIC SCHOOL MOVEMENTS

TEACHING INSTRUCTIONS

Code	**:**	**EQTN – 07**
Period	**:**	**Three (01+02)**
Type	**:**	**Tutorial Discussion & Practical**
Year	**:**	**2nd Year SD/SW**
Conducting Officer	**:**	**PI Staff**
Training Aids	**:**	**Black board and chalk.**

Time Plan

- **Introduction : 05 Mins**
- **Basic School Movements**

(***Circles, Figure of Eight, Serpentines, Change of Directions, Halts and Rein Back***) **: 30 Mins**

- **Conclusion : 05 Mins**

INTRODUCTION

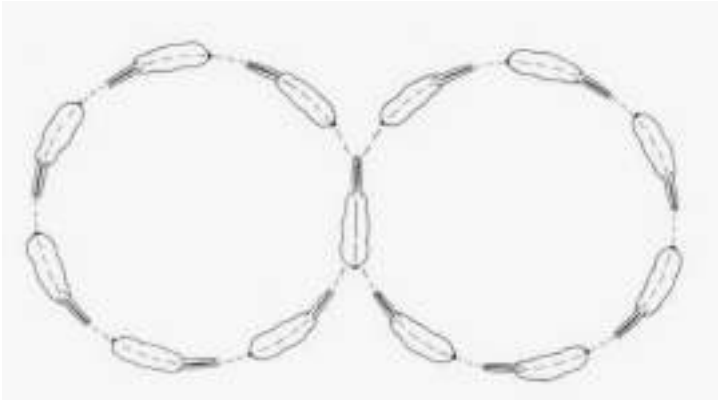
1. Introduction to basic school movements of the horses helps the trainee riders to understand pace of the horses as well as the application of word of command given by the instructor during the training.

PREVIEW	LEARNING OBJECTIVE
The lecture will be conducted in following parts:- ➢ Part I: Basic School Movements (circles, figure of eight, serpentines change of directions, halts and rein back)	➢ To acquaint the cadets with basic school movements of the horses.
OBJECTIVES OF BASIC SCHOOL MOVEMENTS	**IMPORTANCE OF BASIC SCHOOL MOVEMENTS**
The lecture will be conducted as follows:- ➢ Improve Flexibility ➢ Strengthen Rider's Position ➢ Enhance Rider-Horse Communication ➢ Promote Smooth Transitions ➢ Develop Control	➢ Foundation for Advanced Work ➢ Improved Control and Responsiveness ➢ Enhanced Balance and Coordination ➢ Strengthens the Horse

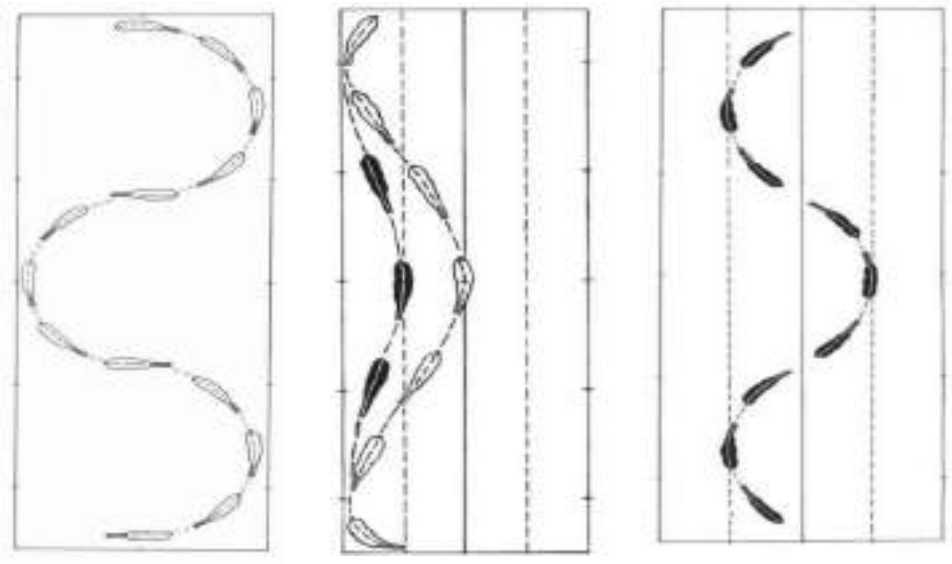
PART I: INTRODUCTION TO BASIC SCHOOL MOVEMENTS OF THE HORSES

2. **Circle (Volte)**. The volte is a circle of six (6), eight (8) or ten (10) metres in diameter. If larger than ten (10) metres it is a circle. In circle, the hind feet should follow the line of fore feet.

3. **Figure of Eight**. This figure consists of two (2) voltes or circles of equal size as prescribed in the test, joined at the centre of the eight (8). The rider should make his Horse straight an instant before changing direction at the centre of the figure.



4. **Serpentine**. The serpentine with several loops touching the long side of the arena consists of half circles connected by a straight line. When crossing the centerline, the Horse should be parallel to the short side (a). Depending on the size of the half circles, the straight connection varies in length. Serpentines with one (1) loop on the long side of the arena are executed with five (5) metres or ten (10) metres distance from the track (b). Serpentines around the centre line are executed between the quarter lines (c).



(a) (b) (c)

5. **The Changes of Directions**

(a) At changes of direction, the Horse should adjust the bend of his body to the curvature of the line it follows, remaining supple and following the indications of the Rider, without any resistance or change of pace, rhythm or speed.

(b) Changes of directions can be executed in the following ways:

(c) Right-angled turn including riding through the corner (one -1- quarter of a volte of approx. six -6- metres).

(d) Short and long diagonal.

(e) Half voltes and half circles with change of rein.

(f) Half pirouettes and turn on the haunches.

(g) Serpentine loops.

RULES FOR BASIC SCHOOL MOVEMENTS

- Maintain Consistency
- Correct Use of Aids
- Proper Alignment
- Smooth Transitions

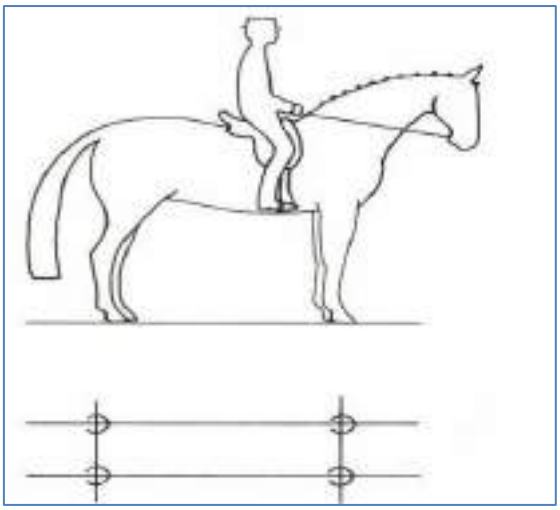
(h) **Counter-changes of Hand (in zig-zag)**. The zig-zag is a movement containing more than two (2) half-passes with changes of direction. The Horse should be straight for a moment before changing direction.

6. **The Halt**.

(a) At the halt the Horse should stand attentive, engaged, motionless, straight and square with the weight evenly distributed over all four (4) legs. The neck should be raised with the poll as the highest point and the nose line slightly in front of the vertical. While remaining "on the bit" and maintaining a light and soft contact with the Rider's hand, the Horse may quietly chew the bit and should be ready to move off at the slightest indication of the Rider. The halt must be shown for **at least 3 seconds**. The halt should be shown throughout the salute.

(b) The halt is obtained by the displacement of the Horse's weight to the hindquarters by a properly increased action of the seat and legs of the Rider, driving the Horse towards a softly closed hand, causing an almost instantaneous but not abrupt halt at a previously fixed place. The halt is prepared by a series of half-halts

(c) The quality of the paces before and after the halt is an integral part of the assessment.



7. **Rein-Back**.

(a) Rein-back is a rearward diagonal movement with a **two (2)-beat** rhythm but without a moment of suspension. Each diagonal pair of legs is raised and returned to the ground alternatively, with the forelegs aligned on the same track as the hindlegs.

(b) During the entire exercise, the Horse should remain “on the bit”, maintaining its desire to move forward.

(c) Anticipation or precipitation of the movement, resistance to or evasion of the contact, deviation of the hindquarters from the straight line, spreading or inactive hind legs and dragging forefeet are serious faults.

CONCLUSION

8. Basic school movements, such as circles, figures of eight, serpentines, changes of direction, halt, and rein-back, are essential exercises for both horse and rider. These movements lay the groundwork for more advanced equestrian skills by improving balance, coordination, flexibility, and communication between horse and rider. They also help strengthen the horse’s muscles, particularly in the hindquarters, and allow the rider to develop greater control and precision. Mastery of these movements is crucial for success in equestrian sports, as they enhance performance, improve safety, and build a strong bond between horse and rider.

ASSESSMENT EXERCISES

1. The series of aids that the rider gives to horse before any transition is termed as?

(a) Semi halt
(b) Half halt
(c) Full halt
(d) Double halt

2. Bending lessons of horse include?

(a) Longitudinal bending
(b) Lateral bending
(c) Both longitudinal & lateral
(d) Transverse bending

3. _____ is a rearward diagonal movement with a two-beat rhythm but without a moment of suspension?

(a) Walk
(b) Halt
(c) Trot
(d) Rein back

4. The halt must be shown for at least _____ seconds?

(a) 10 s
(b) 8 s
(c) 5 s
(d) 3 s

5. What is the maximum diameter of a volte?

(a) 12 metres
(b) 10 metres
(c) 15 metres
(d) 5 metres

6. What defines a regular circle rather than a volte?

(a) Less than 6 metres
(b) Exactly 8 metres
(c) More than 10 metres
(d) Exactly 6 metres

7. During a correct circle, the hind feet should?

(a) Track inside the forefeet
(b) Move wider than the forefeet
(c) Follow the line of the forefeet
(d) Remain stationary

8. What does the figure of eight consist of?

(a) One large circle
(b) Two equal-sized circles or voltes joined at the center
(c) A single diagonal line
(d) A square and a circle

9. At the center of the figure of eight, the rider must?

(a) Halt
(b) Canter
(c) Straighten the horse momentarily
(d) Circle again

10. The serpentine consists of?

(a) Full circles only
(b) Two circles and one diagonal
(c) Half circles connected by straight lines
(d) Diagonals and turns on the haunches

11. When crossing the centerline in a serpentine, the horse should be?

(a) Facing sideways
(b) Parallel to the short side
(c) Stopped
(d) On a diagonal

12. In serpentines with one loop on the long side, the distance from the track is?

(a) 2 or 4 metres
(b) 5 or 10 metres
(c) 12 metres
(d) 15 metres

13. Serpentines around the center line are executed between?

(a) The track and center
(b) The quarter lines
(c) The short sides
(d) The diagonals

14. When changing direction, the horse must?

(a) Halt
(b) Adjust its bend to the new line
(c) Change pace
(d) Ignore the rider

15. Which of the following is NOT a valid way to change direction?

(a) Serpentine loop
(b) Half volte
(c) Leg yield
(d) Half pirouette

16. A right-angled turn includes riding through?

(a) A straight line
(b) A circle
(c) One quarter of a six-metre volte
(d) The short side only

17. Zig-zag (counter-change of hand) includes?

(a) A single circle
(b) More than two half-passes with direction changes
(c) A serpentine and a halt
(d) One half-volte

18. Before changing direction in a zig-zag, the horse must be?

(a) Halted
(b) Flexed sideways
(c) Straight for a moment
(d) Speeding up

19. At the halt, the horse must be?

(a) Head down
(b) Attentive, motionless, straight and square
(c) Slightly bent
(d) Off the bit

20. How long must the halt be maintained in a salute?

(a) 1 second
(b) At least 3 seconds
(c) 5 seconds
(d) Until instructed

21. The correct posture at halt includes?

(a) Nose behind the vertical
(b) Rounded back
(c) Nose slightly in front of the vertical
(d) Weight only on front legs

22. The halt is achieved by?

(a) Pulling the reins
(b) Using voice aid
(c) Displacement of weight to the hindquarters
(d) Lifting the hands

23. What prepares the horse for a correct halt?

(a) Spur pressure
(b) Series of half-halts
(c) Sudden rein aid
(d) Walking backwards

24. In judging the halt, what is considered part of the evaluation?

(a) Rider’s salute
(b) Quality of paces before and after the halt
(c) Saddle fit
(d) Arena surface

25. Rein back is a?

(a) Lateral movement
(b) Four-beat rhythm
(c) Rearward diagonal two-beat movement
(d) Three-beat movement

26. Rein back includes movement?

(a) One leg at a time
(b) In diagonal pairs without suspension
(c) Only with forelegs
(d) With rocking motion

27. During rein back, the horse must remain?

(a) Behind the bit
(b) Stationary between steps
(c) On the bit and willing to move forward
(d) With an arched neck

28. Which of the following is considered a fault in rein back?

(a) Soft contact
(b) Spreading hind legs
(c) Parallel tracks
(d) Two-beat rhythm

29. Dragging forefeet during rein back indicates?

(a) Good rhythm
(b) A serious fault
(c) Light contact
(d) Controlled backward motion

Short Questions

1. What is the standard diameter of a volte?

2. How should a horse position its hind feet in a circle?

3. Define rein back.

4. For how long must the halt be maintained during the salute?

5. In a figure of eight, when should the horse be straightened?

Long Questions

1. Explain the movement of the horse and rider while performing a serpentine.

2. Describe the correct position and preparation required for a proper halt.

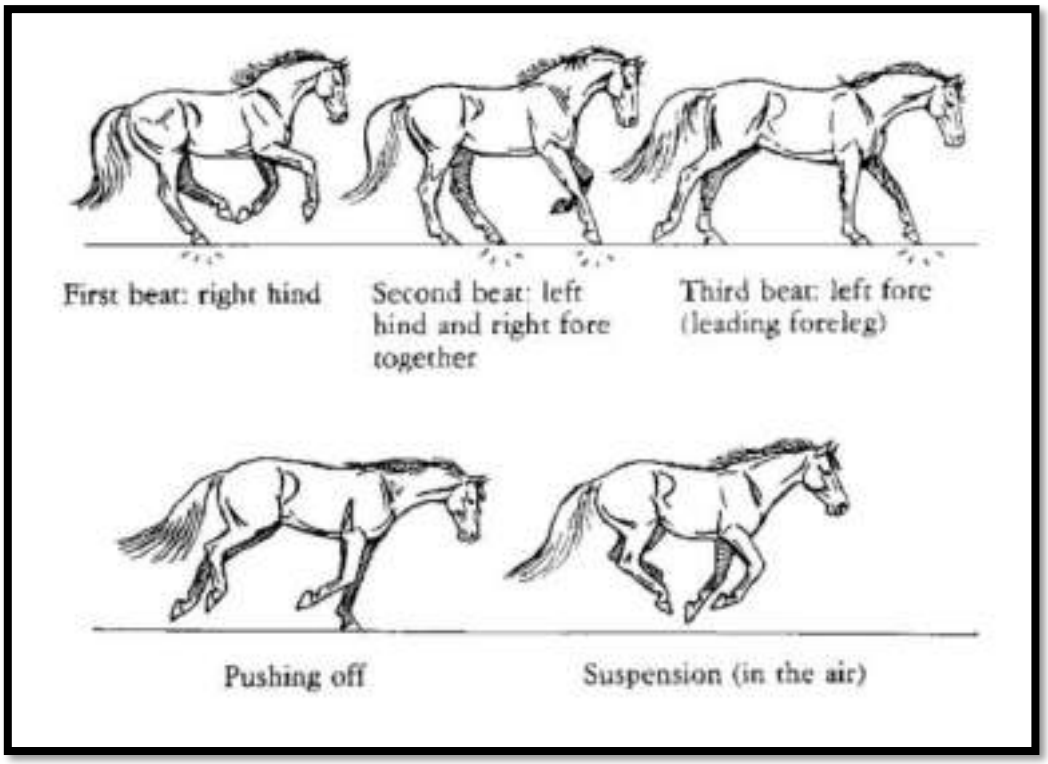
3. Discuss different ways of executing a change of direction in dressage.

4. Explain the rein back movement in detail, including its faults.

5. Compare and contrast volte, figure of eight, and serpentine movements in terms of purpose and execution.

EQUITATION AND EQUESTRIAN SPORTS

CHAPTER VIII: CANTER



TEACHING INSTRUCTIONS

Code	:	**EQTN - 08**
Period	:	**Three (01+02)**
Type	:	**Tutorial Discussion & Practical**
Year	:	**2nd Year SD/SW**
Conducting Officer	:	**PI Staff**
Training Aids	:	**Black board and chalk.**

Time Plan

- **Introduction : 05 Mins**
- **Canter (Aids Synchronizing with Horse) : 30 Mins**
- **Conclusion : 05 Mins**

INTRODUCTION

1. Introduction to canter, its aids and synchronizing with horse helps the trainee riders to understand pace of the horses as well as the application of word of command given by the instructor during the training.

PREVIEW

The lecture will be conducted as follows:-

- Part I: Introduction to canter, its aids and synchronizing with the horse

LEARNING OBJECTIVE

- To acquaint the cadets about Introduction to canter, its aids and synchronizing with horse

OBJECTIVES OF CANTERING

- Develop Rider's Balance
- Strengthen Horse's Muscles
- Enhance Control
- Refine Communication
- Smooth Transition

PART I: CANTER (AIDS, SYNCHRONISING WITH THE HORSE)

2. The canter is movement of three times, with a moment of suspension. In canter a horse leads with either of its forelegs. Horse in canter 'initiates' its movement striking off with either of its hinds, followed by the diagonal pair of the other hind and fore, finally the leading leg. For the horse leading by left foreleg, order of movement of the legs is:-

(a) RH (strikes off)

(b) RF/LH (diagonal pair)

(c) Suspension

(d) LF (leading leg)

3. By its very nature i.e. a series of jumps, the canter is the pace with most impulsion. While moving in a circle the horse moves with the foreleg leading in the direction of the circle i.e., in the left circle to lead by the LF and in the right circle to lead by RF. If for instance riding on a circle to the left the horse moves with the RF leading it is said to be in counter canter. The essence of a pure or true canter is movement in three times. Slower the pace the greater impulsion required to maintain the purity of gait. The rider has the option of cantering on either the right or left leading foreleg. As with the diagonal at the trot, the lead chosen depends on the direction the horse is travelling in. Moving to the right, clockwise, rider should canter on the right lead. Moving in the left direction i.e., counter clockwise, canter should be with the left foreleg leading. A new rider can easily determine what leading leg he is riding on by glancing down at the horse's shoulders.

4. The aids described below are for the left lead canter. They should be reversed for the right lead.

(a) **Seat**. Pushes seat bones forward every stride: the left is slightly more forward than the right.

(b) **Legs**. The legs should be squeezed and released together; the **Right Leg** should be slightly behind the girth. Left remains on the girth.

(c) **Hands**. Hands move forwards following the horse's head.

RULES FOR THE CANTER

The lecture will be conducted in following parts:-

- Correct Lead
- Consistent Rhythm
- Proper Position
- Smooth Transitions
- Balance and Straightness

5. Influences of the natural aids in canter:-

(a) **Seat**. By relaxing the lower back, maintaining the proper seat, and moving with the horse, rider should clearly feel his seat bones rocking forward together. The seat, moving in unison with the horse's motion, sets the rhythm of the gait.

(b) **Legs**. Act together to maintain the impulsion. The **Right Leg** stays a little further back than usual in order to compel the horse to keep the correct leading foreleg.

(c) **Hand**. At the canter, like at the walk, the horse moves his head up and down for leverage and balance. Hands, at a fixed distance from horse's mouth, must yield to allow this motion while still maintaining contact.

6. At the canter, the horse's rocking motion causes the rider's seat to leave the saddle slightly. When rider feels the seat leaving the saddle, he must push it forward, increasing the leg pressure. The hands yield by moving forward when horse's head moves down and returning to their original position when the head comes back up.

CONCLUSION

7. The canter is a crucial gait in equestrian sports, serving as a bridge between the slower trot and the faster gallop. It helps improve the rider's balance, strength, and coordination while building muscle and flexibility in the horse. Mastering the aids to synchronize with the canter allows the rider to maintain control, direction, and rhythm while strengthening the horse's performance. The canter is an essential component of equestrian training, paving the way for more advanced movements and disciplines, and fostering a deeper partnership between rider and horse.

ASSESSMENT EXERCISES

1. The canter pace of the horse covers approximately?

(a) 6 km/hour
(b) 12 km/hour
(c) 14 km/hour
(d) 24 km/hour

2. The walk is a?

(a) 2-beat gait
(b) 3-beat gait
(c) 4-beat gait
(d) 4-beat gait with a period of suspension

3. The gallop is a?

(a) 2-beat gait
(b) 3-beat gait
(c) 4-beat gait
(d) 4-beat gait with a period of suspension

4. The canter is a?

(a) 2-beat gait
(b) 3-beat gait
(c) 4-beat gait
(d) 4-beat gait with a period of suspension

5. The trot is a?

(a) 2-beat gait
(b) 3-beat gait
(c) 4-beat gait
(d) 4-beat gait with a period of suspension

6. The walk pace of the horse covers approximately?

(a) 6 km/hour
(b) 12 km/hour
(c) 14 km/hour
(d) 24 km/hour

7. The gallop pace of the horse covers approximately?

(a) 6 km/hour
(b) 12 km/hour
(c) 14 km/hour
(d) 24 km/hour

8. Which is not a type of canter?

(a) Working canter
(b) Collected canter
(c) Counter canter
(d) Walking canter

9. The distance from one footprint of any leg to the next footprint of the same leg is known as?

(a) Stroke
(b) Strike
(c) Stride
(d) None of the above

10. How many beats does the canter have?

(a) Two
(b) Three
(c) Four
(d) One

11. What does the canter include that is absent in the walk?

(a) Diagonal leg movement
(b) Moment of suspension
(c) Simultaneous four-leg contact
(d) Bouncing head motion

12. Which leg strikes off to initiate the canter?

(a) Left fore
(b) Right hind (RH)
(c) Diagonal pair
(d) Any foreleg

13. Which is the correct sequence of leg movement in a left-lead canter?

(a) RH → LF/RF → LH
(b) RH → RF/LH → LF
(c) LH → RF → LF/RH
(d) RF → RH/LF → LH

14. Which leg is the leading leg in a left lead canter?

(a) Right fore
(b) Left fore
(c) Left hind
(d) Right hind

15. Which pace has the most impulsion?

(a) Walk
(b) Trot
(c) Canter
(d) Rein back

16. In a circle to the left, the horse should lead with?

(a) Right fore
(b) Left fore
(c) Either foreleg
(d) Left hind

17. If the horse leads with the incorrect foreleg for the circle direction, it's called?

(a) Diagonal fault
(b) Counter canter
(c) Flying change
(d) Half-halt

18. In a right circle, which foreleg should be leading?

(a) Left fore
(b) Right fore
(c) Right hind
(d) Left hind

19. Slower canter requires?

(a) Shorter reins
(b) Less contact
(c) Greater impulsion
(d) Quick halts

20. When tracking left (counter-clockwise), which lead should you use?

(a) Right
(b) Left
(c) Hind
(d) Inner

21. When tracking right (clockwise), use the?

(a) Outside lead
(b) Right lead
(c) Left lead
(d) Diagonal lead

22. A rider can check the leading leg by?

(a) Checking stirrups
(b) Looking at the horse's shoulders
(c) Counting hoofbeats
(d) Listening for breathing

23. In a left lead canter, the rider's left seat bone should be?

(a) More backward
(b) Slightly more forward than the right
(c) Out of the saddle
(d) Still

24. Which leg stays on the girth during a left lead canter?

(a) Right
(b) Left
(c) Both
(d) Neither

25. Where should the rider's right leg be positioned for a left lead?

(a) Ahead of the girth
(b) Directly under the seat
(c) Slightly behind the girth
(d) On the saddle flap

26. Hands during canter should?

(a) Pull the reins back
(b) Stay still at all times
(c) Move forward with the horse's head
(d) Be high and wide

27. Seat movement in canter should?

(a) Stay rigid
(b) Rock forward in unison with the horse
(c) Bounce backward
(d) Sway side to side

28. The role of the seat in canter rhythm is to?

(a) Halt the horse
(b) Set the rhythm of the gait
(c) Stay neutral
(d) Resist movement

29. At canter, the right leg (for left lead) helps to?

(a) Halt the horse
(b) Keep the correct lead
(c) Initiate the trot
(d) Control the horse's head

30. Hands at canter must yield to?

(a) Stop forward motion
(b) Allow horse's head movement
(c) Move the reins sideways
(d) Force collection

31. When the rider's seat leaves the saddle, they should?

(a) Halt
(b) Lean backward
(c) Push the seat forward and increase leg pressure
(d) Pull reins

32. Hands yield forward when?

(a) Horse raises head
(b) Horse's head goes down
(c) Rider sits back
(d) Horse slows

33. Hands return to original position when?

(a) Horse stops
(b) Legs engage
(c) Horse's head rises
(d) Seat bones lift

34. At canter, the horse's head?

(a) Remains still
(b) Moves up and down for balance
(c) Tilts sideways
(d) Drops low constantly

Short Questions

1. How many beats does a canter have, and does it include suspension?

2. State the correct order of leg movement for the left lead canter.

3. What is meant by "counter canter"?

4. Which leg should stay slightly behind the girth for the left lead canter?

5. How can a rider check the leading foreleg during canter?

Long Questions

1. Explain the characteristics of the canter, including its sequence and impulsion requirements.

2. Describe in detail the aids (seat, legs, hands) for taking the left lead canter and their synchronization with the horse's movement.

3. Discuss the concept of true canter and counter canter with examples.

4. Explain the role of natural aids (seat, legs, hands) in maintaining rhythm and impulsion during canter.

5. How should the rider coordinate seat, leg, and hand actions during the rocking motion of the canter?

EQUITATION AND EQUESTRIAN SPORTS

CHAPTER IX: SCHOOLING AND INTRODUCTION TO BASIC DRESSAGE

TEACHING INSTRUCTIONS

Code	:	**EQTN – 09**
Period	:	**Ten (05+05)**
Type	:	**Tutorial Discussion & Practical**
Year	:	**3rd Year SD/SW**
Conducting Officer	:	**PI Staff / Officers**
Training Aids	:	**Black board and chalk.**

Time Plan

- **Introduction : 05 Mins**
- **Schooling with Horse : 70 Mins**
- **Introduction to Basic Dressage : 120 Mins**
- **Conclusion : 05 Mins**

INTRODUCTION

1. Schooling & introduction to basic dressage (repetition of above, bending lessons, turn on haunches transition of paces) helps the trainee riders to understand pace of the horses as well as the application of word of command given by the instructor during the training.

PREVIEW

The lecture will be conducted in the following parts:-

- Part I: Schooling with Horse
- Part II: Introduction to Basic Dressage

LEARNING OBJECTIVE

- To acquaint the cadets with Schooling & introduction to basic dressage with horse.

OBJECTIVES OF SCHOOLING AND BASIC DRESSAGE

- Develop Horse's Flexibility
- Improve Rider's Precision
- Strengthen Horse's Muscles
- Enhance Rhythm and Flow
- Build Confidence

PART I: SCHOOLING WITH THE HORSE

The Natural Aids for Transitions

2. A transition is a change from one gait to the other, either upward or downward. Before any transition is asked for the rider gives a series of aids to the horse also collectively termed as half halt.

3. Half halt is a sequence of aids that prepares the horse mentally and physically for the action that is to follow. The half-halt warns the horse, checks or adjusts his balance and "sets him up" for any change of pace, direction, movement or balance. It is also the most effective way of calming a tense or anxious horse.

4. To make the half-halt, the aids are the same as for the halt, but their intensity varies according to what is required of the horse and how sensitive the horse responds.

5. To prepare the horse to go from trot to canter, for example, a slight tightening of the seat bones, a straightening of the back and a momentary closing of the hands should be enough to ensure a smooth, balanced transition. But if the horse is moving too fast or has become badly unbalanced, with most of his weight on his forehand, a stronger half-halt must be used. Rider should brace his back, push downwards with the seat bones while tightening the muscles, and apply legs in the normal position to "collect" the horse under him. This is followed immediately by an increased feel on the reins. The entire action is momentary, but it can be repeated more or less strongly until the desired result is achieved. Performed well, the action of the half-halt is barely visible to the spectator. To avoid tension and resistance, the half-halt is always used quickly and clearly; never prolonging the hand aid, otherwise there is an opposite effect to the relaxation of mind and muscle sought, shortening or tightening the muscles in the horse's neck

and thus, creating resistance. If this happens, the hands yield immediately, and the half-halt repeated firmly but quietly until the horse is more relaxed.

6. While learning how to make a half-halt, the walk (pace having the minimum of impulsion) is the most suitable pace to use. It allows both rider and his horse more time in which to think out and coordinate the movements. The rider will have a better chance of controlling and of feeling what is happening at a slower pace than when travelling faster.

7. To calm an excitable or tense horse that is pulling, it is useless to tug on the reins. Rider should use the half-halt to slow him down and to obtain longer strides, and to encourage him to stretch himself, lowering his head and seeking contact with hands in a more relaxed manner.

8. The half-halt is a vital aid in all riding, but may be difficult to learn at first, especially on a less sensitive horse. Rider should practice on as many different horses as possible until he learns to feel when and how, and how much aids to apply. A trained horse will need less help or warning before changes of pace and direction than one that is less trained.

9. **Upward Transitions**.

(a) Halt to walk.

(b) Walk to trot.

(c) Trot to canter.

(d) Halt to trot.

(e) Walk to canter.

(f) Halt to canter.

IMPORTANCE OF SCHOOLING AND BASIC DRESSAGE

- Foundation for Advanced Movements
- Improves Communication
- Strengthens the Horse
- Balance and Suppleness
- Rider Development

10. **Downward Transitions**.

(a) Walk to halt.

(b) Trot to walk.

(c) Canter to trot.

(d) Canter to walk.

(e) Trot to halt.

(f) Canter to halt.

11. **Upward Transitions**.

(a) From a halt to a walk, a walk to a trot, and a halt to a trot, the aids are identical except for the amount of leg pressure applied. Before an upward transition, horse should lower his neck slightly. This is achieved by increasing the contact on inside rein and an increased inside leg aid at the girth. This helps the horse round his neck and spinal column.

(b) **Seat**. Stay relaxed and ready to follow the motion of the new gait.

(c) **Legs**. Act together at the girth until the desired gait is obtained.

(d) **Hand**. Yield immediately when the desired action take place.

12. **Downward Transitions**.

(a) From a walk to a halt, a trot to a walk, and a trot to a halt, the aids are identical except for the amount of leg pressure applied and the authority of the hands.

(b) **Seat**. Weight is distributed equally on the two seat bones rider leans back slightly.

(c) **Legs**. Resist together at the girth to maintain engagement.

(d) **Hands**. Act together to obtain the desired gait. When changing from a rising trot to a sitting trot, rider must lengthen the rein to maintain the same contact.

13. When the horse comes to halt, rider should yield slightly with hands and legs. If the horse has a tendency to halt crookedly, hands correct the forehand and legs correct the position of the hindquarters.

Downward Transitions from the Canter

14. The downward transitions from the canter require more precision of the hands. From a canter to a trot, a canter to a walk, and a canter to a halt, the only difference in the action of the reins is in the distribution of the tension applied.

15. The instructions below are for downward transitions from the left lead canter. They should be reversed or the right lead:-

(a) **Seat**. Rider sits deeper in the saddle, leaning back slightly.

(b) **Legs**. Resist together at the girth to maintain engagement.

(c) **Hands**. Act together, the left firmer than the right, to restrain the leading left lateral pair of legs.

16. After all downward transitions, with the exception of those involving the halt, the horse is kept attentive by maintaining a brisk pace at the slower gait for a few strides.

The Natural Aids for the Rein Back and Lateral Movements

17. Lateral work is the term used to describe any movement during which the horse's hind feet do not follow the tracks of his fore feet but step sideways. All lateral movement can be performed at walk, trot and canter, but is easier to learn them at the walk till rider establishes co-ordination and feel. Execution of these movements is easier at trot, which has more rhythm and impulsion.

18. Uses of lateral movements:-

(a) Improve obedience of the horse to the rider's aid.

(b) Supple all parts of the horse's body.

(c) Improves the balance of the horse.

19. The lateral movements are leg yielding, shoulder-in, travers, renvers and the half pass. In the lateral movements the pace should remain free and regular, maintained by a constant impulsion. The impulsion is often lost because of the rider's pre-occupation in bending the horse mainly than pushing him side ways

20. Leg yielding is the basic lateral movement in which the rider asks the horse to move forward and sideways away from the rider's leg with the horse's head bent away from the direction it is going. The horse is almost straight, except for a slight flexion at the poll away from the direction which he moves, so that the rider is just able to see the eyebrow and nostril on the inside. Leg yielding should be practiced parallel to a wall or fence, first at the walk and then at the trot. It should be executed to the left and right direction equally.

21. Goals of the movement:-

(a) This is the first of the lateral exercises and develops obedience.

(b) It helps to develop the rider's feel for moving the horse sideways and forward.

22. Rider's aids for leg yielding to the left:-

(a) **Right Hand**. Active behind the wither, creates a slight bend in the neck.

(b) **Left Hand**. Passive, follows the bend.

(c) **Right Leg**. Active behind the girth.

(d) **Left Leg**. at girth, moves the horse forward and prevents deviation of the horse's quarters.

Shoulder-In

23. Shoulder-in is a movement in which the horse is slightly bent round the inside leg of the rider. The horse's inside foreleg passes and crosses in front of the outside leg; the inside hind leg is placed in front of the outside leg. The horse is looking away from the direction in which he is moving.

24. **Goals of the Movement**.

(a) To develop the suppleness of the horse's entire spinal column and better co-ordination between the forelegs and the hindquarters.

(b) To loosen and tone the horse's shoulder muscles.

(c) To further engage the horse's hind legs.

25. **Rider's Aids for the Right Shoulder-in**.

(a) **Right Hand**. Becomes active behind the withers.

(b) **Left Hand**. Softens, goes forward and down.

(c) **Right Leg**. Active at the girth.

(d) **Left Leg**. Active slightly behind the girth.

(e) **Seat**. Rider places more weight on the left seat bone.

26. **Influences of the Natural Aids**.

(a) **Right Hand**. To maintain the bending of the neck to the right and still keep the horse on the track.

(b) **Left Hand**. To allow and then to regulate the action of the **Right Hand**.

(c) **Right Leg**. To encourage bending and to maintain the impulsion.

(d) **Left Leg**. To prevent the haunches from drifting to the left and to maintain the impulsion.

(e) **Seat**. To change the horse's balance and make him maintain the original direction.

27. **Execution of the Shoulder-in**.

(a) Establish the pace and impulsion in a circle.

(b) When coming out of circle on a straight track rider increases tension on right rein to bend the horse to the right, legs active at the girth.

(c) In order to stay on the track, rider resists with both hands as soon as the horse begins turning to the right. The right rein ceases to act directly and the left rein regulates the bend.

(d) The action of the legs and hands continue as described above.

(e) To avoid resistance, rider should have the horse travel only a few steps in this position. Then either continue in the circle or straighten and go forward at the trot.

28. The horse travels straight with his neck bent. When the horse is in a shoulder-in, his entire spinal column must be bent i.e. from the head to the tail, rider must make sure that the horse is not bending only his neck. The rider's weight is on the wrong seat bone. Rider must make sure that the weight is on the proper seat bone. For the right shoulder-in, it should be on the left seat bone; for the left shoulder-in, it should be on the right seat bone.

Travers

29. **What is Travers**. A horse is said to be in the Travers when going forward at the walk, trot, or canter, along the outside track of the riding arena, his haunches are to the inside of the riding arena and his spinal column is straight. The hind legs appear to be crossing each other and the horse looks straight ahead. The traverse is also called haunches-in. The same movement executed on inside of track, haunches facing towards the outside of the arena, it is called renvers or haunches-out.

30. **Goals of the Exercise**.

(a) To teach the rider precise use of the aids.

(b) To improve flexibility of horse's body.

(c) To teach obedience to the action of the rider's legs behind the girth.

(d) To prepare for the half -pass.

(e) To put more emphasis on the action of the horse's hind legs and to improve the engagement.

31. **Rider's aids for Travers /Renvers**. The instructions below are for the right haunches-in, they should be reversed for a left haunches-in.

(a) **Right Hand**. Becomes active and maintains the direction of movement.

(b) **Left Hand**. Softens, goes forward and down.

(c) **Right Leg**. Active at the girth.

(d) **Left Leg**. Active behind the girth.

(e) **Seat**. More weight on the right seat bone.

32. **Uses of the Natural Aids**.

(a) **Right Hand**. To bring the horse's nose and head to the right and to maintain the forehand on the original track.

(b) **Left Leg**. To allow and then to regulate the action of the **Right Hand**.

(c) **Right Leg**. To create and maintain the impulsion.

(d) **Left Leg**. To move the haunches to the right. And to maintain an inside track.

(e) **Seat**. To encourage the horse to maintain the original direction.

33. **Execution of the Travers**.

(a) Rider track to the right and establishes a pace.

(b) Rider slides the **Left Leg** behind the girth to displace the haunches slightly to the right.

(c) Apply the aids as described above.

(d) To avoid muscular contractions and resistance, rider should have the horse travel only a few steps in this position.

34. **Mistake to Avoid**. The rider's weight on the wrong seat bone. Rider should make sure that the weight is on the right seat bone: for the left travers weight should be on the left seat bone.

Half-Pass

35. **The Natural Aids for the Half-Pass**. A horse is said to be in a half-pass when he is going forward obliquely at the walk, trot or canter. His shoulders and haunches make two parallel tracks. And his spinal column is straight. His forelegs as well as his hind legs appear to be crossing each other. The horse looks in the direction he is travelling. Goals of the movement are:-

(a) To reinforce the horse's training in the lateral movements (on two tracks).

(b) To improve the suppleness of the horse's spinal column.

36. **Rider's Aids**. The instructions below are for a half-pass to the right. They should be reversed for a half-pass to the left.

(a) **Right hand**. Active, applies a direct tension for indicating the direction.

(b) **Left hand**. Passive goes forward and down. If necessary, switches to an indirect rein.

(c) **Right leg**. Active at the girth.

(d) **Left leg**. Active behind the girth.

(e) **Seat**. More weight on the right seat bone.

37. **Uses of the Natural Aids**.

(a) **Right Hand**. To lead the horse and to bring his neck and head to the right (right bend).

(b) **Left Hand**. To allow the forehand to go forward and to the right; to regulate the action of the **Right Hand**.

(c) **Right Leg**. To create and maintain the impulsion.

(d) **Left Leg**. To make the horse move his haunches to the right

(e) **Seat**. To encourage the horse to bear to the right.

38. **Execution of the Half-Pass**.

(a) Rider while moving clockwise in a circle inside a riding arena establishes a good impulsion.

