NATIONAL CADET CORPS

UNITY & DISCIPLINE

REMOUNT AND VETERINARY SQN CADETS PRECIS SD/SW

INDEX SHEET

INDEX SHEET

SPECIALISED SUBJECT –SD/SW R&V SQN

LECTURES AS PER LESSON PLAN

ORGANISATION OF RVC (REMOUNT AND VETERINARY CORPS)-O1

Code - O1

Period - One

Type - Lecture

Training Aids

Black board and chalk.

Time Plan

(a) Introduction	-05 mins
(b) Organisation & Various establishments of RVC	-30 Mins
(c) Conclusion	-05 mins

INTRODUCTION

As a cadet of NCC and future prospects of commissioning in to Army/RVC the knowledge of organization of RVC is very important.

AIM

To aquaint the cadets about basic organization of RVC.

PREVIEW

The lecture will be conducted in the following parts:-

(a) Part I - Organization

(b) Part II - Various establishments of RVC Remount and Veterinary Corps

(RVC) is responsible for breeding, rearing and training of equines for the Army. It provides animals (generally mules) to the Animal Transport (AT) Units and horses to the President Body Guard as well as other Cavalry Units.

RVC is controlled by Director General who functions under Quarter Master General's (QMG's) Branch. It has two Equine Breeding Studs (EBS) at Hissar and Babugarh for breeding of horses and mules and two Remount Training School and Depots (RTS&D) at Hempur and Saharanpur for rearing, training and issue of remounts.

The Corps has one RVC Centre and School at Meerut for imparting training to Officers, Junior Commissioned Officers and Other Ranks of RVC and other Arms/Services and one Record Office at the same station

CONCLUSION

Thus the organization of RVC is structured in a manner to have various establishments to provide services to all elements of Armed forces.

2. ORGANISATION OF RVC (REMOUNT AND VETERINARY CORPS)- O2

Code - O2

Period - One

Type – Lecture

Training Aids

Black board and chalk .

Time Plan

(a) Introduction	- 05 mins
(b) Functioning& Elements of units under RVC	-30 mins
(c) Conclusion	- 05 mins

INTRODUCTION

As a cadet of NCC and future prospects of commissioning in to Army/RVC the knowledge of functioning elements of RVC is very important.

AIM

To acquaint the cadets about functioning of RVC.

PREVIEW

The lecture will be conducted in the following parts:-

(a) Part I - Functioning.

(b) Part II - Elements of units under RVC

RVC has got 2 breeding and two training units for the horses, mules and ponies. These 4 centres are in Hissar(Har) Babugarh(UP) ,Sharanpur (UP) and Hempur (UK). RVC also has a Dog breeding and training centre at Meerut (UP), where various specialist dogs like Labrador, German shepherd are trained for tracking, explosive detection and guard duties.

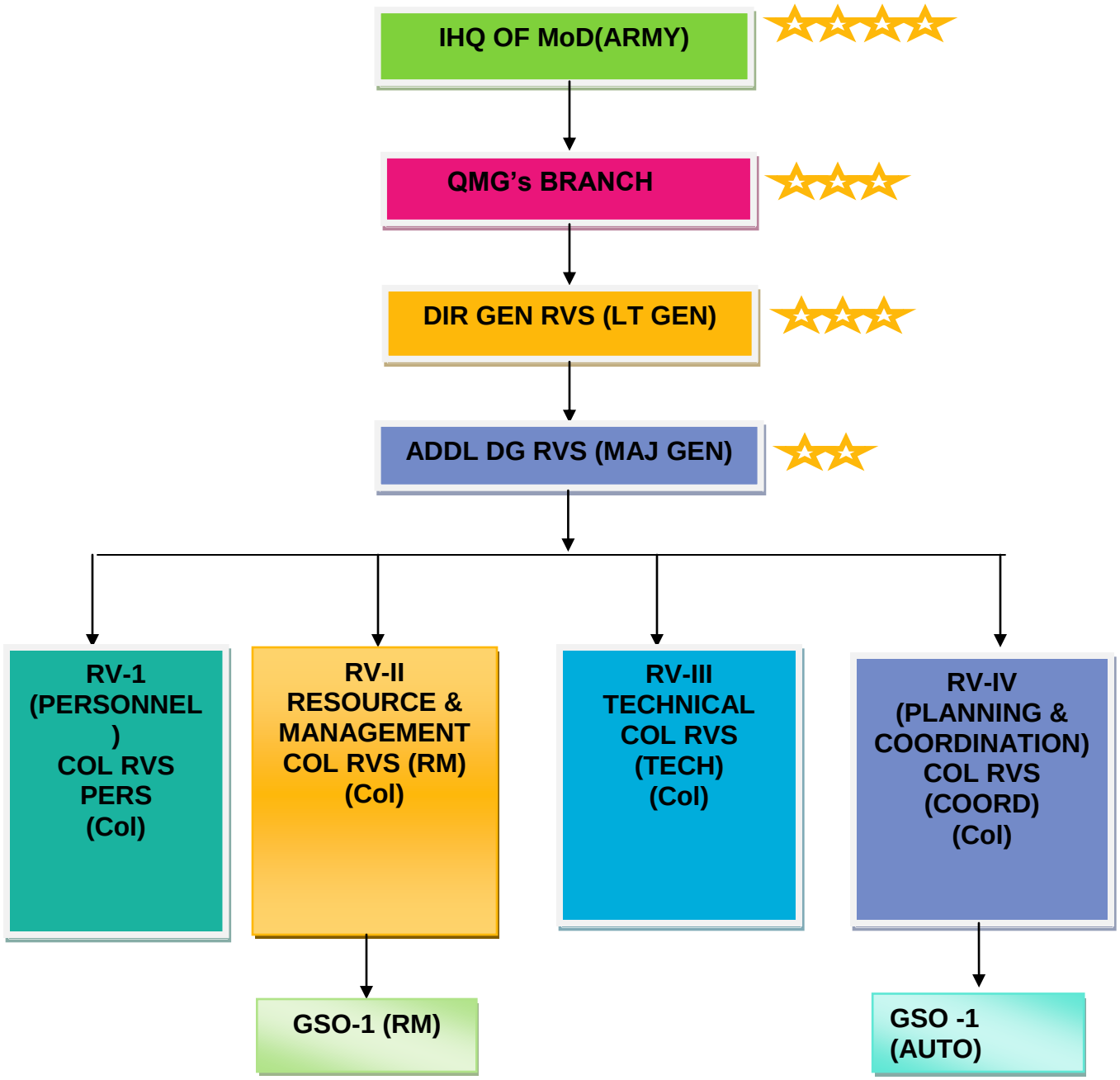
Besides these RVC has its training centre, college and record office at Meerut (UP).In field areas the RVC has mobile field veterinary hospitals and advance field veterinary hospitals. These hospitals provide veterinary cover to various animal transport units in the field and high Altitude areas.

CONCLUSION

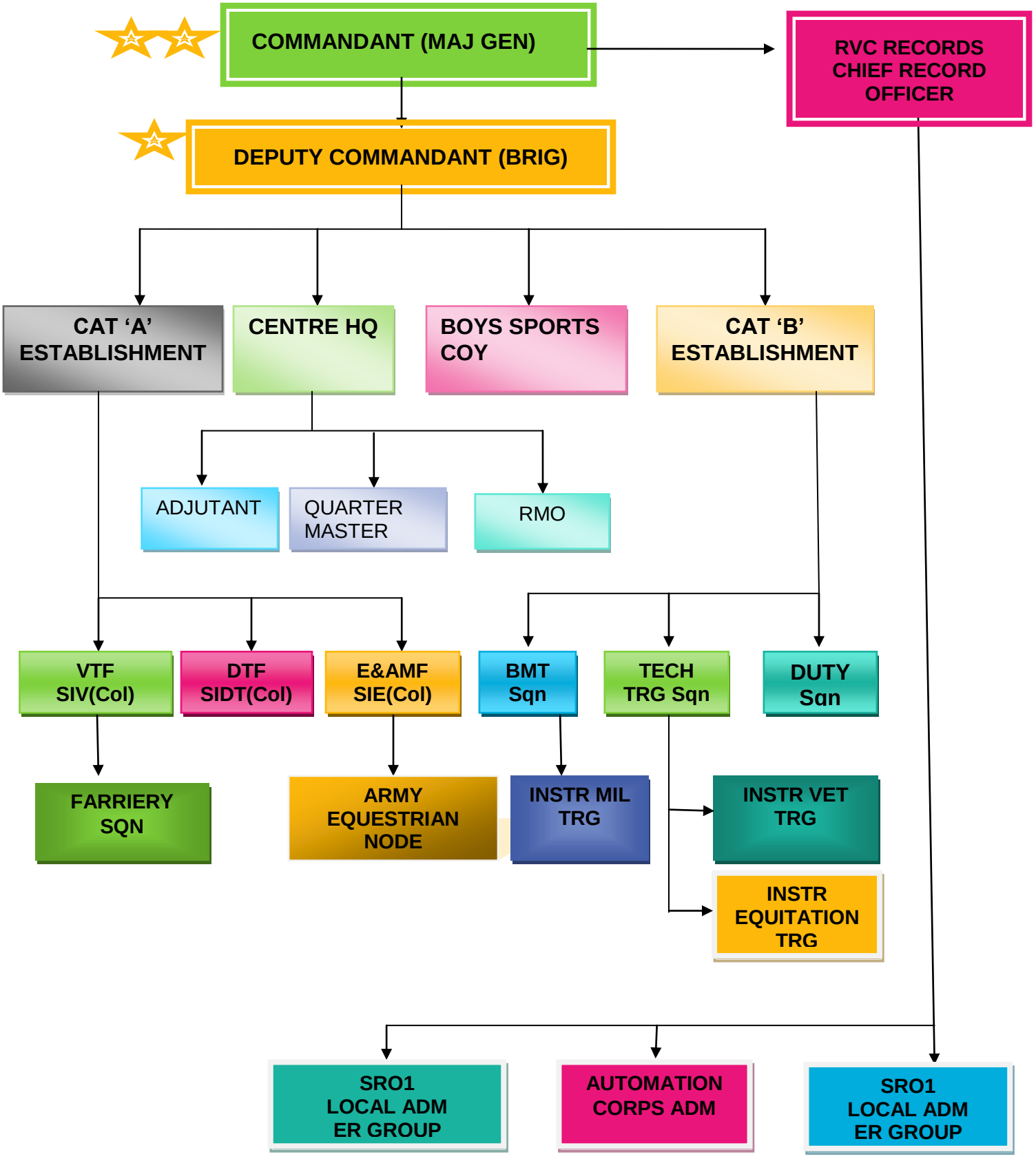
Thus the organization of RVC is structured in a manner to have various establishments to provide services to all elements of Armed forces. The functioning of RVC has been explained in a manner to explain the interrelationship of various establishments.