(b) At the end of the short side of the arena performs a right shoulder-in and passes the corner in this position

(c) At the beginning of the long side of the arena apply a right direct rein and leave the track to follow a diagonal line across the arena. When the horse's forehand leaves the track, slide Left Leg behind the girth and push.

39. **Mistakes to be Avoided by Rider**.

(a) **The Horse has Poor Head Carriage**. Make sure the horse is on the bit.

(b) **The Horse Looks in the Wrong** Direction. Horse's head should be on the proper side. For a half-pass to the right, his head should be bent to the right for a half-pass to the left his head should be bent to the left.

The Natural Aids for the Flying Change of Lead

40. A Flying change of lead is a movement executed when the horse is already at the canter and the horse changes from one leading leg to the other without breaking the gait.

41. **Goals of the Exercise**.

(a) To improve the horse's balance when changing direction.

(b) To prepare the horse for Show Jumping and Advanced Dressage.

42. **Rider's Aids**. The instructions below are for a flying change from the left lead to the right. They should be reversed for flying change from the right lead to the left. The aids are applied when the horse is already cantering say the left foreleg leading. When all 4 feet are off the ground the rider asks for the flying change of lead a little before the suspension phase. Rapid and precise application of the natural aids is mandatory to obtain a flying change.

(a) **Right Hand**. Becomes more active increases the tension.

(b) **Left Hand**. Becomes passive, controls the forward motion.

(c) **Right Leg**. Becomes active at the girth.

(d) **Left Leg**. Active and stronger, moves behind the girth.

(e) **Seat**. Becomes lighter, achieved by increasing the weight in the stirrups.

43. **Execution of the Flying Change**.

(a) Rider teaches and perfects the canter on both leads from a trot, a walk, a halt, and rein back.

(b) Rider performs the counter-canter on both leads.

(c) When the horse can execute the counter-canter correctly on both leads. Practice simple changes of lead. From a left lead canter, bring the horse back to a trot and keep this gait for a few steps. Then ask for either a left or a right lead canter.

(d) As the horse improves at the simple changes, rider progressively reduces the number of steps of the trot and the walk between the changes.

(e) When this exercise becomes easy for the horse, rider can be more demanding and ask for the transitions from a walk and then from a halt.

(f) The horse can also be initiated to change leading leg by cantering over a pole on the ground. The rider applies aids for change in the moment of suspension over the pole.

(g) Put the horse into a left lead canter.

(h) Slightly reduce the pace.

(j) Execute a firm half-halt to perfect the horse's balance or to bring extra weight from his forehand to his hind legs. Follow immediately with a slight increase in the pace.

(k) When the horse is about to enter the suspension phase, apply the aids for a right lead canter as described above.

Rein-Back

44. **Rein-Back**. The rein-back is a 2-phase movement in which the horse travels backwards by diagonal pairs of legs.

45. **Goals of the Exercise**.

(a) To develop the suppleness of the horse's spinal column.

(b) To improve the engagement of the horse's hind legs.

(c) To prefect the horse's balance.

(d) To improve the forward motion.

46. **Rider's Aids**.

(a) **Right Hand**. Resists (Never pulls).

(b) **Left Hand**. Resists (Never pulls).

(c) **Right Leg**. Active at the girth.

(d) **Left Leg**. Active at the girth.

(e) **Seat**. Very light, achieved by increasing the weight in heels.

46. **Uses of the Natural Aids**.

(a) **Hands**. Forbid any kind of forward motion.

(b) **Legs**. Create the backward motion and to maintain the impulsion.

(c) **Seat**. Length the rider's weight on the horses back and to give freedom to his hind legs.

47. **Natural Aids of Rider for Rein Back**.

(a) The horse is at a halt and his hind legs are engaged.

(b) The rider's legs act simultaneously to create impulsion.

(c) The hands resist simultaneously preventing the horse from moving forward.

(d) The leg's yield simultaneously to allow the backward motion of the horse.

48. Once the back is started the motion is maintained by consistent but intermittent action of the legs alternating the action of the hands. The **Right Hand** acts when the horse's right shoulder is forward and the **Left Hand** when the left shoulder is forward.

Mistakes to Avoid

49. The horse backs sideways. If the horse does not back in a straight line, rider should correct the direction of the backward motion with reins to bring the shoulders in line with the haunches. Rider can also correct improper backing by sending the horse forward and applying a disciplinary leg action behind the girth on the same side to which the horse has drifted.

50. The rider pulls on the reins. Under no circumstances should the rider pull on the reins to obtain the backing motion. An honest response to the rider's leg should produce satisfactory results. Pulling on the horse's mouth will only create resistance, making him hollow his back (an inadequate position for any kind of motion) and might cause him to rear.

PART II: INTRODUCTION TO BASIC DRESSAGE

Objective and General Principles

51. The objective of Dressage is the harmonious development of the physique and ability of the horse. It makes the horse calm, supple, loose and flexible, confident, attentive and keen, thus achieving perfect understanding with his rider. The qualities developed in dressage are:-

(a) The freedom and regularity of the paces.

(b) The harmony, lightness and ease of the movement.

(c) The lightness of forehand and the engagement of the hindquarters originating in a lively impulsion.

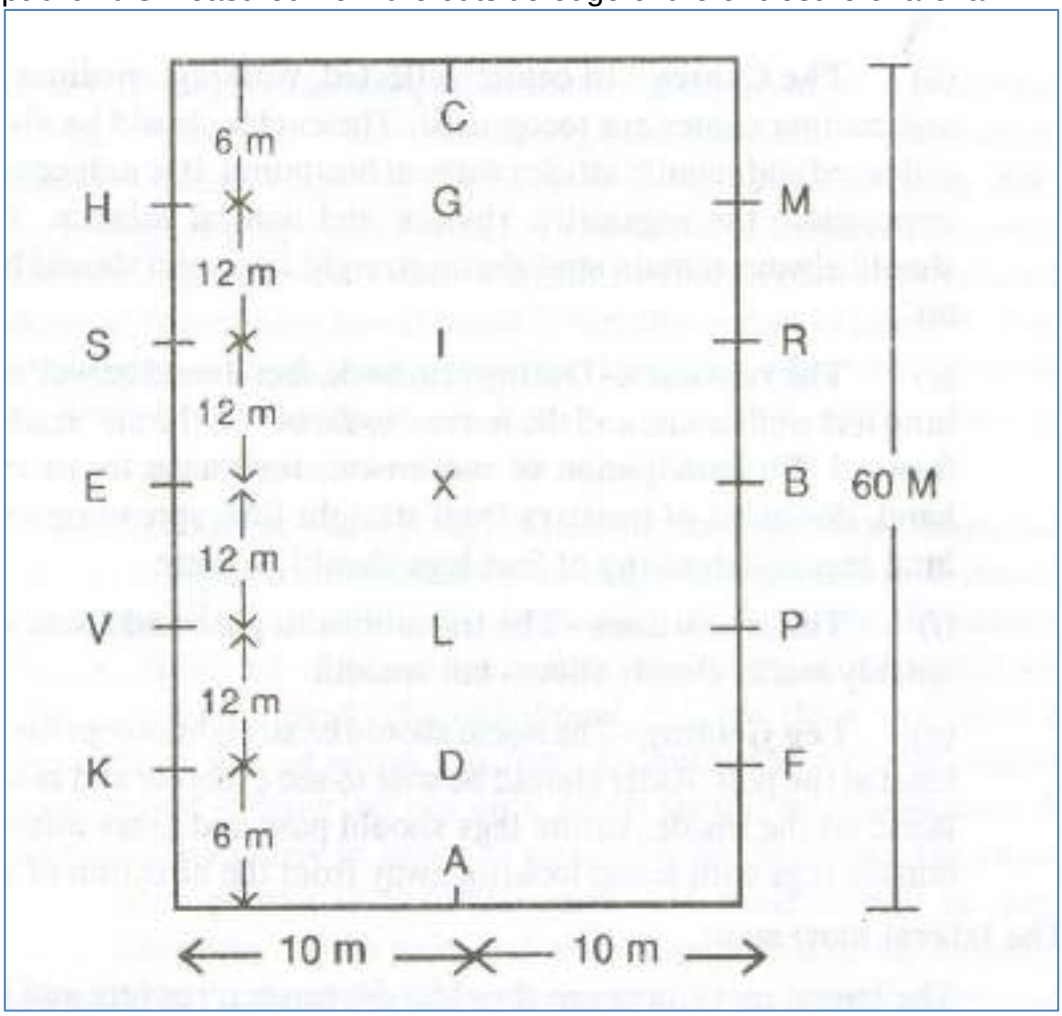
(d) The acceptance of the bridle, with submissiveness throughout and without any tenseness or resistance.

Technical Aspects – Dressage Arena

52. The arena should be absolutely flat and horizontal. A fine turf well-tended and sown in 15 metre of good soil, regularly watered, rolled and mowed and sufficiently compact is the best surface. Surface can also be of sawdust or sand. The surface should encourage easy movement without slipping.

Arena Dimensions

53. The area of the arena is 60 m x 20 m and should be measured from the inside edge of the enclosure. Minimum 15 m is the prescribed space between the arena and the seating area for public. It is measured from the outside edge of the enclosure of arena.



Dressage Arena

54. The immediate vicinity of the Dressage Arena contains only the judge's boxes and the scoring office and possibly a small enclosure for recording the event.

55. The height of the arena enclosure should be approximately 30 cm and the enclosure should not be vulnerable to falling by wind.

56. If there is no fixed enclosure, one can be made of movable parts: 2 m long with light construction, the whole surface being painted white.

57. At '**A**' (the entrance to the arena) the central section of 2 m should be able to lifted up and replaced or opening on the outside by movable cord.

58. **Markers**.

(a) The letters for the markers must be placed outside the enclosure, at about 50 cm from it.

(b) Markers are painted in black on white, on four-sided or triangular frames so that they can be seen from all angles.

(c) Their feet should be firmly secured in the ground or they should be heavy enough to stand up to wind, looking at least as high as the enclosure.

(d) In order that the judges may see the exact spot on the arena, the point for each marker should be marked by an adhesive red strip on the inside edge of the enclosure or by red paint.

(e) The centreline should be marked and best way of marking the centreline and the points '**D**' '**L**' '**X**' and '**G**', is to use a lawnmower for grass and a rake or a small roller for sand Width of centreline is approximately the normal width of a mower or rake. For sand, it is essential to re-mark the centreline after approximately every eight competitors.

59. **Officials' Boxes**.

(a) The three judge's Boxes, which should be raised about 50 cm above the level of the arena, must be placed along the short side of letter '**C**', 5 m outside of the enclosure, in order to give the judges a good view of the arena.

(b) The President of the Ground Jury's Box should be placed exactly in the centre of the short side, facing directly down the centre line '**A**'&'**C**'. This box should be big enough for the President, his writer and his assistant.

(c) The two other boxes, big enough for the judge, his writer and his assistant, are placed at 2.50m from and on the inside of, the prolongation of the long side.

Basic Movements of Dressage

60. **The Halt**. At the halt, horse should stand attentive, motionless and straight, with weight evenly distributed over all four legs, being in pairs abreast with each other. The neck should be raised, the poll high and head slightly in front of the vertical.

61. **The Walk**.

(a) The walk is a marching pace in which the footfalls of the horse's feet follow one another in all work at the walk. The recognized walks are collected walk. medium walk and free walk.

(a) **Collected Walk**. The horse remaining “on the bit” moves resolutely forward with his neck raised and arched. The head approaches the vertical position, the light contact with the mouth being maintained. The hind legs are engaged with good hock action. The pace should remain marching and vigorous, the feet being placed in a regular sequence. Each step covers less ground and is higher than at the medium walk, because all the joints bend more markedly. The hind feet touch the ground behind, or at least in the footprints of the fore feet. In order not to become hurried or irregular, the collected walk is shorter than the medium walk, although showing greater activity.

(b) **Medium Walk**. A free regular and unconstrained walk with moderate extension. The horse, remaining “on the bit”, walks energetically, but calmly, with even and determined steps, the hind feet touching the ground in front of the footprints of the fore feet. The rider maintains a light, but steady, contact with the mouth.

(c) **Extended Walk**. The horse covers as much ground as possible, without haste and without losing the regularity of his steps, the hind feet touching the ground clearly in front of the footprints of the fore feet. The rider allows the horse to stretch out his head and neck without, however, losing contact with the mouth.

62. **The Trot**.

(a) The trot is a pace of "two time" on alternate diagonal legs (left and right hind leg and vice versa) separated by movement of suspension. There are four recognized trots i.e., Collected trot, Working trot, medium trot and extended trot.

(b) **Collected Trot**. The horse, remaining “on the bit” moves forward with his neck raised and arched. The hocks, being well engaged, maintain an energetic impulsion, thus enabling the shoulders to move with greater ease in any direction. The horse’s steps are shorter than in the other trots, but he is lighter and more mobile.

(c) **Working Trot**. This is a pace between the collected and the medium trot, in which a horse, not yet trained and ready for collected movements, shows himself properly balanced, and, remaining “on the bit”, goes forward with even elastic steps and good hock action. The expression “good hock action” does not mean that collection is a required quality of the working trot. It only underlines the importance of an impulsion originated from the activity of the hindquarters.

(d) **Medium Trot**. This is a pace between the working and extended trot, but more “round” than the later. The horse goes forward with free and moderately extended steps and an obvious impulsion from the hindquarters. The rider allows the horse, remaining “on the bit” to carry his head a little more in front of the vertical than at the collected and the working trot, and allows him at the same time to lower his head a little more in trot of the vertical than at the collected and the working trot, and allows him at the same time to lower his head and neck slightly. The steps should be as even as possible, and the whole movement balanced and unconstrained.

(e) **Extended Trot**. The horse covers as much ground as possible. Maintaining the same rhythm, he lengthens his steps to the utmost as a result of great impulsion from the hindquarters. The ride allows the horse, remaining “on the bit”, to lower and extend his neck in order to prevent his action from becoming higher. The fore feet should touch the ground on the spot towards which they are pointing.

63. **The Canter**.

(a) The Canter is pace of "three time" where at canter to the right, for instance, the foot falls' follow one another as follows- Left hind. Left diagonal (simultaneously left fore and right hind). Right fore followed by a movement of suspension with all four feet in the air before the next stride begins.

(b) The canter is always with light, condensed and regular strides should be moved into without hesitation. Types of Canters’ are collected canter, working canter, Medium canter and extended canter.

(c) **Collected Canter**. The horse, remaining “on the bit”, moves forward with his neck raised and arched. The collected canter is marked by the lightness of the forehand and the engagement of the hindquarters, i.e., is characterized by supple, free and mobile shoulders and very active quarters. The horse’s strides are shorter than at the other canters, but he is lighter and more mobile.

(d) **Working Canter**. This is a pace between the collected and the medium canter, in which a horse, not yet trained and ready for collected movement, shows himself properly balanced and, remaining “on the bit” goes forward with even, light and cadenced strides and good hock action. The expression “good hock action” does not mean that collection is a required quality of working canter. It only underlines the importance of an impulsion originated from the activity of the hindquarters.

(e) **Medium Canter**. This is a pace between the working and the extended canter. The horse goes forward with free, balanced and moderately extended strides and an obvious impulsion from the hindquarters. The rider allows the horse, remaining “on the bit”, to carry his head a little more in front of the vertical than at the collected and working canter, and allows him at the same time to lower his head and neck slightly. The strides should be long and as even as possible, and the whole movement balanced and unconstrained.

(f) **Extended Canter**. The horse covers as much ground as possible. Maintaining the same rhythm, he lengthens his strides to the utmost, without losing any of his calmness and lightness as a result of great impulsion from the hindquarters. The rider allows the horse, remaining “on the bit”, to lower and extended his head and neck, the tip of his nose pointing more or less forward.

64. **The Rein-Back**. The rein-back is an equilateral, movement in which the feet are raised and set down by diagonal pairs.

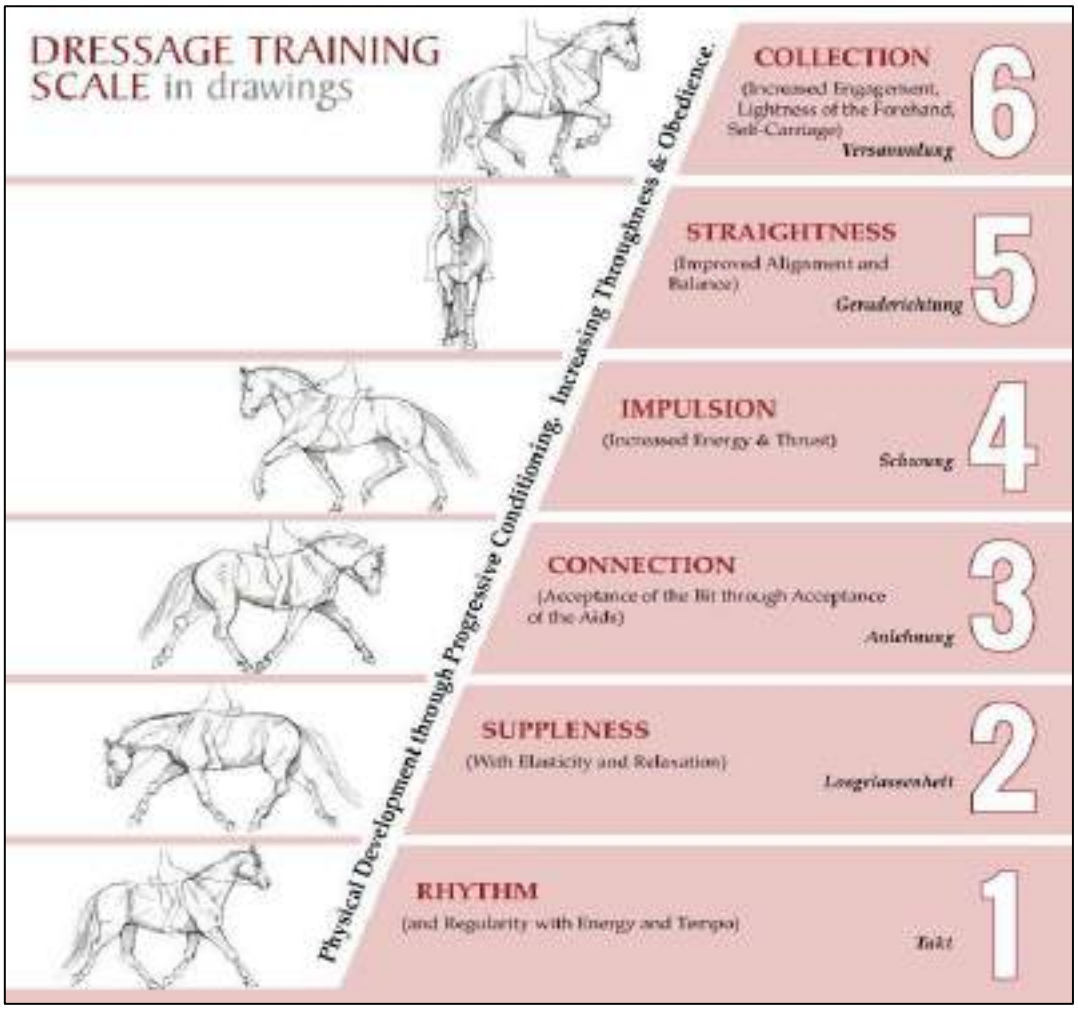
65. **The Pirouette and the Half Pirouette**. The pirouette is a circle executed on two tracks, with a radius equal to the length of the horse, for hand moving round the haunches. Half pirouette is half circle in the same manner.

66. **Other Figures**.

(a) **Volte**. It is a circle of 6, 8 or 10 meters diameter. If larger than 10 meters, one uses the term circle stating the diameter.

(b) **Serpentine**. 'S' shaped figure. It consists of half circles connected by a short straight line. When crossing the centreline, the horses should be straight and parallel to the short side. Depending on the size of the half-circle the straight connection varies in length.

(c) **Figure of Eight**. This figure consists of two exact volts or circles of equal size as prescribed in the test, jointed at the centre of the eight. While doing figure of eight, the rider should make his horse straight an instant before changing direction at the centre of the figure.



Execution of the Dressage Test

67. Dressage tests are prescribed according to the level of competition and must be carried out by rider entirely from memory. All movements must follow in the order laid down. Every error of the course is penalized as follows

(a) First Time : 02 points.

(b) Second Time : 04 points.

(c) Third Time : 08 points.

(d) Fourth Time : competitor is eliminated.

68. Marking each dressage movement is marked for its quality from 0 to 10 by each judge as follows:-

(a)	10	Excellent
(b)	09	Very Good
(c)	08	Good
(d)	07	Fairly good
(e)	06	Satisfactory
(f)	05	Sufficient
(g)	04	Insufficient
(h)	03	Fairly bad
(j)	02	Bad
(k)	01	Very Bad
(l)	0	Not Executed

69. Collective marks are awarded from 0 to 10, after the competitor has finished his performance for each of the following: -

(a) Paces of the horse- their rhythm and purity.

(b) Impulsion of the horse.

(c) Submission of the horse.

(d) The rider’s position and seat; correctness and effect of the aids.

70. **General Rules**. When a competitor makes an, “error of the test” (trots rising instead of sitting, at the salute does not take reins is one hand, etc.) he must be penalized as for an “error of course”. In principle a competitor is not allowed to repeat a movement of the test unless the President of the jury decides on an error of course and sounds the bell.

71. The penalty points are deducted on each judge’s sheet from the total points obtained by the competitor.

72. In a case of marked lameness of the horse, the President of the jury informs the competitor that he is eliminated. There is no appeal against this decision.

73. In a movement, which must be carried out at a certain point of the arena, it should be done at the moment when the competitor's body is above this point.

74. After the sound of the bell, the competitor should enter the arena at '**A**'. For exceeding 45 seconds before entering the arena after the bell sounds, rider will be eliminated. The same also applies to a competitor who enters the arena at '**A**' before the starting signal has been given.

75. Competitors must take the reins in one hand at the salute.

76. In the case of a fall of horse and/or competitor, the competitor will not be eliminated. He will be penalized by the effect of the fall on the execution of the movement concerned and in the collective marks.

Dress

77. Gloves are compulsory.

78. Black riding boots are compulsory, unless other colour is as a part of the rider's military/police uniform.

79. Spurs must be made of metal. There must be a shank either curved or straight pointing directly backs from the centre of the spur. The arms of the spur must be smooth. If rowels are used, they must be free to rotate.

RULES FOR SCHOOLING AND BASIC DRESSAGE

- Consistency
- Correct Aids
- Balance and Alignment
- Smooth Transitions
- Positive Reinforcement

Saddlery

80. **English Type Saddle and Bridle is Used**. Double bridle is used at higher level of competition. Lip strap and rubber or leather covers for curb chain are optional. No saddle covers are allowed.

81. **Bridoon and Curb Bits must be made of Metal**. The lever arm of the curb bit is limited to 10 cm (length below the mouth piece). The ring of the bridoon must not exceed 8 cm in diameter. The thickness of the bridoon must be such so as not to hurt the horse.

82. It is under penalty of elimination, forbidden to carry a whip of any kind while competing. However, the use of a whip in the practice area is allowed.

83. Martingales, Breastplates, bit guards, any kind of gadgets such as bearing, side running or balancing reins, etc, any kind of boots or bandages and any form of blinkers, including ear muffs, hoods and any others, are under penalty of elimination, strictly forbidden. Any decoration of the horse with unnatural things, such as ribbons or flowers, etc in the tail, etc. is strictly forbidden.

84. Normal plaiting of the horse's mane and tail, however, is allowed.

CONCLUSION

85. Schooling in basic dressage, including repetition of bending lessons, turn on haunches, and transitions of paces, is essential for both the horse and rider. These exercises lay the groundwork for advanced movements and help improve flexibility, balance, and communication. Regular practice enhances the rider's position, control, and precision, while building strength and suppleness in the horse. As a result, basic dressage movements are foundational for improving overall performance in equestrian sports, fostering a deeper partnership between horse and rider. Mastery of these fundamental skills leads to better harmony and a more refined riding.

ASSESSMENT EXERCISES

1. Dressage makes the horse?

(a) Calm and flexible
(b) Attractive and keen
(c) To understand the rider
(d) Above all

2. In dressage, the horse is permitted to have?

(a) All types of bits
(b) Prescribed bits
(c) Both
(d) None

3. In dressage, the horse is permitted to have?

(a) False tail
(b) Ear hood
(c) Both
(d) None

4. In dressage competition, the horse is permitted to have?

(a) Ear plug
(b) Boots and bandages
(c) Both
(d) None

5. In dressage, resistance of the horse for more than 20 seconds attracts?

(a) 2 points deduction
(b) 2% point deduction
(c) Elimination
(d) All

6. In dressage, first error of course attracts?

(a) 2 points deduction
(b) 2% point deduction
(c) Elimination
(d) All

7. In dressage, second error of course attracts?

(a) 4 points deduction
(b) 2% point deduction
(c) Elimination
(d) All

8. In dressage, all four feet of the horse leaving the arena attracts?

(a) 2 points deduction
(b) 2% point deduction
(c) Elimination
(d) All

9. In dressage, unauthorized assistance from outside attracts?

(a) 2 points deduction
(b) 2% point deduction
(c) Elimination
(d) All

10. In dressage, not saluting the judge attracts?

(a) 2 points deduction
(b) 2% point deduction
(c) Elimination
(d) All

11. Size of a standard dressage arena is?

(a) 60m × 20m
(b) 80m × 20m
(c) 60m × 40m
(d) 45m × 45m

12. Dressage makes the horse?

(a) Calm and flexible
(b) Attractive and keen
(c) To understand the rider
(d) Above all

13. What is a transition in horse riding?

(a) A break in riding
(b) A change in equipment
(c) A change from one gait to another
(d) A type of jumping movement

14. What prepares the horse for a transition?

(a) Spur aid
(b) Voice command
(c) Half-halt
(d) Lateral movement

15. What is the purpose of the half-halt?

(a) To increase speed
(b) To warn and balance the horse
(c) To stop the horse completely
(d) To initiate lateral movements

16. When is a stronger half-halt needed?

(a) When the horse is sleepy
(b) When the horse is grazing
(c) When the horse is unbalanced and on forehand
(d) When the horse is standing still

17. What happens if hand aid in a half-halt is prolonged?

(a) Horse becomes excited
(b) Horse slows down
(c) Horse resists and tightens neck
(d) Horse jumps

18. Which gait is best for learning half-halt?

(a) Canter
(b) Walk
(c) Gallop
(d) Halt

19. What is useless for calming a tense horse?

(a) Half-halt
(b) Stretching
(c) Tugging the reins
(d) Slowing the gait

20. What type of horse needs less help for transitions?

(a) Young horse
(b) Trained horse
(c) Lame horse
(d) Lazy horse

21. Which of the following is not an upward transition?

(a) Halt to walk
(b) Walk to canter
(c) Canter to halt
(d) Trot to canter

22. Before an upward transition, which rein contact is increased?

(a) Outside rein
(b) Inside rein
(c) Both reins equally
(d) No rein

23. What is the function of the rider's legs in upward transitions?

(a) Only to stop the horse
(b) To apply random pressure
(c) To act together at the girth
(d) To maintain horse's neck bend

24. What is the rider's seat action in downward transition?

(a) Lean forward
(b) Stay neutral
(c) Lean back slightly
(d) Rise in the stirrups

25. What should be done after downward transitions (except halt)?

(a) Let the horse rest
(b) Ride in reverse
(c) Maintain brisk pace for few strides
(d) Tighten the girth

26. What is lateral work?

(a) Movement in circles
(b) Moving only forward
(c) Sideways movement
(d) Moving backward

27. What is the simplest lateral movement?

(a) Travers
(b) Leg yielding
(c) Shoulder-in
(d) Half-pass

28. In leg yielding to the left, which leg is active behind the girth?

(a) Left leg
(b) Right leg
(c) Both legs
(d) No leg

29. In shoulder-in to the right, rider's weight is on which seat bone?

(a) Right
(b) Left
(c) Both equally
(d) None

30. What distinguishes shoulder-in?

(a) Horse bends only the neck
(b) Horse is straight
(c) Inside foreleg crosses outside foreleg
(d) Horse walks backward

31. What is another term for travers?

(a) Shoulder-out
(b) Haunches-in
(c) Neck bend
(d) Forehand-in

32. What does the left leg do in right travers?

(a) Create impulsion
(b) Maintain forehand
(c) Move haunches to right
(d) Stop movement

33. What characterizes half-pass?

(a) Head and haunches in opposite directions
(b) Neck only bent
(c) Forward and diagonal motion with bend in direction of movement
(d) Performed only at walk

34. In a half-pass to the right, where is rider’s weight?

(a) Centered
(b) Left seat bone
(c) Right seat bone
(d) On stirrups only

35. When is a flying change asked for?

(a) At halt
(b) While walking
(c) During suspension phase of canter
(d) After a rein-back

36. What is not a goal of rein back?

(a) Improve hind leg engagement
(b) Improve balance
(c) Improve forward motion
(d) Prepare for jumping

37. What should rider never do in rein back?

(a) Use light seat
(b) Use leg pressure
(c) Pull on reins
(d) Keep hands steady

38. What is a half-halt used for in riding transitions?

(a) Only for upward transitions
(b) To prepare the horse mentally and physically for a change
(c) To signal the horse to stop immediately
(d) To increase rein pressure

39. Which of the following is true about a correctly applied half-halt?

(a) It is done only through strong rein aids
(b) It is a prolonged pulling on the reins
(c) It is momentary and discreet but effective
(d) It replaces the use of leg aids

40. What should the rider do if the horse becomes resistant during a half-halt?

(a) Pull harder on the reins
(b) Yield with the hands and repeat the half-halt quietly
(c) Halt the horse and restart
(d) Use the whip

41. When first learning to apply half-halts, the best gait to practice in is?

(a) Trot
(b) Canter
(c) Walk
(d) Gallop

42. When preparing for an upward transition, what happens with the inside rein and leg?

(a) Increased contact on inside rein and inside leg at the girth
(b) Passive inside leg, increased outside rein
(c) Inside rein held steady, both legs passive
(d) Increased outside leg pressure only

43. During an upward transition, what is the role of the rider's seat?

(a) Sit deeper into the saddle
(b) Lean forward
(c) Stay relaxed and follow the motion of the new gait
(d) Remain still and rigid

44. In downward transitions, how should the rider's seat act?

(a) Distribute weight evenly and lean back slightly
(b) Lean forward to anticipate stop
(c) Stay very light with no weight
(d) Lift off the saddle to cue the horse

45. In a trot-to-walk transition, the rider's legs should?

(a) Be removed from the horse's sides
(b) Do nothing
(c) Resist together at the girth to maintain engagement
(d) Only use the left leg

46. How do the hands act in a correct downward transition?

(a) Hands pull the reins backward forcefully
(b) Hands act together to obtain the desired gait
(c) Hands are passive and allow horse full control
(d) Only the inside hand applies pressure

47. What is done immediately after a downward transition (except into halt)?

(a) Allow the horse to stretch and rest
(b) Apply full rein contact
(c) Maintain a brisk pace in the slower gait
(d) Push the horse into rein back

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(d) Prepare for jumping

72. What should rider never do in rein back?

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(b) Use leg pressure
(c) Pull on reins
(d) Keep hands steady

Short Questions

1. Define a transition in horse riding and explain its importance.

2. What is a half-halt, and why is it used?

3. Name any three upward and three downward transitions.

4. What are the goals of lateral movements in dressage?

5. What is the difference between leg-yield and shoulder-in?

Long Questions

1. Explain the correct sequence of aids for an upward transition from walk to trot and trot to canter.

2. Discuss the role of the half-halt in maintaining balance and preparing the horse for transitions.

3. Describe the aids and execution for shoulder-in and travers (haunches-in).

4. Explain the goals, aids, and common mistakes in performing a half-pass.

5. Write short notes on:

   (a) Rein back and its goals

   (b) Flying change of lead and its execution

   (c) Volte and Serpentine figures

EQUITATION AND EQUESTRIAN SPORTS

CHAPTER X: INTRODUCTION TO SHOW JUMPING AND TENT PEGGING

TEACHING INSTRUCTIONS

Code	:	**EQTN – 10**
Period	:	**Six (03+03)**
Type	:	**Tutorial Discussion**
Year	:	**2nd Year SD/SW & 3rd Year SD/SW (Refresher)**
Conducting Officer	:	**PI Staff**
Training Aids	:	**Black board and chalk.**

Time Plan

- **Introduction : 05 Mins**
- **Introduction to Show Jumping : 60 (40+20) Mins**
- **Introduction to Tent Pegging : 50 (30+20) Mins**
- **Conclusion : 05 Mins**

INTRODUCTION

1. Introduction to show jumping and tent pegging helps the trainee riders to understand the methodology and strategy to go over the jumps with the horse. Similarly, during tent pegging they learn how to control the horse and lift the pegs from ground.

PREVIEW	LEARNING OBJECTIVE
The lecture will be conducted in the following parts:- ➢ Part I: Introduction show jumping ➢ Part II: Introduction tent pegging	➢ To acquaint the cadets with show jumping and tent pegging.

PART I: INTRODUCTION SHOW JUMPING

Show Jumping

2. A jumping competition is one in which combination of the horse and the competitor is tested under various conditions over a course of obstacles in an enclosed arena. It is a test intended to demonstrate the horse's freedom, its energy, its skills and its obedience in jumping and the competitor's horsemanship.

3. The obstacles must be inviting in their overall shape and of varied appearance. Both the obstacles themselves and their constituent parts must be such that they can be knocked down, while not being so light that they fall at the slightest touch or so heavy that they may cause horses to fall. Poles and other parts of the obstacles are held up by supports (cups). The diameter of the supports must be slightly greater than that of the pole and up to a third of the circumference, without gripping it. The pole must be able to roll on its support. In case of planks, barriers, gates, etc. the diameter of the supports must be more open or even flat.

4. Arena for jumping is enclosed completely. Red flags and white flags are used to mark the obstacles. The red flags are passed on right hand side of the competitor and the white flags on his left side. Size of arena may vary from small i.e., 50 m x 80 m, medium 70 m x 80 m and big 100 m x 120 m.

5. **Types of Jumps/ Obstacles in Show Jumping**.

(a) **Straight Obstacle**. When all elements of the obstacle are in same vertical plane. These include jumps made of poles, planks, gates, barriers and walls.

(b) **Spread Obstacle**. A spread obstacle is an obstacle, which is built in such a manner that it requires an effort both in spread and in height. Approved safety cups must be used for the back poles of spread obstacles. Elements of the jump are in 2 vertical planes with a spread between them. Spread obstacles include true parallel/ oxer i.e. when both the elements are at the same height or ascending when the further elements (from the side horse is jumping) is higher than the nearer element. Water jump and Liverpool (A vertical/ parallel/oxer having a water tray underneath) are also types of spread jumps.

(c) **Combinations**. Double, triple or higher combinations mean a group of two three or several obstacle, with distances between each of 7 m minimum and 12 m maximum. The distance is measured form the base of the obstacle of the landing side to the base of the next obstacle of the take –off side. In combinations, each obstacle of the group must be jumped separately and consecutively. When there is a refusal, run-out or fall of competitor the competitor must retake all the jumps.

(d) **In a Course, First Two to Three Fences are Simple**. About one third of fences should be of maximum height or width. The course is designed to make a horse jump equally on both reins. Combinations are usually located on the side of spectator stands

Course and Course Plan

6. The course is the track, which the competitor must follow when competing from passing the starting flags up to the finishing flags. The length must be measured accurately to the nearest meter taking account particularly on the turns, of the normal line to be followed by the horse. This normal line must pass through the middle of the obstacle. The total length of the course in meters should not exceed the number of obstacles in the competition multiplied by 60. The starting line should not be more than 25 m or less than 6 m form the first obstacle. The finishing line should not be less than 15 m or more than 25 m form the last obstacle. A plan showing accurately all the details of the course must be posted as close as possible to the entrance of the arena, at least half an hour before the beginning of competition. Competitors on foot only are admitted once to the arena before each competition to see the course.

IMPORTANCE OF SHOW JUMPING & TENT PEGGING

- Skill Development
- Horse-Rider Partnership
- Promotes Equestrian Discipline
- Competitive Spirit
- Cultural Significance

7. **Bell by the Judges**

(a) To give the signal to the rider to start. After the bell has been rung, the competitor must cross the starting line within 45 seconds under penalty of elimination.

(b) To stop a competitor for any reason or following an unforeseen incident.

(c) To signal him to continue his round after an interruption.

(d) To indicate him that an obstacle and /or flag knocked down or displaced following disobedience has been replaced and that he may restart. If, after an interruption, the competitor starts and jumps or attempts to jump without waiting for the bell to ring, he will be eliminated.

8. **Penalties During a Jumping Round**.

(a) Knocking down an obstacle or foot in the water or on the boundary that defines the water jump. An obstacle is considered knocked by mistake of the horse or competitor.

(i) The whole or only part of it falls, even if the part, which falls, is arrested in its fall by any element of the obstacle.

(ii) At least one of its ends no longer rests on any part of its support.

(b) **Disobediences**.

(i) **Corrected Deviation from the Course**. To correct a deviation, the competitor resumes the course at the point where the deviation took place.

(ii) **Refusal**. When a horse halts in front of an obstacle, which it must jump, whether the horse knocks it down or displaces it.

(iii) **Run Out**. When the horse escapes the control of its rider and avoids an obstacle which it has to jump.

(iv) **Resistance**. When the horse refuses to go forward or makes a halt for any reason, make one or several more or less regular or complete half turns, rears or steps back for whatever reason.

(c) **Deviation from the Course**.

(i) It is deviation from the course when the competitor does not follow the course as set on the published plan.

(ii) Does not cross the starting and finishing line between flags.

(iii) Omits a compulsory turning point.

(iv) Does not jump the obstacle which forms part of the course or omits an obstacle.

(v) Jumps or attempts to jump an obstacle which does not form part of the course

(d) **Fall of a Horse/or Competitor**. A competitor is considered to have fallen when, either voluntarily or involuntarily, he is separated from his horse, which has not fallen, in such a way that he touches the ground or finds it necessary to use some form of support or outside assistance in order to get back into the saddle. Penalized with elimination.

(c) **Unauthorized Assistance**. An intervention by a third party between the starting line and the finishing line, whether solicited or not, with the object of helping the competitor or the horse is considered to be an un-authorized assistance. Penalized by elimination.

(f) Exceeding the time allowed or the time limit is penalised as discussed in *Para (h)* below.

(g) If at the completion of a Show Jumping round, two or more competitors are placed on equal penalties, they go into a jump off; on a shorter course in which the height of some fences may be raised.

(h) **Incurring of Penalties**.

(i) First disobedience - 04 penalties.

(ii) Obstacles knock down while jumping - 04 penalties.

(iii) One or more feet in the water - 04 penalties.

(iv) Second disobedience - Elimination.

(v) Fall of horse or competitor or both -Elimination.

(vi) Exceeding the time allowed - 1 Penalty for 4 seconds.

(vii) In final jump offs against clock - Penalty for each second commenced.

(viii) Exceeding the time limit - Elimination.

(j) Penalties for the disobedience accumulate not just at the same obstacle but through the entire round.

9. Wearing a hard hat secured by a three-point retention harness is compulsory for anyone jumping a horse. Each competitor must salute and the judges may refuse to start a competitor who has not saluted. There are no restrictions on saddles. Only unrestricted running martingales are allowed. Reins must be attached to the bit (s) or directly to the bridle. Gags and hackamores are allowed. In the interests of safety, the stirrup iron and the stirrup leather must hang freely from the bar of the saddle and the outside of the flap. Competitors are allowed to sue a dressage whip when working on the flat but are strictly forbidden to use or carry a whip, which is weighed down at the end at any time, or to carry or use one, which is more than 75 cm in length in the arena.

Types of Show Jumping Competitions

10. **Knock out Competition**.

(a) This competition takes place by pairs of competitors against each other. The competitor will compete against each other simultaneously over two identical courses. If one competitor enters the other competitor's course and as a result interferes with that competitor, the rider responsible, for obstruction is eliminated.

(b) The elimination rounds in which two competitors taking part are run without time. Each fault made of whatever nature is penalized by one point. The competitor who gets the least number of points and who in the event of equality of points has passed the finishing line earlier is the winner.

11. **Six Bar Competition.**

(a) A Six Bar Competition is a power and skill competition organized under special rules over a combination of obstacles.

(b) In this competition, six straight obstacles are placed in a straight line about 11 m apart from each other. They must be identically constructed and composed of poles of the same type and colour.

(c) All the obstacles may be kept at the same height i.e., 1.20 m or at progressive heights i.e. 1.10 m, 1.20 m, 1.30 m, 1.40 m, or the first two at 1.20 m the next two at 1.30 m, and so on.

(d) The competition is judged without a time allowed or time limit.

(e) Competitors who retire during their round for whatever reason or who withdraw from the jump off before going into the arena or who are eliminated during the jump-off, must be placed equal.

12. **Top Score Competition**.

(a) This is a timed jumping competition for which the order of starting must be drawn by draw of lots. No penalties are incurred for knocking down any obstacle except joker (the highest obstacle).

(b) Each obstacle is allotted points from 10 to 100. The obstacles must be built so that they can be jumped in both directions.

(c) Competitors are credited with the number of points allotted to each obstacle provided it is jumped clear. No points are awarded for an obstacle knocked down.

(d) Each obstacle is jumped maximum of two times to count towards the score. Jumping voluntarily or otherwise, an obstacle for the third or subsequent time or jumping or passing through an obstacle already knocked down or displaced including the displacement of a lower element, does not incur elimination but scores no points.

(e) Disobedience and falls are not penalized since they decrease the time available in which to score. Following disobedience, the competitor may either attempt the same obstacle against or proceed to the next obstacle of his choice. A third disobedience

does not incur elimination, but the judges may retire a competitor if it becomes apparent that repeated disobediences have destroyed all chances of the competitor featuring in any final position.

(f) The competition is decided by the highest number of points scored. In the event of equality of points, the fastest time between crossing the starting and finishing lines decides. In the event of equality of points and time for first place, a Jump-off may be held over the same course, the no of obstacles raised and with the time allowed reduced to seconds.

(g) **The Joker**. An obstacle suitably marked and known as the 'Joker'. Each time the Joker is jumped clear, 200 points are awarded but if it is knocked down, 200 points are deducted. The Joker must be built as an upright (no spread) obstacle.

13. **Puissance Competition**.

(a) The aim of this competition is to demonstrate the ability of the horse to jump, a limited number of large obstacles with a wall as the final obstacle for highest jump in the competition.

(b) The initial round will comprise of 4 to 6 single obstacles of which at least one must be a straight obstacle. The first obstacle must be at least 1.10 m in height and two obstacles from 1.20 to 1.25 m and one wall, which may vary from 1.30 to 1.40 m. All combination obstacle, water jump, ditches and natural obstacles are forbidden. The wall top is made of bricks, which can dislodge on impact while jumping.

(c) In the event of equality for first place, there must be successive jump offs over 2 obstacles, which must be a wall, and a spread obstacle. It is permissible to use a wall with a sloping face in take-off side (max slope of 30 centimetres off set at base) In the jump off both the obstacles must be increased regularly in height and the spread fence also in spread. The straight obstacle has to be increased in height (30 cm maximum in 1st jump off and 10 cm subsequently). The jump off is held only if competitors are tied for 1st place.

(d) If at the end of 3rd jump off there is no result, the ground jury may stop the competition and after the 4th jump off the competition will be stopped. The competitors so left will be placed joint winners.

14. **Fault-and-out Competition**.

(a) This competition takes place against the clock over medium sized obstacles each with its own number. Combination obstacles are excluded. The round finishes at the first fault committed of whatever nature (obstacle knocked down, any disobedience, fall etc).

(b) When an obstacle is knocked down or when the fixed time is reached, the bell is rung. The competitor must then jump the next obstacle and the clock is stopped at the moment when the horse’s forefeet touch the ground, but he is not given a point for the obstacle jumped after the bell has rung.

(c) In this competition bonus points are awarded - 2 points for an obstacle jumped correctly and 1 point for an obstacle knocked down.

(d) When the fault, which ends the round, is other than a knock down, such as disobedience, a fall or when the competitor does not jump the obstacle over which the clock must be stopped, the bell is rung. The competitor is then placed last of those who have obtained the same number of points.

(e) The winner of the competition is the competitor who obtains the greatest number of point. In the event of equality, the competitors' times are taken into consideration and the competitor with the shortest time will be declared the winner.

PART II: INTRODUCTION TO TENT PEGGING

15. The Tent Pegging competition (Normal) is one in which a combination of the horse and rider with a lance is tested on a marked track with a prescribed speed; pick the peg driven into the ground with a lance.

16. **Normal Competitions**.

(a) Lance – Individual.

(b) Lance – Team(section).

17. **Special Competitions**.

(a) Lance and Sword-Paired (half section).

(b) Indian File (lance or sword).

(c) Gallows (rings), Peg & Lance.

(d) Lemon & Pegs-Sword.

18. **Rules of Lance Individual**.

(a) **Speed**. 800 metres per minute.

(b) **Number of Rounds**. Two

(c) **Number of Runs**. Three. The first round is 2 runs on 6 cm pegs and 3rd run on 4 cm pegs. In second round the first run is on 6 cm peg and in 2nd & 3rd runs are on a 4 cm peg.

(d) **Placing**. Highest scorer in both rounds is placed first, and the next best scorer will be placed next and so on.

(e) **Tie**. In case of tie for first position, all such competitors are given a maximum of one additional run on 3 cm pegs. If a tie still exists. Then the rider with fastest time will be the winner. In case no rider scores any point and tie persists, the combined total time taken by rider on 4 cm pegs in the second round will decide the placing. The placing of other riders not involved in a tie will be placed on combined total time on 4 cm pegs in second round.

(f) **Length of Course**. 100 meters (Start to Finish line).

(g) **Carry Distance**. 15 meters for wooden pegs and 10 meters for cardboard pegs.

(h) **First Peg**. 70 meters from start line.

Lance Team (Section)

19. This is a team competition starting with 4 riders per team.

(a) **Speed**. 800 metres per minute.

(b) **Number of Rounds**. Two.

(c) **Number of Runs**. First round is of 2 runs on 6 cm pegs and the 3rd run on 4 cm peg. Second round is one (First run) on 6 cm peg and 2nd& 3rd run on 4 cm peg.

(d) **Placing**. Points scored by all four riders will count.

(e) **Tie**. In case of tie for first position, one additional run on 3 cm peg will be given. If a tie still persists, the fastest time will decide the winner. For other positions the combined total time of 4 cm pegs in 2nd and 3rd run of second round will decide.

(f) **Length of Course**. 100 meters (Start to Finish line).

(g) **Carry Distance**. 15 meters for wooden pegs and 10 meters for cardboard pegs.

(h) **First peg**. 70 meters from start line.

Competition – Special

20. In addition to afore mentioned normal competitions, any of the following special competitions can be included in the schedule at the discretion of organizers.

Lance and Sword – Paired (Half Section)

21. This is a paired competition consisting of 2 riders, riding abreast and conducted as per following rules:-

(a) **Speed**. 750 metre per minute.

(b) **No of Rounds**. One round of 2 runs or 2 rounds with 2 runs in each round at the discretion of Organizers. The first run will be on 6 cm pegs and second run on 4 cm pegs. Same procedure adopted in second round.

(c) **Placing**. The team with maximum points will be placed winner. The next best score second and so on.

(d) **Tie**. In case of tie, one additional run on 3 cm pegs will be given. If tie persists, the fastest time will decide placing. For other positions, the fastest time on 4 cm pegs in previous run will decide winner.

(e) **Length of course**. 100 meters.

Indian File (Lance and Sword)

22. Pegs are embedded in line, one behind the other 1 m apart. Competitors must take pegs in the correct order. No 1 rider should take first peg; No 2 rider takes second peg, No 3 rider third peg and No 4 rider fourth peg.

(a) **Speed**. 750 metre per minute between time start and time stop line.

(b) **Time**. While computing time allowed for Indian file, allowance must be catered for the distance between pegs (i.e., 1 m between each peg) and distance required to be maintained between 2 horses (i.e. 11 m). Thus, the time allowed for cardboard pegs is 7 seconds and for wooden pegs 7.5 seconds.

(c) **Rider Position**. If a rider's peg is knocked out of the ground by a previous rider, and the correct rider manages to score a strike on the peg, he will receive 4 points, as for a draw and 6 points if he carried fully.

23. When a rider draws his peg and it falls against the peg of a following rider and this rider touches or carries both pegs, he will receive points scored on his peg alone.

Gallows (Ring) and Peg - Lance

24. Equipment consists or two gallows with a '**T**' crossbar 2.6 m high from ground level with a horizontal cross bar of 1.8 m extending 0.9 m on either side of vertical having a vertical hanging strap (light materials) to the ring holder. The ring (6 cm inside measurement) is suspended at a height of 2.130 m from the ground. The gallows are 15 m apart, and a peg 20 m beyond 2nd gallows and in line. Speed 750 m/min.

25. **Points**.

(a)	Ring carried on lance	-	6(each)
(b)	Carry Peg	-	6
(c)	Draw	-	4
(d)	Strike	-	2

Lemon and Peg (Sword)

26. The course set up as for rings and pegs. Instead of rings, lemon and peg will be positioned in a line. Speed 750 m/min.

27. **Slice One**. With the sword resting horizontally behind the shoulders, hand in line with shoulder at cheek height, elbow below hand, cut horizontally from rear to front.

28. **Slice Two**. With sword at left shoulder, cut horizontally from front to rear, at neck height with elbow as high as hand. A downward cut or "Push" at lemon will not be allowed and no points awarded.

29. **Specifications of lances**. The lance shall not be shorter than 2.5 meters (8 feet 2 inch) and shall not exceed 2.75 meters (9 feet) with a smooth metal point without serration or sharp edges. Grips are permitted. Lances can be of any material.

30. **Pegs (wooden)**. The dimensions of wooden pegs are 30 cm long, 2.5 cm thick but the width will vary from 6 cm/ 4 cm/ 3 cm depending on the stage of competition. The jury will make every effort to select pegs of uniform weight and size as much as possible from the pegs provided by the organizing committee. However, this provision cannot form a point for objection by the teams/competitors.

31. To prevent the pegs from splitting and breaking up, they should be bound with wire 2 cm from the top end and again 13 cm from the bottom point. The wooden pegs will be soaked in water before the competition to prevent them from splitting.

32. The pegs are driven into the ground at an angle of 60 degrees from horizontal, with exactly 17 cm of the peg showing above the ground level. The face of the peg must be painted white or sprinkled with pure white chalk/lime.

33. The pegs should preferably be made of the wood of a date palm or any other fibrous material and should as far as possible equal in weight and should not break up when pierced by the lance/sword.

34. **Pegs (Cardboard)**.

(a) Cardboard pegs can be used and should be made of 2 layers of corrugated cardboard glued together with total thickness of 2.5 cm with corrugations running vertically, sizes will be as specified for wooden pegs.

(b) Any other synthetic peg of same dimensions can be used provided above specifications hold good.

35. **Award of Points**.

(a) **Pegs**.

(i) **Carry**. 6 points. Peg carried/fall beyond 10 meters (in case of cardboard pegs) and 15 meters (in case of wooden pegs) measured from the point at which the peg was placed. In single file same principle hold good.

(ii) **Draw**. 4 points. Peg removed from the ground, but not carried full distance as stipulated above.

(iii) **Strike**. 2 points. Peg struck on face but not removed from its position in the ground.

(b) **Lemon & Pegs**.

(i) **Lemon – Slice**. 6 points (must be clear and distinct and caused due to use of sword).

(ii) **Pegs**. Same as for other events.

(c) **Gallops (Rings) & Pegs**.

(i) **Rings Carried on Lance**. 6 points per each ring.

(ii) **Pegs**. Same as other events.

36. **Saddlery**.

(a) Saddlery in good condition and of any type may be used. The stirrups or stirrup leather may not be attached to any other part of the horse or saddlery.

(b) Running reins and dropped nose bends are permitted. Martingales are optional.

37. **Safety Equipment**. Crash helmets, hard top hat or turban must be worn except for service personnel. Service personnel must wear appropriate authorized headgear.

38. **Dress**. T-shirts are allowed for civilian competitors only. Service personnel must wear appropriate uniform. Changes to this if any, can be made with the permission of the President of the Ground Jury in case of exceptional circumstances.

39. **Bits**. The following bits are permitted:-

(a) Pelham

(b) Double

(c) Snaffle

CONCLUSION

40. Show jumping and tent pegging, though distinct in style and purpose, both showcase the remarkable synergy between horse and rider. While show jumping emphasizes precision, agility, and technique over obstacles, tent pegging celebrates speed, accuracy, and martial heritage. Together, they reflect the discipline, training, and trust required in equestrian sports. Mastery in these events not only enhances riding skills but also deepens the understanding of horse behaviour and care. As riders progress, they learn to balance control with courage, and finesse with force-making these sports not just competitive, but transformative experiences in horsemanship and personal growth.

ASSESSMENT EXERCISES

1. The minimum speed of the horse in the tent pegging competition should be?

(a) 200 meters per minute
(b) 400 meters per minute
(c) 600 meters per minute
(d) 800 meters per minute

2. In a tent pegging competition, if the peg is carried 10 m, ____ points are given?

(a) 8 points
(b) 6 points
(c) 4 points
(d) 2 points

3. In the tent pegging competition, if the peg is struck by point of lance but not lifted off the ground, the point given is?

(a) 8 points
(b) 6 points
(c) 4 points
(d) 2 points

4. When all the elements of the obstacles are in the same vertical plane, it is called as?

(a) Spread obstacle
(b) Straight obstacle
(c) Combination obstacle
(d) None of the above

5. In show jumping, first disobedience attracts?

(a) Four penalties
(b) Elimination
(c) One penalty for every four seconds
(d) One penalty for each second or commenced fraction of a second

6. In show jumping, obstacle knock down while jumping attract?

(a) Four penalties
(b) Elimination
(c) One penalty for every four seconds
(d) One penalty for each second or commenced fraction of a second

7. In show jumping, fall of horse or athlete attracts?

(a) Four penalties
(b) Elimination
(c) One penalty for every four seconds
(d) One penalty for each second or commenced fraction of a second

8. In show jumping, second disobedience or other infringement set forth attracts?

(a) Four penalties
(b) Elimination
(c) One penalty for every four seconds
(d) One penalty for each second or commenced fraction of a second

9. In show jumping, exceeding the time limit attracts?

(a) Four penalties
(b) Elimination
(c) One penalty for every four seconds
(d) One penalty for each second or commenced fraction of a second

10. In a jumping competition, which of the following is tested?

(a) Horse’s weight
(b) Horse's speed only
(c) Horse’s obedience and rider’s horsemanship
(d) Competitor’s dress

11. What must be true of show jumping obstacles?

(a) They must not fall when touched
(b) They must grip the pole tightly
(c) They should be knock-able but not too light or heavy
(d) They should be fixed in place

12. In the arena, where should the red flag be placed?

(a) On the left of the obstacle
(b) On both sides
(c) On the right of the obstacle
(d) Behind the obstacle

13. Which of the following is a straight obstacle?

(a) Oxer
(b) Water Jump
(c) Gate
(d) Liverpool

14. A spread obstacle?

(a) Requires jumping height only
(b) Requires effort in both height and spread
(c) Is lower than a straight obstacle
(d) Is always a wall

15. What is the minimum distance between obstacles in a combination?

(a) 6 meters
(b) 5 meters
(c) 7 meters
(d) 10 meters

16. A course plan must be posted at least?

(a) 15 minutes before the competition
(b) 30 minutes before the competition
(c) 1 hour before the competition
(d) The day before

17. After the bell rings, a competitor must cross the starting line within?

(a) 30 seconds
(b) 60 seconds
(c) 15 seconds
(d) 45 seconds

18. Knocking down an obstacle results in?

(a) Elimination
(b) 2 penalty points
(c) 4 penalty points
(d) Warning

19. What results in elimination?

(a) First disobedience
(b) Second disobedience
(c) Knocking down one pole
(d) Going slightly off-course

20. What is the penalty for exceeding time allowed?

(a) 2 penalties every 5 seconds
(b) 1 penalty every 4 seconds
(c) 1 penalty per second
(d) Elimination

21. Unauthorized assistance leads to?

(a) Warning
(b) 5 penalty points
(c) Elimination
(d) 10-second time addition

22. Which of the following is allowed in saddlery?

(a) Weighted whip
(b) Dressage whip in arena
(c) Gag bit
(d) Fixed stirrup

23. What is the maximum length of a whip allowed in the arena?

(a) 85 cm
(b) 60 cm
(c) 75 cm
(d) 90 cm

24. What is the maximum allowed number of jump-offs in puissance?

(a) Two
(b) Three
(c) Four
(d) Five

25. In Knockout competitions, which of the following results in elimination?

(a) Entering other competitor's course
(b) Fault at second obstacle
(c) Knocking one pole
(d) Time delay

26. In Top Score, how many times can each obstacle be jumped for points?

(a) 1
(b) Unlimited
(c) 3
(d) 2

27. What is the point value of the Joker if cleared?

(a) 100
(b) 150
(c) 200
(d) 250

28. In Six Bar competition, how many obstacles are placed in a line?

(a) 4
(b) 5
(c) 6
(d) 7

29. Fault-and-Out competition ends when?

(a) The time is exceeded
(b) Any fault is committed
(c) The competitor retires
(d) The horse stops

30. What is the standard speed for Tent Pegging?

(a) 600 m/min
(b) 750 m/min
(c) 700 m/min
(d) 800 m/min

31. What is the carry distance for cardboard pegs?

(a) 5 meters
(b) 10 meters
(c) 15 meters
(d) 20 meters

32. In Gallows & Peg, how many points is a ring worth if carried?

(a) 2
(b) 4
(c) 6
(d) 8

33. In Lemon & Peg competition, slicing the lemon gives how many points?

(a) 2
(b) 4
(c) 5
(d) 6

34. What is the minimum legal length of a lance?

(a) 2.0 meters
(b) 2.25 meters
(c) 2.5 meters
(d) 3.0 meters

Short Questions

1. What is the main purpose of a jumping competition?

2. What is the correct placement of red and white flags on show jumping obstacles?

3. Define a straight obstacle and give two examples.

4. What is a Joker in a Top Score Competition, and how many points is it worth if cleared?

5. State the minimum and maximum distance between obstacles in a combination.

Long Questions

1. Explain the rules related to course layout, including measurements and plan display for show jumping.

2. Describe the different types of obstacles in show jumping with examples.

3. Explain the various types of show jumping competitions (Knock-out, Six Bar, Puissance, Top Score, Fault-and-Out) and their rules.

4. Discuss the penalty system in show jumping, including faults, eliminations, and jump-offs.

5. Describe the rules and specifications for Tent Pegging, including pegs, lances, and competition format.

EQUITATION AND EQUESTRIAN SPORTS

CHAPTER XI: CAVALLETTI

TEACHING INSTRUCTIONS

Code	**:**	**EQTN – 11**
Period	**:**	**Two (01+01)**
Type	**:**	**Tutorial Discussion & Practical**
Year	**:**	**3rd Year SD/SW**
Conducting Officer	**:**	**PI Staff**
Training Aids	**:**	**Black board and chalk**
Time Plan		
➢ **Introduction**	**:**	**05 Mins**
➢ **Cavelletti Training**	**:**	**30 Mins**
➢ **Conclusion**	**:**	**05 Mins**

INTRODUCTION

1. Cavaletti, meaning "little horse" in Italian, refers to a training tool consisting of small, fixed jumps or rails, primarily used for horse training to improve balance, stride length, and overall conditioning, and more recently, also for canine training.

PREVIEW	LEARNING OBJECTIVE
The lecture will be conducted in the following parts:- ➢ Part I: Cavelletti training of Horses.	➢ To acquaint the cadets with Cavelletti training of horses.

PART I: CAVELLETTI TRAINING OF HORSES

2. The education of a riding horse is the end sequel of a natural exercise. The horse's body must be hardened and his muscles made flexible. Quite a proportional part of his training comes within the sphere of exercising the muscles and in this Cavalletti work which is a valuable aid.

3. Work over Cavalletti has the advantage of loosening up and strengthening the horse's muscles. Obviously, they are then useful for the development of both the heart and circulation. Work over the Cavalletti is useful for exercising the organs, and at the same time they serve to realize a further training programme. Caveletti training involves:-

(a) Cavalletti for training the rider.

(b) Work over the cavalletti without the rider

(c) Basic exercises over poles.

(d) Riding over cavalletti on a circle

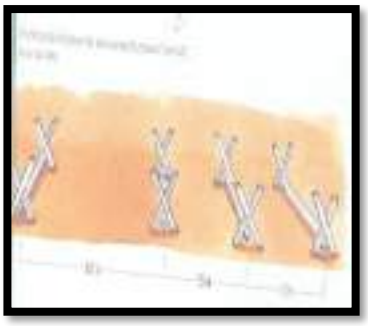
(e) Canter work

(f) Working over Cavalleti in canter

(g) Starting to jump

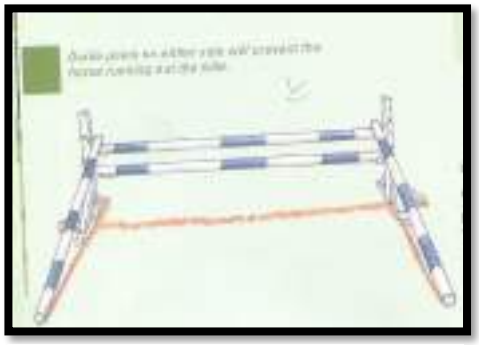
(h) Jumping single fences

Cavaletti



Basic Exercises over Poles

Riding Over Cavalletti on a Circle



Jumping Single Fences

CONCLUSION

4. Cavaletti exercises can improve a horse's footwork, build confidence, independence, and patience. Cavaletti exercises are designed to help horses improve their:-

(a) **Balance**. Stepping over poles or rails requires horses to maintain balance and coordination.

(b) **Stride Length**. Cavaletti exercises can help horses adjust their stride length and improve their rhythm.

(c) **Conditioning**. The exercises contribute to overall muscle strength and suppleness.

ASSESSMENT EXERCISES

1. What is the primary purpose of Cavalletti work in horse training?

(a) To improve horse grooming
(b) To train the rider in show jumping
(c) To harden the horse's body and make muscles flexible
(d) To teach horses to gallop

2. Cavalletti exercises contribute to which physiological development in a horse?

(a) Improving digestion
(b) Enhancing eyesight
(c) Strengthening heart and circulation
(d) Thickening hoof walls

3. Which of the following is not directly listed as a component of Cavalletti training?

(a) Working over poles
(b) Jumping ditches
(c) Riding over Cavalletti on a circle
(d) Canter work

4. What benefit does Cavalletti work offer regarding muscle development?

(a) Muscle atrophy
(b) Muscle relaxation only
(c) Loosening and strengthening of muscles
(d) Prevents muscle formation

5. Which of the following is included in a Cavalletti training programme?

(a) Swimming exercises
(b) Cross-country gallops
(c) Jumping single fences
(d) Vaulting

6. What aspect of Cavalletti work helps initiate a horse's jumping training?

(a) Water jumps
(b) Dressage movements
(c) Working over Cavalletti in canter
(d) Sprinting over hills

7. Which Cavalletti exercise involves a horse performing without a rider?

(a) Jumping double fences
(b) Canter work
(c) Work over Cavalletti without the rider
(d) Lunging only

8. How does Cavalletti training assist the rider?

(a) By increasing rider's height
(b) Training the rider through pole work and rhythm
(c) By teaching the rider to trot faster
(d) It focuses only on the horse

9. Riding over Cavalletti on a circle primarily improves:

(a) Galloping technique
(b) Balance and rhythm
(c) Endurance
(d) Jump height

10. What does starting to jump through Cavalletti training help develop in the horse?

(a) Only leg strength
(b) Spontaneous reaction to high jumps
(c) Confidence, coordination, and rhythm
(d) Speed for racing

Short Questions

1. What is the primary purpose of Cavalletti work in horse training?

2. Mention two advantages of working over Cavalletti for the horse.

3. List any three basic Cavalletti training exercises.

4. How does Cavalletti work improve a horse’s stride length?

5. Name two aspects of horse fitness improved through Cavalletti exercises.

Long Questions

1. Explain the importance of Cavalletti work in the education and development of a riding horse.

2. Describe the different stages or methods involved in Cavalletti training.

3. Discuss how Cavalletti exercises contribute to improving balance, stride length, and conditioning in horses.

4. Write short notes on:

(a) Work over Cavalletti without a rider

(b) Riding over Cavalletti on a circle

(c) Canter work with Cavalletti

5. Analyse how Cavalletti exercises benefit the horse's muscular development and cardiovascular system.

SADDLE FITTING

4

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SADDLE FITTING

CHAPTER I: TYPES OF SADDLE AND ITS PARTS

TEACHING INSTRUCTIONS

Code	**:**	**SF-1**
Period	**:**	**Two (01+01)**
Type	**:**	**Tutorial Discussion & Practical**
Year	**:**	**1 Year SD/ SW**
Conducting Officer	**:**	**PI Staff**
Time Plan		
➢ **Introduction**	**:**	**05 Mins**
➢ **Saddle and its Parts**	**:**	**15 Mins**
➢ **Types of Saddle**	**:**	**15 Mins**
➢ **Conclusion**	**:**	**05 mins**

INTRODUCTION

1. Knowledge of types of saddle is very important aspect of training during learning phase of the novices as well as during equestrian events. The animal management depends on proper saddlery, its use as per the various events, for optimum performance of the horse, safety of the rider and also preventing the avoidable injuries to the horse.

PREVIEW	LEARNING OBJECTIVES
The lecture will be conducted as follows:- ➢ Part I: Types of Saddles ➢ Part II: Saddle and its Parts.	➢ To acquaint the cadets with types of Saddle and its parts.

PART I: TYPES OF SADDLES

2. All personnel dealing with equitation should be able to identify each item of harness and saddlery. They must also know in how many sizes each item is manufactured and the particulars of each size. Unless they know all this, they will not be able to make the best use of the saddlery and may injure the animals by using wrong size or wrong patterns of saddles.

3. The following **four** types of saddles are used in the Army:-

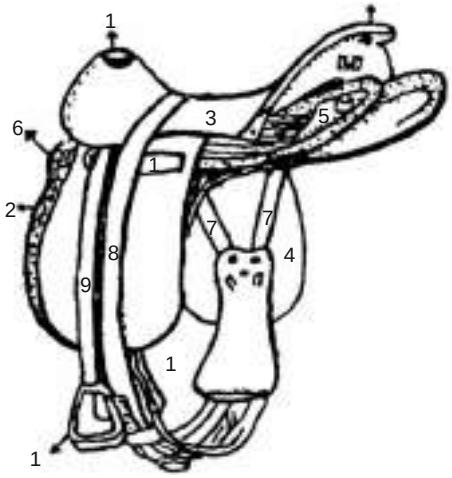
(a) Saddle Universal (SU)(Riding Saddle).

(b) Sporting Saddle – Show Jumping / Dressage).

(c) Saddle Pack General Service (Saddle PGS).

(d) Casualty Saddle or Hamilton Saddle.

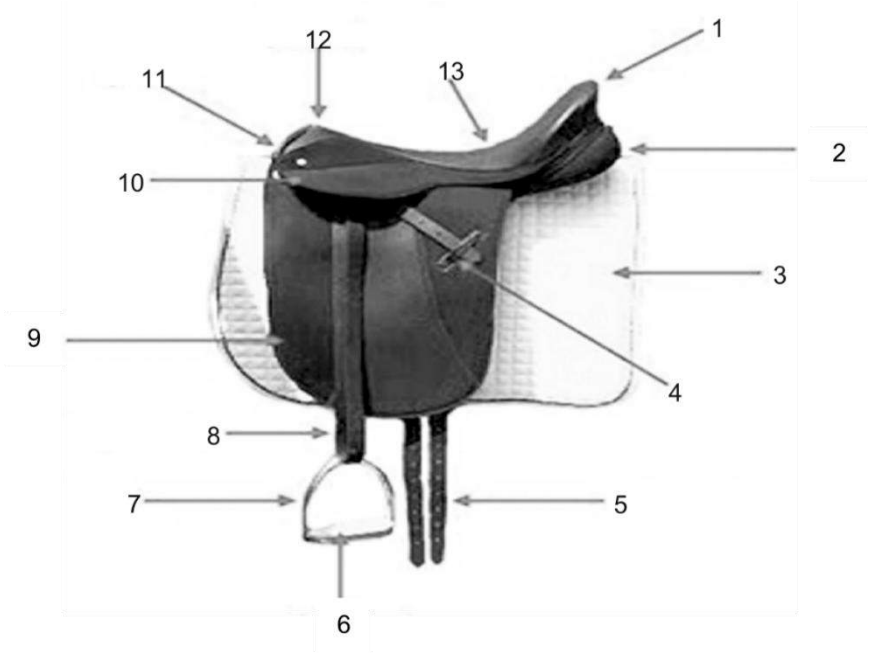
4. **Saddle Universal (SU).**



1- Pommel (Front Arch); 2- Cantle (Rear Arch); 3- Seat; 4- Flap; 5- Fan; 6- Burr; 7- 'V' Attachment; 8- Surcingle; 9- Stirrup Leather; 10- Stirrup Iron; 11- Girth (Cord or Leather); 12- Numnah Panel.

The Saddle Universal – Description & Fittings

5. **Sporting Saddle – Show Jumping / Dressage.**



1- Cantel; 2- Lining; 3- Numnah (Saddle Pad); 4- Loop; 5- Long Billets;
6- Stirrup Pad; 7- Stirrup Fillis Irons; 8- Stirrup Leathers; 9- Flap; 10- Skirt;
11- Gullets; 12- Pommel; 13- Seat.

The Sporting Saddle – Description & Fittings

6. **Saddle PGS.** Is used for draught purpose to carry loads in animal transport unit of Indian Army on mules in mountainous terrains

7. **Casualty Saddle (or Hamilton Saddle)**. A saddle universal with certain modifications of the super structure is changed into a casualty saddle. Four iron rods are fixed on the arches (two each on the rear and front arches). A horizontal bar joins the front pillars and helps the casualty to hold on for support for the back. The casualty thus can rest on it. Similarly, the front and rear rods of the same side are joined by webbing and this arrangement ensures safety against falling. This saddle is sometimes referred to as **'Hamilton Saddle'** also.

8. **General Purpose Saddle**. These saddles are ideal for the beginner and intermediate rider who has just bought their first horse and enjoys various types of riding. They are sturdy with flaps. Riders balance well on these saddles They are often used in riding schools because there are so many riders of different abilities.

9. **Dressage Saddle**. Dressage saddles are designed for advanced riders who are regularly competing in flat-work competitions. The saddles enhance the traditional straight-legged and upright torso dressage position.

10. **Jumping Saddle**. Jumping saddles are designed to push the rider slightly forward into the two-point jumping position, when they are going over fences.

11. **Hunting Saddle**. Hunting saddles are designed for riders who regularly go fox-hunting. This allows the rider to remain in a safer positioning leaning backwards when they are landing over large fences. The saddles have a low cantle and pommel which makes jumps more comfortable.

12. **Kid's Saddle.** These saddles are very light weight and used for young children who are riding small ponies. The shape of the saddle is much smaller which allows the child to be more balanced in the seat.

13. **Western Saddle**. Cowboys ride these saddles! There is a horn at the front of the saddle which aids balance while the other hand holds the reins. The saddles are designed to be more comfortable and sturdier for ranch hands who spent long hours on horse-back often performing sharp turns.

14. **Side-Saddle**. When women started riding horses in European countries in the middle ages, it was not deemed proper for them to straddle a horse - particularly because they would be wearing skirts. Hence the side-saddle was developed as a way for to sit aside a horse with their legs crossed. The saddles have two pommels, or horns, that hold a rider's legs in place.

15. **Racing Saddles.** Racing saddles are very small and lightweight. They are used specifically for jockeys who are galloping and jumping fences on thoroughbred horses. The saddles have only one girth strap and the stirrups are very short. The seat is flatter than other saddles as they are not intended for a rider to sit in but for them to hover over while crouching in the stirrups. Saddles for flat racing have much smaller flaps than steeplechase saddles which have larger flaps to give the jockey a more secure lower leg over fences.

PART II: PARTS OF A SADDLE

16. **Parts of Saddle**.

(a) **Saddle Tree**. The front and rear arches are made of steel, the front arch is called pommel and the rear arch is called cantle. Both arches are riveted to the side bars.

(b) **The Felt Channels**. Side bars are fitted with detachable felt channels which are secured by straps and buckles.

(c) **'V' Girth Attachment**. 'V' girth attachment consists of two straps (front and rear) which connect the sweat flap to the side bar, meeting in a 'V' shape on the sweat flap to which they are riveted.

(d) **The Seat**. It is made of leather and covers the frame of saddle between the front and rear arches which are connected by a string of webbing.

(e) **The Flap**. It is the covering on the side of the saddle, of such a shape as to suit the bend of the rider's leg.

(f) **The Stirrup Leather**. It is used to hold the stirrup iron.

(g) **The Stirrup Iron**. These are made of steel. The tread is on the flat portion on which the rider's foot rests.

(h) **The Girth**. It is 2'- 6" to 3', made of leather or cord.

CONCLUSION

17. There are various types of saddles used in the Army and in general, but the basis of their construction is the same. The underlying principle is to avoid any injury to the animal by equal distribution of weight over its back. The components of the saddle are issued in various sizes and should be selected to conform to the size and build of the animal.

ASSESSMENT EXERCISES

1. What is the main consequence of using the wrong size or pattern of saddle?

(a) It saves time
(b) It enhances horse speed
(c) It may injure the animal
(d) It improves saddle fit

2. How many main types of saddles are used in the Army?

(a) Two
(b) Three
(c) Four
(d) Five

3. Which of the following is not a type of saddle used in the Army?

(a) Saddle Universal
(b) Western Saddle
(c) Sporting Saddle
(d) Casualty Saddle

4. What is another name for the Casualty Saddle?

(a) Universal Saddle
(b) Side Saddle
(c) Hamilton Saddle
(d) Racing Saddle

5. In the Saddle Universal (SU), what is the pommel?

(a) Rear arch
(b) Seat flap
(c) Front arch
(d) Side strap

6. What is the usual length of a girth in a Saddle Universal?

(a) 1'-2'
(b) 2'-3'
(c) 3'-4'
(d) 4'-5'

7. What type of saddle is ideal for both beginners and intermediate riders?

(a) Dressage Saddle
(b) General Purpose Saddle
(c) Racing Saddle
(d) Hamilton Saddle

8. Which saddle is specially designed for show jumping and dressage?

(a) Casualty Saddle
(b) Pack Saddle
(c) Sporting Saddle
(d) General Purpose Saddle

9. Which saddle is primarily used to carry loads in mountainous terrains?

(a) Sporting Saddle
(b) Saddle PGS
(c) Side Saddle
(d) Racing Saddle

10. Which saddle is used to secure an injured rider with safety bars and webbing?

(a) Saddle Universal
(b) Pack Saddle
(c) Racing Saddle
(d) Hamilton Saddle

11. What distinguishes the Dressage Saddle in design?

(a) Wide flaps and deep seat
(b) Lightweight and flat
(c) Forward flap and shallow seat
(d) Traditional upright design for flatwork

12. Which saddle aids the rider into a two-point position over fences?

(a) Side Saddle
(b) Dressage Saddle
(c) Jumping Saddle
(d) General Purpose Saddle

13. Which saddle is best for very young riders and small ponies?

(a) Racing Saddle
(b) Western Saddle
(c) Kid’s Saddle
(d) General Purpose Saddle

14. Which saddle is smallest and lightest, designed for jockeys?

(a) Jumping Saddle
(b) Racing Saddle
(c) Casualty Saddle
(d) General Purpose Saddle

15. Racing saddles used in steeplechase have?

(a) No girth
(b) Shorter flaps
(c) Larger flaps than flat racing saddles
(d) No stirrups

16. Which part of the Saddle Universal provides length adjustment for rider's legs?

(a) Seat
(b) Flap
(c) Stirrup leather
(d) Girth

17. What is the tread in the stirrup iron?

(a) The top curve
(b) The flat portion where the foot rests
(c) The buckle
(d) The leather loop

18. Which saddle is commonly used in riding schools for varied riders?

(a) Racing Saddle
(b) Kid's Saddle
(c) General Purpose Saddle
(d) Side-Saddle

Short Questions

1. Name the four types of saddles used in the Army.

2. What is the purpose of the pommel and cantle in a saddle?

3. Define "V" girth attachment.

4. Why was the side-saddle developed?

5. What is the primary feature of a racing saddle?

Long Questions

1. Explain the construction and main parts of the Saddle Universal (SU).

2. Discuss the different types of saddles used in the Army and their purposes.

3. Describe the features and uses of Casualty Saddle (Hamilton Saddle).

4. Differentiate between Dressage Saddle, Jumping Saddle, and Hunting Saddle.

5. Explain why selecting the correct size and pattern of saddle is important for horse safety.

SADDLE (SD/SW)

CHAPTER II: FITTING OF THE SADDLE

TEACHING INSTRUCTIONS

Code	:	**SF – 02**
Period	:	**One (01)**
Type	:	**Tutorial Discussion**
Year	:	**1st Year SD/ SW**
Conducting Officer	:	**PI Staff**
Training Aids	:	**Black board and chalk.**

Time Plan

- **Introduction : 05 Mins**
- **Fitting of Saddle : 10 Mins**
- **Method of Saddle Fitting : 10 Mins**
- **Method of Folding Blanket : 10 Mins**
- **Conclusion : 05 Mins**

INTRODUCTION

1. Knowledge of saddle fitting, parts of saddle is very important aspect of training during equestrian events as well as learning phase of the novices. The animal management depends on proper saddlery, its maintenance in preventing the avoidable injuries for ensuring functional efficiency of the horse.