ORGANISATION OF RVC

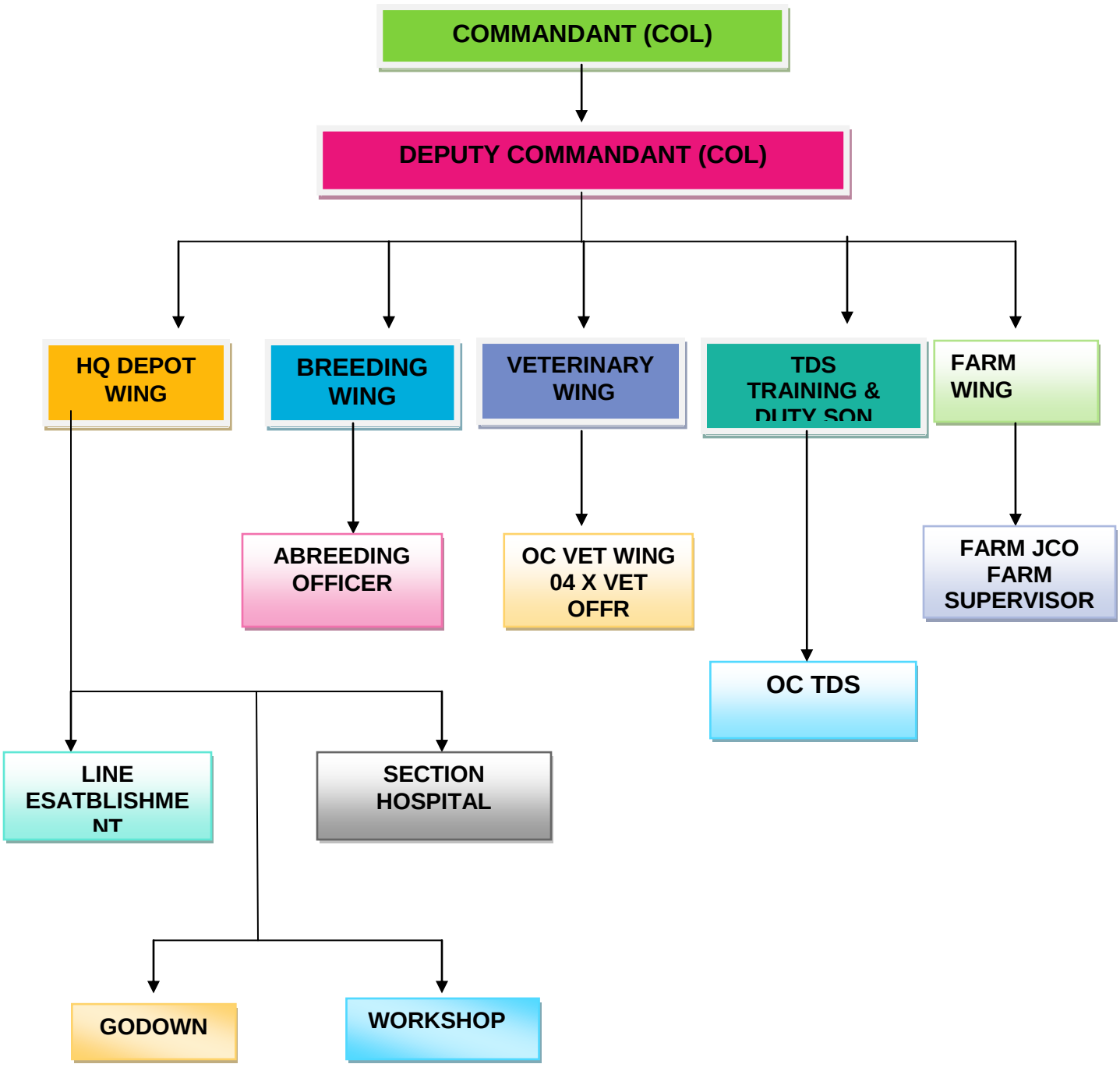
DIRECTORATE GENERAL REMOUNT VETERINARY SERVICES