PREVIEW	LEARNING OBJECTIVES
The lecture will be conducted in following parts:- ➢ Part I: Fitting of Saddle ➢ Part II: Method of Saddle Fitting ➢ Part III: Method of Folding Blanket	➢ To acquaint the cadets with Fitting of Saddles

PART I : FITTING OF THE SADDLE

2. Fitting of Saddles is one of the most important aspect in learning horse riding thus holds great learning value. The following points should be particularly noted while learning fitting of Saddles:-

(a) The general condition of the leatherwork throughout should be examined. All straps, reins and other flexible portions of the harness should be capable of being bent over the forefinger at any point without showing signs of cracking. The cracking of leather is proof that it has perished due to lack of grease or soap.

(b) The stitching should be carefully examined to see that no portion is giving way, and care should be taken to see that, portion of the harness which comes in contact with the animals' body is flat, smooth and free from knots;

(c) All metal portions should be sound and in thoroughly good working order.

(d) The places where harness is likely to wear out are the stitching, the places where various straps, traces, etc., are buckled and eyes.

(e) The age of harness and the amount of work that is has done can be fairly well estimated by noticing the amount of wear that has occurred in the metal work at the wearing parts.

Principles of Saddle Fitting

3. The following are the principles of saddle fitting:-

(a) The withers must not be pinched or pressed upon.

(b) There must be no pressure on the horse's spine.

(c) The shoulder blades must have free and unimpeded movement.

(d) The weight must not be put on the loins but on the upper part of the ribs through the medium of the muscles covering them.

(e) The weight must be evenly distributed over a surface

(f) The saddle should be level on the horse's back neither dipped in front nor in rear.

4. **Points to be observed while Saddle Fitting**. While saddling (putting saddle on) a horse following points should be kept in mind:-

(a) Proper size of saddle.

(b) Presence of injuries on the back of the animal.

(c) Use clean blanket.

(d) Clean the horse before saddling.

(e) Girth should be fitted properly.

(f) Saddle should be soft and well maintained.

(g) If any nail or sharp metallic edges of the saddle are noticed; the saddle should not be used.

PART II: METHOD OF SADDLE FITTING

5. **Method of Saddle Fitting**.

(a) The folded blanket should be placed on the centre of the horse's back; care being taken that no grass or grit is adhering to it. It should be folded to such a size that it projects about two inches in front of the burrs and behind the fans. It can be folded in several ways.

(b) With a horse of normal shape and condition the “normal fold”, is recommended.

(c) In the case of a horse which has lost condition, and for certain shapes of back a useful method is the "channel fold".

(d) In cases where an extra thickness of blanket under the front arches is required the "envelope fold' may be found a useful method.

(e) The front of the saddle should not be so far forward that it interferes with the play of the shoulder. The panels of the saddle should lie flat on the top of the horse's ribs, and the rider’s weight should be borne by the parts between the front and rear arches. The burrs and fans should bear no weight. The front arch, when stuffed panels are attached should clear the withers to the breadth of not less than two fingers when the rider is in the saddle. The saddle, to afford a suitable seat for the rider should, be

level, neither dipped in front nor in rear.

(f) The girth should be placed about four inches behind the point of the elbow. It should be sufficiently tight to keep the saddle in its place and no tighter. It should be tightened gradually and not abruptly, care being taken that the skin is not wrinkled. It is recommended that the girths of all except young the growing horses should be fitted with the buckle in the second or third hole from the free end of the strap.

(g) The surcingle should lie flat over the girth and not be tighter than girth.

(h) Stirrups should be attached to the saddle by passing the end of the stirrup leather through the stirrup iron then through bar on the side bar of the saddle from below inwards to outwards then fasten to the tongue of the buckle. The buckle should be then pulled up close to the bar on the side bar, the point of the stirrup leather passed under the two leathers from the front, then passed under the surcingle.

6. **Importance of Saddling up before Riding**. If an animal is not properly saddled, there is every possibility of its developing galls. There is also the danger to the safety of the rider. Therefore, all ranks must be conversant with the appropriate method of saddling up.

7. **Uses of Saddle Blanket**. The saddle blanket is used to provide a cushion between the saddle and the animal's back and to protect it against injuries by rivets, the hard surface of the leather and the saddle tree. Ordinary towel, felt or any other soft cloth can be used in place of a blanket.

PART III: METHODS OF FOLDING BLANKETS

8. **Methods of Folding Blankets**. In the Army, a saddle blanket is folded in three ways:-

(a) **Normal Fold**. For a horse of normal shape and condition this method is recommended. The method of folding the blanket is halving it length wise and then fold it again cross wise. It should then be placed lengthwise across the horse's back with the salvage edges on the left side and to the rear. The size when folded is 2 feet 8-1/2 inches by 2 feet 4 inch.

(i) **Four Thicknesses**. To obtain four thicknesses double the blanket length wise and then double it again cross wise. This is the normal method of folding the blanket.

(ii) **Six Thicknesses**. Fold in three folds of equal widths in the length of blanket and then again marking three folds of equal length cross wise.

(b) **Channel Fold**. In case a horse has lost condition or has a peculiar shape of back, the channel fold is found useful. The blanket is first folded half way along its length and turned over and folded towards the centre. Two or three such folds may be taken as required to suit the horse's back, leaving a channel in the centre. When this method is used, a second blanket is necessary to prevent rubbing against the ‘V’ attachment.

(c) **Envelope Fold**. This method is used when an extra thickness of blanket is required under the front arch. The blanket is folded in two or three folds of equal width lengthwise. A fold of 600 mm is then made at one end. The end is then turned over forming a pocket into which the opposite end is tucked. It is then placed on the horse's back with the thick end near the withers. An extra blanket will be required if the blanket is folded in three folds lengthwise.

9. **Important Considerations while using Saddle Blanket.**

(a) See that the blanket is free from any foreign matter and then place it on the centre of the horse's back. The blanket must be folded to such a size that it projects two inches in front and behind the saddle. Double fold is normally employed.

(b) Dust off the felt lining of the saddle and place it on the horse’s back ensuring that it does not interfere with the play of the shoulder blades.

(c) Place the girth about 4 inches behind the point of the elbow and tighten gradually hole by hole without causing wrinkles on the skin. It, should allow insertion of two fingers between the body and the girth. Thereafter, lift each foreleg and stretch it forward to remove wrinkles from under the girth.

(d) Put on the head collar.

(e) After riding for about five minutes, tighten the girth straps.

CONCLUSION

10. The importance of saddle fitting cannot be over emphasised. A slightly bad adjustment will cause a gall on the animal's back and put the latter out of action. Initial saddle fitting must be carried out by the Officer-in-Charge animals and the monthly refitting must be observed as a regular parade. Principles of saddle fitting must be strictly adhered to when fitting saddlery on animals. Use of blanket will be resorted to in emergency only.

ASSESSMENT EXERCISES

1. Why is proper saddle fitting considered important in horse riding?

(a) It improves horse's speed
(b) It enhances the saddle's appearance
(c) It ensures rider safety and prevents injuries to the horse
(d) It helps in faster grooming

2. What indicates leather in a saddle has perished?

(a) Shiny surface
(b) Cracking when bent
(c) Faded colour
(d) Soft texture

3. What should be avoided in areas of the saddle that contact the horse's body?

(a) Extra padding
(b) Knots and uneven stitching
(c) Buckles
(d) Flexible material

4. The pommel should clear the withers by ?

(a) 1 finger width
(b) 2 fingers width
(c) 3 fingers width
(d) 4 fingers width

5. Which of these is not a principle of saddle fitting?

(a) Withers must be pressed slightly
(b) No pressure on the spine
(c) Even weight distribution
(d) Saddle should be level

6. The girth should be placed?

(a) At the point of the elbow
(b) 2 inches behind the elbow
(c) 4 inches behind the elbow
(d) Right over the shoulder

7. The girth must be tightened?

(a) Abruptly
(b) Rapidly
(c) Gradually
(d) Not at all

8. The saddle should bear weight on?

(a) The loins
(b) The burrs and fans
(c) The upper ribs
(d) The spine

9. Which saddle blanket fold is used for horses with a peculiar back shape?

(a) Normal Fold
(b) Channel Fold
(c) Envelope Fold
(d) Triple Fold

10. In the Normal Fold, how many thicknesses are there typically?

(a) Two
(b) Three
(c) Four
(d) Five

11. What is the purpose of the saddle blanket?

(a) Decoration
(b) Weight distribution
(c) Cushion between saddle and back
(d) Grip for rider

12. Which fold is designed to provide extra thickness under the front arch?

(a) Channel Fold
(b) Envelope Fold
(c) Saddle Fold
(d) Double Fold

13. When using the channel fold, what additional item is recommended?

(a) Second girth
(b) Extra stirrup
(c) Second blanket
(d) Seat pad

14. What is the minimum clearance required between the withers and the front arch of the saddle?

(a) One inch
(b) Width of two fingers
(c) Width of one hand
(d) Width of the girth

15. What should be done before saddling the horse?

(a) Apply hoof oil
(b) Feed the horse
(c) Clean the horse and check for back injuries
(d) Tie the horse to a tree

16. Which of the following is a sign that a saddle should not be used?

(a) Minor dirt on the leather
(b) Slight wear near the buckles
(c) Sharp nails or metallic edges
(d) Faded stirrup

17. What is a key indicator of harness wear?

(a) Frayed girth
(b) Rust on metal
(c) Wear on metal parts at stress points
(d) Moldy leather

18. Which part should lie flat over the girth?

(a) Stirrup
(b) Surcingle
(c) Saddle flap
(d) Pommel

19. Why should the forelegs be stretched after tightening the girth?

(a) To increase blood flow
(b) To relax the horse
(c) To remove skin wrinkles under the girth
(d) To test the saddle fit

20. How should the stirrup leather be attached to the saddle?

(a) Tied directly to the saddle flap
(b) Passed through stirrup iron, then the bar, then buckled
(c) Buckled to the girth
(d) Looped under the saddle pad

21. The saddle should be level and?

(a) Tilted forward
(b) Tilted backward
(c) Neither dipped in front nor rear
(d) Slightly raised in the back

22. Why is it important that saddle panels lie flat on the top of the ribs?

(a) Aesthetic reasons
(b) Better rider control
(c) To prevent pressure on burrs and fans
(d) For easier saddling

23. Which fold method forms a pocket into which the opposite end is tucked?

(a) Channel Fold
(b) Double Fold
(c) Envelope Fold
(d) Flat Fold

24. What material can be used in place of a traditional saddle blanket?

(a) Canvas
(b) Wool sweater
(c) Towel or felt
(d) Leather pad

Short Questions

1. Why is the general condition of leatherwork important during saddle fitting?

2. What is the purpose of using a saddle blanket?

3. Name any two principles of saddle fitting.

4. Where should the girth be placed while fitting a saddle?

5. What is the recommended clearance between the front arch of the saddle and the horse's withers when the rider is mounted?

Long Questions

1. Explain the principles of proper saddle fitting and their importance for horse welfare and rider safety.

2. Describe the methods of folding a saddle blanket and their specific uses.

3. Discuss the step-by-step method of saddle fitting, including blanket placement and girth tightening.

4. Why is proper saddling up essential before riding? What risks are associated with incorrect saddling?

5. Write a detailed note on the points to be observed while using a saddle blanket during saddling.

SADDLE FITTING

CHAPTER III: DEFECTS & DISEASES DUE TO ILL-FITTING SADDLES

TEACHING INSTRUCTIONS

Code	:	**SF – 03**
Period	:	**Two (01+01)**
Type	:	**Tutorial Discussion & Practical**
Year	:	**3rd Year SD/SW**
Conducting Officer	:	**ANO**
Training Aids	:	**Black board and chalk**

Time Plan

- **Introduction : 05 Mins**
- **Defects & Signs due of Ill-fitting Saddles : 30 Mins**
- **Conclusion : 05 Mins**

INTRODUCTION

1. Knowledge of Defects and disease due to ill-fitting of saddle is very important aspect of animal management as working efficiency of horse and rider depends on proper saddlery, its maintenance so as to prevent the avoidable injuries to the horse.

PREVIEW	LEARNING OBJECTIVE
The lecture will be conducted as follow:- ➢ Part I : Defects & Diseases due to Ill-Fitting Saddles	➢ To acquaint the cadets with defects & diseases due to ill-fitting saddles

PART I: DEFECTS AND SIGNS OF ILL-FITTING SADDLE

2. **Signs of Poor Saddle Fit**. Although horses do not speak, they are certainly able to communicate with us, especially regarding poor saddle fit. If a horse is experiencing pain caused by a poor fitting or defective saddle, there can be physical signs that may occur, such as:-

(a) **Physical Signs of Poor Saddle Fit**.

(i) Sores under the saddle area.

(ii) White hairs under the saddle area (which can also indicate past damage done by a saddle).

(iii) Friction rubs in the hair.

(iv) Scars or hard spots.

(v) Dry patches on the back or saddle pad while the rest is dampened by sweat.

(vi) Dropping of the back when it is palpated.

(vii) Muscle atrophy on either side of the withers.

(viii) Even if there are no physical signs, if your horse is behaving differently, it is wise to evaluate saddle fit as part of any other exam.

(b) **Behavioural Signs of Poor Saddle Fit**.

(i) Hypersensitivity while being brushed.

(ii) Objecting to being saddled or cinched.

(iii) Fidgeting while mounting.

(iv) Uncooperative while being ridden.

(v) Pinning ears, swishing tail and/or tossing head under saddle.

(vi) Reluctance to go forward and use the hind end.

3. **Seven Potential Signs of Poor Saddle Fit**. Seven signs of poor saddle fit are:-

(a) **White Hair and Friction Rubs**. A well-fitting saddle will distribute the weight equally over the horse's back. An ill-fitting saddle can have uneven weight distribution that results in pressure points. Over time, pressure points can show up as white hairs or friction rubs in the hairs in the saddle area.

(b) **Dry Spots**. When you take off your saddle and pad after a long ride, what you want to see is an even wet pattern across the horse's back where the saddle makes contact. While the channel down the horse's spine should be dry, there should be even wetness on all contact points. Dry spots can be a sign of pressure points.

(c) **Sores, Galls, Scars or Hard Spots**. In the saddle area, sores and other physical marks can be a sign of several problems: a poorly fitting saddle, a poorly adjusted saddle, or a poor-quality cinch.

(d) **Rolling/Rocking from Side to Side**. A saddle that rolls to the side or rocks from side to side can be either a sign of poor fit or a sign of a rider who isn't balanced in the saddle.

(e) **Tipping up in Back**. Tipping is generally a pretty straight forward sign of a poorly fitting saddle and is usually caused by saddle tree bars with the wrong rocker and twist (angles) to fit the back of the horse.

(f) **Hindered Movement by the Horse**. Restricted horse movement is a more difficult sign to detect and usually takes a more advanced rider to notice the difference in the way a horse moves under different saddles. A saddle that restricts a horse's shoulders will often impact how freely it moves out.

(g) **General Crankiness under Saddle**. Many saddle problems are commonly misdiagnosed as behaviour or attitude problems. Put yourself in your horse's place. How happy are you when you're wearing shoes that are one size too small? Thus, on being fitted misfit saddle the horse will exhibit physical or behavioural signs as enumerated above.

CONCLUSION

4. Ill-fitting saddles can cause a range of physical and behavioral problems in horses, including saddle sores, muscle atrophy, back pain, and poor performance. These issues not only affect the horse’s health but also its willingness to work and interact. To prevent such defects and diseases, it is crucial to ensure proper saddle fit through regular assessments, use of correct padding, and consultation with saddle fitting experts. Early detection and timely correction can significantly reduce discomfort and long-term damage. A well-fitted saddle promotes comfort, enhances performance, and supports the overall welfare of the horse, making it a vital aspect of equine care.

ASSESSMENT EXERCISES

1. What is a common physical sign of a poorly fitting saddle?

(a) Shiny coat
(b) White hairs under saddle area
(c) Extra energy during riding
(d) Increased appetite

2. Which behavioural sign may indicate saddle discomfort?

(a) Relaxed posture
(b) Tossing head under saddle
(c) Increased speed
(d) Whinnying frequently

3. What does a dry patch on a sweaty back typically indicate?

(a) Healthy saddle contact
(b) Excessive exercise
(c) Pressure point or poor saddle fit
(d) Dehydration

4. What is a gall in the context of saddle fit?

(a) An infection
(b) A sore or abrasion caused by pressure/friction
(c) A bone growth
(d) A type of saddle pad

5. White hair under the saddle can indicate?

(a) Good circulation
(b) Recent grooming
(c) Past damage from poor saddle fit
(d) Proper sweat pattern

6. A saddle that rocks or rolls from side to side can be a sign of?

(a) Balanced rider
(b) Horse fatigue
(c) Saddle fit issues or rider imbalance
(d) Tight girth

7. What is the ideal sweat pattern after riding?

(a) Dry across the entire back
(b) Wet only at the spine
(c) Even wetness where saddle contacts
(d) Patchy sweat with dry spots

8. Which of the following is a behavioural change linked to saddle discomfort?

(a) Quiet under saddle
(b) Fidgeting while mounting
(c) Willingly moving forward
(d) Consistent performance

9. What can scars or hard spots under the saddle indicate?

(a) Proper muscle development
(b) Normal aging
(c) Chronic saddle fit issues
(d) Healing from rain scald

10. What happens when a saddle restricts shoulder movement?

(a) Increased jumping power
(b) Improved trot rhythm
(c) Hindered and restricted movement
(d) Horse relaxes

11. Which physical sign indicates muscle atrophy from saddle fit?

(a) Swelling near spine
(b) Muscle loss near withers
(c) Thickened skin over loins
(d) Excess sweating

12. Hypersensitivity while being brushed can be a result of?

(a) Poor grooming technique
(b) Tick infestation
(c) Ill-fitting saddle pain
(d) New grooming brush

13. A saddle tipping up in the back usually indicates?

(a) Correct fit
(b) Saddle bars with wrong rocker and twist
(c) Weak girth straps
(d) Horse’s fatigue

14. Which of these can be both a physical and behavioural sign?

(a) White hairs
(b) Scars
(c) Reluctance to go forward
(d) Dropping back when palpated

15. Reluctance to go forward during a ride could be a sign of?

(a) Rider error
(b) Improper shoeing
(c) Poor saddle fit causing discomfort
(d) Lack of training

16. Uneven weight distribution from a poor saddle fit can cause?

(a) Faster riding
(b) Pressure points and white hair
(c) Tighter girth
(d) Uneven hooves

17. Which of the following is not typically caused by an ill-fitting saddle?

(a) Scars
(b) Balanced riding
(c) Friction rubs
(d) Crankiness under saddle

18. If a horse suddenly becomes uncooperative when ridden, what should be checked first?

(a) Diet
(b) Grooming schedule
(c) Saddle fit
(d) Vaccination record

19. Dropping of the back when palpated may suggest?

(a) Laziness
(b) Pressure sores
(c) Saddle discomfort or pain
(d) Weak leg muscles

20. What may be misdiagnosed as a behavioral issue but actually is a saddle fit issue?

(a) Crankiness and resistance
(b) Barking
(c) Overeating
(d) Tail growth

21. A saddle that fits poorly can create which long-term consequence?

(a) Hair shine
(b) Height increase
(c) Chronic back pain and poor performance
(d) Stronger spine

22. Which is a clear visual indicator of old saddle-related damage?

(a) Swollen hocks
(b) White hairs under saddle
(c) Wet blanket
(d) Raised tail

23. If a horse pins its ears and swishes its tail when saddled, it may be?

(a) Excited to work
(b) Reacting to temperature
(c) In discomfort from ill-fitting saddle
(d) Listening to other horses

24. What is a sign of improper saddle tree design?

(a) Symmetrical sweat pattern
(b) Saddle tipping forward
(c) Clear withers clearance
(d) Proper weight distribution

25. When assessing for poor saddle fit, always?

(a) Only look at sweat marks
(b) Ignore behaviour
(c) Combine physical and behavioural signs
(d) Rely on girth tightness

Short Questions

1. List any two physical signs of a poorly fitting saddle.

2. What do white hairs under the saddle area indicate?

3. Why can dry spots under a saddle pad be a sign of poor saddle fit?

4. Name any two behavioral signs that a horse shows due to saddle discomfort.

5. What does a saddle tipping up at the back usually indicate?

Long Questions

1. Explain the physical and behavioral signs of poor saddle fit in detail.

2. Describe the seven potential signs of poor saddle fit and their implications on horse's health.

3. Discuss how poor saddle fit can lead to long-term physical damage in horses.

4. Write a note on the importance of early detection and correction of ill-fitting saddles.

5. Explain the relationship between ill-fitting saddles and changes in horse performance and behavior.

SADDLE FITTING

CHAPTER IV: HARNESSING THE HORSE

TEACHING INSTRUCTIONS

Code	**:**	**SF – 04**
Period	**:**	**Two (01+01)**
Type	**:**	**Tutorial Discussion & Practical**
Year	**:**	**2nd Year SD/ SW**
Conducting Officer	**:**	**PI Staff**
Training Aids	**:**	**Black board and chalk**

Time Plan

- **Introduction : 05 Mins**
- **Harness and Its Parts : 15 Mins**
- **Fitting of Harness : 15 Mins**
- **Conclusion : 05 Mins**

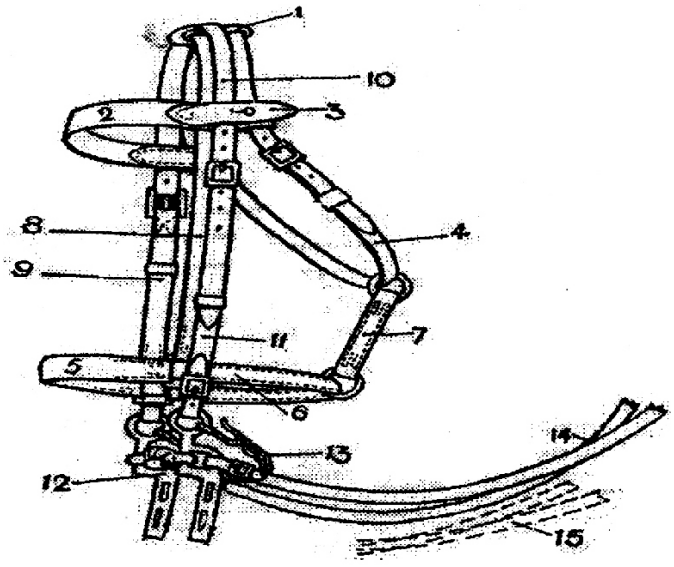
INTRODUCTION

1. Harnessing a horse is a fundamental practice in equine management that enables the animal to perform a variety of tasks, from pulling carriages and agricultural equipment to participating in competitions and recreational driving. The process involves fitting the horse with specialized equipment - collectively known as a harness - designed to distribute weight, provide control, and ensure the horse's comfort and safety. Proper harnessing requires knowledge of both the horse's anatomy and the purpose of the work to be done, as different types of harnesses are suited to different functions. When done correctly, harnessing not only maximizes the horse's efficiency and performance but also supports its physical well-being and prevents injury.

PREVIEW	LEARNING OBJECTIVES
The lecture will be conducted in following parts:- ➢ Part I: Harness and its parts ➢ Part II: Fitting of Harness	➢ To acquaint the cadets with harnessing the horse

PART I: HARNESS AND ITS PARTS

2. The service head collar as shown in fig is constructed in such a way that it can be used either as a bridle or as a head collar in the stables and on the picket line. It consists of the following parts: -



1- Crown Loop; 2- Brow Band; 3- Brow Band Tap; 4- Throat Lash; 5- Nose Band; 6- Back Stay; 7- Jowl Piece; 8- Cheek Piece; 9- Buckling Piece; 10- Long Piece of Bridle Head; 11- Short Piece of Bridle Head; 12- Bit; 13- Curb Chain; 14- Cheek Rein; 15- Curb Rein.

Head Collar – Description And Fittings

(a) **Crown Loop**. It is a small piece of leather, consisting of two loops which connect the cheek piece and throat lash at the top of the bridle on the animal's poll.

(b) **Brow Band**. It consists of a leather strap with two loops at each end, through which both the cheek piece and throat lash pass, and over these loops lie the tabs, which are small leather straps stitched on to the brow band and fastened by a brass stud which is sewn into the loop on the brow band, through which the bridle head passes. The object of the brow band is to prevent the cheek piece and throat lash from slipping backwards. The object of the tab is to hold the bridle head in position.

(c) **Cheek Piece**. It consists of a strap of leather sewn at one end of the square which connects the noseband and back stay together on the near side. At the other end it is punched with holes for securing to the buckle of the buckling piece.

(d) **Buckling Piece and the Cheek Piece**. It consists of a strap sewn on at one end to the square which connects the nose hand and back stay together, but on the opposite square to that which holds the cheek piece. At the other end of the buckling piece is a buckle to which the cheek piece is fastened. The check piece and buckling piece when fastened together, support nose band and back stay in position.

(e) **Throat Lash**. It consists of a plain leather strap with a buckle at one end and punched with holes at the other end for adjustment. The throat lash secures the bridle on the animal's head.

(f) **Nose Band and Back Stay**. These are two leather straps connected to each other by two square links. On the backstay runs the lower ring of the jowl piece.

(g) **Jowl Piece**. It consists of a short piece of double leather with a ring sewn on to each end connecting both the throat lash and back stay.

(h) **Bridle Head**. It is in two parts:-

(i) The long piece has a buckle and leather billet at one end for securing to the bit, and punched with holes at the other end for adjusting with the short piece.

(ii) The short piece has buckle and leather billet at one end for securing to the bit and at the other end is a buckle for engaging with the long piece.

PART II: INSTRUCTIONS FOR FITTING

3. The various parts are to be fitted as below:-

(a) **Brow Band**. The brow band should be just long enough to allow the cheek piece to pass from the crown down, without rubbing the bones on each side of the temple or cutting the base of the horse's ears.

(b) **Cheek Piece and Buckling Piece**. The cheek piece and buckling piece should be parallel to and behind the projecting cheekbone.

(c) **Throat Lash**. The throat lash should fit loosely; being only sufficiently tight

to prevent the head collar from slipping, over the horse's ears, thus in no way interfering with the breathing or swallowing. A good guide is to allow space equal to breadth of the hand between the throat lash and the horse's cheek. The buckle of the strap should be in line with the horse's eye on the near side.

(d) **Nose Band and Back Stay**. The noseband and backstay should fit so as to admit the breadth of two fingers between the horse's nose in front and the noseband, and between the horse's jaw and the back stay. The noseband and backstay should hang so as to allow to finger-breadth below the projecting cheekbone.

(e) **Neck Strap**. It provides a useful support for the rider if he goes off balance, and also keep the martingale in the proper position by preventing it from drooping which may entrap the fore legs of an excited horse.

4. **Martingales**. Martingales are of three types:-

(a) **Standing Martingales**. It is fitted to such length that there is no strain on it until the horse lifts his head above the proper position as given below:-

(i) For a horse which naturally carries its head too high and thereby evades the action of the bit.

(ii) For a horse badly trained who has learnt to evade the bit by throwing its head up.

(iii) Hollow back jumpers

(b) **Running Martingales**. Should be fitted so that it has no bearing on reins as long as the rider's hand and horse's head are in the proper position. It has two uses:-

(i) To help in keeping a horse straight while moving.

(ii) To ensure that the pull of the reins on the horse's mouth is in the right direction even if the riders hand assume the wrong position.

(c) **Irish Martingale**. It consists of two rings connected by a short piece of leather about 8 inches long, through which the reins are passed. It has no effect on keeping the horse's head down but will prevent the horse tossing the rein over its head. It acts in the same way as the running martingale, in keeping the horse straight but has no other effects on its mouth or head.

5. **Bridling**. The bit should be put in the horse's mouth with the smooth side of the bar against the tongue. It should be so placed that it is not high enough to wrinkle the lips. The mouthpiece will be correctly placed between these limits when the lower cheek being drawn back to approximately 45 degrees to the mouth, the curb chain, lies flat and truly in the chin groove. The proper length of the curb chain, and the right position of the mouthpiece, depends on each other, and on the sensitiveness of the horse's mouth.

CONCLUSION

6. When correctly fitted and used, a harness ensures the horse's comfort, safety, and efficient performance, while allowing the handler better control and communication. mastering the art of harnessing is not just a practical skill but a reflection of responsible and compassionate horsemanship.

ASSESSMENT EXERCISES

1. What is the purpose of the brow band in a head collar?

(a) To tighten the noseband
(b) To hold the bit in place
(c) To prevent cheek piece and throat lash from slipping backward
(d) To attach the martingale

2. What is the crown loop used for in a bridle?

(a) To connect the reins
(b) To secure the bit
(c) To connect cheek piece and throat lash at the top of the head
(d) To hold the saddle in place

3. The cheek piece and buckling piece work together to support?

(a) Throat lash and reins
(b) Noseband and back stay
(c) Stirrup and girth
(d) Bridle head

4. The throat lash should be?

(a) Very tight to keep the bridle secure
(b) Fitted to allow a hand's breadth between it and the cheek
(c) Looped through the noseband
(d) As tight as the girth

5. What connects the throat lash and back stay in a head collar?

(a) Brow band
(b) Cheek strap
(c) Jowl piece
(d) Bridle head

6. The bridle head has how many parts?

(a) One
(b) Two
(c) Three
(d) Four

7. What is the function of the neck strap?

(a) To support the girth
(b) To stabilize the saddle
(c) To assist the rider and hold the martingale
(d) To attach the bit

8. What part should allow two fingers between it and the nose?

(a) Throat lash
(b) Cheek piece
(c) Nose band
(d) Crown loop

9. The brow band should avoid contact with?

(a) Nose tip
(b) Jawline
(c) Ears and temple bones
(d) Throat latch

10. Which martingale is used to prevent the horse from raising its head too high?

(a) Irish martingale
(b) Running martingale
(c) Standing martingale
(d) Sliding martingale

11. The running martingale helps ensure?

(a) The noseband remains tight
(b) Pull of reins stays correct even if hands are wrongly positioned
(c) The bit stays high
(d) The horse walks in circles

12. What is a key purpose of the Irish martingale?

(a) Keeping horse's head low
(b) Strengthening the jaw
(c) Preventing reins from being tossed over horse's head
(d) Increasing rein tension

13. Which martingale is least restrictive on the horse's head?

(a) Running
(b) Standing
(c) Irish
(d) Side-rein

14. For which kind of horse is a standing martingale particularly useful?

(a) One that leans forward
(b) One that moves sideways
(c) One that evades the bit by lifting its head
(d) One that runs slowly

15. Where should the smooth side of the bit bar go?

(a) Outside the mouth
(b) Against the tongue
(c) Under the chin
(d) On top of the nose

16. The curb chain should lie?

(a) Inside the cheek
(b) On top of the bit
(c) Flat and in the chin groove
(d) Below the noseband

17. If the bit is too high, it may?

(a) Be easier to control the horse
(b) Cause the horse to relax
(c) Wrinkle the lips
(d) Sit correctly in the mouth

18. What determines the correct placement of the bit and curb chain?

(a) Rider’s comfort
(b) Noseband position
(c) Shape of the ears
(d) Sensitivity of the horse's mouth

19. The bridle bit is fitted best when the cheek piece angle is?

(a) 90 degrees
(b) 15 degrees
(c) 45 degrees
(d) 60 degrees

20. The jowl piece includes?

(a) One metal buckle
(b) Two rings sewn at either end
(c) A leather flap
(d) A throat clip

21. The buckle of the throat lash should align with?

(a) The horse’s withers
(b) The horse’s eye
(c) The nostril
(d) The jawbone

22. The brow band tabs are secured by?

(a) Lacing
(b) Glue
(c) Brass studs
(d) Rivets

23. The bridle head connects to the bit using?

(a) Rings
(b) Bolts
(c) Buckles and billets
(d) Stirrups

24. What does the brow band pass through at each end?

(a) Girth straps
(b) Noseband
(c) Loops connecting cheek piece and throat lash
(d) Saddle flaps

Short Questions

1. What is the function of the brow band in a head collar?

2. How much space should be left between the throat lash and the horse's cheek?

3. What are the two parts of the bridle head?

4. State the primary use of an Irish martingale.

5. Where should the nose band and back stay fit in relation to the horse's cheekbone?

Long Questions

1. Explain the parts of a service head collar and their functions in detail.

2. Describe the correct method of fitting the head collar on a horse.

3. Write short notes on the three types of martingales and their uses.

4. Explain the process of bridling, including the correct position of the bit and curb chain.

5. Discuss the importance of proper fitting of brow band, cheek piece, throat lash, and nose band for horse comfort and safety.

SADDLE FITTING

CHAPTER V: BITTING

TEACHING INSTRUCTIONS

Code	:	**SF-5**
Period	:	**Two (01+01)**
Type	:	**Tutorial Discussion & Practical**
Year	:	**2nd Year SD/ SW**
Conducting Officer	:	**PI Staff**
Training Aids	:	**Black board and chalk**
Time Plan		
➢ **Introduction**	:	**05 Mins**
➢ **Bitting**	:	**10 Mins**
➢ **Types of bits**	:	**20 Mins**
➢ **Conclusion**	:	**05 Mins**

INTRODUCTION

1. When a horse is moving freely without rider, the impulsion for forward movement comes naturally from the hindquarters. The movement of the head and neck reduces his forward movement. However, when that same horse has a rider on his back, it is the rider who creates the impulsion, by means of the legs and seat. The rider also controls the direction and speed by contact with the horse's mouth through the reins connected to the bit.

PREVIEW	LEARNING OBJECTIVES
The lecture will be conducted in following parts:- ➢ Part I: Bitting ➢ Part II: Types of Bits	➢ To acquaint the cadets with bitting of Horse.

PART I: BITTING

2. Bit acts on points inside and outside the horse's mouth. The seven points of control are pressure points and are highly sensitive. Pressure points within the mouth are; the lips, the tongue, the bars and the roof of the mouth. Pressure points outside the mouth are the nose, the chin grove (curb groove) and the poll.

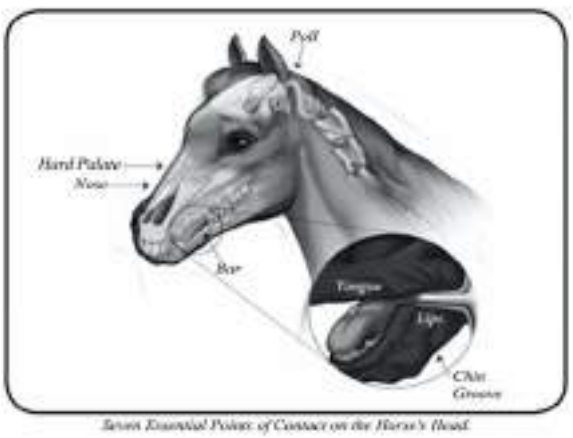
3. **Importance of Pressure Points**. Significance of pressure points on a horse are: -

(a) They are easily hurt and damaged, which means that incorrect bitting can lead not only to excessive pain but also to permanent injury.

(b) If a horse is in pain because of an improper bit, he cannot be properly controlled by inflicting more pain, although a degree of control may be achieved in this way for a while.

(c) Every rider must realize that the points of control he is using to convey aids to the horse can be abused. If abused, may cause the horses to rear, to bolt or to become unmanageable.

(d) A dirty or ill-fitting bit can give a horse sore mouth. It may cause him to become head-shy or refuse to accept the bit. Riding such horses is always a problem, because they can pull extremely hard.



Seven Essential Points of Contact on the Horse's Head

Pressure Points of a Horse

PART II: TYPES OF BITS

4. Bits belong to four principal groups; Snaffles, Weymouth or double bridle, Pelham and Gag as depicted in fig. However, there is a bitting arrangement, which does not involve use of mouth and is called Bit less Bridle (also called Hackamore).

The Snaffle Bits

5. Snaffles are the largest and most varied group of bits. The wide range of choice in snaffles includes not only mild and kind bits, but also some of the most severe bits. Snaffle mouthpieces differ not only in thickness but also in shape and cross section. They may be straight- bar, mullen (slightly curved), single jointed, double jointed (arms joined by links, plates or angled plates), plain, twisted, square, ported (with a central arched portion), ringed or hollow. The cheeks can vary too. Usually, they are circular or D-shaped rings, either loose or fixed, but some bits have a long full-cheek or half cheek design.

The Double Bridle

6. As the name implies, a double bridle is composed of two separate bits: a curb and a snaffle, called a bridoon and is a sealed down version of an ordinary snaffle having much smaller rings giving a closer contact between the rider and the horse's mouth.

7. The action of the curb is to obtain flexion by applying pressure to the poll, at the same time as applying pressure to the chin groove by means of the curb chain.

8. The bridoon raises and places the horse's head, while the curb produces flexion to give greater and more accurate control. The rider controls the bits independently.

Pelham Bits

9. The Pelham is a hybrid bit resulting from the crossing of a snaffle with a curb to form a single mouthpiece. It is designed to give the action of both. But in practice it gives no definite action from either.

Gag Bits and Bridles

10. The gag bridle, in all its forms, has its origin in the various over cheeks and pulley-operated reins used on driving horses to fix the head carriage in what was considered a desirable position. Most gags are used as a powerful means of controlling a strong horse. They are made even more severe by being used with a martingale

11. There are many varieties of gag bit, but the essential division is between those used with a curb and those used without any attachment.

Bit Severity

12. The mildness or severity of a bit depends on the design of the mouthpiece and the rings

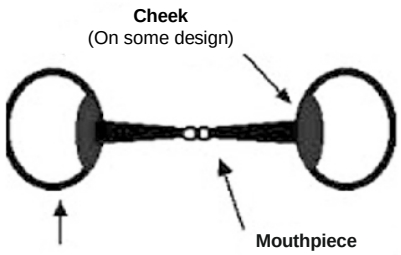
of cheeks. Thinner the mouthpiece, the sharper the action and the more pain is inflicted directly on the horse's mouth. A thick mouthpiece is gentle provided it is not too thick to be uncomfortable in the mouth. The mild rubber mouthpiece is kind to young horses that have not yet taken to the bit.

13. In a jointed bit, the shape of the arms and the amount of free play in the joint determine the sharpness of the nutcracker action. Curved arms with a firm joint are less severe than straight arms with a loose joint.

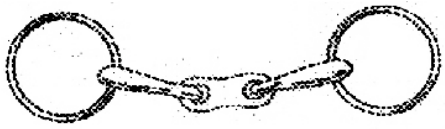
14. Most bits have metal mouths; however other patterns are also available in nylon, copper, steel, rubber and vulcanite.

Bitless Bridles

15. An important group of bridles, often both misunderstood and mis-named in Europe, is that to which the hackamore belongs. Often the name 'hackamore' tends to be given to any form of bridle that does not employ a bit.



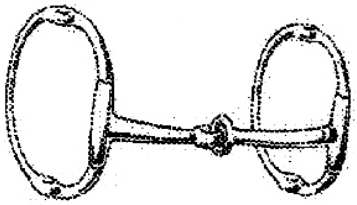
Single Jointed Egg Butt Snaffle



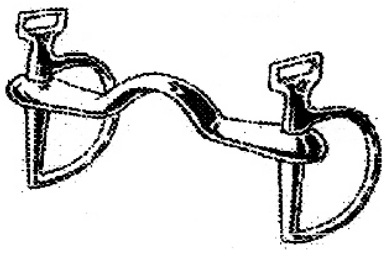
Egg Link/French Link Snaffle

Rubber Mullen Mouth Loose Ring Snaffle

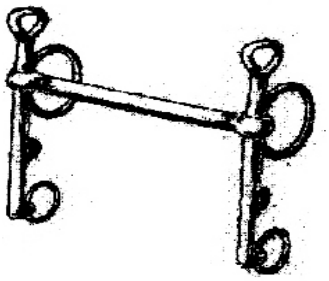
Fulmer Snaffle (Loose Ring)



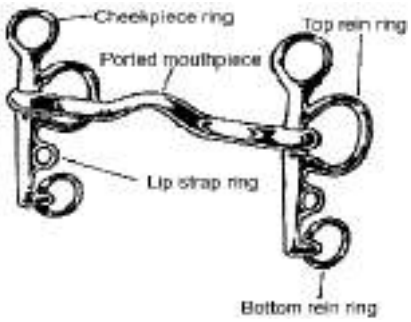
Cheltenham Gag Snaffle



Kimble Wick



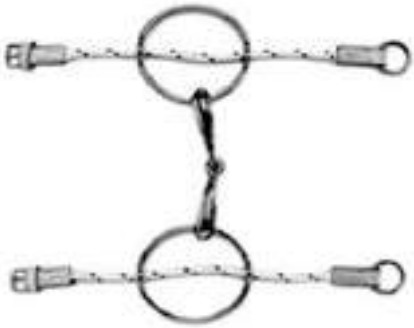
Mullen – Mouth Pelham



Mullen – Mouth Pelham

Bitless Bridle (Blair's Pattern Hackamore)

Weymouth Curb



Polo Gag Bit

CONCLUSION

16. The bitting of horses is a crucial aspect of equine management that directly affects communication, performance, and welfare. While bits serve as important tools for directing and controlling horses, improper selection, poor fit, or harsh use can lead to discomfort, pain, behavioural issues, and long-term physical harm. A well-chosen bit, combined with skilled and empathetic handling, enhances the horse-rider connection and supports ethical horsemanship.

ASSESSMENT EXERCISES

1. How many total pressure points are involved in bitting a horse?

(a) 5
(b) 6
(c) 7
(d) 8

2. Which of the following is a pressure point inside the horse's mouth?

(a) Chin groove
(b) Poll
(c) Lips
(d) Nose

3. Which of the following is not a pressure point outside the horse's mouth?

(a) Poll
(b) Chin groove
(c) Bars
(d) Nose

4. What is a possible effect of using an improper bit?

(a) Increased energy
(b) Smoother gait
(c) Head-shyness
(d) Increased appetite

5. Which behavior may indicate bit-related pain?

(a) Pawing
(b) Refusing to eat
(c) Tossing the head
(d) Rolling on the ground

6. The snaffle bit can range from?

(a) Only mild to neutral
(b) Very mild to very severe
(c) Only severe
(d) Only bitless

7. The most commonly used group of bits is?

(a) Gag
(b) Pelham
(c) Double bridle
(d) Snaffles

8. Which snaffle bit has a slightly curved mouthpiece?

(a) Twisted
(b) Mullen
(c) Ported
(d) Straight bar

9. A double bridle consists of?

(a) Snaffle and Pelham
(b) Snaffle and Gag
(c) Snaffle and Curb
(d) Pelham and Gag

10. The bridoon is a type of?

(a) Curb chain
(b) Bitless bridle
(c) Snaffle bit
(d) Martingale

11. What is the primary action of the curb bit in a double bridle?

(a) To raise the horse's head
(b) To pressure the tongue only
(c) To create poll and chin groove pressure
(d) To tighten the noseband

12. The Pelham bit combines?

(a) A martingale and noseband
(b) A snaffle and gag
(c) A snaffle and curb
(d) Two snaffles

13. A gag bridle is most often used to?

(a) Train young horses
(b) Prevent eating
(c) Control strong horses
(d) Relax the jaw

14. Which bit is designed to lift the horse's head in action?

(a) Curb
(b) Gag
(c) Pelham
(d) Mullen

15. A gag bit can be made more severe when used with?

(a) Neck strap
(b) Double reins
(c) Martingale
(d) Bridoon

16. What determines the sharpness of a bit?

(a) Length of reins
(b) Material of the saddle
(c) Thickness and shape of the mouthpiece
(d) Size of stirrups

17. Thinner bit mouthpieces are usually?

(a) Kinder
(b) Decorative
(c) Sharper in action
(d) Preferred for beginners

18. A mild rubber mouthpiece is ideal for?

(a) Old horses
(b) Untrained riders
(c) Young horses new to the bit
(d) Races only

19. A jointed bit with straight arms and a loose joint is?

(a) Less severe
(b) Decorative
(c) More severe
(d) Less flexible

20. Which material is not typically used for bits?

(a) Nylon
(b) Copper
(c) Gold
(d) Vulcanite

21. A bitless bridle is also known as a?

(a) Weymouth
(b) Bridoon
(c) Hackamore
(d) Pelham

22. A hackamore operates by applying pressure to?

(a) Inside the mouth
(b) Nose and poll
(c) Only the tongue
(d) Horse’s ears

23. Which of the following is true about bitless bridles?

(a) They always contain a metal bit
(b) They are used in double bridles
(c) They do not employ a bit
(d) They are suitable only for show jumping

24. A hackamore is?

(a) A kind of Pelham
(b) Used with a bridoon
(c) A bitless bridle
(d) Attached to the curb chain

25. Which bit group does not involve the use of a bit in the horse’s mouth?

(a) Snaffle
(b) Weymouth
(c) Gag
(d) Bitless bridle

Short Questions

1. Name the seven pressure points affected by a bit.
2. What is the function of a bridoon in a double bridle?
3. Which type of bit combines the action of a snaffle and a curb?
4. What is the primary purpose of a gag bit?
5. Why is a thick mouthpiece considered milder than a thin one?

Long Questions

1. Explain the significance of pressure points in bitting and the risks of incorrect bitting.
2. Describe the main types of bits and their specific purposes.
3. Discuss the structure and function of a double bridle.
4. What factors determine the severity of a bit? Illustrate with examples.
5. Write a detailed note on bitless bridles and their role in horse training.

SADDLE FITTING

CHAPTER VI: CARE, MAINTENANCE AND PRESERVATION OF SADDLE & HARNESS

TEACHING INSTRUCTIONS

Code	:	**SF-6**
Period	:	**One (01)**
Type	:	**Tutorial Discussion**
Year	:	**1 Year SD/ SW**
Conducting Officer	:	**PI Staff**
Training Aids	:	**Black board and chalk**

Time Plan

- **Introduction : 05 Mins**
- **Care of Saddlery & Harness : 30 Mins**
- **Conclusion : 05 Mins**

INTRODUCTION

1. Taking care of saddle goes beyond appearances; it's a responsibility for equestrians. A maintained saddle looks great and guarantees the comfort and safety of the horse and rider. Regularly cleaning and conditioning the saddle prevents the build-up of dirt, sweat, and grime that can degrade the material over time, potentially leading to safety issues like breakage or slipping. Additionally, proper maintenance extends the lifespan of the saddle. Furthermore, it ensures performance by preserving its suitable shape, ensuring a snug fit for the horse, and providing a secure seat. Regular and thorough saddle maintenance is essential for maximizing comfort during rides and minimizing risks associated with wear and tear, prolonging the life of riding equipment, preserving its appeal, and maintaining its value.

PREVIEW	LEARNING OBJECTIVES
The lecture will be conducted as follows:- ➢ Part I: Care of saddlery & harness	➢ To acquaint the cadets with care maintenance and preservation of saddle & harness

PART I: CARE OF SADDLERY AND HARNESS

Examination of Harness

2. The following points should be particularly noted:-

(a) The general condition of the leather should be examined thoroughly to check that no portion is worn out or in partially perished condition. All straps, reins and other flexible portions of the harness should be capable of being bent over the forefinger at any point without showing signs of cracking. The cracking of leather is usually a proof that it is in a perished or partially perished condition from lack of grease or soap, or from soaking and scouring in hot water.

(b) The stitching should be carefully examined to see that no portion is withered way, and care should be taken to see that, portion of the harness which comes in contact with the animal's body is flat, smooth and free from knots. Prominent, coarse or knotted stitching may cause galls.

(c) All metal portions should be sound and in thoroughly good working order.

(d) Traces should be most carefully examined to see that they are of equal length and in thoroughly serviceable condition.

3. The places where harness is likely to wear out are the stitching, the places where various straps, traces, etc, are buckled and eyes.

4. Care should be exercised in the handling of all articles of harness and saddlery. Saddles should not be dropped or thrown about, as fractured arches or broken side bars may result in injury to horse or rider. Stitching should be tested from time to time, as the life of the thread is short compared with that of the leather. Stirrup leathers should be exchanged occasionally, or shortened at the buckle end, to bring the wear on fresh holes. All exposed

iron work should be kept bright

Preservation of Leather

5. Leather in constant use should be well dubbed every six months as follows:-

(a) The leather having first been moistened with a sponge, the dubbin (warmed if the weather is cold) should be lightly rubbed in with a sponge or brush; after two or three days it should be rubbed off, and the leather should then be well polished with a brush or cloth.

(b) Leather must not be washed with soda or soaked in water. Its vitality is destroyed by hot water. Washing with soap and lukewarm water, quickly and without soaking, will do the least harm, if the precaution is taken to apply dubbin or good soap while the leather is slightly damp.

(c) Drying leather by the fire destroys its durable properties and is forbidden.

(d) Dry cleaning by brush and rubbing is sufficient to remove dust and dirt in many instances.

(e) Seats and flaps of saddles and handled parts of reins should not be polished.

(f) All saddlery and harness should be taken to pieces, periodically and carefully inspected. Once or twice a year, certain parts, such as the inside of breaching and breast collars, should be dubbed.

(g) Ropes, web girths and whips should be scrubbed with clean cold water, when necessary.

(h) Saddle blanket, panels and numdahs should be placed in the sun or wind to dry, and then brushed.

(j) Steel or ironwork should be wiped over immediately after use and then rubbed with an oily rag.

CONCLUSION

6. Proper care and maintenance of saddlery and harness are essential for the safety, comfort, and performance of both horse and rider. Regular cleaning, inspection, and storage prevent wear and damage, extending the equipment’s lifespan. Well-maintained tack ensures effective communication and promotes animal welfare during work or riding activities.

ASSESSMENT EXERCISES

1. Horse Riding equipment?

(a) Saddle
(b) Anvil
(c) Pritchel
(d) Rasp

2. Front arch of saddle is also called as?

(a) Pannel
(b) Bonet
(c) Patch
(d) Pommel

3. Rear arch of saddle is also called as?

(a) Cantle
(b) Canker
(c) Mantle
(d) Falter

4. Which of the following is a jointed bit?

(a) Rubber snaffle
(b) Bit PMR
(c) Disjointed ring snaffle
(d) Bar snaffle

5. Which of the following is a disjointed bit?

(a) Ring snaffle
(b) Hunter snaffle
(c) Rubber snaffle
(d) Bar snaffle

6. Bit is held on the horse's head by means of a?

(a) Reins
(b) Bridle
(c) Horns
(d) Pole

7. Nose band is a part of the?

(a) Bit
(b) Saddle
(c) Exercise head collar
(d) Farrier kit

8. The simple fold blanket is used, when?

(a) Horse is weak
(b) Horse body is in good condition
(c) Withers are prominent
(d) Horse is ferocious

9. The channel or envelop folds are used, when?

(a) Horse is weak
(b) Horse is in good condition
(c) Horse is ferocious
(d) Horse is healthy

10. Front arch of the saddle is also known as the?

(a) Cantel
(b) Namdha panel
(c) V attachment
(d) Pommel

11. Rear arch of the saddle is also known as the?

(a) Cantel
(b) Namdha panel
(c) V attachment
(d) Pommel

12. In bit PMR stands for?

(a) Permanent mouth ring
(b) Pourt mouth ring
(c) Port mouth reversible
(d) Permanent mouth reversible

13. Saddle pack is used for?

(a) Transportation of load
(b) Riding purpose
(c) Show purpose
(d) Protects eyes

14. Gall girth is a type of?

(a) Saddle
(b) Farrier tool
(c) Saddle injury
(d) Shoe injury

15. Fitness of saddle must be checked at least once in?

(a) A month
(b) Two months
(c) 15 days
(d) Three months

16. Saddle SU is used for?

(a) Transportation of load
(b) Riding purpose
(c) Show purpose
(d) Protects eyes

17. When examining leather harness, what indicates the leather is perished or partially perished?

(a) Excessive softness
(b) Cracking when bent over the forefinger
(c) Shiny surface
(d) Stiffness when dry

18. Which part of the harness should be flat, smooth, and free from knots to avoid causing galls?

(a) Buckles
(b) Straps that contact the animal's body
(c) Metal rings
(d) Stitching edges only

19. What should be done if stitching on a harness is found to be withered away?

(a) Ignore it
(b) Repair or replace the stitching
(c) Apply oil
(d) Soak in water

20. Which of the following should be checked to ensure equal length and good condition?

(a) Buckles
(b) Traces
(c) Stirrup leathers
(d) Noseband

21. What may happen if saddles are thrown or dropped?

(a) Leather becomes shiny
(b) Arches or side bars may fracture
(c) Color fades
(d) Metal parts rust

22. Which part of the harness wears out the quickest?

(a) Leather straps
(b) Stitching thread
(c) Metal buckles
(d) Traces

23. How often should leather in constant use be dubbed?

(a) Every month
(b) Every six months
(c) Every year
(d) Every week

24. What is the correct method to apply dubbin to leather?

(a) Apply on dry leather and leave
(b) Moisten leather first, then lightly rub in dubbin, let sit for days, then polish
(c) Soak leather in dubbin overnight
(d) Heat dubbin and apply to wet leather immediately

25. Which of the following should never be used to wash leather?

(a) Lukewarm water with soap
(b) Soda
(c) Cold water
(d) A damp sponge

26. What is the effect of drying leather by fire?

(a) Strengthens it
(b) Preserves colour
(c) Destroys durable properties
(d) Softens leather

27. Which of these cleaning methods is acceptable for removing dust and dirt from leather?

(a) Washing in hot water
(b) Dry cleaning by brush and rubbing
(c) Soaking overnight
(d) Using soda solution

28. Which parts of saddles and reins should not be polished?

(a) Buckles
(b) Seats, flaps of saddles, and handled parts of reins
(c) Straps
(d) Metal fittings

29. How often should saddlery and harness be taken apart for inspection?

(a) Once a week
(b) Once or twice a year
(c) Every six months
(d) Only when broken

30. Which parts should be dubbed once or twice a year?

(a) Entire harness
(b) Inside of breaching and breast collars
(c) Stirrup leathers only
(d) Nosebands

31. How should ropes, web girths, and whips be cleaned?

(a) With hot water
(b) By scrubbing with clean cold water
(c) By soaking in soap
(d) By dry brushing only

32. After washing, how should saddle blankets and panels be dried?

(a) By fire
(b) In the sun or wind
(c) Indoors on a heater
(d) Wrapped in towels

33. What should be done to steel or ironwork after use?

(a) Leave it wet
(b) Wipe immediately and rub with oily rag
(c) Polish with soap
(d) Soak in water

34. Why should stirrup leathers be exchanged or shortened occasionally?

(a) To improve aesthetics
(b) To bring wear on fresh holes
(c) To tighten the saddle
(d) To prevent slipping

35. What is a common cause of cracking in leather?

(a) Over-oiling
(b) Lack of grease or soap, or soaking in hot water
(c) Exposure to cold air
(d) Excessive brushing

36. Which is NOT a likely place for harness wear?

(a) Stitching
(b) Buckled strap areas
(c) Metal rings (eyes)
(d) Horse's tail

37. What is the danger of prominent or coarse stitching on harness?

(a) It looks unattractive
(b) It may cause galls on the horse
(c) It weakens the harness
(d) It stretches too much

38. When applying dubbin in cold weather, the dubbin should be?

(a) Frozen
(b) Heated/warmed
(c) Applied directly
(d) Mixed with water

39. What should be done if leather becomes soaked during cleaning?

(a) Dry near fire immediately
(b) Apply dubbin while leather is slightly damp
(c) Leave to dry naturally without treatment
(d) Wash with soda

40. Which cleaning method is forbidden for leather?

(a) Washing with lukewarm soapy water quickly
(b) Dry cleaning by brush
(c) Drying by the fire
(d) Light dubbing

41. What is the main reason for carefully examining all metal portions of the harness?

(a) To polish them for shine
(b) To ensure they are sound and in good working order
(c) To prevent rust colour
(d) To tighten bolts

Short Questions

1. Why should stitching in harness be examined regularly?

2. What is the effect of drying leather by the fire?

3. How often should leather in constant use be dubbed?

4. Name two common places where harness is likely to wear out.

5. What is the proper way to clean ropes, web girths, and whips?

Long Questions

1. Explain the procedure for dubbing leather and the precautions to be observed.

2. Discuss the points to be noted during the examination of harness.

3. What precautions should be taken to preserve leather and prevent its deterioration?

4. Describe the general care and handling of saddlery to ensure durability.

5. Write in detail about the cleaning and maintenance of saddlery, including metal and fabric parts.

SHOEING

5

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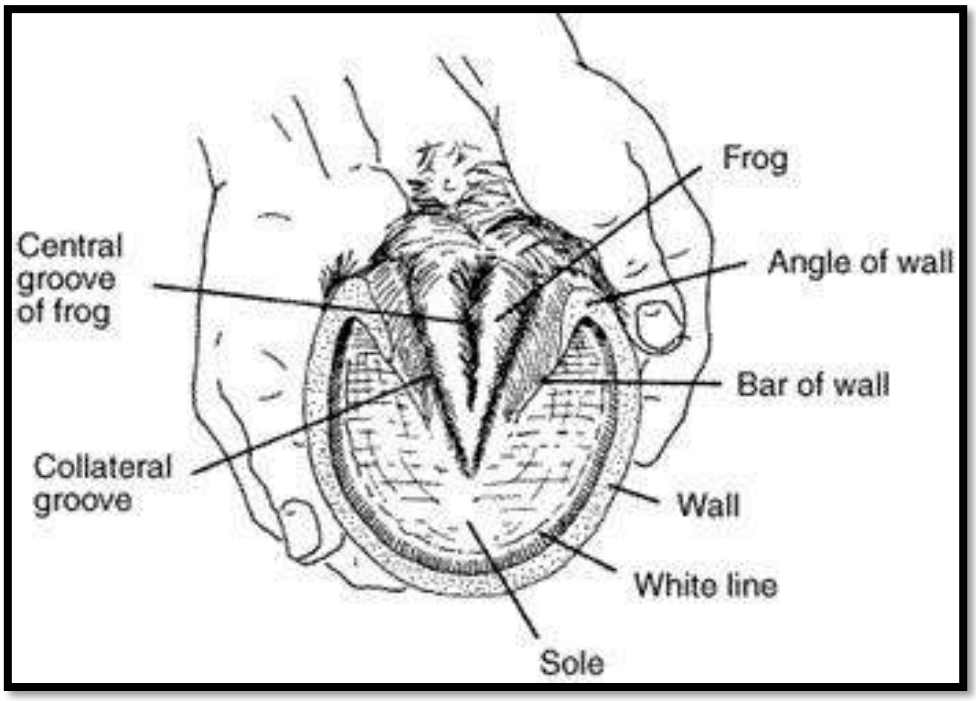
SHOEING

CHAPTER I: THE HOOF



TEACHING INSTRUCTIONS

Code	**:**	**S-1**
Period	**:**	**One (01)**
Type	**:**	**Tutorial Discussion**
Year	**:**	**1 Year SD/ SW**
Conducting Officer	**:**	**Officer / Farrier**

Time Plan

- **Introduction : 05 Mins**
- **Hoof of a Horse : 10 Mins**
- **External Hoof Structures : 10 Mins**
- **Internal Hoof Structures : 10 Mins**
- **Conclusion : 05 Mins**

INTRODUCTION

1. The **hoof of a horse** is a tough, keratin-covered structure that forms the outer part of the horse's foot. It plays a crucial role in supporting the horse's weight, absorbing shock, and providing traction. Each hoof consists of several parts, including the **wall**, **sole**, **frog**, and **heel**, all working together to protect the inner bones and tissues. Healthy hooves are essential for a horse's overall well-being and mobility, which is why regular care like trimming and shoeing is important. The saying "no hoof, no horse" highlights just how vital hooves are to a horse's health and performance

PREVIEW

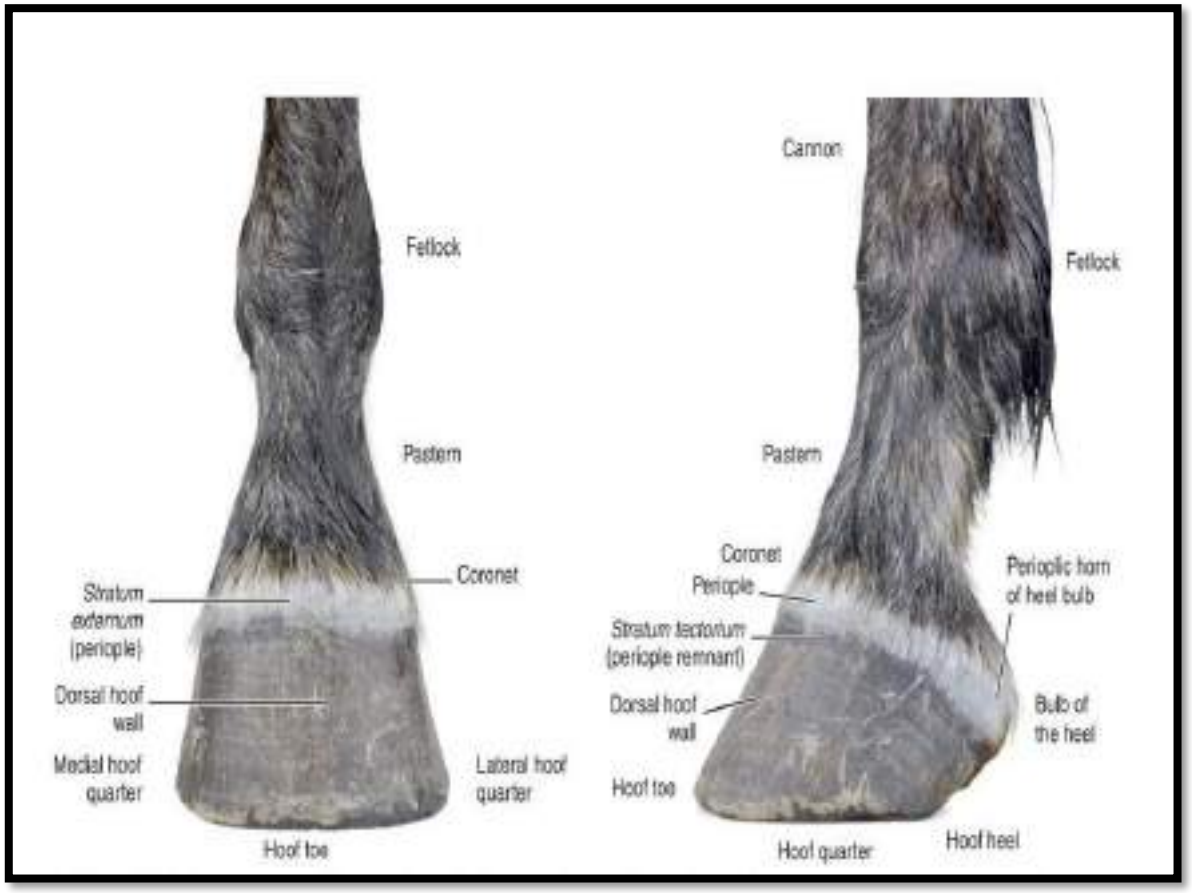
The lecture will be conducted in following parts:-

- Part I: Hoof of a horse
- Part II: External Hoof Structures
- Part III: Internal Hoof Structures

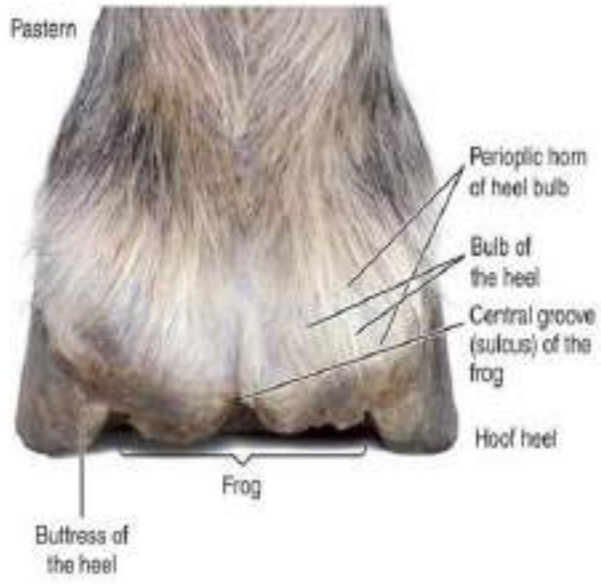
LEARNING OBJECTIVES

- To acquaint the cadets with hoof and parts of hoof of a horse.

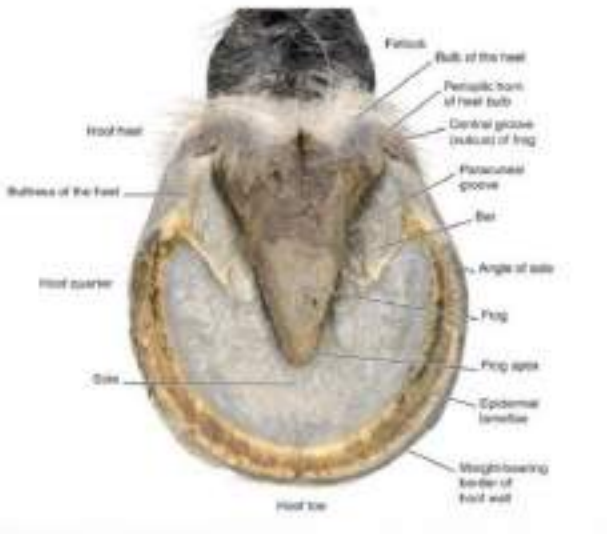
PART I: HOOF OF A HORSE



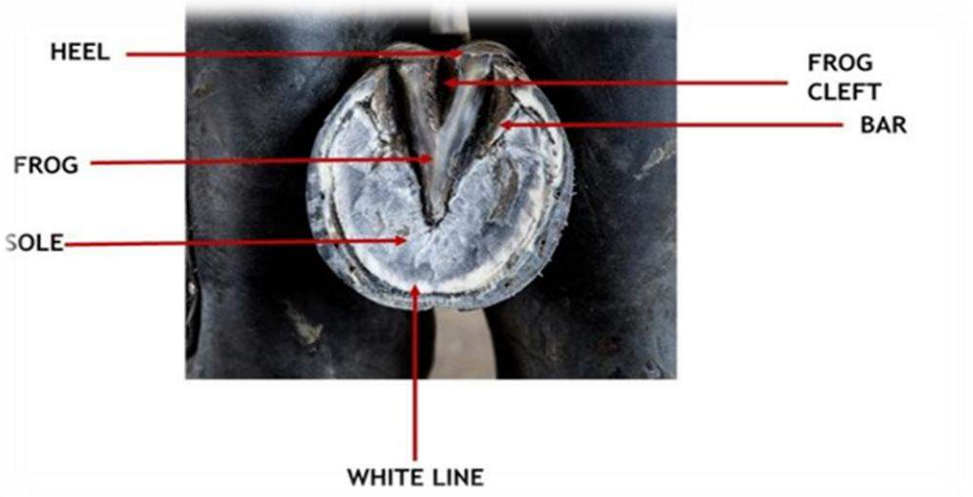
Surface Anatomy of the Dorsal Aspect of a Normal Distal Forelimb



Surface Anatomy of the Palmar Aspect of a Normal Distal Foot



Surface Anatomy of the Solar Aspect of a Normal Distal Foot



Parts of Hoof

PART II: EXTERNAL HOOF STRUCTURES

2. **Hoof Wall.** This is the exterior part of the hoof that can be seen and encases the internal structures, offering a hard layer of protection. The material which makes up the hoof wall is keratin-based, which is also known as 'horn'. Keratin is a protein and is the same material which makes up human hair and fingernails. It takes approximately 9-12 months for the horn to grow from the coronary band to the toe. The hoof wall should be smooth in appearance, with no obvious dips, grooves, lines or bulges.

3. **Coronary Band.** The coronary band is located where the skin joins the hoof wall. It has a rich supply of blood vessels to provide nourishment to the hoof and creates new tissue which makes up the hoof wall.

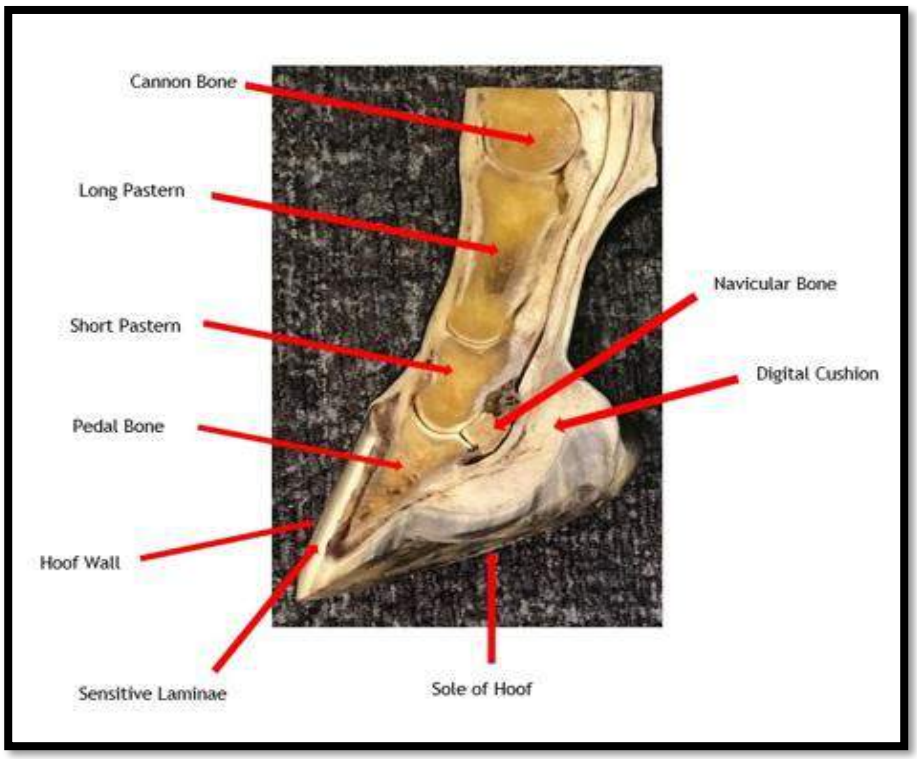
4. **Sole.** The sole is located underneath the horse's foot and is also made up of horn. It's a tough structure which provides protection to the internal, sensitive parts of the hoof. The sole is usually slightly curved and shouldn't come into contact with the ground. This helps absorb concussive forces as the shape allows the hoof to expand when weight-bearing and contract when lifted.

5. **Frog.** The frog is a triangle-shaped structure and is softer than the horn. This structure plays an important role in weight-bearing, absorbing concussion and circulation. The grooves along the side of the frog allow it to expand when in contact with the ground.

6. **Bulbs of the Heel.** The bulbs of the heel are of a similar texture to the frog. The heels in conjunction with the hoof wall aid shock absorption by moving in and out as well as up and down. The heels can flex independently to better support the horse when moving across uneven ground.

7. **The White Line.** The white line forms where the hoof wall meets the sole of the foot. It's the only visible part of the horse's laminae; it's therefore very important to monitor the white line closely for stretching or signs of infection. Stretching may occur due to poor foot balance, limb conformation, incorrect (uneven) weight-bearing, poor riding, poor farriery and an overweight horse. Stretching can also allow bacteria to become trapped within the hoof wall causing an infection known as white line disease, commonly referred to as seedy toe.

PART III: INTERNAL HOOF STRUCTURES



8. **Sensitive Sole.** Sole produces new horn to the insensitive sole when it's worn away.

9. **Digital Cushion.** This is a mass of flexible material that contributes to the formation of the horse's heels. These structures are the main shock absorbers. Located between the

pedal bone and the digital flexor tendon, the cushion also helps to push blood back up the leg

10. **Collateral Cartilages.** These structures are in place to provide protection to the coffin joint both on the inside and outside of the hoof wall. They allow the back of the hoof to become more flexible for concussion, absorption and when tackling different terrains.

11. **Laminae.** The sensitive and non-sensitive laminae are complex structures which interlock and connect the outer hoof wall to the pedal bone and cartilages. The sensitive laminae act like Velcro to form a strong bond to support the pedal bone within the hoof. The division between the two laminae can be identified by the white line on the sole of the foot

12. **Pedal Bone.** The pedal bone is arched in shape which gives this relatively small bone the strength to bear the weight of the horse. It spreads the pressure created by distributing weight through the entire bone to reduce tension.

13. **Navicular Bone**. The navicular bone, also known as the distal sesamoid, is located at the back of the pedal bone and is held in place by two ligaments. The bone sits inside the navicular bursa - a pocket of synovial fluid which allows the deep digital flexor tendon to glide over the bone smoothly. The navicular bone and the bursa sit within the coffin joint.

CONCLUSION

14. Understanding the hoof of a horse is essential for anyone involved in equine care, training, or riding. The hoof plays a critical role in the overall health, movement, and performance of the horse.

ASSESSMENT EXERCISES

1. What is the hoof wall primarily made of?

(a) calcium
(b) keratin
(c) collagen
(d) cartilage

2. Approximately how long does it take for the hoof wall horn to grow from the coronary band to the toe?

(a) 3–4 months
(b) 6–8 months
(c) 9–12 months
(d) 1–2 months

3. The coronary band is important because it?

(a) connects the hoof to the leg bones
(b) produces new tissue for the hoof wall
(c) absorbs shock during movement
(d) provides cushioning inside the hoof

4. The sole of the hoof should?

(a) be thick and make full contact with the ground
(b) be slightly curved and not contact the ground
(c) be soft and flexible
(d) have visible grooves and dips

5. What is the main function of the frog?

(a) to grow the hoof wall
(b) weight-bearing, concussion absorption, and circulation
(c) connect the hoof to tendons
(d) provide structure to the heel bulbs

6. The bulbs of the heel?

(a) are rigid and hard
(b) have a texture similar to the frog and aid shock absorption
(c) are part of the hoof wall
(d) are located on the dorsal aspect of the hoof

7. The white line of the hoof?

(a) is a visible part of the laminae
(b) is located on the coronet
(c) is the thickest part of the sole
(d) contains blood vessels

8. Stretching of the white line can be caused by?

(a) excessive exercise only
(b) poor foot balance and uneven weight-bearing
(c) wet weather
(d) regular hoof trimming

9. What disease can result from infection trapped in the white line?

(a) laminitis
(b) white line disease (seedy toe)
(c) navicular syndrome
(d) thrush

10. The sensitive sole?

(a) is located above the pedal bone
(b) lies underneath the pedal bone and produces new horn
(c) is part of the hoof wall
(d) is the hardest part of the sole

11. The digital cushion primarily functions to?

(a) support the pedal bone
(b) absorb shock and help blood circulation
(c) connect the hoof to the leg
(d) produce keratin for the hoof

12. Collateral cartilages are found?

(a) on the inside and outside of the hoof wall, protecting the coffin joint
(b) only on the dorsal aspect of the hoof
(c) inside the sole
(d) attached to the navicular bone only

13. What is the role of the laminae in the hoof?

(a) produce blood cells
(b) connect the hoof wall to the pedal bone
(c) form the outer hoof wall
(d) absorb concussive forces

14. The pedal bone is arched in shape to?

(a) allow movement of the hoof
(b) bear and distribute the horse's weight
(c) attach tendons
(d) connect to the navicular bone

15. Another name for the navicular bone is?

(a) proximal sesamoid
(b) distal sesamoid
(c) coffin bone
(d) digital cushion

16. The navicular bone is located?

(a) at the front of the pedal bone
(b) at the back of the pedal bone
(c) inside the coronary band
(d) in the frog

17. The navicular bone is held in place by?

(a) the digital cushion
(b) two ligaments
(c) the hoof wall
(d) the sole

18. The navicular bone sits inside a fluid-filled sac called the?

(a) navicular bursa
(b) digital cushion
(c) coronary band
(d) laminae

19. The navicular bursa allows the?

(a) pedal bone to move freely
(b) deep digital flexor tendon to glide smoothly
(c) sole to expand
(d) frog to absorb shock

20. The hoof wall is smooth in appearance and should have?

(a) no dips, grooves, lines or bulges
(b) several grooves for flexibility
(c) bulges at the toe for shock absorption
(d) lines that indicate growth only

21. The grooves along the side of the frog allow it to?

(a) expand on contact with the ground
(b) connect to the digital cushion
(c) protect the navicular bone
(d) prevent the sole from contacting the ground

22. The heels of the hoof?

(a) are fixed and do not move
(b) can flex independently to support uneven ground
(c) are located at the toe
(d) are part of the coronary band

23. The sole of the hoof helps absorb concussive forces by?

(a) being flat and hard
(b) expanding when weight-bearing and contracting when lifted
(c) being soft and elastic
(d) connecting directly to the pedal bone

24. The white line is important to monitor because?

(a) it shows the colour of the hoof
(b) it is the only visible sign of laminae health
(c) it controls hoof growth
(d) it is where the frog attaches

25. The hoof wall grows from the coronary band and the material grows?

(a) downward and outward
(b) upward and inward
(c) from the toe to the heel
(d) from the coronary band toward the toe

26. The hoof wall grows from the coronary band and the material grows?

(a) Downward and outward
(b) Upward and inward
(c) From the toe to the heel
(d) From the coronary band toward the toe

Short Answer Questions

1. What is the composition of the hoof wall and how long does it take to grow from the coronary band to the toe?

2. Define the coronary band and state its function.

3. Where is the white line located and why is it important?

4. What is the primary role of the frog in the horse’s hoof?

5. Name the bone that provides strength to bear the horse's weight and describe its shape.

Long Answer Questions

1. Explain the structure and function of the hoof wall, sole, frog, and bulbs of the heel.

2. Describe the internal structures of the hoof, including the digital cushion, collateral cartilages, laminae, and their functions.