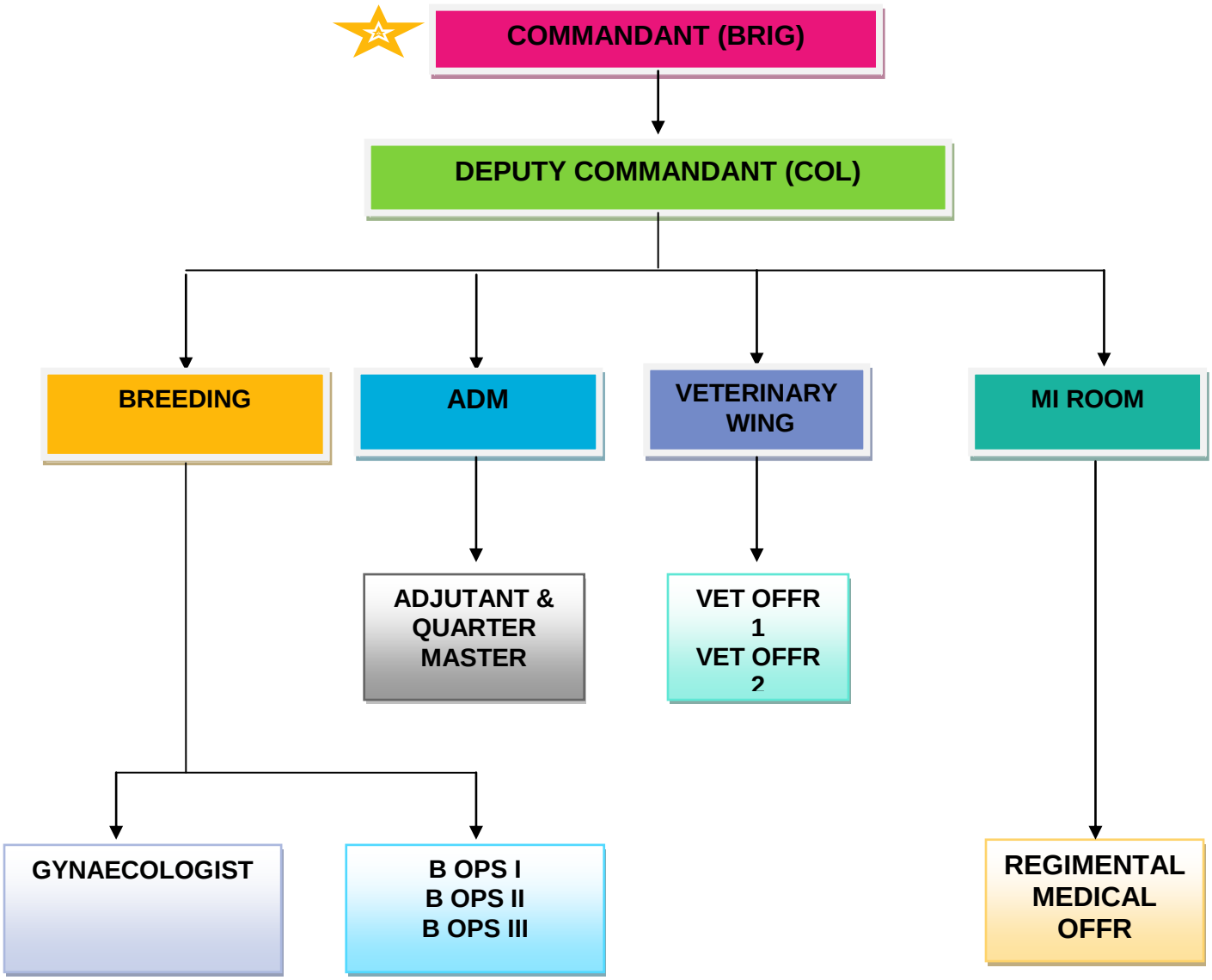
RVC CENTRE AND COLLEGE



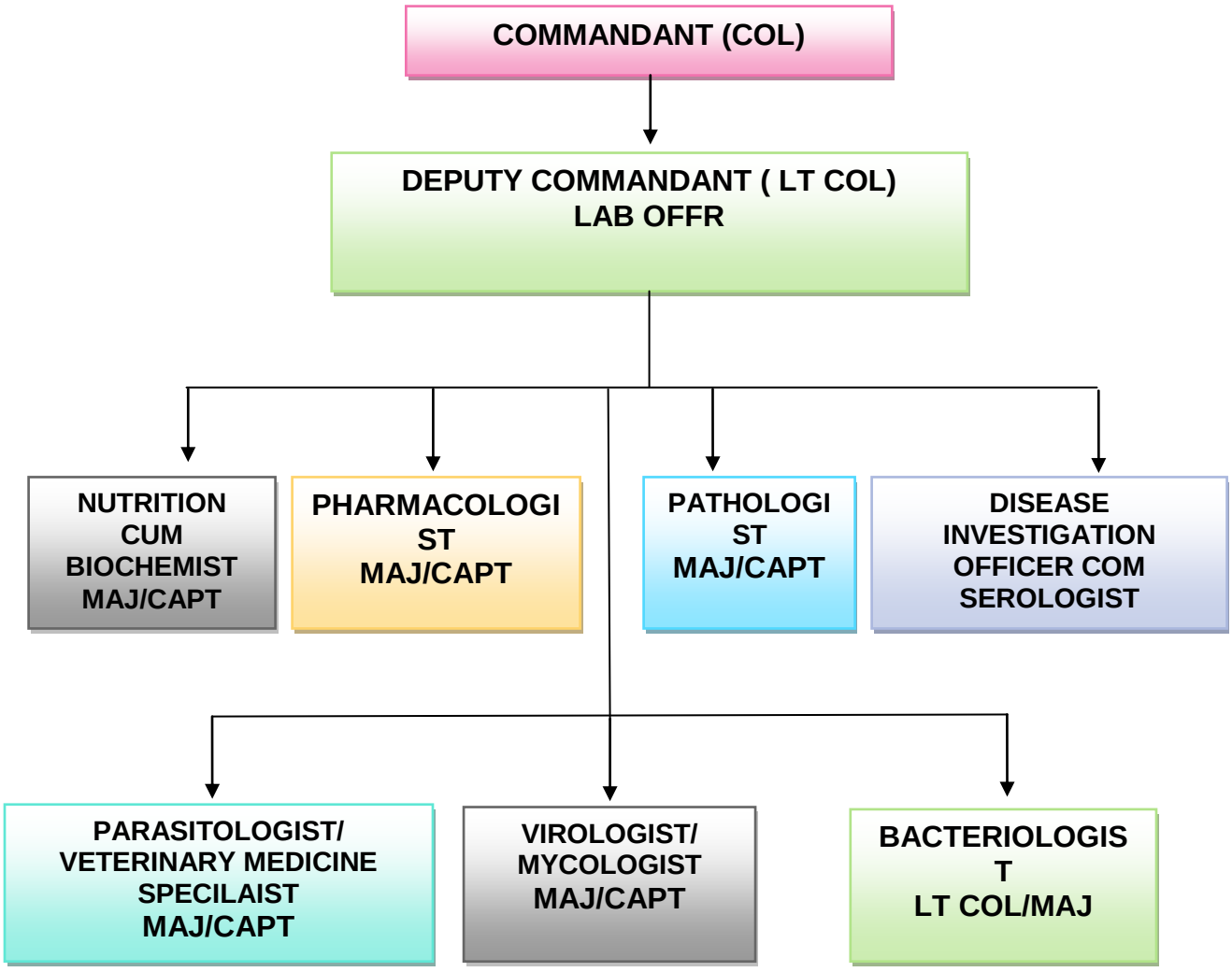
REMOUNT TRAINING SCHOOL & DEPOT



EQUINE BREEDING STUD(CAT B ESTABLISHMENT)



CENTRAL MILITARY VETERINARY LABORATORY



R&V NCC UNITS

	R&V NCC REGT	R&V NCC SQN
OFFRS	02	01
JCOS	02	01
PI STAFF		
RIDER	04	02
NA VET	01	01
FARRIER	01	01
CIVILIANS		
OFFICE STAFF	08	05
SYCES	12	06
AT CART DVR	02	01
OTHER CIV		12
HORSES	22	11
PONY/MULES	04	02

AIM AND DEFINITION OF EQUITATION & ACQUAINTANCE WITH HORSE

Code - AM 1

Period - One

Type - Lecture

Training Aids

Black board and chalk .

Time Plan

(a) Introduction -05 mins
(b) Acquaintance with horse, aim and definition of equitation -30 mins
(c) Conclusion -05 mins

INTRODUCTION

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

AIM

To aquaint the cadets about aim and definition of equitation.

PREVIEW

The lecture will be conducted in the following parts :-

(a) Part I - Aim of equitation.
(b) Part II - Definition of equitation.

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. It aims at continuously keeping the largest possiblenumber of horses fit for work and reducing in-efficiency to a minimum by the prevention of accidents and illnesses.

2. The importance of being a good horse master should be impressed on every mounted soldier. 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.

3. 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.

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

5. The troop leader/stable in-charge is responsible for the condition of the horses in his charge. Good horse management consists in 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.

CONCLUSION

Acquaintance with horse and the various concepts of equitation will help the riders understand importance of training and apply the skills at various levels during advanced training .

DIFFERENT PACES OF HORSE

Code - AM 2

Period - One

Type - Lecture and demo

Training Aids

Horse and Rider, Black board and chalk.

Time Plan

(a) Introduction -05 mins
(b) Paces of the Horse-30 mins
(c) Conclusion – 05 mins

INTRODUCTION

As a cadet of NCC and future prospects of professional horse rider the knowledge of paces of horse is very important.

AIM

To aquaint the cadets about paces of horse.

PREVIEW

The lecture will be conducted in the following parts :-

(a) Part I - Paces of horse -Theory.
(b) Part II- Paces of horse -Demonstration

1. Paces - There are five basic paces of the horse and each pace has its variations. The basicpaces of the horse are: -

(a) The walk, at about 6 km/hour, covering approx 105m/minute.
(b) The trot, at about 12-km/ hour, covering approx 211m / minute.
(c) The canter, at about 14-km/ hour, covering approx 237m/minute.
(d) The slow gallop, about 19-km/ hour, covering approx 316 m/minute.
(e) The gallop, about 24 Km/hour covering approx 396 m/minute.

Note: The walk, trot and the gallop are the paces of drill. These, with the addition of -slow gallop‖, are the paces of manoeuvre.

2. Terms in relation to paces pertain to limbs of the horse.

(a) Left Fore (LF).
(b) Left Hind (LH).
(c) Right fore (RF).
(d) Right Hind (RH).
(e) Left and Right Diagonal pair is LF/RH and RF/LH).
(f) Stride - The distance from one-footprint of any leg to the footprint of the same leg when it next comes to the ground; or the distance that is being covered with all four legs.
(g) Step - When one foot moves and comes to the ground or when two feet move and come to the ground simultaneously.
(h) Period of suspension - The period during which all four legs are off the groundat the same time.

3. **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, atleast 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.

4. **Trot -** The trot is pace of two times. It is a symmetrical diagonal movement wherein both the feetof a diagonal pair of legs strike the ground together with both feet of other i.e. supporting pair of legsin suspension. These diagonal pairs are:

(a) Right fore leg (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 fore leg (LF) and Right hind (RH) moving together with Right foreleg (RF)and Left hind (LH) bearing weight on ground known as the Left Diagonal

5. 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 fore leg, order of movement of the legs is:-

(a) RH (strikes off)
(b) RF/LH (diagonal pair)
(c) Suspension
(d) LF (leading leg)

6. 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.

7. Gallop -The canter merges into the gallop as the pace increases. Basically they do not constitute two different gaits, but two different varieties of gait, since the sequence of the footfalls is not the same. The gallop is a movement of four time: -

(a) LH
(b) RH
(c) LF
(d) RF
(e) Suspension.

CONCLUSION

The basic knowledge of paces leads a rider to have better control over the horse and learn the jumping skills efficiently.

BREEDS AND COLOURS OF HORSE

Code - AM 3

Period - One

Type - Lecture and demo

Training Aids

Horses of available colours,Black board and chalk .

Time Plan

(a) Introduction-05 mins
(b) Breeds and colours demo-30mins
(c) Conclusion -05 mins

INTRODUCTION

As a cadet of NCC and future prospects of commissioning in to Army/RVC the knowledge of breeds and colours of horse is very important during various events like commissioning of horses ,making of their history sheets, breeding records and other pedigree related data compilation..

AIM

To aquaint the cadets about breeds and colours of horses.

PREVIEW

The lecture will be conducted in the following parts :-

(a) Part I - breeds and colours of horse –theory
(b) Part II- breeds and colours of horse-Demo with available colours &breeds

Indian Army uses Thirough breed Horses produced in its own breeding centres .

1. Horses. These are divided into three categories:-

(a) Ride Class A. 15 hands (152.5 cms) and above.
(b) Ride Class B. 14 hands 2 inches (147.3 cms) to 15 hands (152.4 cms).
(c) Pony. 13 hands (132 cms) to 14 hands 2 inches (147.3 cms).

2. Mules:-In the Army, we have two types of mules:-

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

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

BREEDS OF HORSES

1. **Marwari Horses:-**The Marwari breed is derived from the Marwar region of the Rajasthan - the natural habitat of the breed. The Marwar region includes Udaipur, Jalor, Jodhpur and Rajasamand districts of Rajasthan and some adjoining areas of Gujarat. 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 have 130-140 cm long body, 152-160 cm height, 166- 175 cm heart girth, 60 cm face length, 22 cm face width, 18 cm ear length and 47 cm tail length without switch. The Marwari horses are longer and taller than Kathiawari horses.

2. Kathiawari Horses:-The superintendent of Gaekwar Contingent in 1880 suggested that the Kathiawari breed may have sprung from the wild horses of Kathiawar (a sort of Quagga, Bombay Gazette, Kathiawari, foot note, page 97). The breeding tract of the breed is Saurashtra province ofGujarat which comprises of Rajkot, Bhavnagar, Surendranagar Junagarh and Amreli districts 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). The physical characteristics of Kathiawari horses are concave profile, long neck, short leg and squared quarters. Face is dry and short, triangular from pale to forehead and small muzzle, big nostrils, edge of nostril is thin; small, fineand curved upright ears on 90 degrees axis that can rotate at 180 degrees, broad forehead and largeexpressive sensitive eyes. Tail is long, not bushy, curved well and touching to the ground, foot roundand broad. Kathiawari horses have on an average 119 cm long body, 147 cm height and 160 cm heart girth. The average ear length is 15 cm. The average face length and width are 53 and 21 cm, respectively.

3. **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. The Spiti horses are hardy and surefooted. Body is well developed with fairly strong bones. The legs are thick and covered with long coarse hairs. The mane is longer having 20 to 30 cm long hairs. Solid and compact body, convex face, erect ears, black eyes, straight back, long and straight tail, alert looking and short height are some of the important breed characteristics. The horses are nervous in temperament. The Spiti horses have on average 97 cm body length, 127 cm height, 150 cm paunch girth, 15 cm long ear, 49 cm face length and 20 cm face width. It has been observed that females have shorter body, height, heart girth and paunch girth.

4. Zanskari Horses:- Zanskari horses are available in 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. Horses are medium in size, well built and 120 to 140 cm high. The Zanskari horses have predominant eyes, heavy and long tail and uniform gait. The body hairs are fine, long and glossy. Only a few hundred horses at present exist in the Zanskar and other valleys of Laddakh. Large scale breeding with non descript ponies has endangered this breed. The Animal Husbandry Department,Jammu and Kashmir has recently established a Zanskari horse Breeding farm at Padum Zanskar in Kargil district of Ladakh for breed improvement and conservation through selective breeding.