3. Discuss the significance of the white line in hoof health and conditions that may affect it.

4. Write a detailed note on the pedal bone and navicular bone, including their anatomical position and function.

5. Explain the mechanisms of shock absorption in the distal forelimb, focusing on the frog, digital cushion, and collateral cartilages.

SHOEING

CHAPTER II: OBJECTIVES OF SHOEING

TEACHING INSTRUCTIONS

Code	:	**S - 02**
Period	:	**One (01)**
Type	:	**Tutorial Discussion**
Year	:	**1 Year SD/ SW**
Conducting Officer	:	**Officer/Farrier**
Training Aids	:	**Black board and chalk**
Time Plan		
➢ **Introduction**	:	**05 Mins**
➢ **Objectives of Shoeing**	:	**20 Mins**
➢ **Essentials of Shoeing**	:	**10 Mins**
➢ **Conclusion**	:	**05 Mins**

INTRODUCTION

1. Knowledge of shoeing of Horses is an important aspect of animal management and helps student understand the technicalities of shoeing and its importance in ensuring functional efficiency of the horse.

PREVIEW	LEARNING OBJECTIVES
The lecture will be conducted in following parts:- ➢ Part I: Objectives of Shoeing ➢ Part II: Essentials of Shoeing	➢ To acquaint the cadets with shoeing of Horses.

PART I: OBJECTIVES OF SHOEING

2. The Objectives of Shoeing can be enumerated as under:-

(a) To prevent undue wear of the foot when working upon surface, which otherwise, would tend to reduce the foot by friction to the extent where lameness would occur.

(b) To prevent the wall from cracking and splitting.

(c) To afford the horse a better grip on slippery surfaces.

(d) To reduce a certain amount of concussion which the foot would have to sustain where no shoes used.

Aim of Shoeing

3. The aim of horse shoeing is to provide the horse with a well-balanced foot that will allow them to work for longer periods of time without excessively wearing the hoof down and to help maintain the hoof shape. The use of horseshoes can give the horse a secure grip, due to the groove called a fuller, which runs around the surface of the shoe.

Materials Used in Shoeing

4. Various materials used in shoeing of horses and mules are as under:-

(a) Shoes {(2, 3, 4, 5 No's Shoes for Mules (all classes) and 4, 5, 6, 7, 8 No's Shoes for Horses (all classes)}.

(b) Nails.

(c) Basic Farrier Tools.

(d) Advance Farrier Tools.

(e) Supplementary Farrier Tools.

Stages of Shoeing

5. The whole procedure of shoeing is divided into six definite stages:-

(a) Removal.

(b) Preparation of Foot.

(c) Fitting of Shoe.

(d) Nailing on.

(e) Finishing.

(f) Inspection.

PART II: ESSENTIALS OF SHOEING

6. The essentials of shoeing are:-

(a) The shoe should be suitable for the purpose for which it is intended.

(b) The foot should be reduced to a proper bearing surface.

(c) The shoe should rest on the bearing surface all the way round.

(d) The shoe follows the outline of the wall without being widened or closed except at the heels where the shoe may be wider than the foot.

(e) The shoe should be strong enough to last for a month but not heavy enough to tire the animal unduly.

(f) Only a sufficient number of nails should be used to keep the shoe in position.

(g) Each nail should be so driven that its point emerges from the wall at a proper height and is clenched so that it obtains a proper hold;

(h) The toe clip or quarter clips should be so made that they only require the removal of a minimum amount of wall below them and while strong enough to prevent the shoe from shifting on the foot, should not be unduly high, pointed or coarse.

(j) The outer surface of the wall should be untouched except for the making of the 'beds' for the clenches.

(k) The sole and frog should not be pared away with the knife.

CONCLUSION

7. Shoeing a horse is not just about protecting the hoof - it's a specialized practice with several key goals that support the horse's health, performance, and comfort.

ASSESSMENT EXERCISES

1. One primary objective of shoeing a horse is?

(a) To reduce hoof growth
(b) To prevent hoof colour fading
(c) To reduce wear from friction and prevent lameness
(d) To stiffen the hoof wall

2. Horseshoes help to prevent?

(a) Muscle cramps
(b) Hairline fractures
(c) Cracking and splitting of the hoof wall
(d) Swelling in joints

3. A shoe helps a horse gain better grip on?

(a) Grass fields
(b) Rocky slopes
(c) Slippery surfaces
(d) Sand tracks

4. Another function of horseshoes is to?

(a) Increase hoof size
(b) Reduce concussion to the foot
(c) Thicken the hoof wall
(d) Lower the horse’s center of gravity

5. The ultimate aim of horse shoeing is to?

(a) Make hooves more decorative
(b) Maintain balance and hoof shape
(c) Increase the weight of hooves
(d) Reduce hoof sensitivity

6. What feature in a horseshoe improves traction?

(a) Toe clip
(b) Nail groove
(c) fuller
(d) Heel support

7. What are the common size numbers of shoes for mules?

(a) 1, 2, 3, 4
(b) 2, 3, 4, 5
(c) 4, 5, 6, 7
(d) 6, 7, 8, 9

8. Horses typically use shoe sizes?

(a) 2 to 5
(b) 3 to 6
(c) 4 to 8
(d) 6 to 10

9. Which of the following is NOT listed as a farrier tool category?

(a) Decorative tools
(b) Basic farrier tools
(c) Advance farrier tools
(d) Supplementary farrier tools

10. What is the first stage of the shoeing procedure?

(a) Preparation of foot
(b) Finishing
(c) Inspection
(d) Removal

11. The stage that includes shaping the hoof for shoeing is?

(a) Finishing
(b) Fitting of shoe
(c) Preparation of foot
(d) Inspection

12. Nailing the shoe onto the hoof is done during which stage?

(a) Fitting of shoe
(b) Finishing
(c) Nailing on
(d) Inspection

13. The final quality check in shoeing is referred to as?

(a) Fitting
(b) Removal
(c) Finishing
(d) Inspection

14. An essential aspect of shoeing is that the shoe must?

(a) Be smaller than the foot
(b) Be handmade from silver
(c) Rest on the bearing surface all the way round
(d) Be thicker than the hoof wall

15. At the heels, the shoe may be?

(a) Wider than the foot
(b) Narrower than the foot
(c) Tied with string
(d) Removed for comfort

16. The shoe should be?

(a) Very thick and heavy
(b) Enough to last 3 months
(c) Strong enough to last a month without being too heavy
(d) Only decorative

17. The number of nails used in shoeing should be?

(a) As many as can fit
(b) Minimal but sufficient
(c) Exactly six
(d) More than ten

18. Proper nail placement requires the point to?

(a) Go deep into the frog
(b) Exit the sole
(c) Emerge from the wall at a proper height
(d) Be visible from the hoof base

19. What is the purpose of the toe clip or quarter clips?

(a) Decoration
(b) Assist hoof cleaning
(c) Prevent shoe movement without damaging the hoof
(d) Elevate the horse

20. The clips should be?

(a) Tall and sharp
(b) Flat and pointed
(c) Just strong enough without being coarse
(d) Hammered into the frog

21. The outer surface of the hoof wall should be?

(a) Filed evenly
(b) Flattened out
(c) Untouched except for clenches
(d) Completely rasped

22. What parts of the hoof should not be cut away with a knife?

(a) Sole and frog
(b) Wall and sole
(c) Coronary band
(d) Heels and bulbs

23. The main reason for shoeing horses that work on hard surfaces is?

(a) Hoof colour retention
(b) To reduce horn hardness
(c) To avoid excessive wear and lameness
(d) To increase hoof temperature

24. Which of the following is considered a part of advance farrier tools?

(a) Clippers
(b) Nippers
(c) Shoe tongs
(d) Not specifically listed

25. A correctly shod horse should be able to?

(a) Bear more weight on the heel
(b) Maintain balance and perform longer without hoof breakdown
(c) Gallop without reins
(d) Develop Thicker Hooves

Short Answer Questions

1. What is the primary aim of horse shoeing?

2. Mention two key objectives of shoeing.

3. Name the groove in the horseshoe that provides a better grip.

4. List any two materials required for shoeing.

5. How many definite stages are there in the procedure of shoeing?

Long Answer Questions

1. Explain the main objectives of shoeing a horse in detail.

2. Describe the stages involved in the shoeing procedure.

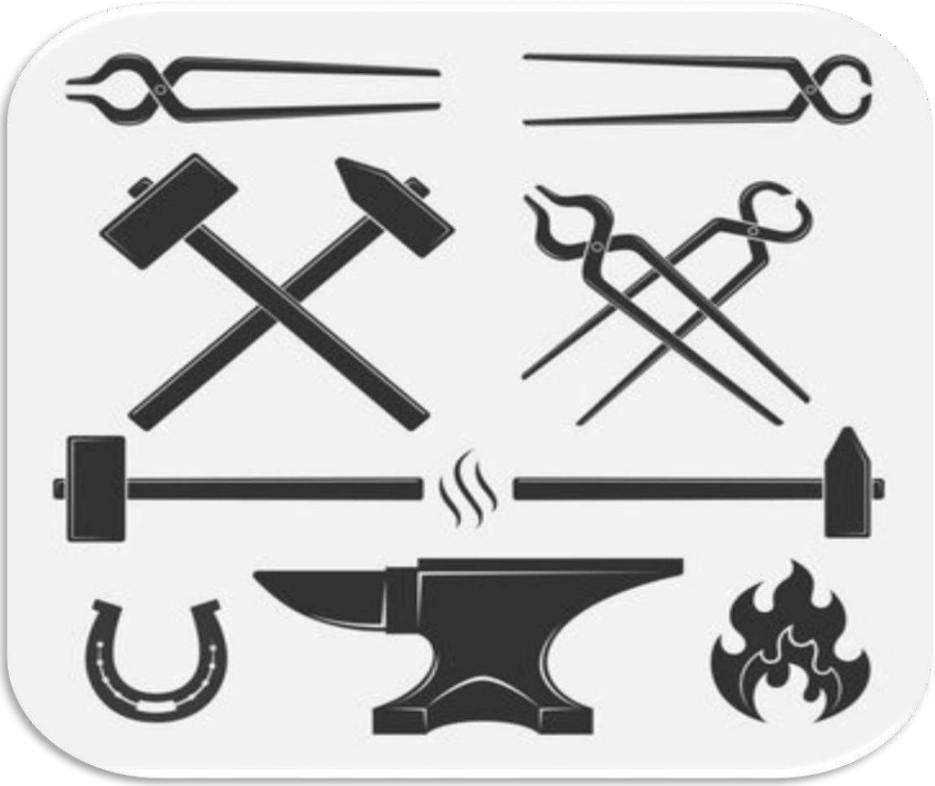
3. Discuss the essentials of correct shoeing and why they are important.

4. Explain the role of materials and tools used in the shoeing of horses and mules.

5. Write a detailed note on the importance of shoeing for hoof protection, balance, and performance.

SHOEING

CHAPTER III: FARRIER TOOLS AND THEIR USES



TEACHING INSTRUCTIONS

Code	:	**S – 03**
Period	:	**Two (01+01)**
Type	:	**Tutorial Discussion & Practical**
Year	:	**1st Year SD/SW**
Conducting Officer	:	**ANO / Farries**
Training Aids	:	**Black board and chalk.**

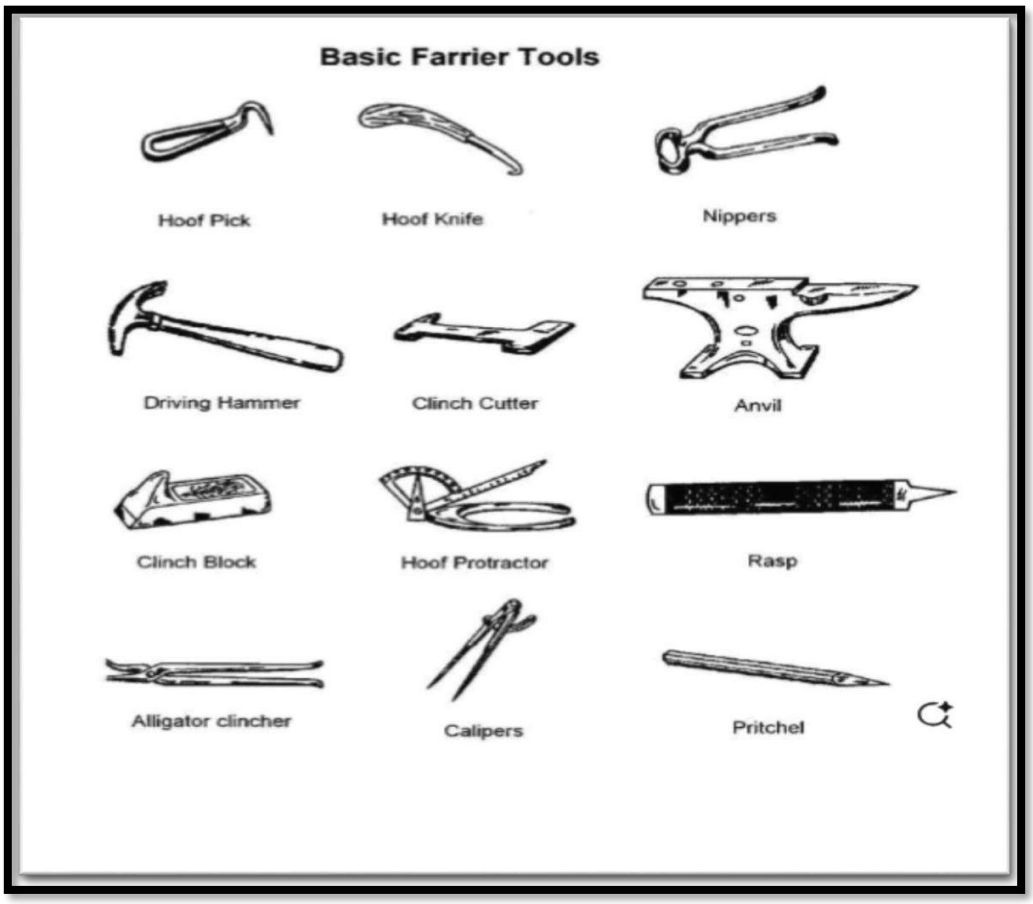
Time Plan

- **Introduction : 05 Mins**
- **Farreir Tools and Their Uses : 10 Mins**
- **Usage of Farreir Tools : 20 Mins**
- **Conclusion : 05 Mins**

INTRODUCTION

1. Knowledge of use of farrier tools is very important aspect of animal management and helps Cadets to understand the usage of various farrier tools and their importance in ensuring a perfect shoeing.

PREVIEW	AIM
The lecture will be conducted as follows:- ➢ Part I: Farreir tools and their uses ➢ Part II: Usage of Farreir tools	➢ To acquaint the cadets with use of Farrier Tools in Shoeing of Horses.



PART I: FARRIER TOOLS AND THEIR USES

2. Two types of farrier tools are used in farriery as under:-

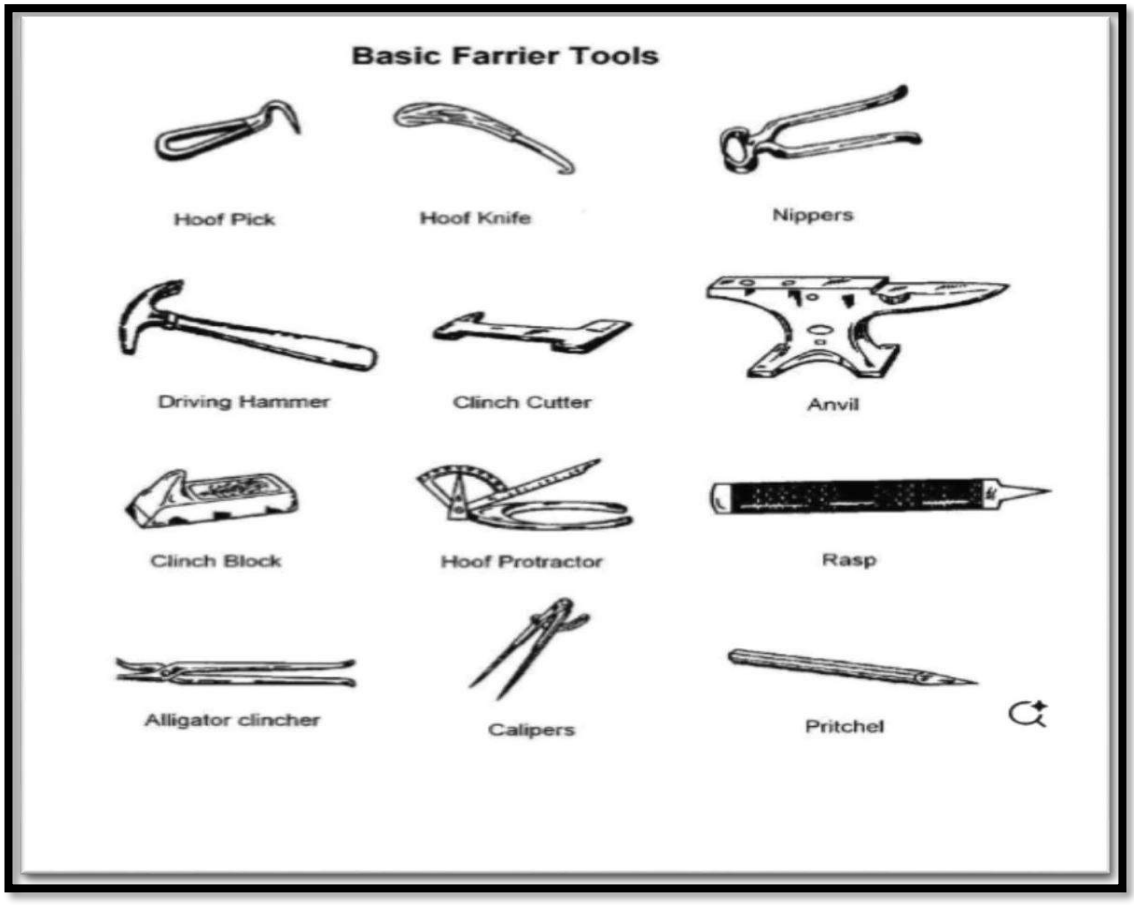
(a) **Basic Farrier Tools**.

(i) Shoeing Hammer
(ii) Buffer Farrier
(iii) Drawing Knife
(iv) Searching Knife
(v) Regstone

(vi) Rasp Farrier
(vii) Pincer Farrier
(viii) Pritchel Farrier
(ix) Apron Leather
(x) Farrier Tools Bag

(b) **Supplementary Farrier Tools**.

(i) Turning Hammer
(ii) Turning Tongs
(iii) Flatter Smith
(iv) Fire Tongs
(v) Fuller Smith
(vi) Pritchel Farrier
(vii) Stamp Farrier
(viii) Anvil Heel Cutter
(ix) Anvil
(x) Set Smith
(xi) Sledge Hammer
(xii) Slice Forge
(xiii) Poker Smith
(xiv) Tool Box



PART II: FARRIER TOOLS IN SHOEING OF HORSES

3. Various uses of the farrier tools during different stages of shoeing are as under:-

(a) **Trimming the Hoof**.

(i) **Hoof Pick**. Farriers need these to clean out the horse's feet before they can get to work with the other tools.

(ii) **Shoe Puller**. These tools look like giant pliers, help in getting the shoe off of the hoof without damaging the foot.

(iii) **Nail Puller.** This tool is used to pull nails out of a horseshoe one at a time, either to get the shoe off before a trim, or to remove a loose nail.

(iv) **Hoof Testers**. It is a two-pronged tool that lets a farrier see if/where a horse's foot is sore. It uses a pinching motion to put pressure on different points of the horse's sole or heel when the horse reacts to the pressure that usually indicates a sore spot.

(v) **Nippers.** These are giant pair of nail clippers, used to trim around the hoof wall.

(vi) **Knife.** The knife is used to pare away excess sole, and get rid of loose, dead frog so that healthy tissue can breathe. Different kinds of knives used in farriery are viz Loop knives, curved blade knives, double- edged knives.

(vii) **Rasp.** It is like a huge nail file. Once the foot has been trimmed to the right length, it needs to be evened out and made level, and the edges of the foot rounded slightly. The rasp also gets used at the end of a shoe job to smooth out nails and make sure that the edges of the hoof exactly meet the edges of the horseshoe.

(viii) **Buffer Farrier.** A farrier buffer is a specialized tool used by farriers to primarily lift and remove nails when taking off a horse's horseshoe, often featuring additional functions like cutting clinches on one end and a pritchel on the other for further hoof cleaning and nail hole preparation; essentially, it helps with the process of removing old shoes from a horse's hoof with ease and precision.

(b) **Shaping the Shoes**

(i) **Forge.** Usually powered by gas nowadays, although coal-fired ones are still used, the forge heats up metal to the point where it can be shaped and moulded.

(ii) **Anvil.** Its work surface is for shaping horseshoes, or any metal. Typically made of stainless steel, anvils are designed with a flat top and a rounded "horn." The top surface is where the bulk of the hammering gets done, as it ensures that the shoe will end up being level. The horn lets the farrier bend and curve the metal.

(iii) **Tongs**. Usually two-ended, the tongs hold hot horseshoes for all of the obvious reasons. The narrow end is used to take the horseshoe in and out of the forge, and the wider end holds the horseshoe on both sides so it can be pressed to the hoof of the horse.

(iv) **Cross and Straight Pin Hammer**. These hammers create horseshoes from raw metal. One end is flat, with the other forming a wedge. If the wedge is parallel to the handle, it's a straight pin. If it faces the other way, it's called a cross pin.

Cross Pin Hammer

Straight Pin Hammer

(v) **Rounding Hammer**. This type of hammer is used to shape the horseshoes themselves. It has a convex face, and is used on a hot shoe when it comes out of the forge.

(vi) **Pritchel**. Like a very pointy chisel, the pritchel punches holes in shoes or pads, widens nail holes where necessary, and can help remove nails that have become embedded in the hoof wall.

(vii) **Leather Apron**. A leather apron protects a farrier's legs from horse hooves and hot metal. It also protects from sharp blades and accidental self-injury while rasping. They can be customized to have pockets for tools and accessories like hoof knives and magnets for nails. They are generally designed to be comfortable and provide back support to the farrier.

(c) **Putting Shoes On**.

(i) **Driving/Nailing Hammer**. This is the hammer that gets the nails through the horse's feet so the shoes stay on. It's shaped like a claw hammer, and the claws are used to break off the excess nail.

(ii) **Nail Cutter**. This tool, shaped like a smaller pair of nippers, can also be used to clip off excess nail once the shoe has been nailed onto the hoof.

(iii) **Clinch Blocks**. A small metal block with an angled edge, the clinch block is put underneath the nail end to help set the nails before they're clinched down.

(iv) **Clinchers**. Tool used to bend over and secure the ends of horseshoe nails, preventing them from pulling out and ensuring a strong, secure fit of the shoe on the horse's hoof.

(v) **Clinch Cutters**. A bit like a small hatchet, this tool has a sharp edge that removes excess nail points once the nail has been clinched. It gets tapped lightly with the hammer, and the nail point is cut away.

(vi) **Hoof Stand**. The hoof stand supports the horse's foot in the final stages of the trim/shoe job. The horse rests its foot on the top of the stand so the farrier can have both hands free to clinch and rasp. It also means a little less strain on the farrier's knees and back should the horse try to pull its foot away.

(vii) **Hoof Gauge**. The angles of a horse's hooves need to be correct (that is, in line with the pastern), and even left and right. The front feet might differ in angle from the rear, but each pair should be even. Lots of farriers prefer to check by sight, but this little device will let a farrier objectively measure angles and balance.

CONCLUSION

4. Understanding farrier tools is essential for anyone involved in horse care. These tools are used to trim, shape, balance, and shoe a horse's hooves, and each has a specific function that contributes to the health, soundness, and performance of the horse.

ASSESSMENT EXERCISES

1. What is the primary purpose of the shoeing hammer?

(a) Filing hooves
(b) Driving nails into the hoof
(c) Measuring hoof angle
(d) Shaping shoes

2. The drawing knife is mainly used for?

(a) Removing old shoes
(b) Cutting clinches
(c) Paring away excess sole and frog
(d) Pulling nails

3. Which tool is described as a large nail file used to smooth and level hooves?

(a) Clinch cutter
(b) Buffer
(c) Rasp
(d) Knife

4. The pincer farrier is used for?

(a) Cutting shoes
(b) Holding hot metal
(c) Pulling off old shoes
(d) Driving nails

5. Which tool in the supplementary list is specifically used for shaping and leveling hot metal shoes?

(a) Flatter smith
(b) Pritchel
(c) Regstone
(d) Apron

6. Which farrier tool is designed to punch or widen holes in a horseshoe?

(a) Pincer
(b) buffer
(c) Rasp
(d) Pritchel

7. The leather apron is worn to?

(a) Clean the hoof
(b) Store tools
(c) Protect the farrier from injury
(d) Prevent dirt

8. Which tool looks like large pliers and is used to remove horseshoes?

(a) Clinchers
(b) Nippers
(c) Shoe puller
(d) Nail cutter

9. Hoof testers are used for?

(a) Measuring hoof size
(b) Checking for sore spots
(c) Shaping hot shoes
(d) Trimming the hoof wall

10. What type of knife is used for removing dead frog and excess sole?

(a) Loop knife
(b) Cleaver
(c) Clinch cutter
(d) Flatter smith

11. Which hammer is specifically used to shape a hot shoe after it's removed from the forge?

(a) Shoeing hammer
(b) Cross pin hammer
(c) Rounding hammer
(d) Driving hammer

12. The anvil is primarily used for?

(a) Heating shoes
(b) Cooling shoes
(c) shaping shoes
(d) Trimming hooves

13. Which farrier tool holds hot shoes while forging?

(a) Poker smith
(b) Clinchers
(c) Tongs
(d) Hoof stand

14. A hoof gauge helps in?

(a) Measuring hoof length
(b) Measuring and balancing hoof angles
(c) Determining nail size
(d) Trimming the frog

15. Nippers are used to?

(a) Hammer nails
(b) Smooth the hoof wall
(c) Trim the hoof wall
(d) remove old shoes

16. Clinchers are used to?

(a) Drive nails
(b) Remove nails
(c) Cut the frog
(d) Bend over the ends of nails

17. The clinch block is used?

(a) To cool shoes
(b) Under nails before clinching
(c) To test hoof soreness
(d) To trim the frog

18. What is the function of the forge?

(a) Filing hooves
(b) Heating metal shoes
(c) Clinching nails
(d) Measuring hoof angles

19. The buffer farrier is used primarily to?

(a) Sharpen tools
(b) Remove nails and clinches during shoe removal
(c) Smooth hoof edges
(d) Widen shoe holes

20. Which tool is used to cut off excess nail after shoeing?

(a) Clinch cutter
(b) Driving hammer
(c) Nail cutter
(d) Nippers

21. What tool is used at the end of shoeing to support the hoof?

(a) Hoof tester
(b) Anvil
(c) Hoof stand
(d) Tongs

22. Which tool can double as a nail remover and a chisel for widening nail holes?

(a) Rasp
(b) Pritchel
(c) Buffer
(d) Flatter

23. The cross pin hammer and straight pin hammer are distinguished by?

(a) Weight
(b) Shape of wedge direction
(c) Handle size
(d) Material

24. Which supplementary tool is used to maintain airflow in a coal forge?

(a) Slice forge
(b) Poker smith
(c) Fire tongs
(d) Stamp farrier

25. The tool box in farriery is used to?

(a) Protect the hooves
(b) Store metal scraps
(c) Store and organize tools
(d) Transport hot shoes

Short Answer Questions

1. Name any three basic farrier tools used in shoeing horses.

2. What is the main function of a rasp in hoof trimming?

3. Which farrier tool is used to hold hot horseshoes while shaping them?

4. Why does a farrier wear a leather apron during shoeing?

5. What is the use of clinchers in shoeing a horse?

Long Answer Questions

1. Explain the role of different tools used in trimming the hoof before shoeing.

2. Describe the importance of forge, anvil, and hammers in shaping horseshoes.

3. Discuss the tools used in the process of putting shoes on a horse and their specific functions.

4. Why is knowledge of farrier tools important for cadets, and how does it help in animal management?
5. Differentiate between basic farrier tools and supplementary farrier tools with suitable examples.

SHOEING

CHAPTER IV: PREPARATION OF FOOT AND FAULTS IN PREPARATION

TEACHING INSTRUCTIONS

Code	:	**S – 04**
Period	:	**Two (01+01)**
Type	:	**Tutorial Discussion**
Year	:	**2nd Year SD/ SW**
Conducting Officer	:	**Officer/Farrier**
Training Aids	:	**Black board and chalk**

Time Plan

- **Introduction : 05 Mins**
- **Preparation of foot : 20 Mins**
- **Faults in Preparation of Foot : 10 Mins**
- **Conclusion : 05 Mins**

INTRODUCTION

1. Knowledge of preparation of foot & faults in preparation is very important aspect of animal management and helps cadets understand the technicalities of shoeing and its importance in ensuring functional efficiency of the horse.

PREVIEW	LEARNING OBJECTIVES
The lecture will be conducted as follows:- ➢ Part I: Preparation of Foot. ➢ Part II: Faults in Preparation of Foot.	➢ To acquaint the cadets with Preparation of Foot & Faults in Preparation in shoeing of Horses.

PART I: PREPARATION OF FOOT

2. It comprises reduction of the overgrown hoof horn/wall and the adjustment of the foot for the fitting of new shoe. Both foot and shoe must fit each other. A well prepared foot should be:-

(a) When standing on the level ground:-

(i) **From the Front.** Both sides of the wall should be of equal height and the transverse plane of coronet parallel with the ground.

(ii) **From the Side.** Toe, Quarter and heels should be proportionate i.e. in fore hoof the height should be in ratio of 3:2:1 and in hind hoof 2:1.5:1.

(iii) **From Behind.** Frog should touch the ground and heels should be of equal height.

(b) When the foot is lifted:-

(i) Level bearing surface from one heel all-round the circumference of the hoof to the other heel.

(ii) Sole should be concave and rough i.e. not pared out.

PART II: FAULTS IN PREPARATION OF FOOT

3. Care must be taken to avoid common faults while preparation of the foot as under:-

Over Lowering of Wall

Uneven Bearing Surface

Stumping Up or Dumping the Toe

Toe Paring the Sole

Opening the Heels

Over Lowering the Heels

Airing and Trimming the Frog

Rasping the Wall

<u>Defects of Unshod Feet</u>

4. Various defects of an unshod foot are as under:-

(a) Low heels due to excessive wear.

(b) Long heels leading to contraction of heels, loss of frog pressure and thrush, even predispose to ring/side bone.

(c) Uneven wear at the toe has to be corrected immediately. If not corrected hoof will become permanently out of shape and more pressure will be exerted on the pastern joint.

(d) Brittle feet due to rasping of the wall from outside results in evaporation of moisture, which should be avoided.

CONCLUSION

5. Proper preparation of the foot is one of the most critical steps in the horse shoeing process. Before a shoe is applied, the hoof must be carefully trimmed, balanced, and cleaned. This ensures that the shoe fits well and supports the horse's hoof and limb structure correctly.

ASSESSMENT EXERCISES

1. What is the primary goal of preparing a hoof before shoeing?

(a) increase its height
(b) create a decorative shape
(c) reduce overgrown hoof horn and adjust the foot for shoe fitting
(d) flatten the frog

2. From the front view, how should the hoof appear when the horse is standing on level ground?

(a) wall should curve outward
(b) one side higher than the other
(c) both sides equal in height; coronet parallel to the ground
(d) frog must be raised

3. What is the recommended proportional height of the toe, quarter, and heel in a fore hoof?

(a) 3:2:2
(b) 3:2:1
(c) 2:2:1
(d) 2:1.5:1

4. In the hind hoof, what is the correct height ratio of toe, quarter, and heel?

(a) 3:2:1
(b) 2:2:2
(c) 2:1.5:1
(d) 1:1:1

5. From behind, a well-prepared foot should show?

(a) A flat sole
(b) Frog off the ground
(c) Uneven heel height
(d) Frog touching the ground and heels of equal height

6. What should the bearing surface of the lifted foot look like?

(a) Slightly convex
(b) Level all around from one heel to the other
(c) Curved upward
(d) Rough and jagged

7. The sole of a properly prepared hoof should be?

(a) Flat and smooth
(b) Cut away completely
(c) Concave and rough
(d) Convex and polished

8. Which of the following is a common fault in hoof preparation?

(a) Equal wall height
(b) smooth frog surface
(c) Over lowering of the wall
(d) keeping the sole concave

9. Uneven bearing surface can cause?

(a) Better traction
(b) Improved growth
(c) Lameness and poor shoe fit
(d) More frog pressure

10. What does “stumping up the toe” refer to?

(a) Leaving the frog untouched
(b) Paring the sole deeply
(c) Trimming the toe too short and bluntly
(d) Opening the heels

11. Why should the sole not be pared during foot preparation?

(a) It causes faster growth
(b) It enhances grip
(c) It leads to loss of natural concavity and protection
(d) It is time-consuming

12. What is the consequence of opening the heels improperly?

(a) Faster walking
(b) Better fit of the shoe
(c) Weak heel structure
(d) Frog expansion

13. Over-lowering the heels may result in?

(a) Balanced foot
(b) Greater frog pressure
(c) Improper weight distribution
(d) Better gait

14. Trimming or airing the frog excessively causes?

(a) Strengthening of the hoof
(b) Better traction
(c) Loss of shock absorption
(d) Uniform shape

15. What does rasping the hoof wall from the outside lead to?

(a) A shinier hoof
(b) Stronger wall
(c) Loss of moisture and brittle feet
(d) Better shoe grip

16. Which of the following is a defect in an unshod foot?

(a) Balanced heel length
(b) short toes
(c) Low heels due to excessive wear
(d) Proper concavity

17. Long heels in unshod feet can cause?

(a) Improved flexibility
(b) Contraction, thrush, and side bone
(c) Rapid hoof growth
(d) Less frog involvement

18. What is a serious consequence of uneven wear at the toe?

(a) No effect on hoof shape
(b) Enhanced movement
(c) Permanent hoof distortion and pastern pressure
(d) Stronger coronary band

19. The white line becomes vulnerable to infection due to?

(a) Long toe
(b) Poor foot balance and riding
(c) Clean shoeing
(d) Rough frog

20. The transverse plane of the coronet should be?

(a) Angled
(b) Parallel to the ground
(c) Curved
(d) Bent downward

21. What happens if the foot and shoe do not match properly?

(a) Horse gets better grip
(b) Increased comfort
(c) Improper load distribution and discomfort
(d) Easier shoe removal

22. In a lifted foot, what is not desirable in foot preparation?

(a) Smooth and concave sole
(b) Level bearing surface
(c) Paring the sole smooth
(d) Clean edges

23. The goal of fitting a shoe includes?

(a) Making the hoof wider
(b) Following the outline of the wall
(c) Elevating the toe unnaturally
(d) Trimming the coronet

24. Why is rasping the wall from the outside discouraged?

(a) It causes white line disease
(b) It enhances cracking
(c) It leads to drying and brittleness
(d) It encourages wall separation

25. Thrush and contraction of heels are caused mainly by?

(a) Long toes
(b) Long heels
(c) Level soles
(d) Over-trimmed frog

Short Answer Questions

1. What should be the ratio of toe, quarter, and heel height in the fore hoof?

2. From the front view, how should the transverse plane of the coronet appear when the horse is standing on level ground?

3. Why should the sole of the hoof be left concave and rough during preparation?

4. Name any two common faults to avoid during foot preparation.

5. Mention one defect caused by excessive wear of an unshod foot.

Long Answer Questions

1. Describe the characteristics of a well-prepared hoof when viewed from the front, side, behind, and when lifted.

2. Explain in detail the common faults made during foot preparation and their possible consequences.

3. Discuss the main defects of an unshod foot, their causes, and how they can be prevented.

4. Why is correct hoof preparation essential for fitting shoes properly? Explain the anatomical and functional reasons.

5. Write a detailed note on the importance of maintaining proportionate hoof measurements (fore hoof and hind hoof ratios) and the effect of imbalance on movement.

SHOEING

CHAPTER V: FITTING OF SHOES

TEACHING INSTRUCTIONS

Code	**:**	**S-5**
Period	**:**	**Two (01+01)**
Type	**:**	**Tutorial Discussion**
Year	**:**	**2nd Year SD/ SW**
Conducting Officer	**:**	**Officer / Farrier**
Training Aids	**:**	**Black board and chalk.**

Time Plan

- **Introduction : 05 Mins**
- **Fitting of Shoes : 10 Mins**
- **Shoeing Procedure : 20 Mins**
- **Conclusion : 05 Mins**

INTRODUCTION

1. Knowledge of various types of shoes and the methods of fitting them on the Horses helps student understand the methods to handle normal shoeing as well as surgical shoeing depending upon the condition of foot of the horses. Thus, treat foot ailments and keep the horses fit for duty.

PREVIEW	LEARNING OBJECTIVES
The lecture will be conducted as follows:- ➢ Part I: Fitting of Shoes ➢ Part II: Shoeing Procedure	To acquaint the cadets with various types of shoes and the methods of fitting them on the horses.

PART I: FITTING OF SHOES

2. Fitting of the shoe is completed in 03 steps as under:-

(a) Fitting

(b) Nailing On

(c) Finishing

3. Two systems of shoeing are ‘HOT SHOEING' and ‘COLD SHOEING’. These are explained below:-

(a) **Hot Shoeing**. The shoe specially made to fit the foot, it is tried-hot, and adjustments are made before it is finally nailed on. This system is generally adopted because it is the best way to ensure a perfect fit. The farrier can see at a glance from the brown appearance of the burnt horn where the web of the shoe touches the hoof and by rasping these parts down till perfect contact of the whole shoe is assured as proved by complete brown rim, he is certain to get an accurate fitting of the shoe to the foot.

(b) **Cold Shoeing**. A ready-made shoe is employed which is fitted and altered cold as far as possible. Cold shoeing cannot be carried out for heavy horses because of the impossibility of altering the shape of large shoes when cold. As a rule, shoes to be fitted cold are stamped with several extra nail holes and these are placed close

together. This allows a wider choice when nailing the shoes on the horses. In cold fittings, a nicer appreciation by the eyes of the surfaces to be joined is required. Cold fitting is, therefore, not as accurate and solid as when carried out hot and the result is a greater proportion of loose or lost shoes from the shoe rocking and the clenches rising.