5. 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.Generally the Manipuri ponies are of 11-13 hands high at wither with a good shoulder, short back, well developed quarters and strong limbs. Mane is generally coarse and upright. It has small pointed prsicked ears, eyes are alert and slightly slant .The area between the nostrils is flat not crispy.Withers are not prominent. Face is concave and tail is well set and commensurate with height. Manipuri ponies are intelligent and extremely tough, and have tremendous endurance. Perhaps all these good qualities made it suitable for polo game for which it is globally famous. 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. The pony undoubtly played significant role in the field of war and play. It has close association with the socioeconomic life of the people of hilly region through travel, transport and hunting. It is a matter of concern that the number of Manipuri has decreased drastically. As per latest data the population of Manipuri pony is 2327 only. Thus, immediate attention and efforts are required to conserve this precious breed of ponies in India.

6. Bhutia Bhutia horses are distributed in Sikkim and Darjeeling. They are usually grey or baycoloured and similar to the Tibetan pony

COLOURS OF THE HORSES :-

Bay Bay horses run from light reddish or tan shades to dark brown and mahogany/auburn shades. Bay horses **always** have black points (legs, muzzle, mane and tail, and the tips of their ears are black). Many bay horses have black legs that are covered by white markings

Dark Bay:- Dark brown coat, reddish or black highlights, black points.

Bay Dun:- This horse is a bay dun. Bay duns have a bay color, but they are not bay since they have the duncharacteristic of a dorsal stripe down the middle of their back. An uneducated horse-person mightthink this is a buckskin, but we know better!

Red Dun: - This horse is a dun, but with reddish/chestnut highlights. He has a dorsal stripe down the middle ofthe back, and the legs a darker color than the body color.

Zebra Stripes:- Some dun colored horses also have primitive zebra markings on their legs, such as this one.

Roan :- Roan horses have otherwise solid colored coats, but with white hairs interspersed. The white hairsare not actual spots, but single white hairs mixed with the darker coat color.

Bay Roan:- A Bay Roan is a horse with a bay coat and the roan gene. The roan gene gives the horse interspersed white hairs on his body. The Bay roan sometimes looks very similar to a red roan or ablue roan.

Gray:- Gray horses have black skin with white or gray hair. Many horse people will call a gray horse"white", but if their skin is dark, they are gray! Gray horses are born dark, sometimes black or brown, and their hair coat turns lighter as they grow older.

Light Gray:-This is the type of horse that people mistake for "white". This horse is a light gray, not white. See how the skin (around his nose, inside his ears, andbetween his hind legs) is black? That is how you can tell that this horse is really a light gray.

Steel Gray:- Steel gray horses are a dark gray, silver color. The horse has a black base coat with lightly mixed white/gray hairs. Many steel gray horses lighten andturn into a dapple gray or a light gray with age.

Rose Gray:- Medium gray whose hairs are tinted with red. This type of hair gives the horse a light "rose" tint. Rosegray horses often have points that are darker thantheir body color, including mane and tail.

Chestnut :- Chestnut, (also known as "sorrel"), is reddish brown. The points (mane, tail, legs and ears) arethe same color as the horse's body (other than white markings). Chestnuts range from light yellowish brown to a golden-reddish or dark liver color. All chestnuts have shades of red in their coats.

Black:- Black horses have pure black coats with no signs of brown or any other color. Many horse-people mistake dark bays or liver chestnuts for black. If you can see any other color (with the exception ofwhite markings) on the horse's coat in the winter, he is not a true black. The reason I say "in the winter" is because the sun tends to lighten a dark horse's coat in the summer, and the exception iswhen the hair has been sun-burnt.

TRANSPORTATION OF HORSES

Code - AM 4

Period - Two

Type - Lecture and demo

Training Aids

Horses, vehicle, Black board and chalk .

Time Plan

(a) Introduction-05 mins
(b) Breeds and colours demo-70mins
(c) Conclusion 05 mins

INTRODUCTION

As a cadet of NCC and future prospects of commissioning in to Army/RVC 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.

AIM

To aquaint 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.

PREVIEW

The lecture will be conducted in the following parts :-

(a) Part I - methods of transportation of animals –theory
(b) Part II- transportation of animals from one place to other Demo with available vehicles.

1. 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.

2. **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 forsoundness of its body structure should be carried out. A special emphasis should be given tothe condition of the floor .It should not have any holes/ termite ant 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.

(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. Tailbandage 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 isfed there itself in the lorry. During night halt the animals can be unloaded. Trouble makers 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. 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 toavoid any incident of dehydration and shock.

(h) Saddlery and ration can be kept at the rear end of the vehicle or a separate vehicle maybe detailed.

(j) Necessary fire precautions should be taken.

(3) **Rail Transport**

For transportation of horses by railway, demand should be placed for CA/Horse Box/ VPU'S well in advance with the railway authorities :-

(a) Before loading of these wagons or horseboxes they should be cheeked 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 regularly carried 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 have a tendency 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.

4. **Air Transport :-**

Horse transportation by air needs careful and detailed planning. Following are the salientguidelines to be followed: -

(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 takeoff and landing. Horses are likely to lean by bracing their rump against the back of the stall, especially during takeoff.

(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 behavior. 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 has to be made against the possibility of an animal going wild as a result of fear or discomfort during journey. Use of sedative is recommended. The veterinary first aid boxto cope with basic emergency treatment, specially containing sedative, disposable syringesand needles must be always at hand.

(e) Due to pressurized interior of the aircraft, horse loses a lot of fluids. It is recommended to 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

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

STABLE VICES

Code - AM 5

Period - Two

Type - Lecture

Time Plan

Black board and chalk

Training Aids

(a) Introduction- 05 mins
(b) Stable vices – 70 mins
(c) Conclusion - 05 mins

INTRODUCTION

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

AIM

To aquaint the cadets about various vices of the Horses..

PREVIEW

The lecture will be conducted in the following parts:-

(a) Part I - Name of various vices –theory

(b) Part II - Remedy to control the vices of the Horses-theory

1. 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.

Weaving

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

3. 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 in order to get firm hold and at the moment he gulps a characteristic' grunt' is emitted. Horses are prone to learn these two habits 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 fronts 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 also frequently result from wind sucking and crib biting. 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 great application, this needs supervision.

Biting

4. It is a vice more common in stallions than in mares or geldings, though occasionally may be met within all three. 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. Putting on a nosebag is also as effective.

Tearing

5. Tearing rugs is a bad stable habit which can be prevented by the use of 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. Loose fitting clothing should be avoided.

Kicking

6. 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, and a light in the stable keeps them quiet, but others will continue the habit in spite of every precaution.

CONCLUSION

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

HORSE MANAGEMENT –WATERING, FEEDING, GROOMING

Code - AM 6

Period - Three

Type - Lecture and demo.

Training Aids

Black board ,chalk and Horse with watering ,feeding and grooming kit.

Time Plan

(a) Introduction-05 mins
(b) Watering feeding and Grooming theory and practical -110mins
(c) Conclusion - 05 mins

INTRODUCTION

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.

AIM

To aquaint the cadets about advantages of watering feeding and Grooming to keep a horse ingood health, obtain the best appearance ,find hidden injuries and develop an understanding between man and animal.

PREVIEW

The lecture will be conducted in the following parts:-

(a) Part I - Watering feeding and Grooming –theory
(b) Part II - Watering feeding and Grooming –practical

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 horse‘s 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.
(j) Feed chaff mixed with the hard food so that the horse has to chew every mouthful.
(k) Feed something succulent.

FEEDING

1. 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.

2. 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.

3. 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.

4. 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 color. Cracked grain should be avoided as it is prone to develop moulds 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 them from 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 firm footing on slippery floors. Good hay should have the following qualities:-

(i) Small, flexible stems
(ii) Bright dark green color, which indicates high protein and vitamin content. Browning of hay indicates a loss of nutrients.
(iii) No bad or unusual odour.
(iv) No moulds. Moulds 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.

5. **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 horse‘s 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.

6. 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.

7. **Standard Daily scale of Rations**

Ser No	Animals	Gram Crushed in Kgs	Barley Crushed inKgs	Bran in Kgs	Salt in Kgs	Fodder/ Hay in Kgs	Hay for Bedding inKgs
(a)	Rides,Cl A	1.360	2.040	1.130	0.030	9.070	1.360
(b)	Rides, Cl B Hafff linger/ Pack Ponies	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	-	2.490	-	0.020	7.260	-

WATERING

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 horse‘s 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

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 mustbe kept clean so that the water remains fresh.

GROOMIMNG

1. Good grooming is just as important to the condition of the horse as good feeding. 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.

2 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. No horse is groomed properly which is not groomed quickly; a good rider should groom a horse thoroughly in half an hour unless the horse is particularly dirty.

3. (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 brushes -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 brushes- 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. The use of the body brush is to remove scurf and dirt from the coat, and for this purpose the bristle brushes are far superior to those made of fiber. Fiber, however stiff at first, ultimately flattens down from the continued pressure on the brush and is then useless. Bristles, on the other hand, though more xpensive, do not bend, but simply wear shorter and retain their upright position till worn down to the back. It should be remembered that as bristles get shorter they become less plaint and stiffer, so that a half worn brush is not very prickly article to bring down hard on a tender, ticklish skin and should be used with consideration.

(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 - are 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- 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 and in the service pattern they are rounded at the top and bottom. This prevents the bristles being unduly worn away when the comb used to clean the body brush and also guards against injury to the skin when used for the removal of dirt. Other patterns have wooden handles and some have a series of curved springy blades/rubber studs made entirely of rubber. At the sides small projections of the blades are seen for the purpose of knocking on the ground when dislodging dirt from the back.

Description:-

1. Mane and tail combs 2. Sponges (for the eyes and the dock) 3. Hoof oil and brush 4. Dandy brush 5. Body brush 6. Water brush (soft) 7a. Curry comb (rubber), 7b. Curry comb (metal) 8. Sweat scraper 9. Cloth sponge 10. Hoof pick on return from workout or when a stabled horse is to be groomed, the horse must be properly secured. Grooming routine is described below.

CONCLUSION

Watering feeding and Grooming helps develop better understanding between man and animal. This is an important aspect of animal management to ensure fitness of the horses to keep a horse in good health, obtain the best appearance, improve their performance

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CLIPPING

Code - AM 7

Period - Two

Type - Lecture and demo.

Training Aids

Black board ,chalk Clipping machine and a horse .

Time Plan

(a) Introduction- 05 mins
(b) Stable vices -70 mins
(c) Conclusion - 05 mins

INTRODUCTION

Knowledge of clipping of Horses helps student understand the methods to maintain personal hygiene and coat maintenance of Horses and keep themselves healthy as well as look shiny .

AIM

To aquaint the cadets about personal hygiene and coat maintenance of Horses.

PREVIEW

The lecture will be conducted in the following parts:-

(a) Part I - Equipments and preparation of horse –theory
(b) Part II - Clipping of horse-theory- Practical

1. CLIPPING

Clipping is essential for horses required to work hard in the winter. A clipped horse is capable of a greater 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 first clipping is carried out, the less often subsequent clipping will be necessary, as the hair grows less rapidly. A commanding officer can exercise his discretion with regard to 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. Clipping machines are used for this purpose, except when the legs are clipped. The necessity for clipping a horse depends on:-

(a) Climate
(b) Work
(c) The horse's coat

2. 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.

Plaiting manes and tails

3. The mane and tail are plaited to give the horse a tidy appearance, and to encourage the mane to lie on the correct side. For this a strong needle is required, stout thread of a suitable colour, some elastic bands, and a pair of scissors. Plaiting the mane.

MINOR AILMENTS AND TREATMENT

Code - AM 8

Period - Two

Type - Lecture

Training Aids

Black board and chalk.

Time Plan

(a) Introduction-05 mins
(b) Minor ailments and treatment -70mins
(c) Conclusion -05 mins

INTRODUCTION

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

AIM

To aquaint the cadets minor ailments of Horses and their management.

PREVIEW

The lecture will be conducted in the following parts:-

(a) Part I - Name of various minor ailments of Horses and their management –theory
(b) Part II - Procedures to treat minor ailments of Horses – Practical

MINOR AILMENTS AND TREATMENT

A Prevention and cure of Minor Diseases and Accidents In order to prevent complications of disease arising out of apparently simple ailments orinjuries, all animals affected should be paraded for veterinary inspection.

1. The following table deals with a few of the more common ailments and accidental injuries and should be taken as a guide for action in cases when immediate veterinary advice is not available.

Ailment orInjury Symptoms, causes, treatment

(a) Brushing

Symptoms

Wounds on inside of fetlock.

Cause

(i) Careless riding.
(ii) Faulty action/ gait
(iii) Bad shoeing (clinchesof shoe projecting)
(iv) Fatigue and loss of condition.

Treatment

See wounds, remove cause if due to bad shoeing and put on 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.

Cause

(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 immediately reported to the Veterinary officer.

(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 stables.

Treatment

Consider contagious, isolate, treat as for fever.

(d) Diarrhoea

Cause

(i) Overwork.
(ii) Unsuitable food.
(ii) Exposure.

Treatment

Give dry bran; keep body warm; reduce work if overwork is cause of ailment.

(e) Discharge from nostrils eyes or mouth

Treatment

Isolate and obtain veterinary advice. Great care should be exercised in cases where there is a discharge from the nostrils, as the disease may be glanders, which is contagious and communicable to man.

(f) 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.

(g) 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

(h) 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 waterfomentations.

(j) 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
See wounds.

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 donot allow horses to lie down.

(k) Lameness

Keep the animal tied and give complete rest. If lameness is due to recent injury, apply cold fomentation preferably with ice. Obtain veterinaryadvice as early as possible.

(l) Mange

Symptoms
Marked skin irritation, horse rubshimself against any available object.
Treatment
Isolate and obtain veterinary adviceas soon as possible.

(m) Over reach

Symptoms
Wound on back tendon or heel offore-leg.
Causes
Inner edge of toe of hind feet kicks or treads on foreleg; caused while jumping ; pulling up suddenly; galloping into deep ground;weakness.

(n) Ringworm

Symptoms
Hair falls out in circular patches.
Treatment
Isolate and obtain veterinary advice as soon as possible. If an isolated case, apply tincture of iodine to affected part.

(o) Rope gall or ropeburns

Symptoms
Wound in hollow between heel andfetlock.
Causes
Long tying rope over which horsegets his foot entangled.
Treatment See wounds.

(p) Sore backs and

Symptoms

	saddle galls	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.
(q)	**Sprained tendons**	**Cause** Bad riding/ training/ overwork Working horse without proper fitnessSymptom Soft swelling in the tendon area, usuallyin the forelegs **Treatment** Stand in cold water (running if possible)or bandage loosely with linen bandage which should be kept continually wet.
(r)	**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.
(s)	**Treads**	**Symptoms** Wound on outside of coronet or,sometimes, above fetlock on hind legs. **Causes** Bad riding / training Treatment see wounds
(t)	**Wounds**	**Treatment** (i) Clean the general area of wound of dirt (ii) Cold water fomentation on and (iii) around the wound area if the woundis closed and fresh (iv) Antiseptic solution (v) A tourniquet to stop bleeding

CONCLUSION

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

EQTN 1 TO 10 LECTURES

EQTN – 1 – RULES AND REGULATIONS OF EQUESTRIAN SPORTS

1. Introduction

Equestrian sport is governed Internationally by Federation Equestre Internationale (FEI) and Nationally by Equestrian Federation of India (EFI). Every year FEI upgrade the Rules for various disciplines of Equestrian i.e. Show Jumping, Dressage & Eventing. EFI govern the rules of Tent Pegging.

2. Rules & Regulations; As per Discipline

(a) Show Jumping

(i) Definition:- In show jumping Event ,an obstacle course comprising of 12 – 16 jumps (unfixed) are laid out in a serial order, to be Jumped by horse & rider in a stipulated time. Rider with least penalties is declared as the winner.

(ii) Penalties

Faults are penalized in Penalty points or by Elimination according to the below mentioned table:-

FAULT	PENALTY
(aa) First Disobedience	Four Penalties
(ab) Obstacle knocked down while jumping	Four Penalties
(ac) One or more feet in the water jump or an imprint made by the foot or shoe on the lath defining its limits on the landing side.	Four Penalties
(ad) Fall of Horse or Athlete or both in all Competitions.	Elimination
(ae) Second Disobedience or other infringement set forth under JRs Art. 241.	Elimination
(af) Exceeding the time limit	Elimination
(ag) Exceeding the time allowed in the first and second rounds and jump-offs not against the clock	One Penalty for every four seconds commenced
(ah) Exceeding the time allowed in a jump-off against the clock	One Penalty for each second or commenced fraction of a second

(b) Dressage

(i) Definition - Dressage is the development of the Horse into a Happy Athlete through harmonious education. As a result, it makes the Horse calm, supple, loose and flexible, but also confident, attentive and keen, thus achieving perfect understanding with the Rider.

(c) **Rules of Dressage**

(i) Bit – Only prescribed bits are permitted.(unprescribed bits lead to Elimination)
(ii) Whip – Not allowed while competing in main arena, however allowed in practice Arena. (2 Penalty Points)
(iii) False tail – Allowed
(iv) Ear Hood – Allowed
(v) Ear Plug – Allowed only in Prize giving ceremony but not during competition
(vi) Boots and bandages – Not Allowed (2 Penalty Points)
(vii) Lame Horse – Elimination (No Appeal is permitted)
(viii) Entry in to Arena – Must enter into arena with in 45 Sec of sound of Bell. If enters between 45 sec to 90 sec, 2 Penalty Points are deducted. If the rider enters the arena 90 sec after the sound of bell, he stands Eliminated.
(ix) Fall – Fall of Horse/Rider incurs Eliminated
(x) **Error of Course**

Every "error of course", whether the bell is sounded or not, must be penalized, except as noted above.

First error	_____	Deduction of Two (2) percentage points from the total score (per Judge).
Second error	_____	Elimination.

For Young Horses tests, Children, Pony Riders and Junior tests, the deduction for the **first error** is zero point five percentage points (0.5%) from the total score, for the **second error** one percentage point (1%) and for the third error, Elimination.

(xi) Resistance - Any resistance which prevents the continuation of the test longer than twenty (20) seconds is punished by Elimination.
(xii) Leaving Arena During Dressage Test - A Horse leaving the arena completely, with all four (4) feet, during a Dressage Competition between beginning and end of the test will be eliminated.
(xiii) Unauthorised Assistance - Any outside help by voice, signs, etc. (earphone and/or electronic communication devices included) is considered as illegal or unauthorised assistance to the rider or to his Horse. The rider or Horse receiving unauthorised assistance must be Eliminated.
(xiv) Not saluting the Judge – 02 Points deduction (If reins are not taken in one hand)

(d) **Dressage Marking**

(aa) All movements, and certain transitions from one to another, which have to be marked by the Judges, are numbered on the Judge's sheet.
(ab) They are marked from zero (0) to ten (10) by each Judge, zero (0) being the lowest and ten (10) the highest mark.
(ac) The scale of marks is as follows:-

10 → Excellent	7 → Fairly good	4 → Insufficient	1 → Very bad
9 → Very good	6 → Satisfactory	3 → Fairly bad	0 → Not executed
8 → Good	5 → Sufficient	2 → Bad	

All Half marks from 0.5-9.5 may also be used both for movements and the collective mark, at the discretion of the judge.

"Not executed" means that practically nothing of the required movement has been performed.

(e) Tent Pegging

(i) The Sport originated in India and is now one of the most popular Equestrian discipline in many parts of the world.

(ii) In a tent pegging competition, the combination of the horse and the rider is required to pick a peg with a lance on a marked track of 100 meters at a minimum speed of 800 meters per minute. It is also a test of the rider's horsemanship.