4. **Care Between Shoeing Periods**. In order to prevent any disorders, feet should receive proper care between shoeing periods. Horses are deprived of moisture in the horny structures of hoof when they are stabled and spending more time indoors. Standing on wet surface, in urine, breaks down the outer covering of hoof. When moisture is deprived, especially the fore hooves become narrower, the frogs atrophy, the quarters and heels contract and the horny structures become un-elastic.

PART II: SHOEING PROCEDURE

5. If the horse has a shoe already on, then it must first be removed.

(a) This is done by using Pincers to lever the horseshoe off from the heel to the toe.

(b) The hoof wall is then trimmed down to the correct length using the nippers.

(c) The sole of the foot and the frog are trimmed back using a paring knife or Hoof knife.

(d) The foot is re-assessed for balance and trimmed using a Rasp.

(e) The farrier then does Hot or Cold shoeing.

6. **Hot Shoeing**.

(a) If farrier is doing hot shoeing, then they will take a shoe and hold it over the hoof to assess that it is roughly the right size before placing the shoe into the forge for a few moments. When the shoe is removed from the forge using tongs, it can then be adjusted on the Anvil with a hammer to correct the shape before then being placed back into the forge using Tongs if necessary.

(b) The shoe will then be taken out of the forge and held against the hoof for a few seconds to make a light impression, this allows the farrier to see exactly where the shoe will lie and allow the farrier to continue to make adjustments to the shoe. When the farrier is happy with the shape of the shoe, the shoe is rapidly cooled off in cold water.

(c) The shoe can then be fixed to the hoof with nails. The nail is driven into the shoe and through the insensitive structure of the hoof wall so that the nail appears on the outside of the hoof. All the nails should line up evenly at the same height around the outer edge of the hoof wall. The sharp end of the nail is then broken off.

(d) The remaining nail edge is bent over using a Clincher so that it lie's flat with the hoof wall, this part of the nail is then known as a clench which will help to hold the shoe in place and prevent anything from getting caught on the sharp edge.

(e) The hoof is then rasped and smoothed over.

CONCLUSION

7. Properly fitting horses' hoes are essential for maintaining a horse's hoof health, comfort, movement, and overall performance. Incorrectly fitted shoes can lead to serious issues, including lameness, injury, or long-term hoof damage.

ASSESSMENT EXERCISES

1. What are the three main steps of shoe fitting?

(a) Filing, Welding, Cooling
(b) Trimming, Polishing, Cleaning
(c) Fitting, Nailing On, Finishing
(d) Forging, Heating, Cooling

2. In hot shoeing, how is the shoe tried before nailing?

(a) Cold fitted directly
(b) Burned into the foot
(c) Tried hot and adjusted based on burn marks
(d) Hammered onto the hoof

3. What indicates a proper fit during hot shoeing?

(a) White powder
(b) Thick smoke
(c) Brown burn mark around shoe contact area
(d) Sound of sizzle

4. Why is hot shoeing preferred?

(a) It's faster
(b) No need for adjustment
(c) Ensures more accurate shoe fit
(d) Requires fewer tools

5. Cold shoeing is typically avoided for which type of horses?

(a) Ponies
(b) Young foals
(c) Heavy horses
(d) Race horses

6. What is a key disadvantage of cold shoeing?

(a) Too much heat
(b) Permanent shoe fixation
(c) Inaccurate and less secure fit
(d) Leaves hoof blackened

7. What feature allows flexibility in nail placement for cold-fitted shoes?

(a) Hooks
(b) Nail ridges
(c) Extra, closely spaced nail holes
(d) Rounded heels

8. Which of the following is not an advantage of hot shoeing?

(a) More accurate fit
(b) Brown rim shows contact area
(c) Easier shaping of shoe
(d) Avoids horn damage

9. What does “clench” refer to in farriery?

(a) Rasp mark
(b) Smoothed hoof wall
(c) Bent-over nail end
(d) Inner shoe groove

10. Which tool is used to make a clench?

(a) Rasp
(b) Clincher
(c) Hoof pick
(d) Tongs

11. What happens to hooves when deprived of moisture?

(a) They widen
(b) They harden and expand
(c) They become un-elastic, frogs atrophy
(d) They become more flexible

12. Which hoof area is most affected when horses are stabled long-term?

(a) Toe
(b) Sole
(c) Fore hooves
(d) Hindquarters

13. What causes the breakdown of the hoof’s outer covering in stabled horses?

(a) Lack of grooming
(b) Exposure to sunlight
(c) Standing in urine and wet conditions
(d) Excessive rasping

14. What is the first step in shoeing if the horse already has a shoe on?

(a) Fit new shoe
(b) Trim the sole
(c) Remove old shoe using pincers
(d) Assess foot balance

15. What is used to trim down the hoof wall?

(a) Rasp
(b) Pincers
(c) Nippers
(d) Hammer

16. What tool is used to trim the frog and sole?

(a) Anvil
(b) Clincher
(c) Hoof Knife or Paring Knife
(d) Pritchel

17. Why is a Rasp used after trimming?

(a) To flatten the frog
(b) To check nail depth
(c) To smooth and balance the hoof
(d) To harden the horn

18. In hot shoeing, what tool holds the heated shoe?

(a) Hoof gauge
(b) Tongs
(c) Clinch block
(d) Rounding hammer

19. What is the purpose of placing a hot shoe briefly against the hoof?

(a) To burn away moisture
(b) To test nail holes
(c) To create an impression for exact fit
(d) To weld the shoe

20. After final shaping, how is the hot shoe cooled?

(a) Let it air dry
(b) Dip in oil
(c) Place in forge
(d) Quenched in cold water

21. What part of the hoof should nails emerge from?

(a) Inner sole
(b) Frog
(c) Insensitive outer wall
(d) Heel bulbs

22. What is the final step after clinching nails?

(a) Paint the hoof
(b) Apply hoof oil
(c) Rasp and smooth the hoof wall
(d) Measure again with hoof gauge

23. Why must nails be lined evenly at the same height?

(a) For style
(b) To make rasping easier
(c) For uniform pressure and security
(d) To keep frog off the ground

24. What is used to assess the approximate size of the shoe before heating?

(a) Clincher
(b) Eye
(c) Tongs
(d) Holding the shoe to the hoof

25. What happens if the shoe is not properly fitted and nailed?

(a) Stronger growth
(b) Increased hoof moisture
(c) Shoe becomes loose or lost
(d) Better traction

Short Answer Questions

1. Name the three steps involved in fitting a horseshoe.

2. What is the main advantage of hot shoeing over cold shoeing?

3. Why is cold shoeing not suitable for heavy horses?

4. Which tool is used to remove an existing horseshoe?

5. What is a “clench” in horseshoeing?

Long Answer Questions

1. Explain the difference between hot shoeing and cold shoeing, including advantages and limitations of each.

2. Describe the complete procedure of removing an old shoe and preparing the hoof for a new shoe.

3. Write in detail the steps involved in hot shoeing, from heating the shoe to finishing the hoof.

4. Discuss the care required for horse hooves between shoeing periods and the effects of lack of moisture on hoof structure.

5. Explain why accurate fitting of a shoe is essential and the role of balance in hoof preparation and shoeing.

SHOEING

CHAPTER VI: INJURIES DUE TO FAULTY SHOEING

TEACHING INSTRUCTIONS

Code	:	**S-6**
Period	:	**Two (02)**
Type	:	**Tutorial Discussion & Practical**
Year	:	**2nd Year SD/ SW**
Conducting Officer	:	**Officer/Farrier**
Training Aids	:	**Black board and chalk**

Time Plan

- **Introduction : 05 Mins**
- **Injuries due to Faulty Shoeing : 30 Mins**
- **Conclusion : 05 Mins**

INTRODUCTION

1. Knowledge of injuries due to faulty shoeing leads to overcome many different hoof problems that can occur in horses. Thus, the practical knowledge helps the student understand the methods to handle the injuries well to keep horses safe from injury.

PREVIEW	LEARNING OBJECTIVES
The lecture will be conducted as follows:- ➢ Part I: Injuries due to faulty shoeing	➢ To acquaint the cadets with various injuries due to faulty shoeing of Horses.

PART I : INJURIES DUE TO FAULTY SHOEING

2. **Shoeing Faults and Injuries Caused**.

(a) **Easing the Heels or Springing the Heels.** This means leaving a space between the wall and the shoe at the heels. It may be carried out either by rasping away the wall, or by removing a little iron at the heels.

(b) **Opening the Heels.** This means cutting away the bars. The practice leads to shrinkage and atrophy and is responsible for ruining many horses' feet.

(c) **Dumping or Stumping up the Toe**. If the toe requires shortening, it should be done by rasping the ground surface and not by chopping away the front of the wall. If dumping is practiced, it narrows the bearing surface of the toe and, by rasping away the hard outer horn, exposes the softer, moister layers beneath, which then become brittle. Dumping predisposes the horse to stumbling.

(d) **Uneven Bearing Surfaces**. These are produced by a careless use of rasp or hoof cutters. One side of the wall may be lowered more than the other. The parts over-reduced are those most easily reached with the rasp.

(e) **Paring away the Sole**. The soft horn of the pared sole rapidly becomes brittle and dry, just like that of the dumped toe. It also removes the horn just within the border of the wall, taking away part of the natural support.

(f) **Rasping the Outside of the Wall**. Repeatedly rasping off the periople and outer layer of horn increases evaporation and causes hardening of the deeper layers of the wall, its natural toughness is lost, and it becomes brittle. When it must be carried out, it is desirable to rub a little oil, hoof compound or Stock- holm tar over the surface of the wall. This prevents cracking.

(g) **Over-reduction of the Wall**. If either the toe or heel is lowered too much, the natural angle of the foot will be upset. Too long a toe may cause a horse to stumble, and too low heels increase the strain on the back tendons. Heels too high prevent the frog from taking its proper bearing on the ground, and tend to throw the knee forward to straighten the pastern.

(h) **Pricks**. These are wounds from nails being driven into the sensitive structures.

(j) **Presses or Nail-Binds**. They result when nails are driven close to the sensitive structures that they bruise them or press upon them. Lameness may not be seen for a day on two after shoeing.

(k) **A Drawn Nail**. When a farrier, in driving a nail, misdirects it, and then withdraws it, having pricked the sensitive structures. It is not as serious as a prick, but may result in pus production if the nail carried infection into the sensitive matrix.

(l) **Injuries from Clips**. A badly drawn dip is not easily laid level and flat against the wall. It becomes necessary to knock it back with the hammer to avoid a projection in which straw, grass etc could get stuck.

(m) **Injuries caused by the Shoe**. One of the most common -bruised sole is brought about by pressure on the sole. Feet with flat soles are liable to be bruised by a shoe too wide in the web, unless it is well seated out. A shoe with too short branches may cause corns, while when the inside branch or heel is fitted too wide, brushing or speedy-cutting may result.

(n) **High and Shallow Driving of Nails**. These may be regarded as faults on good feet with thick strong walls, but there are frequent occasions when both may be necessary. To obtain a hold on a brittle or broken foot, or to prevent injury to a weak one, they may be safeguards instead of faults.

(o) **Corns**. A corn is a bruise on that part of the sensitive sole between the wall and the bars (seat of corn). Feet with high and contracted heels, and long feet with low heels, are predisposed to corns.

(p) **Burnt Sole**. Occurs from the hot shoe being held too long on the foot. The injury is often caused by a shoe with a very thick toe clip, when a large piece of horn has been removed to accommodate it, and the hot shoe has been held too long in contact with the foot.

(q) **Capped Elbow**. Sometimes due to an injury to the elbow from the inner heel of the front shoe.

3. There are many different hoof problems that can occur in horses. To reduce hoof problems, following are recommended:-

(a) Regular trimming or shoeing.

(b) Maintain good hoof balance.

(c) Maintain the correct hoof pastern angle, break over, and medial-lateral balance.

(d) Give heel support if needed.

(e) Use appropriate shoeing for different weather and footing conditions.

(f) Use appropriate treatment if disease process occurs.

CONCLUSION

4. Knowledge of injuries due to faulty shoeing allows overcoming many different hoof problems that can occur in horses. Thus, the practical knowledge helps cadets understand the methods to handle the injuries well to keep horses safe from injury

ASSESSMENT EXERCISES

1. Which of the following helps in reducing hoof problems?

(a) Ignoring minor cracks
(b) Frequent sole paring
(c) Regular trimming or shoeing
(d) Overuse of hoof oil

2. What is a key goal in hoof care?

(a) Keeping the hoof dry at all times
(b) Allowing sole wear for natural shape
(c) Maintaining hoof-pastern angle and medial-lateral balance
(d) Flattening the frog

3. What is easing the heels in shoeing?

(a) Adding extra metal at the heels
(b) Leaving space between shoe and wall at heels
(c) Closing the heels together
(d) Rasping the frog

4. What is a major consequence of opening the heels (cutting away the bars)?

(a) Prevents heel contraction
(b) Increases frog strength
(c) Leads to shrinkage and atrophy
(d) Enhances hoof elasticity

5. Why should the toe not be stumped or dumped?

(a) It saves farrier time
(b) It increases frog pressure
(c) It narrows bearing surface and exposes brittle layers
(d) It strengthens the toe

6. What are uneven bearing surfaces usually caused by?

(a) Balanced hoof cutting
(b) Incorrect nailing
(c) Careless use of rasp or hoof cutters
(d) Poor feeding

7. Why should the sole not be pared away?

(a) It softens the sole
(b) It invites moisture
(c) It removes natural support
(d) It improves traction

8. What can repeated rasping of the wall lead to?

(a) Harder outer layer
(b) Reduced moisture evaporation
(c) Brittle and cracked walls
(d) Stronger hooves

9. How can rasping damage be minimized?

(a) Use sandpaper
(b) Apply oil or hoof compound after rasping
(c) Dry the hoof in sun
(d) Soak hoof in warm water

10. What can happen from over-reducing the toe or heel?

(a) Perfect balance
(b) Smooth gait
(c) Disrupted foot angle and strain on tendons
(d) Reduced lameness

11. What is a prick in farriery?

(a) Nail driven too low
(b) Nail wound in sensitive hoof structures
(c) Clip fitted too close
(d) Burn from hot shoe

12. What is a press or nail-bind?

(a) Rusted nail
(b) Bruise from clip
(c) Nail close to sensitive areas causing pain
(d) Bent nail

13. What is a drawn nail?

(a) A misplaced nail that is removed
(b) A nail used for show
(c) Nail pulled due to rust
(d) Decorative nail

14. What may happen from a drawn nail if infection occurs?

(a) Improved horn growth
(b) Strengthening of the hoof
(c) Pus production in the sensitive matrix
(d) Dryness of hoof

15. Improperly seated clips can cause?

(a) Better traction
(b) Corns
(c) Injury from catching straw or grass
(d) Enhanced frog function

16. A bruised sole may result from?

(a) Thick hoof wall
(b) Narrow shoe
(c) Wide web shoe on a flat sole
(d) Frog overgrowth

17. What can a too short shoe branch cause?

(a) Nail binds
(b) Frog growth
(c) Corns
(d) White line disease

18. What can result if the heel branch is too wide?

(a) Sinking hoof
(b) Brushing or speedy-cutting
(c) Corn relief
(d) Extra frog pressure

19. What may high or shallow nail driving help with?

(a) Stronger hooves only
(b) Brittle or broken feet
(c) Hard wall only
(d) Clip injuries

20. A corn is a bruise that occurs?

(a) At the frog
(b) Between wall and bars
(c) On the toe
(d) Along the coronet

21. Corns are more likely in feet with?

(a) Thick wall and high frogs
(b) High heels and contracted heels
(c) Balanced toe-heel angles
(d) Soft hooves

22. What is a burnt sole caused by?

(a) Soaking in cold water
(b) Filing the hoof
(c) Holding hot shoe too long
(d) Nail overuse

23. What can make the burnt sole injury worse?

(a) Thin frog
(b) Thick toe clip and over-rimming
(c) Cold shoe contact
(d) Extra hoof oil

24. What is a capped elbow?

(a) Nail injury
(b) Frog contraction
(c) Injury from front shoe's inner heel
(d) Wall separation

25. What is the best way to maintain hoof health long term?

(a) Frequent oiling
(b) Occasional trimming
(c) Balanced trimming/shoeing with disease prevention
(d) Soaking daily

Short Answer Questions

1. What is meant by easing the heels in shoeing?

2. Define pricks and drawn nails in shoeing faults.

3. Why should paring away the sole be avoided?

4. Explain the term corns in horses' feet.

5. What causes a burnt sole during shoeing?

Long Answer Questions

1. Explain the ill effects of opening the heels and dumping the toe during shoeing.

2. Describe the injuries caused by faulty use of nails during shoeing.

3. Discuss the consequences of over-reduction of the wall and rasping the outside of the wall.

4. What are the common injuries caused by improper fitting or application of shoes? Explain with examples.
5. Explain in detail the causes and preventive measures of corns, bruised sole, and capped elbow.

SHOEING

CHAPTER VII: SHOES AND TYPES OF SHOES

TEACHING INSTRUCTIONS

Code	:	**S-7**
Period	:	**Two (01+01)**
Type	:	**Tutorial Discussion & Practicle**
Year	:	**3rd Year SD/ SW**
Conducting Officer	:	**Officer/Farrier**
Training Aids	:	**Black board and chalk.**
Time-plan		
➢ **Introduction**	:	**05 Mins**
➢ **Shoes and its types**	:	**30 Mins**
➢ **Conclusion**	:	**05 Mins**

INTRODUCTION

1. Knowledge of Horseshoes and its types helps student understand the methods to put shoe to the horses as per the requirement and also to treat certain foot abnormalities to keep the horses safe from injury.

PREVIEW	LEARNING OBJECTIVES
The lecture will be conducted as follows:- ➢ Part I: Horseshoes and their types	➢ To acquaint the cadets with Horseshoes and their types.

PART I: HORSESHOES AND ITS TYPES

2. Various types of shoes used in horses are as under:-

(a) **Standard Horseshoe**. The basic horseshoe consists of a solid section of aluminium or steel in a U shape that follows the outline of a horse's hoof. The average shoe protects the hoof wall from wearing down too quickly, chipping or cracking. The farrier attaches the shoe by nailing it into the hoof wall. The shoe stays on the hoof for roughly six weeks, to be removed and replaced when hoof grows and the shoe wears down.

(b) **Corrective Shoes**. The egg bar and hind bar shoes both feature a full shoe design that puts shoe underneath the heel of the hoof as well as under the hoof wall. Bar shoes provide support for the heel as well as remedy to certain gait and movement problems. Some horses need corrective shoes for life while others only require corrective shoeing for a limited period.

(c) **Performance Shoes**. Horses regularly used in speed events, such as tent pegging, racing or ridden through rugged terrain, are fitted with shoes that provide additional grip. The farrier may also modify corrective shoes to provide additional traction, if the horse has hoof health issues that require treatment.

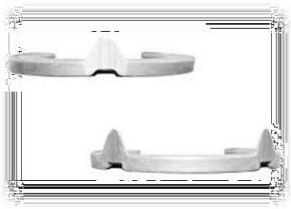
(d) **Gaited Horses**. Gaited horses have specific movements, and many owners who compete in breed shows with these horses have their horses shod specially with weighted and stacked horseshoes to accentuate the gaits. Specialty horseshoes should be applied by a farrier with extensive knowledge about how the horse needs to move and what type of shoeing keeps the hooves and joints healthy.

(e) **Specialist Horseshoe**. There are many variations to the traditional horseshoe available that can be used for specific disciplines, assist horses with specific veterinary ailments and conformation weaknesses. Heart Bar Shoe A shoe which also covers the frog and increases frog pressure is often used for horses with Laminitis.

(f) **Egg Bar Shoe**. Shaped like an egg this shoe increases the ground bearing surface of the heel often used for horses with Navicular disease.

(g) **Bar Shoe**. The continuous circle of this shoe increases the ground bearing surface of the heel.

(h) **Rolled Toe Quarter Clips**. Assists in the horses break over action and reduces pressure on the toe.



(j) **Straight Bar Shoe**. Enlarges the ground bearing surface at the heels, by forming a bar that runs straight between the two heels. Therefore, offering support to low heels protect the set of corn.

(k) **Racing Plates**. These are lighter than traditional shoes and are often made of aluminium.

(l) **Polo Shoes**. These have often been tailored to help reduces the shoe from causing speedy cuts.

(m) **Regular Shoe**. The regular horseshoe is what the vast majority of horses wear. When it is premade by machine, it's often called a "keg" shoe. This shoe supports the normal hoof and protects it under regular riding circumstances. Most horses never need anything more than this. The grooves where the nail holes lie are called "fullers", and they just are a channel to allow space for the nail heads to sit so they are more secure.

(n) **Rim Shoe**. A rim shoe is very much like the regular horseshoe, only with a deep, wide groove through the middle. This groove allows the horse to get a little more traction. Rim shoes are popular for sports that require speed and quick turns, like roping or barrel racing.

(o) **Bar Shoe**. Bar shoes consist of some sort of extra "bar" on the back part of the shoe, generally for increased support in the back of the hoof, heel, or leg. A straight bar, like the one above, is often used for heel support, and it can also help hold the hoof together if excessive hoof movement is counter-indicated, which might be the case in a hoof injury.

CONCLUSION

3. Understanding the different types of horseshoes is vital for anyone involved in horse care. Each type of horseshoe is designed to serve a specific purpose, depending on the horse's job, hoof condition, conformation, and terrain. Knowledge of these options allows for informed decisions that directly impact the horse's health, soundness, and performance.

ASSESSMENT EXERCISES

1. What is the main purpose of a standard horseshoe?

(a) Improve jumping ability
(b) Protect the hoof wall from wear and damage
(c) Enhance muscle strength
(d) Support leg joints

2. How long does a standard horseshoe usually stay on a horse's hoof?

(a) 2 weeks
(b) 4 weeks
(c) 6 weeks
(d) 8 weeks

3. What material is commonly used to make standard horseshoes?

(a) Titanium
(b) Iron
(c) Aluminum or steel
(d) Copper

4. What is the purpose of corrective shoes like egg bar and hind bar shoes?

(a) Improve digestion
(b) Protect the frog
(c) Support the heel and correct gait problems
(d) Help with traction in mud

5. Which condition often requires the use of corrective shoes for life?

(a) Ringbone
(b) Laminitis
(c) Navicular disease
(d) Chronic gait problems

6. Performance shoes are most commonly used for horses involved in?

(a) Dressage
(b) Trail riding
(c) speed events like tent pegging and racing
(d) Breeding

7. Gaited horses are often fitted with?

(a) Standard shoes
(b) Heart bar shoes
(c) weighted and stacked horseshoes
(d) Rim shoes

8. Who should apply specialty shoes to gaited horses?

(a) any blacksmith
(b) A vet
(c) A trainer
(d) A farrier with specialized knowledge

9. What is the purpose of a heart bar shoe?

(a) Reduce jumping strain
(b) increase frog pressure
(c) Protect the sole
(d) Lengthen the toe

10. Heart bar shoes are commonly used for horses suffering from?

(a) Capped elbow
(b) Ringbone
(c) Laminitis
(d) Abscesses

11. What is the shape of an egg bar shoe?

(a) Circular
(b) Egg-shaped
(c) Flat
(d) l-shaped

12. Which condition is the egg bar shoe often used to treat?

(a) Thrush
(b) Navicular disease
(c) Sidebone
(d) Corns

13. What does a bar shoe design help with?

(a) Strengthens the cannon bone
(b) Increases the bearing surface of the heel
(c) Reduces hoof size
(d) Decreases break-over action

14. Rolled toe quarter clips are used to?

(a) Enhance traction
(b) Reduce pressure on the toe during break-over
(c) Support heel structure
(d) Strengthen the wall

15. What is the purpose of a straight bar shoe?

(a) Improve frog growth
(b) Reduce sole bruising
(c) Support low heels and protect against corns
(d) Enhance grip on wet surfaces

16. Racing plates differ from regular shoes because they are?

(a) Heavier
(b) Made of steel
(c) Made of aluminum and lighter
(d) Used for trail riding

17. Polo shoes are specifically tailored to reduce?

(a) Break-over
(b) Gait extension
(c) Speedy cuts
(d) Cracks in the hoof wall

18. What is a “keg” shoe?

(a) A custom therapeutic shoe
(b) A premade regular horseshoe
(c) A shoe for jumping events
(d) A shoe used in hoof rehab

19. What are “fullers” in a horseshoe?

(a) Protective plates
(b) Grooves for nail heads
(c) Reinforced heels
(d) Toe caps

20. How is a rim shoe different from a regular shoe?

(a) It is flatter
(b) It has added frog coverage
(c) It has a deep central groove for better traction
(d) It is made of rubber

21. In which sports are rim shoes commonly used?

(a) Trail riding
(b) Dressage
(c) Roping or barrel racing
(d) Jumping

22. What part of the hoof does a bar shoe generally support?

(a) Toe
(b) Quarter
(c) Frog
(d) Heel

23. Which of the following is true about bar shoes?

(a) Only used on hind feet
(b) Typically made of plastic
(c) Include a bar at the back for extra support
(d) Must be changed weekly

24. What is the main benefit of using a bar shoe on an injured hoof?

(a) Accelerates growth
(b) Prevents hoof expansion
(c) Helps hold the hoof together and limits motion
(d) Improves sole thickness

25. What type of horseshoe is most suitable for regular, everyday use?

(a) Rim shoe
(b) Bar shoe
(c) Regular or keg shoe
(d) Heart bar shoe

Short Answer Questions

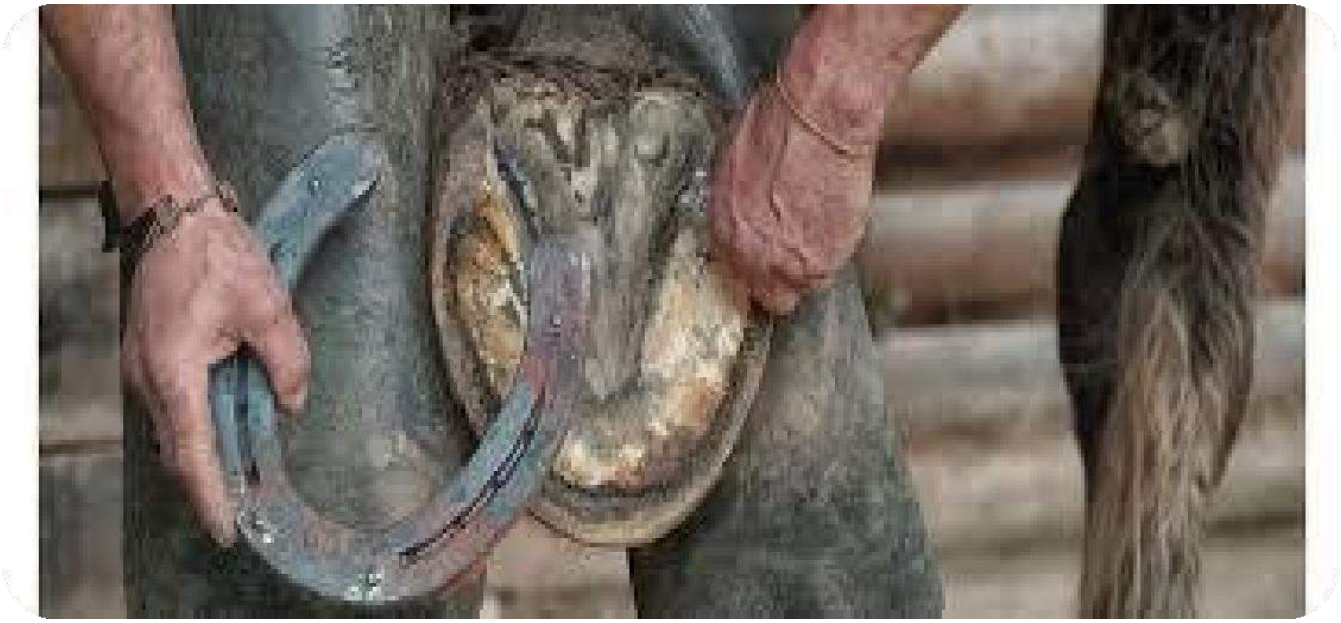
1. What is the purpose of a standard horseshoe?
2. Name any two types of corrective shoes and their functions.
3. Why are racing plates used instead of regular horseshoes?
4. Define a rim shoe and state its use.
5. What is the function of a heart bar shoe?

Long Answer Questions

1. Explain in detail the uses and benefits of corrective shoes in horses.
2. Describe the different types of shoes used for performance horses and their purposes.
3. Discuss specialized shoes such as heart bar, egg bar, and straight bar shoes – their structure and role.
4. Explain the difference between regular shoes, rim shoes, and racing plates with their applications.
5. Write a detailed note on the classification of horseshoes based on function and design.

SHOEING

CHAPTER VIII: DISEASES OF THE FOOT



TEACHING INSTRUCTIONS

Code	:	**S-8**
Period	:	**Four (02+02)**
Type	:	**Tutorial Discussion & Practical**
Year	:	**3rd Year SD/ SW**
Conducting Officer	:	**Officer/Farrier**
Training Aids	:	**Black board and chalk**
Time Plan		
➢ **Introduction**	:	**05 mins**
➢ **Diseases of the Foot**	:	**70 mins**
➢ **Conclusion**	:	**05 mins**

INTRODUCTION

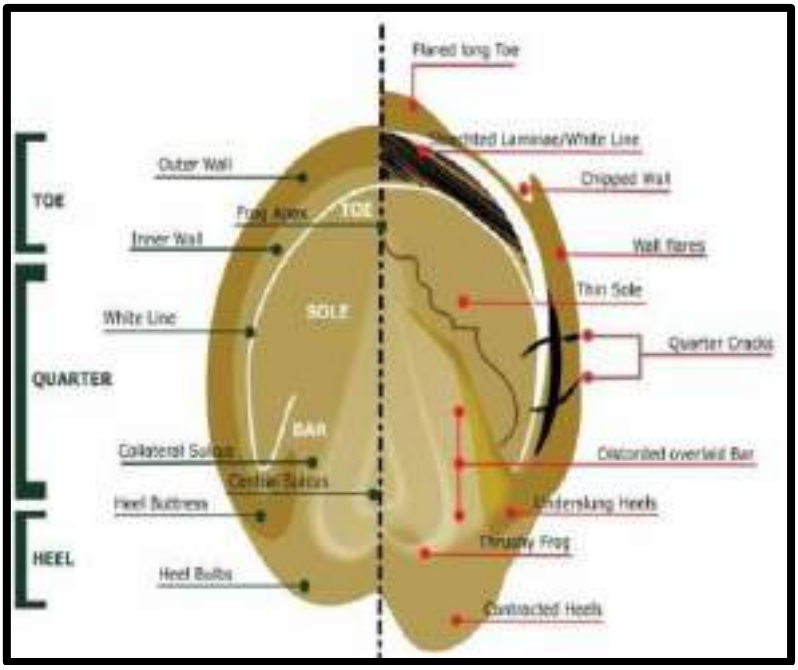
1. Knowledge of diseases of the foot, of horses, helps cadets understand the methods to handle various ailments of foot, their treatment and keep the horses in exercise fit condition.

PREVIEW	LEARNING OBJECTIVES
The lecture will be conducted as follows:- ➢ Part I: Diseases of the foot of Horses	➢ To acquaint the cadets with various Disease of the foot of Horses.

PART I: DISEASES OF THE FOOT

2. The health of a horse's feet is paramount to its overall well-being and performance. The hooves are not only essential for movement and bearing weight, but they also serve as a protective structure that supports the delicate tissues of the lower limb. However, despite their resilience, horse hooves are susceptible to a variety of diseases and conditions that can significantly impact a horse's soundness, comfort, and ability to perform.

3. This chapter explores the most common foot diseases that affect horses, ranging from infections and inflammations to structural deformities and environmental factors. We will delve into the underlying causes, symptoms, diagnostic methods, treatment options, and preventive measures for each condition, with a focus on maintaining optimal hoof health and minimizing the risk of complications.

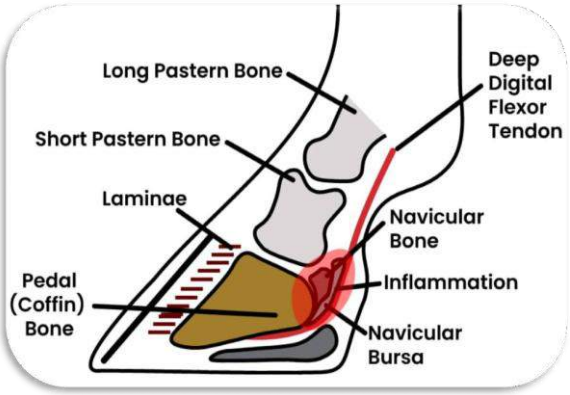


4. By understanding these conditions and how they affect the equine foot, riders can take proactive steps to ensure that their horses maintain healthy, functional hooves throughout their lives. Whether dealing with common ailments like thrush or navicular

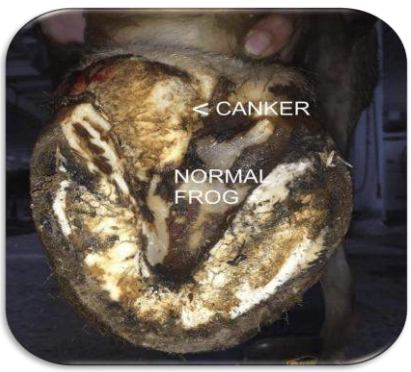
disease, or more severe issues such as laminitis, this chapter provides valuable insights into the management and treatment of these often-debilitating conditions. Some common foot ailments are as under:

(a) **Laminitis**. Also known as Founder. The lamina is connective tissue within the horses' hoof and the coffin bone of the foot. This tissue can become inflamed, which can then impact the circulation in the foot, leading to the laminitis. This inflammation leads to lactic acid and bacterial toxins enter into the bloodstream of the horse and can be caused by poor foot care, too much grain, injury, colic or some medications that include steroids. To help spot laminitis, look for the horse moving its weight onto its back feet. You may also find that your horse becomes resistant to walking. Generally, horses with laminitis will be visibly lame and will often lie down. If you believe that your horse has this condition, it is important to call a vet as soon as possible.

(b) **Navicular Disease.** Navicular disease may take a long time to show symptoms as it is more long-term gradual deterioration. The tissue of the navicular bone becomes inflamed and then breaks down over time, leading to lameness. One of the early signs of this disease is intermittent lameness that becomes more common and a worn toe which no longer touches the ground on the front hoofs. This disease has a number of different causes, such as poor nutrition, genetics or the impact of the toe over a long time on hard surfaces.

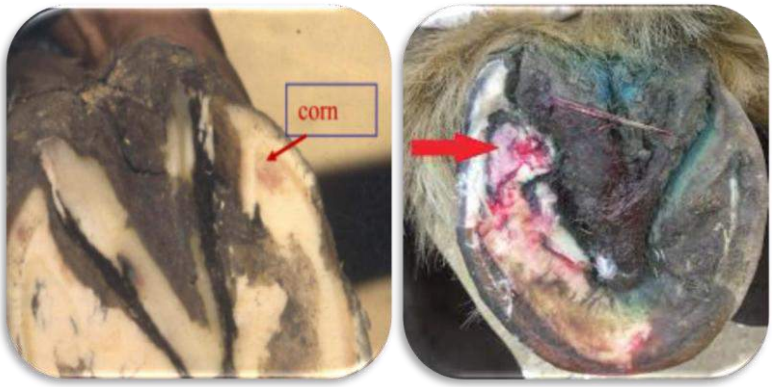


(c) **Canker.** This condition is an overgrowth and infection of the horn producing tissues of the hoof which is often visible from pus protruding from the horse's sole (the frog). Canker is found in both front and back feet and produces a foul-smelling discharge. Treating a horse with canker is a challenge and must include intensive care. All loose horn/bone growth must be removed first and an antiseptic and antibiotic dressing needs to be applied daily. Your horse will require strict box rest in a clean and dry stable and several weeks or months of rest and recovery.



(d) **Hoof Wall Cracking**. The hoof of a horse can often be cracked due to a number of different reasons, such as a lack of regular trimming, cuts and injuries or too much moisture, which can lead to the expansion and contraction of the hoof wall. If there is no external reason to why the hoof walls are cracked, it may be worth looking at the horses' diet as vitamin and amino acid deficiencies in the horse can also impact the horses hoof health. Treating a cracked hoof is important to prevent further issues and one method to assist is to apply glue-on patches to protect the hoof and provide additional stability to the hoof wall. In many cases a 'bar shoe' with strategically positioned clips are applied to provide stability to the hoof wall.

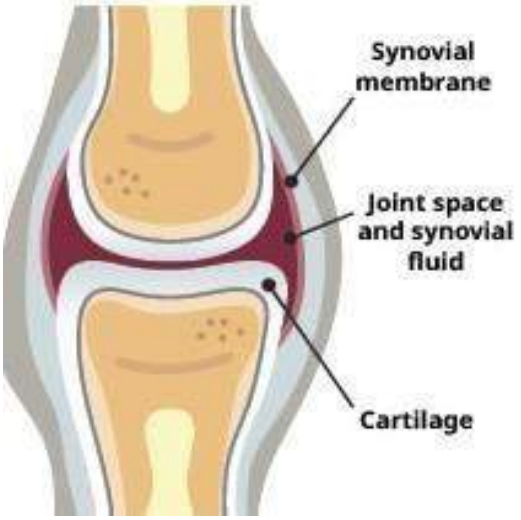
(e) **Corns and Sole Bruises (Hoof Bruises)**. If you look at the sole of the hoof and it is bruised, it may be due to poor shoeing or bad trimming of the hoof. Additionally, rocks or other sharp objects can lead to damage or bruising of the foot. Corns are bruises on the foot that form at an angle. They are commonly found between the bars of the hoof and the hoof wall and generally occur when shoes are ill-fitting or are left on too long. Corns and bruises can sometimes be spotted due to the red and yellow discolouration on the sole and soreness when tested with a hoof tester. To prevent corns and bruised soles regular trimming and shoeing is advised.



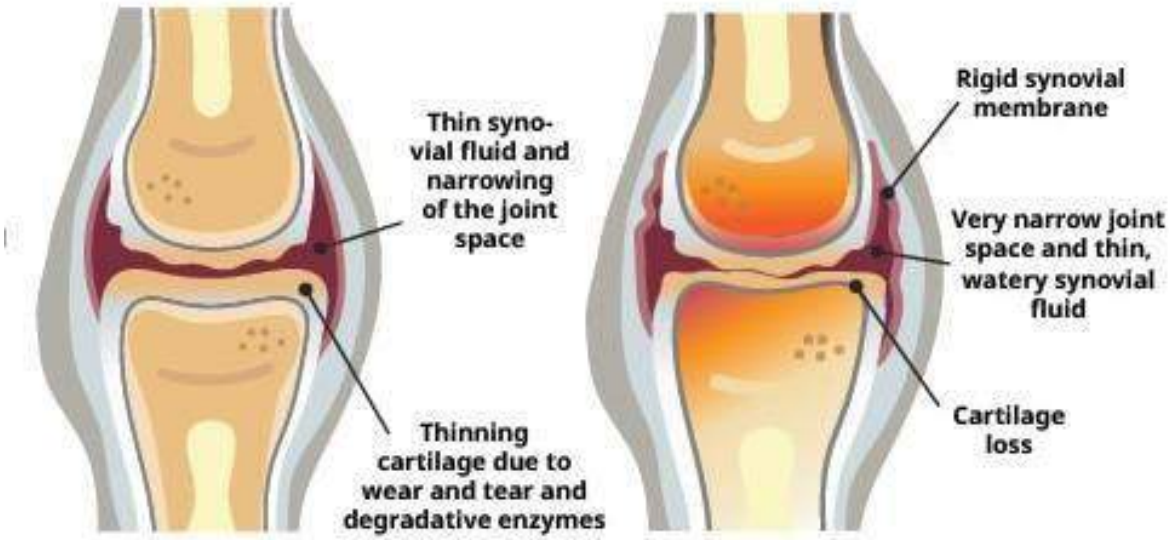
(f) **Abscesses.** An abscess is an infection in the hoof that commonly occurs due to an injury or puncture wound to the soft portion of the foot. Signs that your horse has an abscess include a dark patch on the hoof, bleeding or pus around the hoof or lameness of the foot due to the pain.

(g) **Joints**. The disease is degenerative and has no cure, but treatment can prolong a horse's active life by reducing pain and allowing more comfortable

movement. Diagnosis is similar to that of navicular disease--history, physical exam of the whole horse and musculoskeletal system, and observing the horse's way of going. If the pain source isn't obvious, radiographs and/or nerve blocks can be performed. Options for treatment are based on type of horse, use, and amount of arthritis already present. Certain types of corrective or therapeutic shoeing may protect or support damaged joints or tissue. Trim the horse in a way to relieve stress and strain on the injured area--not anything fancy, but with proper angles and support, and to make the limb very easy to break over, in most cases. Low dose anti-inflammatories also are administered.



Normal Joint



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(h) **Seedy Toe**. Also known as white line disease, is a condition affecting the hoof wall of horses, where the junction between the hoof wall and the sensitive laminae (the tissue that connects the hoof wall to the coffin bone) becomes compromised. This condition is characterized by a separation or disintegration of the hoof wall, particularly in the toe area, which often leads to an irregular, soft, or crumbly texture in the affected region. Moisture and poor environmental conditions, poor hoof care or improper trimming, Trauma or injury and bacterial or fungal infections are some of the common

causes of this condition. Basic symptomatic treatment and regular care and maintenance of the hoof usually prevents the condition.

(j) **Thrush.** Thrush is an unpleasant infection of the horse's frog, which is predisposed by moist, damp, dirty ground or stable conditions. It is an infection of the central and lateral sulcus (clefts) of the frog of the horse's foot, most often involving bacterial and occasionally fungal infection. One species of bacterium (*Fusobacterium necrophorum*) is particularly aggressive, invading and destroying the frog, sometimes exposing the deeper sensitive tissues. A foot affected by thrush produces a foul-smelling black discharge in the affected sulcus. There is pain on applying pressure to the area. The hind feet are more often affected than the front feet and, occasionally, infection may result in a general swelling of the distal (lower) limb. Thorough cleaning, removing debris from within the affected frog sulcus and paring of horn down to healthy tissue while simultaneously ensuring that the horses is kept in clean & dry stable conditions are effective ways of treating a Thrush case.

CONCLUSION

5. The horse's foot is a complex, weight-bearing structure that is crucial to its movement, performance, and overall health. Understanding foot diseases is essential for early detection, treatment, and prevention.

ASSESSMENT EXERCISES

1. What is the primary function of a horse's hoof?

(a) Digestion
(b) Vision
(c) Support and movement
(d) Respiration

2. What is laminitis also known as?

(a) Thrush
(b) Canker
(c) Founder
(d) Corns

3. Which structure becomes inflamed in laminitis?

(a) Navicular bone
(b) Frog
(c) Lamina
(d) Sole

4. A horse shifting its weight onto its back feet may be showing signs of?

(a) Arthritis
(b) Laminitis
(c) Canker
(d) Seedy-toe

5. Navicular disease primarily affects which bone?

(a) Coffin bone
(b) Pastern bone
(c) Navicular bone
(d) Cannon bone

6. What is a common early sign of navicular disease?

(a) Cracked hoof
(b) Worn toe
(c) Black discharge
(d) Red sole

7. Canker typically affects what part of the hoof?

(a) White line
(b) Frog
(c) Wall
(d) Pastern

8. What is a symptom of canker?

(a) Clear discharge
(b) Foul-smelling pus
(c) Loss of hair
(d) Worn hooves

9. Which condition often results from excessive moisture or poor trimming?

(a) Seedy-toe
(b) Abscess
(c) Navicular disease
(d) Thrush

10. Which hoof condition often shows red or yellow discoloration on the sole?

(a) Laminitis
(b) Corns and sole bruises
(c) Thrush
(d) Abscess

11. A glue-on patch and bar shoe are commonly used to treat?

(a) Arthritis
(b) Canker
(c) Hoof wall cracking
(d) Laminitis

12. What causes hoof wall cracking?

(a) Bacterial infection only
(b) Lack of regular trimming or too much moisture
(c) Fungal diseases only
(d) Parasites

13. What is a hoof abscess typically caused by?

(a) Excessive exercise
(b) Hot weather
(c) Injury or puncture wound
(d) Vitamin deficiency

14. Which symptom is NOT commonly associated with a hoof abscess?

(a) Dark patch
(b) Lameness
(c) Red sole
(d) Pus discharge

15. What is arthritis in horses?

(a) Hoof rot
(b) Inflammation of the joints
(c) Viral infection
(d) Bone fracture

16. Which diagnostic method is often used for arthritis?

(a) dna testing
(b) Radiographs and nerve blocks
(c) Blood sugar test
(d) Ultrasound of the lungs

17. What condition involves disintegration of the hoof wall in the toe area?

(a) Thrush
(b) Seedy-toe
(c) canker
(d) Navicular disease

18. Seedy-toe is also known as?

(a) Canker
(b) Founder
(c) White line disease
(d) Sole rot

19. Which environmental condition promotes the development of thrush?

(a) Dry and clean ground
(b) Rocky terrain
(c) Wet and dirty stables
(d) High altitude

20. Which bacterium is commonly involved in thrush?

(a) E. coli
(b) Salmonella
(c) Fusobacterium necrophorum
(d) Streptococcus

21. Which part of the hoof is primarily affected by thrush?

(a) Sole
(b) Wall
(c) Frog
(d) White line

22. A foul-smelling black discharge is most associated with which condition?

(a) Arthritis
(b) Abscess
(c) Thrush
(d) Navicular disease

23. What is one of the main treatments for canker?

(a) Anti-fungal shampoo
(b) Vitamin c supplements
(c) Removal of loose horn and antibiotic dressing
(d) Stretching exercises

24. What is often the first step in managing hoof wall cracking?

(a) Hoof painting
(b) Changing bedding
(c) Applying glue-on patches
(d) Sanding the hoof

25. Which condition is caused by poor foot care, excessive grain, or medications like steroids?

(a) Seedy-toe
(b) Navicular disease
(c) Laminitis
(d) Abscess

Short Answer Questions

1. What is Laminitis and what are its common causes?

2. Name two signs that indicate a horse may have Navicular Disease.

3. What is the primary cause of Thrush in horses' hooves?

4. Define Seedy-Toe and mention one contributing factor.

5. What type of shoe is often recommended for horses with Navicular Disease?

Long Answer Questions

1. Discuss Laminitis in detail, including causes, clinical signs, and management principles.

2. Explain the development, symptoms, and treatment of Canker in horses.

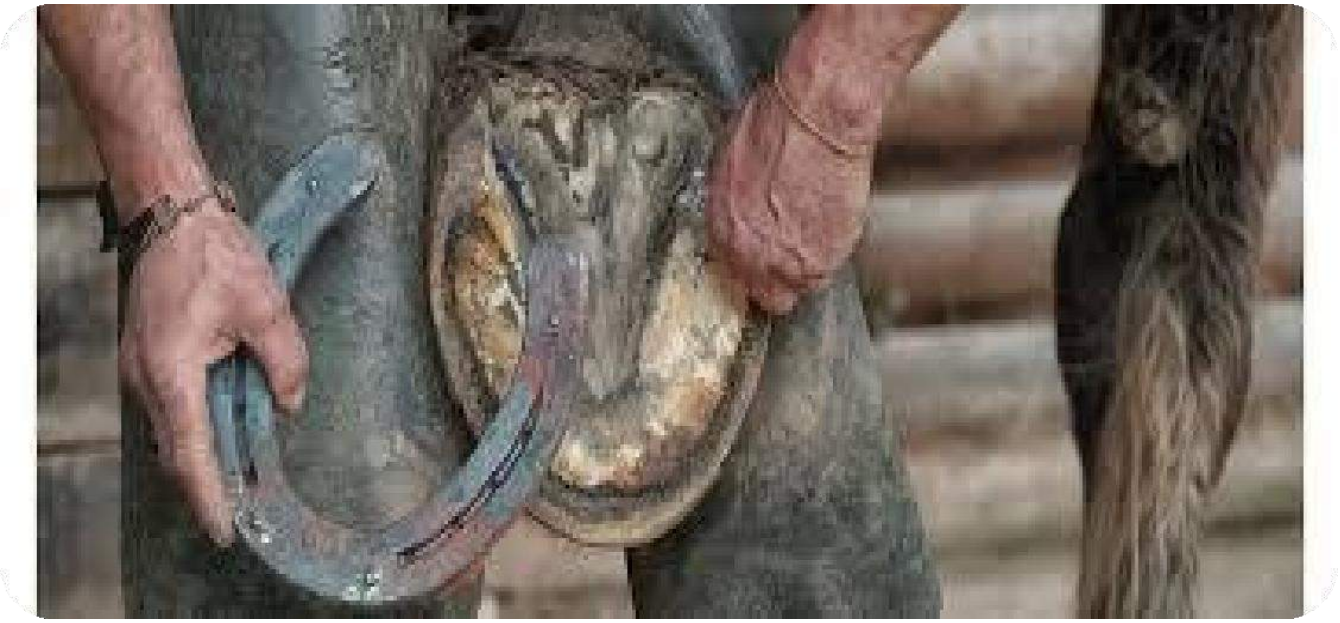
3. Describe the common causes, symptoms, and preventive measures for Corns and Sole Bruises in horses.

4. What is Arthritis in horses? Explain its diagnosis and treatment options with emphasis on corrective shoeing.

5. Write a detailed note on Thrush – its causes, clinical signs, and treatment.

SHOEING

CHAPTER IX: SURGICAL SHOEING



TEACHING INSTRUCTIONS

Code	:	**S-9**
Period	:	**Two (01+01)**
Type	:	**Tutorial Discussion & Practical**
Year	:	**3rd Year SD/ SW**
Conducting Officer	:	**Officer/Farrier**
Training Aids	:	**Black board and chalk**

Time Plan

- **Introduction : 05 Mins**
- **Surgical Shoeing and its Methodology : 30 Mins**
- **Conclusion : 05 Mins**

INTRODUCTION

1. Knowledge of surgical shoeing also known as corrective shoeing of Horses is very important aspect of animal management and helps cadets understand the technicalities of shoeing and its importance in ensuring functional efficiency of the horse.

PREVIEW	LEARNING OBJECTIVES
The lecture will be conducted as follows:- ➢ Part I: Surgical shoeing and its methodology	➢ To acquaint the cadets with surgical/corrective shoeing of horses.

PART I: SURGICAL SHOEING AND ITS METHODOLOGY

2. Surgical/corrective shoeing is usually carried out by a competent horseshoer also known as farrier working in conjunction with a veterinary surgeon. Some horses during their life time will need surgical or remedial shoeing. These shoes can help to treat a disease, support the hoof, correct a gait abnormality and in some cases may even save a horses' life (Laminitis). There are many different types of surgical and remedial shoes for many different types of problems. These shoes along with the skill of the farrier may help to return a horse to soundness much quicker than it would do in the wild.

3. Some commonly used surgical shoes are described here as under:-

(a) **The Heart Bar Shoe.** This shoe is mainly used in the treatment of acute Laminitis to mechanically oppose pedal bone rotation, this shoe is also a good column support shoe.

(b) **The Straight Bar Shoe.** This shoe is also used to support the foot mainly in horses with low week heels. The bar across the back forces the frog to bear some of the weight reducing the load on the heels and allowing them to repair. This shoe is better used in horses that do fast work as there is less chance of it being pulled off than the egg bar shoe.

(c) **The Egg Bar Shoe**. This shoe works in the same way as the straight bar shoe although the egg bar does offer more support. On the negative side it is more prone to being lost as more of the shoe is showing out the back of the foot.

(d) **The Hospital Plate Shoe**. This shoe is used when the horse has a serious injury to the sole or frog that requires a clean dry dressing changing daily, the plate is made of aluminium and is bolted to a straight bar shoe. When the shoe is nailed on, the dressing is applied and the plate is then screwed into position using the 4 bolts, when the dressing needs changing all one needs to do is remove the inspection plate, carry out whatever task is required then screw back the plate, this also acts as a protection plate.

(e) **The Spavin Shoe:** This shoe is used in the treatment of horses suffering from bone spavin. In the early stages of the disease when the joint is fusing, the horse can be lame but usually once the joint has fully fused the horse will return to soundness. The wedge heels on this shoe open up the joint spaces and cause them to fuse faster by stimulating the joint.

(f) **Lateral Extension Shoe:** This shoe is used for many different things; they are very useful for horses that 'Brush'. It works by widening the horse's gait during locomotion. It can also be used as a support shoe and in the treatment of bone spavin.

(g) **Hind Bar Preventer Shoe:** A further type of bar shoe, this particular example is aimed at 'preventing' interference (the horse knocking into itself) from the other hind foot. The outside is fullered and has two plain tamped nail holes.

(h) **MC'S T- Bar Shoes / Spider Bar Shoe:** This shoe can give support to a broken or fractured coffin bone, short pastern bone, navicular bone or horses that have foundered. These shoes are designed with the square toe for quicker break over which should take stress off of the horse's ligaments. These are special corrective shoes that can be used on show horses as well as any horse, in any equine sport. These shoes are designed and pre-shaped with the T-bar built into the shoe. This will save the farrier's time and cost of not having to make or buy the inserts and attach the inserts to the shoes.

(j) **PMC'S Z-Bar Shoe:** PMC's z-bar shoes are designed to eliminate pressure off the heel area of the hoof capsule and distribute the weight evenly over the remainder of the foot. These shoes are designed with a square toe for quicker break over which should take stress off the horse's ligaments. These shoes are designed and pre-shaped with the z-bars built into the shoe. This will save the farrier time and cost of not having to make or buy the inserts and then attach them to the shoes.

CONCLUSION

4. Corrective shoeing is a specialized farriery technique used to correct or manage hoof imbalances, conformational defects, and lameness. Understanding this practice is essential for farriers, veterinarians, trainers, and horse owners to ensure the soundness, performance, and well-being of the horse.

ASSESSMENT EXERCISES

1. How many types of shoeing are practiced in horses?

(a) 1
(b) 2
(c) 3
(d) 4

2. What is the gap between two shoeings in horses?

(a) 20 days
(b) 45 days
(c) 30 days
(d) 15 days

3. What number of shoe is used in mules?

(a) 4–6 no.
(b) 2–5 no.
(c) 3–6 no.
(d) 4–7 no.

4. How many degrees does the horse's front leg make an angle with the ground?

(a) 45 to 50 degrees
(b) 60 to 70 degrees
(c) 40 to 45 degrees
(d) 30 to 35 degrees

5. ___ is the term used for the reapplication of old shoe?

(a) removal
(b) reshoeing
(c) mob shoeing
(d) none of the above

6. How many steps are there in horse shoeing?

(a) 2
(b) 4
(c) 1
(d) 6

7. How many parts is the horse's hoof divided into?

(a) 2
(b) 6
(c) 3
(d) 7

8. In the use of farriery, the hoof is divided into how many parts?

(a) 3
(b) 6
(c) 5
(d) 2

9. Farriery means?

(a) art of saddling
(b) art of treating
(c) art of shoeing
(d) none of the above

10. What is the cause of foot injuries and ailments?

(a) poor care
(b) not having a qualified farrier
(c) not doing daily inspection
(d) all of these

11. Name the tool which is used by farrier?

(a) rasp
(b) rein
(c) stirrup
(d) saddle

12. What number of shoe is used in mules?

(a) 4–5 no.
(b) 2–3 no.
(c) 3–4 no.
(d) 4–5 no.

13. What is the range of size of shoe in horses?

(a) 2–3 no.
(b) 4–6 no.
(c) 5–6 no.
(d) 4–8 no.

14. What is the gap between two shoeings in horses?

(a) 20 days
(b) 45 days
(c) 30 days
(d) 15 days

15. How many types of supplementary tools are there?

(a) 15
(b) 10
(c) 12
(d) 11

16. How many parts is a nail divided in?

(a) 3
(b) 6
(c) 5
(d) 2

17. What is the advantage of shoeing in the horses?

(a) secure grip
(b) assist in hoof ailments
(c) hoof cracks
(d) none of these

18. How many clips are there in front shoe?

(a) 1
(b) 2
(c) 3
(d) 4

19. How many bones are there in a hoof?

(a) 4
(b) 6
(c) 3
(d) 5

20. Why is cold shoeing done?

(a) not having heating system for shoe
(b) during the war
(c) all of above
(d) none of above

21. Which type of shoe helps to ensure functional efficiency of the horse?

(a) remedial shoes
(b) surgical shoes
(c) both a and b
(d) none of these

22. How many holes are there in 4 to 6 number shoe?

(a) 08
(b) 04
(c) 06
(d) 10

23. Cold shoeing is done at?

(a) war time
(b) peace
(c) both
(d) none

24. What is the number of the shoe used in horseshoeing?

(a) 2–3 no.
(b) 4–6 no.
(c) 5–6 no.
(d) 4–8 no.

25. Hot shoeing is done at?

(a) war time
(b) peace
(c) both
(d) none

26. What angle does the hoof of hind limb make with ground?

(a) 50–55º
(b) 70–75º
(c) 65–70º
(d) 45–50º

27. What should be the size of the shoe?

(a) smaller than a horse's hoof
(b) larger than a horse's hoof
(c) according to the horse's hoof
(d) none of the above

28. Which type of shoeing cannot be carried out on heavy horses?

(a) bar shoe
(b) cold shoeing
(c) rim shoe
(d) all of above

29. Foul smelling foot indicates?

(a) seedy toe
(b) thrush & canker
(c) abscess of foot
(d) burn sole

30. The shoes that increase the ground bearing surface of the heel is called?

(a) polo shoe
(b) racing plate
(c) rolled toe quarter clip
(d) bar shoe

31. What tool is used to clean a hoof?

(a) chisel
(b) drawing knife
(c) hoof pick
(d) turning hammer

32. PMC's Z-bar shoe is designed to?

(a) apply even pressure to the foot
(b) take the pressure off the heel of the hoof
(c) put pressure on the frog
(d) none of these

33. How many basic tools are there for a farrier?

(a) 4
(b) 8
(c) 10
(d) 12

34. The equipment used to put hole in the shoes is?

(a) anvil
(b) forge
(c) tongs
(d) pritchel

35. The equipment used to hold the hot horseshoes is?

(a) anvil
(b) forge
(c) tongs
(d) pritchel

36. Which is the tool used by farrier to give shape to the shoe?

(a) rasp
(b) forge
(c) tongs
(d) both b and c

37. What is the importance of heart bar shoes in horse?

(a) to treat laminitis
(b) to save the life of the horse
(c) good column support shoes
(d) all of these

38. What is a turning tong used for?

(a) to hold the hot shoe
(b) to cut hoof
(c) to remove shoe
(d) to clinch nails

39. What is rasp farrier used for?

(a) to hold the shoe
(b) to equalize the shoe
(c) to extract the sole
(d) to remove frog

40. Which tool is used by a farrier to shape shoes?

(a) rasp
(b) forge
(c) tongs
(d) both b and c

41. Which of the following is a farrier tool?

(a) nail cutter
(b) bridle
(c) beet
(d) collar

42. How many bones are there in the hoof?

(a) 4
(b) 6
(c) 3
(d) 5

43. Why surgical shoes are needed?

(a) to support the hoof
(b) to correct a gait abnormality
(c) laminitis
(d) all of these

Fill in the Blanks

1. _____is also called as Corrective shoeing.

2. Various tools used in farriery are called_____ .

3. Fitting of shoe on hoof of the horse is called _____.

4. Fitting of readymade shoe on the hoof is called _____.

5. _____and _____ are the main diseases of foot of the horse, if they are not regularly cleaned.

6. After shoeing of horse, the shoe should be strong enough to last for _____ weeks.

7. Hoof numbers are branded on the _____ feet of the horse.

8. During the march, if the horseshoe falls, _____shoeing should be done.

9. _____helps in improving of the feet.

10. During rasping of feet for shoeing, the _____should not be paired.

11. Hoof numbers are not branded on _____of the horses.

12. Dumping is a_____ in shoeing.

13. _____are used to bend the end of nails so the horseshoe nail doesn't fa

14. _____is used to remove the end of the clenched nail

15. _____is used to remove excess hoof.

16. Over-lowering & Under-lowering are the faults of _____

17. _____Shoe, _____shoe, _____shoe and _____shoes types of shoes used for horse.

18. _____shoeing is when the shoe is made to fit on the hoof.

19. _____shoeing is when the foot is made to fit on the shoe

Short Answer Questions

1. What is the main purpose of surgical shoeing in horses?

2. Name two surgical shoes commonly used for treating Laminitis.

3. What is the function of the Hospital Plate Shoe?

4. Which shoe is used to speed up joint fusion in horses with Bone Spavin?

5. What is the primary advantage of the Heart Bar Shoe?

Long Answer Questions

1. Explain the role of corrective and surgical shoeing in managing hoof diseases and gait abnormalities. Give examples.

2. Describe the design and purpose of the Heart Bar Shoe and its application in Laminitis.

3. Discuss the Hospital Plate Shoe in detail, including its construction, use, and advantages.

4. Write a detailed note on Egg Bar and Straight Bar Shoes – their similarities, differences, and applications.

5. Explain the uses and benefits of advanced corrective shoes like MC's T-Bar Shoe and PMC's Z-Bar Shoe.

ANSWER KEY

ORGANISATION – ORG

ANSWER KEY MULTIPLE CHOICE QUESTIONS

Q No	ORG 1	Q No	ORG 1
1	**B**	16	**D**
2	**D**	17	**B**
3	**E**	18	**B**
4	**D**	19	**A**
5	**C**	20	**C**
6	**B**	21	**B**
7	**A**	22	**C**
8	**B**	23	**C**
9	**B**	24	**B**
10	**A**		
11	**B**		
12	**B**		
13	**B**		
14	**D**		
15	**B**		

ANIMAL MANAGEMENT – AM

ANSWER KEY MULTIPLE CHOICE QUESTIONS

Q No	AM 1	Q No	AM 2	Q No	AM 3	Q No	AM 4	Q No	AM 5
1	**C**	1	**B**	1	**B**	1	**A**	1	**D**
2	**B**	2	**C**	2	**D**	2	**B**	2	**B**
3	**D**	3	**A**	3	**A**	3	**B**	3	**C**
4	**C**	4	**C**	4	**B**	4	**B**	4	**D**
5	**C**	5	**A**	5	**A**	5	**B**	5	**A**
6	**C**	6	**B**	6	**D**	6	**C**	6	**D**
7	**D**	7	**D**	7	**B**	7	**B**	7	**A**
8	**B**	8	**D**	8	**B**	8	**B**	8	**B**
9	**B**	9	**C**	9	**C**	9	**B**	9	**C**
10	**C**	10	**C**	10	**B**	10	**C**	10	**B**
11	**C**	11	**C**	11	**B**	11	**C**	11	**A**
12	**B**	12	**C**	12	**C**	12	**D**	12	**B**
13	**A**	13	**C**	13	**B**	13	**C**	13	**C**
14	**B**	14	**C**	14	**B**	14	**C**	14	**D**
15	**C**	15	**C**	15	**B**	15	**B**	15	**B**
16	**B**	16	**D**	16	**B**	16	**C**	16	**B**
17	**C**	17	**C**	17	**B**	17	**C**	17	**B**
18	**B**	18	**C**	18	**B**	18	**C**	18	**B**
19	**A**	19	**C**	19	**C**	19	**B**	19	**C**
20	**B**	20	**C**	20	**C**	20	**C**	20	**C**
21	**C**	21	**C**	21	**C**	21	**B**	21	**C**
22	**A**	22	**C**	22	**C**	22	**C**	22	**C**
23	**C**	23	**C**	23	**B**			23	**B**
24	**A**	24	**C**	24	**B**			24	**C**
25	**B**	25	**B**	25	**C**			25	**C**
26	**B**	26	**B**	26	**B**			26	**C**
27	**C**	27	**C**	27	**B**			27	**C**
		28	**D**	28	**C**			28	**A**
		29	**B**	29	**C**			29	**C**
		30	**C**					30	**C**
		31	**B**					31	**B**
		32	**B**					32	**B**
		33	**A**					33	**C**
		34	**B**					34	**C**
		35	**C**					35	**C**
		36	**B**					36	**A**
		37	**B**					37	**C**
								38	**C**

Q No	AM 6	Q No	AM 7	Q No	AM 8	Q No	AM 9
1	**B**	1	**B**	1	**B**	1	**B**
2	**C**	2	**B**	2	**B**	2	**B**
3	**C**	3	**C**	3	**B**	3	**C**
4	**C**	4	**B**	4	**A**	4	**B**
5	**A**	5	**C**	5	**C**	5	**C**
6	**C**	6	**A**	6	**B**	6	**B**
7	**C**	7	**D**	7	**B**	7	**B**
8	**B**	8	**B**	8	**A**	8	**B**
9	**B**	9	**A**	9	**B**	9	**B**
10	**B**	10	**D**	10	**B**	10	**B**
11	**C**			11	**B**	11	**C**
12	**C**			12	**B**	12	**C**
13	**C**			13	**B**	13	**C**
14	**B**			14	**B**	14	**C**
15	**B**			15	**B**	15	**C**
16	**C**			16	**C**	16	**C**
17	**B**			17	**B**	17	**C**
18	**B**			18	**C**	18	**B**
19	**B**			19	**C**	19	**C**
20	**B**			20	**C**	20	**C**
21	**C**			21	**C**	21	**C**
22	**C**			22	**C**	22	**C**
23	**C**			23	**C**	23	**C**
24	**C**			24	**B**	24	**C**
25	**C**			25	**C**	25	**C**
26	**C**			26	**C**	26	**C**
27	**C**			27	**B**	27	**C**
28	**B**			28	**A**	28	**C**
29	**B**			29	**C**	29	**C**
30	**C**			30	**C**	30	**C**
31	**C**			31	**C**	31	**B**
				32	**C**	32	**C**
				33	**C**	33	**C**
				34	**C**		
				35	**B**		

EQUESTRIAN SPORTS

ANSWER KEY MULTIPLE CHOICE QUESTIONS

Q No	EQTN 1	Q No	EQTN 2	Q No	EQTN 3	Q No	EQTN 4
1	**C**	1	**B**	1	**A**	1	**D**
2	**D**	2	**B**	2	**C**	2	**D**
3	**B**	3	**A**	3	**B**	3	**C**
4	**D**	4	**A**	4	**A**	4	**C**
5	**C**			5	**B**	5	**B**
6	**B**			6	**D**	6	**B**
7	**C**			7	**A**	7	**C**
8	**C**			8	**C**	8	**C**
9	**C**			9	**C**	9	**D**
10	**C**			10	**C**	10	**C**
11	**B**			11	**B**	11	**B**
12	**B**			12	**B**	12	**C**
13	**C**			13	**C**	13	**B**
14	**B**			14	**C**	14	**C**
15	**C**			15	**C**	15	**B**
16	**C**			16	**C**	16	**B**
17	**C**			17	**B**	17	**B**
18	**C**			18	**C**	18	**B**
19	**C**			19	**C**	19	**C**
20	**B**			20	**B**	20	**C**
				21	**B**	21	**C**
				22	**C**	22	**B**
						23	**C**
						24	**B**
						25	**C**

Q No	EQTN 5	Q No	EQTN 6	Q No	EQTN 7
1	**C**	1	**B**	1	**B**
2	**A**	2	**A**	2	**C**
3	**B**	3	**E**	3	**D**
4	**C**	4	**A**	4	**D**
5	**B**	5	**B**	5	**B**
6	**C**	6	**C**	6	**C**
7	**C**	7	**A**	7	**C**
8	**B**	8	**B**	8	**B**
9	**B**	9	**B**	9	**C**
10	**C**	10	**C**	10	**C**
11	**C**	11	**B**	11	**B**
12	**B**	12	**B**	12	**B**
13	**B**	13	**C**	13	**B**
		14	**B**	14	**B**
		15	**B**	15	**C**
		16	**B**	16	**C**
		17	**B**	17	**B**
		18	**B**	18	**C**
		19	**B**	19	**B**
		20	**B**	20	**B**
		21	**C**	21	**C**
		22	**B**	22	**C**
		23	**B**	23	**B**
		24	**B**	24	**B**
		25	**B**	25	**C**
		26	**B**	26	**B**
		27	**B**	27	**C**
		28	**B**	28	**B**
		29	**B**	29	**B**

EQUESTRIAN SPORTS

ANSWER KEY MULTIPLE CHOICE QUESTIONS

Q No	EQTN 8	Q No	EQTN 9	Q No	EQTN 9	Q No	EQTN 10	Q No	EQTN 11
1	**B**	1	**A**	41	**C**	1	**D**	1	**C**
2	**C**	2	**B**	42	**A**	2	**B**	2	**C**
3	**D**	3	**C**	43	**C**	3	**C**	3	**B**
4	**B**	4	**B**	44	**A**	4	**B**	4	**C**
5	**A**	5	**C**	45	**C**	5	**A**	5	**C**
6	**A**	6	**A**	46	**B**	6	**A**	6	**C**
7	**D**	7	**A**	47	**C**	7	**B**	7	**C**
8	**D**	8	**C**	48	**C**	8	**B**	8	**B**
9	**C**	9	**C**	49	**C**	9	**C**	9	**B**
10	**B**	10	**A**	50	**B**	10	**C**	10	**C**
11	**B**	11	**A**	51	**C**	11	**C**		
12	**B**	12	**A**	52	**C**	12	**C**		
13	**B**	13	**C**	53	**B**	13	**C**		
14	**B**	14	**C**	54	**C**	14	**B**		
15	**C**	15	**B**	55	**B**	15	**C**		
16	**B**	16	**C**	56	**C**	16	**B**		
17	**B**	17	**C**	57	**B**	17	**D**		
18	**B**	18	**B**	58	**C**	18	**C**		
19	**C**	19	**C**	59	**C**	19	**B**		
20	**B**	20	**B**	60	**C**	20	**B**		
21	**B**	21	**C**	61	**C**	21	**C**		
22	**B**	22	**B**	62	**B**	22	**C**		
23	**B**	23	**C**	63	**B**	23	**C**		
24	**B**	24	**C**	64	**B**	24	**C**		
25	**C**	25	**C**	65	**C**	25	**A**		
26	**C**	26	**C**	66	**B**	26	**D**		
27	**B**	27	**B**	67	**C**	27	**C**		
28	**B**	28	**B**	68	**C**	28	**C**		
29	**B**	29	**B**	69	**C**	29	**B**		
30	**B**	30	**C**	70	**C**	30	**D**		
31	**C**	31	**B**	71	**D**	31	**B**		
32	**B**	32	**C**	72	**C**	32	**C**		
33	**C**	33	**C**			33	**D**		
34	**B**	34	**C**			34	**C**		
		35	**C**						
		36	**D**						
		37	**C**						
		38	**B**						
		39	**C**						
		40	**B**						

SADDLE FITTING

ANSWER KEY MULTIPLE CHOICE QUESTIONS

Q No	SF 1	Q No	SF 2	Q No	SF 3	Q No	SF 4	Q No	SF 5	Q No	SF 6
1	**C**	1	**C**	1	**B**	1	**C**	1	**C**	1	**A**
2	**C**	2	**B**	2	**B**	2	**C**	2	**C**	2	**D**
3	**B**	3	**B**	3	**C**	3	**B**	3	**C**	3	**A**
4	**C**	4	**B**	4	**B**	4	**B**	4	**C**	4	**C**
5	**C**	5	**A**	5	**C**	5	**C**	5	**C**	5	**A**
6	**B**	6	**C**	6	**C**	6	**B**	6	**B**	6	**B**
7	**B**	7	**C**	7	**C**	7	**C**	7	**D**	7	**C**
8	**C**	8	**C**	8	**B**	8	**C**	8	**B**	8	**C**
9	**B**	9	**B**	9	**C**	9	**C**	9	**C**	9	**A**
10	**D**	10	**C**	10	**C**	10	**C**	10	**C**	10	**D**
11	**D**	11	**C**	11	**B**	11	**B**	11	**C**	11	**A**
12	**C**	12	**B**	12	**C**	12	**C**	12	**C**	12	**D**
13	**C**	13	**C**	13	**B**	13	**C**	13	**C**	13	**A**
14	**B**	14	**B**	14	**D**	14	**C**	14	**B**	14	**C**
15	**C**	15	**C**	15	**C**	15	**B**	15	**C**	15	**C**
16	**C**	16	**C**	16	**B**	16	**C**	16	**C**	16	**B**
17	**B**	17	**C**	17	**B**	17	**C**	17	**C**	17	**B**
18	**C**	18	**B**	18	**C**	18	**D**	18	**C**	18	**B**
		19	**C**	19	**C**	19	**C**	19	**C**	19	**B**
		20	**B**	20	**A**	20	**B**	20	**C**	20	**B**
		21	**C**	21	**C**	21	**B**	21	**C**	21	**B**
		22	**C**	22	**B**	22	**C**	22	**B**	22	**B**
		23	**C**	23	**C**	23	**C**	23	**C**	23	**B**
		24	**C**	24	**B**	24	**C**	24	**C**	24	**B**
				25	**C**			25	**D**	25	**B**
										26	**C**
										27	**B**
										28	**B**
										29	**B**
										30	**B**
										31	**B**
										32	**B**
										33	**B**
										34	**B**
										35	**B**
										36	**B**
										37	**B**
										38	**B**
										39	**B**
										40	**C**
										41	**B**

SHOEING

ANSWER KEY MULTIPLE CHOICE QUESTIONS

Q No	S 1	Q No	S 2	Q No	S 3	Q No	S 4	Q No	S 5
1	**B**	1	**C**	1	**B**	1	**C**	1	**C**
2	**C**	2	**C**	2	**C**	2	**C**	2	**C**
3	**B**	3	**C**	3	**C**	3	**B**	3	**C**
4	**B**	4	**B**	4	**C**	4	**C**	4	**C**
5	**B**	5	**B**	5	**A**	5	**D**	5	**C**
6	**B**	6	**C**	6	**D**	6	**B**	6	**C**
7	**A**	7	**B**	7	**C**	7	**C**	7	**C**
8	**B**	8	**C**	8	**C**	8	**C**	8	**D**
9	**B**	9	**A**	9	**B**	9	**C**	9	**C**
10	**B**	10	**D**	10	**A**	10	**C**	10	**B**
11	**B**	11	**C**	11	**C**	11	**C**	11	**C**
12	**A**	12	**C**	12	**C**	12	**C**	12	**C**
13	**B**	13	**D**	13	**C**	13	**C**	13	**C**
14	**B**	14	**C**	14	**B**	14	**C**	14	**C**
15	**B**	15	**A**	15	**C**	15	**C**	15	**C**
16	**B**	16	**C**	16	**D**	16	**C**	16	**C**
17	**B**	17	**B**	17	**B**	17	**B**	17	**C**
18	**A**	18	**C**	18	**B**	18	**C**	18	**B**
19	**B**	19	**C**	19	**B**	19	**B**	19	**C**
20	**A**	20	**C**	20	**C**	20	**B**	20	**D**
21	**A**	21	**C**	21	**C**	21	**C**	21	**C**
22	**B**	22	**A**	22	**B**	22	**C**	22	**C**
23	**B**	23	**C**	23	**B**	23	**B**	23	**C**
24	**B**	24	**D**	24	**B**	24	**C**	24	**D**
25	**D**	25	**B**	25	**C**	25	**B**	25	**C**
26	**D**								

Q No	S 6	Q No	S 7	Q No	S 8	Q No	S 9
1	**C**	1	**B**	1	**C**	1	**B**
2	**C**	2	**C**	2	**C**	2	**C**
3	**B**	3	**C**	3	**C**	3	**B**
4	**C**	4	**C**	4	**B**	4	**A**
5	**C**	5	**D**	5	**C**	5	**B**
6	**C**	6	**C**	6	**B**	6	**D**
7	**C**	7	**C**	7	**B**	7	**C**
8	**C**	8	**D**	8	**B**	8	**A**
9	**B**	9	**B**	9	**A**	9	**C**
10	**C**	10	**C**	10	**B**	10	**D**
11	**B**	11	**B**	11	**C**	11	**A**
12	**C**	12	**B**	12	**B**	12	**B**
13	**A**	13	**B**	13	**C**	13	**D**
14	**C**	14	**B**	14	**C**	14	**C**
15	**C**	15	**C**	15	**B**	15	**D**
16	**C**	16	**C**	16	**B**	16	**A**
17	**C**	17	**C**	17	**B**	17	**A**
18	**B**	18	**B**	18	**C**	18	**A**
19	**B**	19	**B**	19	**C**	19	**C**
20	**B**	20	**C**	20	**C**	20	**C**
21	**B**	21	**C**	21	**C**	21	**B**
22	**C**	22	**D**	22	**C**	22	**A**
23	**B**	23	**C**	23	**C**	23	**A**
24	**C**	24	**C**	24	**C**	24	**D**
25	**C**	25	**C**	25	**C**	25	**B**
						26	**A**
						27	**C**
						28	**B**
						29	**B**
						30	**D**
						31	**C**
						32	**B**
						33	**C**
						34	**D**
						35	**C**
						36	**D**
						37	**D**
						38	**A**
						39	**B**
						40	**D**
						41	**A**
						42	**C**
						43	**D**

SHOEING S – 9

FILL IN THE BLANKS

1. Surgical shoeing
2. Farriery tools
3. Shoeing
4. Cold shoeing
5. Thrush and Canker
6. 4-6
7. Hind
8. Cold
9. Shoeing helps in improving traction.
10. Frog and sole
11. Fore feet
12. Fault
13. Clenches
14. Buffer
15. Hoof-cutter
16. Shoeing
17. Plain shoe, Bar shoe, Three quarter shoe and Fullered shoes
18. Hot
19. Cold

UNITY & DISCIPLINE

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