(iii) Scoring-

(aa) Pegs carried clear upto 10 Meters – 6 Points

(ab) If the peg is lifted out of the ground but falls within 10 Meters- 4 Points

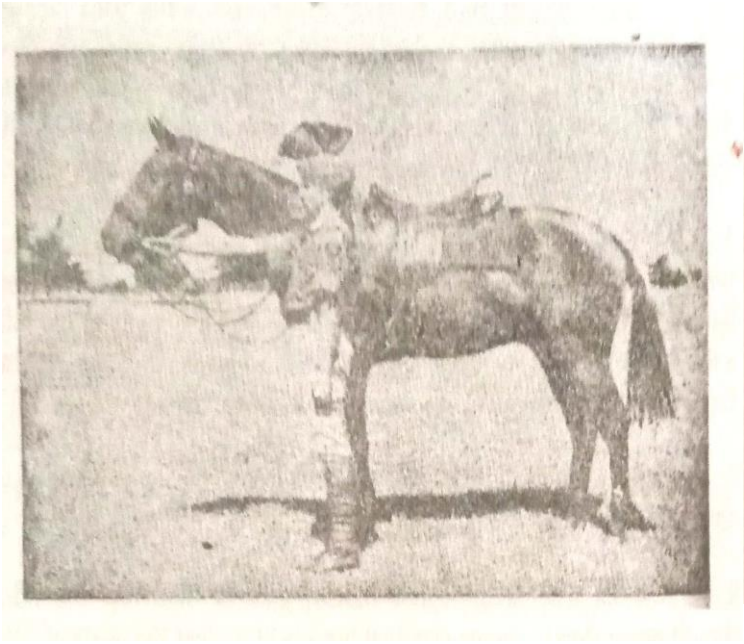
(ac) If the peg is struck by the point of the lance but not lifted off the ground - 2 Points

EQTN – 2 – LEADING / HANDLING OF DISMOUNTED HORSE
DISMOUNTED DRILL WITH THE HORSE

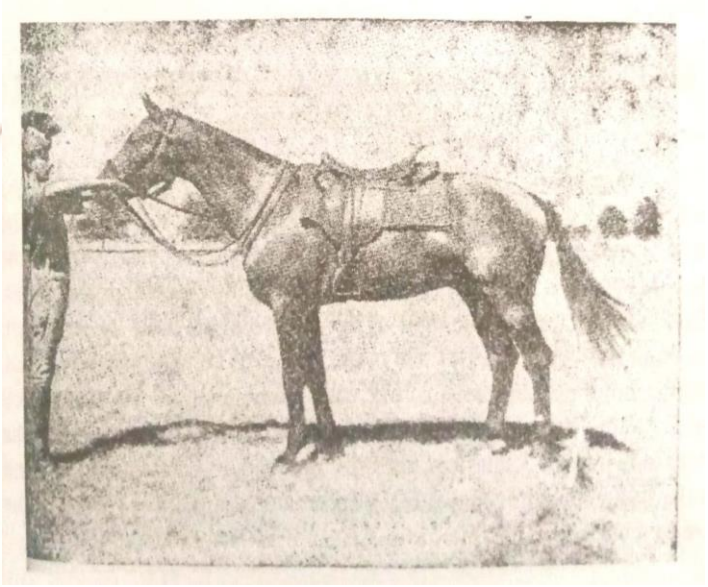
1. **Stand attention with your horse** – The rider stands at attention as for foot drill, on the near side of the horse, his toes in line with the horse's fore feet. The left cheek rein is held in the right hand near the ring, back of the hand to the right; hand as high as the shoulder, arm at full extent. 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''.

2. **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.

3. Picture of attention with horse;-



Attention



In Front of Your

4. **In Front of your Horses** - Rider takes a full pace forward with the right foot, turns to the right-about and take one rein in each hand near the ring, still holding the horse's head. Hands and elbows to be as high as the 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. **In front of your Horses** - the right foot to the horse's near side and turns left-about.

7. 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.

EQTN -3 – MOUNTED AND DISMOUNTED DRILL

MOUNTED DRILL ON HORSEBACK

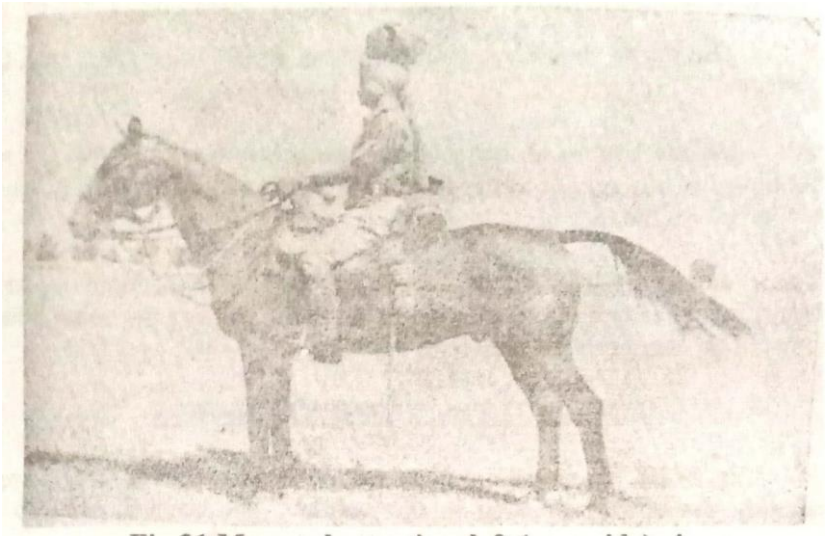
1. **Attention (reins in both hands)** - The seat should be in the center of the saddle. The positions of the head, neck and body are the same as when dismounted. The arms should hang easily from the shoulders, upper arm perpendicular and lightly touching the sides. Hands slightly below the level of 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 forces downwards and pressure of the stirrup iron on the sole of the boot.

2. The horse should be at attention as well as the rider that is "collected".

3. On the command of **"Sit at Ease**" The reins should be relaxed by dropping the left and on to 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 disengaging arm should hang easily from the shoulder, the hand holding the reins being opposite the center of the body

5. Picture –Mounted Attention



Mounted Attention, left (near side) view

Mounted attention, right (off side) view

EQTN – 4 – BASIC SEAT & POSTURE

1. **SEAT** - Seat is that position of a rider in the saddle, which permits the administration of the aids to guide and control the horse with grace and security. The term seat is also used to refer to the manner of distribution of the rider's weight on the buttocks and Ischia i.e. seat bones.

2. The term seat is also used to refer to the way a rider sits in the saddle A rider has a good seat when he moves in total harmony with the horse. Good seat controls balance of the rider in all circumstances, regardless of the horse's actions.

3. A good seat or a basic seat is the foundation of a good rider. The seat varies according to the type of riding that is being engaged in. It is elegant and practical for controlling the horse and for allowing the maximum use, with minimum effort, of the natural aids body, seat, legs and hands. It requires the rider to be straight, but not stiff, supple but not slack. Any stiffness or tension in the rider sets off a similar reaction in the horse, while a slack position makes it difficult for the rider to give clear, precise aids.

4. The seat comprises of –

(i) The position of the upper body
(ii) Pelvis
(iii) Upper leg and Knee
(iv) Lower leg and Foot Position
(v) Arms

Position of upper body

5. The upper body comprises of the head, shoulders and abdomen. Head is the largest and heaviest collection of bones in the human body. Changes in its position have a corresponding influence on the seat and movement of the horse. Head must be held upright as only this way the weight of the, body can fall correctly into the seat. A hanging head nullifies all aids for forward movement from the rider to the horse. Head should be carried level without tilting towards any one side and turned in the direction of the movement of the horse. The rider’s front line i.e. parts of the body head downwards which is the chest and abdomen should be as long as possible.

6. Shoulders should be level and parallel to shoulders of the horse. They should be open and relaxed and as arms originate from here, any tenseness at shoulder will be transmitted to arms and hands further to the horse's mouth

Pelvis

7. Pelvis is composed of the hipbones and the pin bones. Hipbones of rider must be parallel to the horse's hips. Pin bones must bear equal weight on either side.

8. Spine originates from pelvis and rider gets the feel' of the movement of the horse under him through this region. Therefore the more relaxed and soft this region, better is the 'feel' and more relaxed is the horse in turn. It is to be borne in mind that the rider is also bearing his weight directly on the spine of the horse.

Upper leg and knee

9. Upper leg or the thighbone should lie flat against and turned inwards from the hip joint it should be relaxed and pointing to the ground.

10. Knees should lie flat and in contact with the saddle. The knees should not grip the saddle as gripping with knees causes a reaction of rigidity in the horse's movement.

11. When viewed from the side, the hip, upper leg and knee should be in a smooth continous line. The legs should ‘hang’ down, in contact as 'wet towels’ i.e. not rigid but clinging softly.

Lower leg and foot position

12. The lower leg requires to be turned inward, in contact with, not clinging to the horse. The calf muscle, of which the lower leg comprises of, also is the part from which aids to the horse are given.

13. The foot position is influenced by the ankle, heel and toe. Ankle joint must be relaxed and the heel should form the lowest point of the rider. This will firm up the calf muscle thereby stabilizing the lower leg.

14. Toe rests in the stirrup Only the ball of the toe should rest in the stirrup. Perching the toes only in the stirrup will force the heel down, tensing the whole leg position Pressure on the iron should be on the inside of the sole of the boot. Toes should lie parallel to the horse's bodyline

Adjusting Length of stirrups while standing on ground

15. While standing, at the horse's left side, rider folds the fingers & puts the fingertips of right hand on the stirrup safety bar (Stirrup buckle) with left hand the stirrup leather including the iron is pulled to the armpit of the outstretched right arm, so that this measurement of leather is the length of arm, and the buckle is secured. This is the idea length for normal riding.

Adjusting Length of stirrups while mounted

16. Rider lets the stirrup hang free of foot. The sole of boot should be level with the stirrup base. For a beginner, the sole of the boot should be 2 to 3 inches below the stirrup base.

17. Long stirrups enable the maximum use of the legs for collecting the horse and applying the ads (great driving power), but this reduces real security in the saddle as the base of support being small, there is no thigh leverage in front of the rider. On the other hand the short stirrups give greater power or resistance but cramp the seat and the use of the leg. A happy medium is sought between the two, so that the rider has an adequate leverage in front of him and can still get his legs round his horse and use the lower legs.

18. On the whole, as suppleness from the loins is of very great importance, it is best to start the rider riding slightly shorter than he naturally would. But care must be taken to shorten the stirrups sufficiently to get him supple.

Arms

19. The arms must hang from relaxed, drawn back shoulders. The upper arms should lie lightly by the rider's sides. The lower arm and fist should be on a straight line from the bit to the elbow. Both the wrist and elbow should always be supple and relaxed. The wrist should be held in line.The back of the hand and the forearm should form a smooth continuous line Ideally both hands should be about 4 inches apart.

THE RIDER'S POSITION

1. In order to co-ordinate the natural aids properly, rider must maintain the correct position in the saddle. The 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 all directions.

(c) Upper body is comfortable, straight and free.

(d) Shoulders equally open and totally relaxed.

(e) Head is held high and straight.

(f) Eyes are attentive to the direction.

(g) Arms and elbow bent, dropped naturally by side of body.

(h) Wrists are held in line with forearms.

(j) Hands on the same line as 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 leather 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

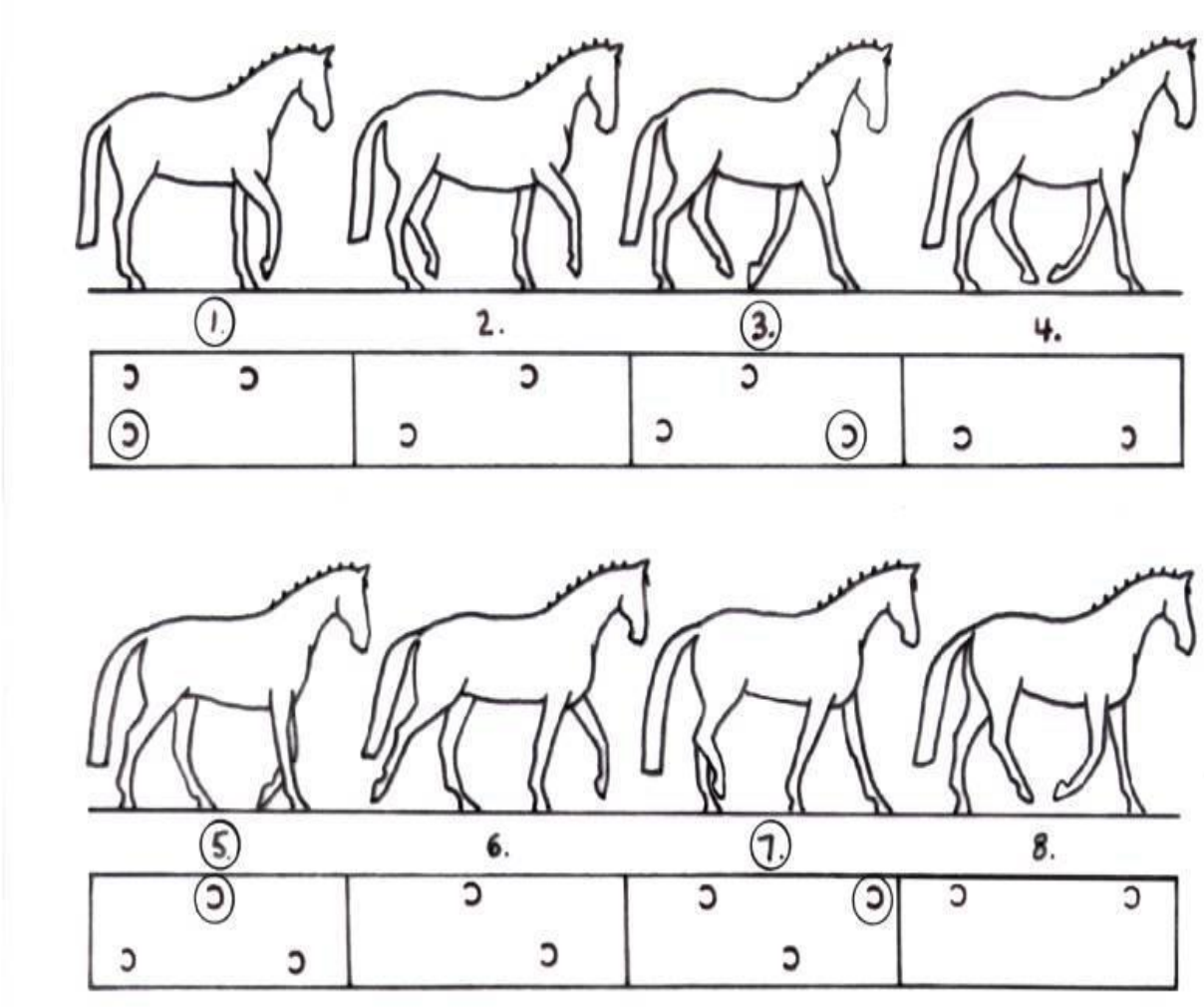
EQTN – 5 - WALK (INTRODUCTION TO WALK AND ITS AIDS)

Definition

1. The walk is a marching pace in a regular and well-marked **four (4) times beat** with equal intervals between each beat. This regularity combined with full relaxation must be maintained throughout all walk movements.

2. **Lateral Walk**: When the foreleg and the hind leg on the same side move almost on the same beat, the walk tends to become an almost lateral movement. This irregularity, which might become an ambling movement, is a serious deterioration of the pace.

3. **Types of Walk:** The following walks are recognised: Medium walk, Collected walk, Extended walk and Free walk. There should always be a clear difference in the attitude and overtracking in these variations.



4. **No of Beats in Walk:** The walk is a pace in four (4)-beat rhythm with eight (8) phases (numbers in circles indicate the beat).

5. **Action of Rider during Walk**

(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.

6. **Effects of the natural aids in walk**

(a) **Seat:** Move 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.

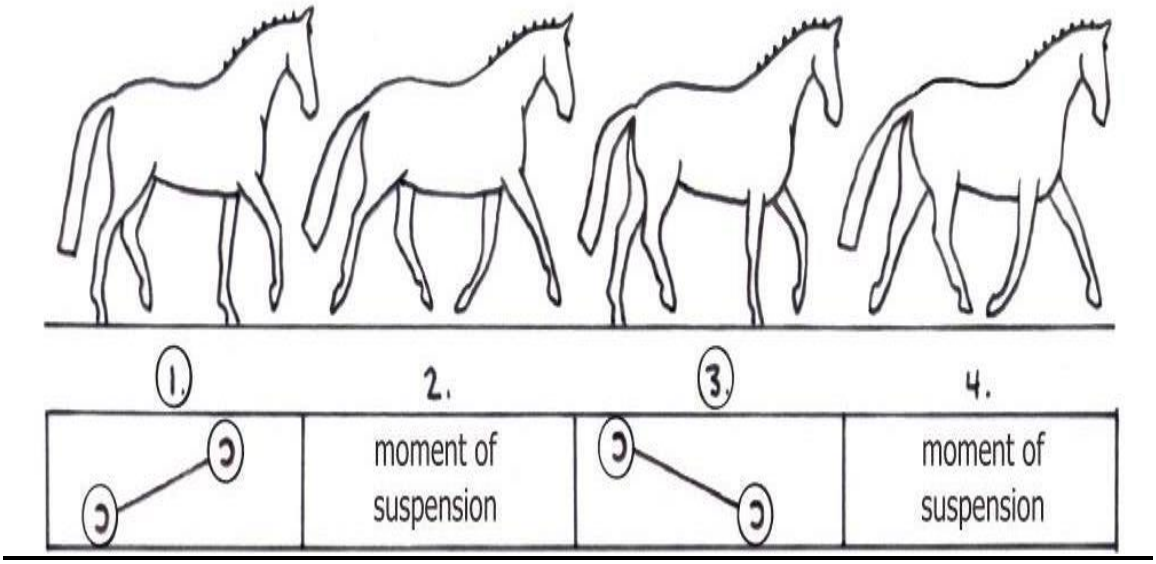
EQTN – 6 – TROT – (AIDS, SYNCHRONIZING OF RISING MOVEMENT AND TROTTING WITH/WITHOUT RISING

Definition

1. The trot is a two (2)-beat pace of alternate diagonal legs (left fore and right hind leg and vice versa) separated by a moment of suspension.

2. The trot should show free, active and regular steps.

3. The quality of the trot is judged by general impression, i.e. the regularity and elasticity of the steps, the cadence and impulsion in both collection and extension. This quality originates from a supple back and well-engaged hindquarters, and by the ability to maintain the same rhythm and natural balance with all variations of the trot.



The trot is a pace in two (2)-beat rhythm with four (4) phases
(Numbers in circles indicate the beat)

Types of Trot

The following trots are recognised: Working trot, lengthening of steps, collected trot, Medium trot and extended trot.

AIDS

1. (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

2. 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.

3. 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

4. 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.
(b) **Legs:** Athlete relaxes 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.

Influence of natural aids in trot

5. (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

6. 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, counterclockwise, 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.

7. Leg pressure increases when rider comes down into the saddle and decreases when rider rises.

8. 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 forward 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.

9. There are two options to the rider to correct himself if rising on the wrong diagonal: -

(a) To sit down one extra step

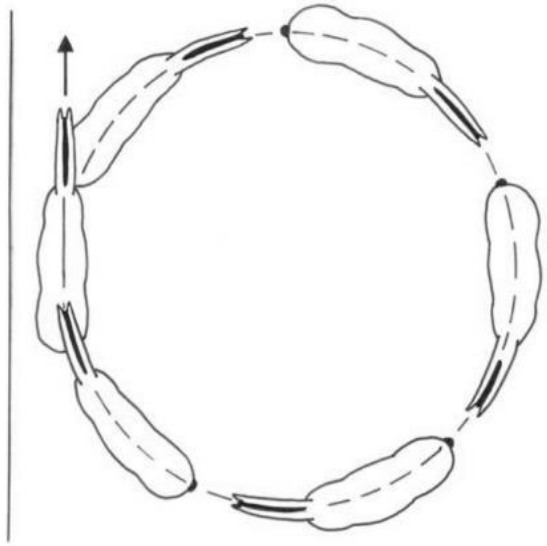
(b) Stay up out of the saddle one extra step. This is preferable when riding a young horse and for new riders.

(c) 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.

EQTN – 7 – BASIC SCHOOL MOVEMENTS; (CIRCLE, FIG OF EIGHT, SERPENTINES, CHANGE OF DIRECTIONS, HALT AND REIN BACK)

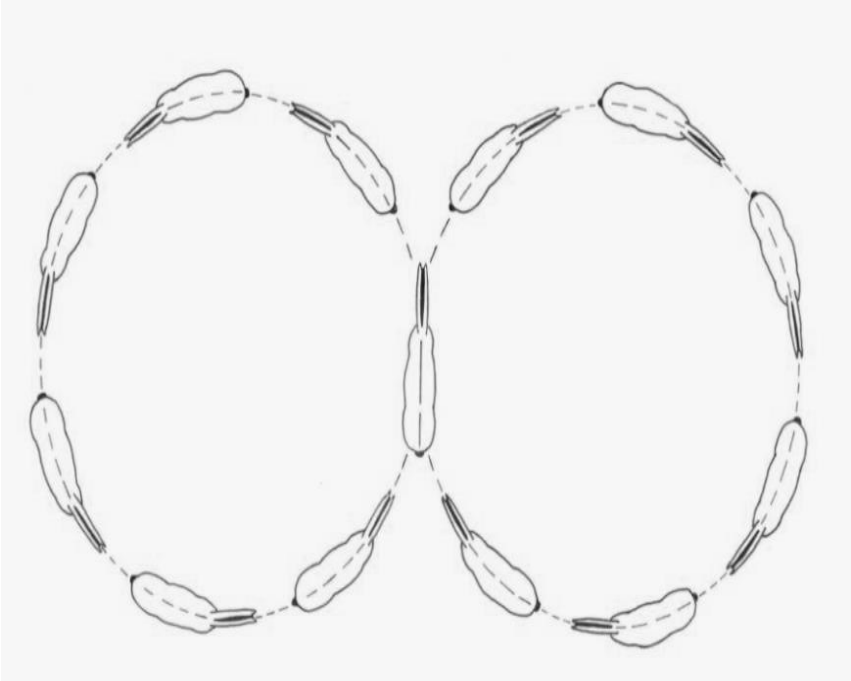
1. **Circle (Volte):-**

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.



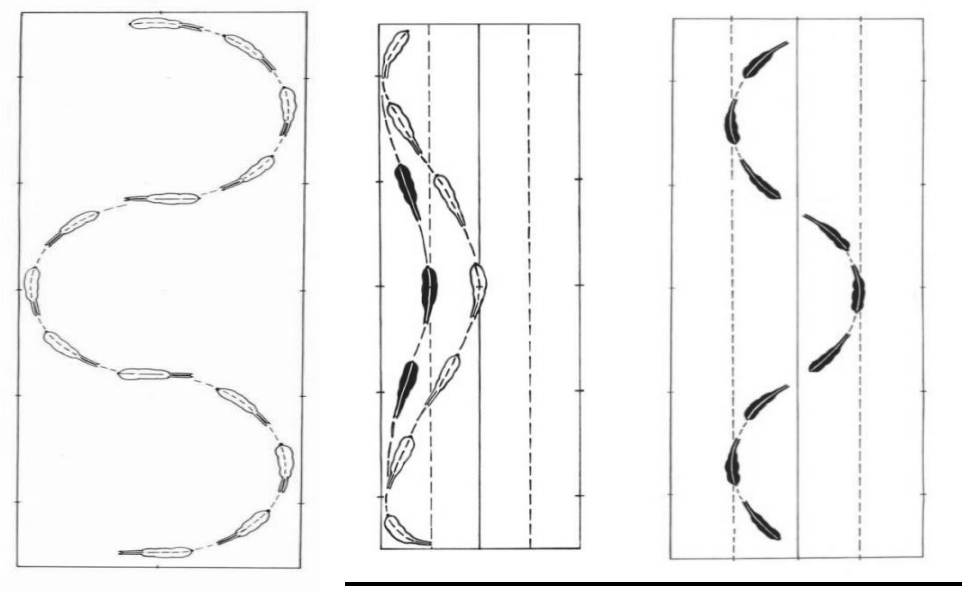
2. **Figure of eight :-**

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.



3. **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)

4. **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.

(h) Counter-changes of hand (in zig-zag)*. The Horse should be straight for a moment before changing direction.

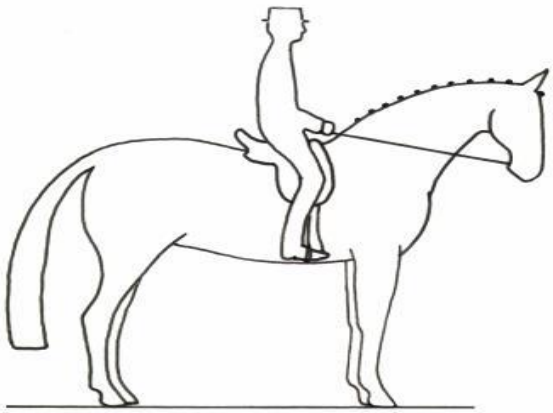
*Zig-zag: A movement containing more than two (2) half-passes with changes of direction.

5. **THE HALT**

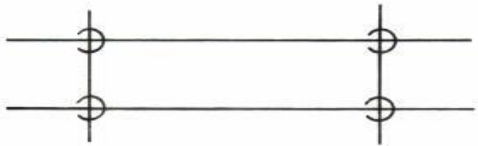
Definition

(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 (see transitions).



(c) The quality of the paces before and after the halt is an integral part of the assessment.



REINBACK

Definition

1. Reinback 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.

2. During the entire exercise, the Horse should remain “on the bit”, maintaining its desire to move forward.

3. 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.

EQTN – 8 – CANTER – (AIDS SYNCHRONISING WITH HORSE)

Definition :-

1. The canter is a **three (3)-beat pace** where, in canter to the right, for example, the footfall is as follows: left hind, left diagonal (simultaneously left fore and right hind), right fore, followed by a moment of suspension with all four (4) feet in the air before the next stride begins.

2. The canter, always with light, cadenced and regular strides, should be moved into without hesitation.

AIDS

1. 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.

Influences of the natural aids in canter

2. (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.

(d) 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.

3. **Types of Canter**

(a) Working canter

(b) Lengthening of strides

(c) Collected canter

(d) Medium canter

(e) Extended canter

(f) Counter–canter

(g) Simple change of leg at the canter

(h) Flying change of leg

EQTN – 9 – SCHOOLING AND INTRODUCTION TO BASIC DRESSAGE (REPETITION OF ABOVE, BENDING LESSONS, TURN ON HAUNCHES & TRANSITION OF PACES)

1. **BENDING LESSON**

INTRODUCTION

The bending lessons for the horse include Longitudinal bending (bend of horse’s body from poll to tail i.e. length bend) and lateral bending (sideward bending of spinal column).

Aim of bending lessons

The aim of bending lessons is to develop and increase the suppleness, engagement and collection of the horse.

Bending Lesson include the following:-

(a) **Longitudinal Bending**

(i) Riding 20 mtr, 15 mtr, and 10 mtr circles.
(ii) Spiralling from 20 mtr circle to 10 mtr circles and back to 20 mtrs circle.
(iii) Volte of 8 mtrs to 6 mtrs.
(IV) **Riding a corner**

(aa) **In Walk** riding of corner starts from 3 mtr before the turn & finish 3 mtr after the turn.
(ab) **In Trot** riding of corner starts from 4 mtr before the turn & finish 4 mtr after the turn.
(ac) **In Canter** riding of corner starts from 5 mtr before the turn & finish 5 mtr after the turn.

(V) **HOW TO RIDE A CORNER , AIDS**

(aa) **Legs** - Inner leg in the line of girth and outer leg 3 to 4 inches behind the girth to drive the horse in to the turn.
(ab) **Hands** – Inside rein guiding the direction & bend of the Neck and outside rein controlling the speed.
(ac) **Body Weight** – Equal weight on both seat bones.

(b) **Lateral Bending** - The lateral bending include the following movements, where in the horse moves sidewards :-

(i) Leg Yielding
(ii) Shoulder In & Shoulder out
(iii) Half Pass
(iv) Travers (Haunches In)
(v) Renvers (Haunches Out)
(vi) Full Pass (180 degree sideward movement)

2. **TURN ON HAUNCHES**

It is an exercise to prepare the Horse for collection. The “turn on the haunches” is executed out of Medium walk prepared by half halts to shorten the steps a little and to improve the ability to bend the joints of the hindquarters. The Horse does not halt before or after the turn. The “turn on the haunches” can be executed on a larger radius (approx. ½m) than the pirouette in walk, but the demands of the training scale concerning rhythm, contact, activity and straightness are the same.

3. **TRANSITIONS OF PACES**

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.

(a) **THE HALF-HALT**

Every movement or transition should be invisibly prepared by barely perceptible half halts. The half halt is an almost simultaneous, coordinated action of the seat, the legs and the hands of the Athlete, with the object of increasing the attention and balance of the Horse before the execution of the movements or transitions to lower and higher paces. By shifting slightly more weight onto the Horse’s hindquarters, the engagement of the hind legs and the balance on the haunches are improved for the benefit of the lightness of the forehand and the Horse’s balance as a whole.

(b) **UPWARD TRANSITIONS**

(i) Halt to walk

(ii) Walk to trot

(iii) Trot to canter

(iv) Halt to trot

(v) Walk to canter

(vi) Halt to canter

(c) **DOWNWARD TRANSITIONS**

(i) Walk to halt

(ii) Trot to walk

(iii) Canter to trot

(iv) Canter to walk

(v) Trot to halt

(vi) Canter to halt

(d) **UPWARD TRANSITIONS**

(i) 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.

(ii) **Seat** : Stay relaxed and ready to follow the motion of the new gait.

(iii) **Legs** : Act together at the girth until the desired result is obtained.

(iv) **Hands** : Yield immediately when the desired action take place.

(e) **DOWNWARD TRANSITIONS**

(i) From a walk to a halt, a trot to a walk, and a treat to halt, the aids are identical except for the amount of leg pressure applied and the authority of the hands.

(ii) **Seat:** Weight is distributed equally on the two seat bones rider leans back slightly.

(iii) **Legs:** Resist together at the girth to maintain engagement.

(iv) **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.

(v) 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.

(f) **DOWNWARD TRANSITIONS FROM THE CANTER**

(i) 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.

(ii) The instructions below are for downward transitions from the left lead canter. They should be reversed for the right lead:-

- **Seat**: Rider sits deeper in the saddle, leaning back slightly
- **Legs**: Resist together at the girth to maintain engagement
- **Hands**: Act together, the left firmer than the right, to restrain the leading left lateral pair of legs.

(iii) 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.

EQTN – 10 - INTRODUCTION TO SHOW JUMPS

SHOW JUMPING

DEFINITION

1. A Show jumping event 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.
2. The obstacles must be inviting in their overall shape and varied appearance. Both the obstacles themselves and their constituency 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 pole 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.

3. 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 120m.

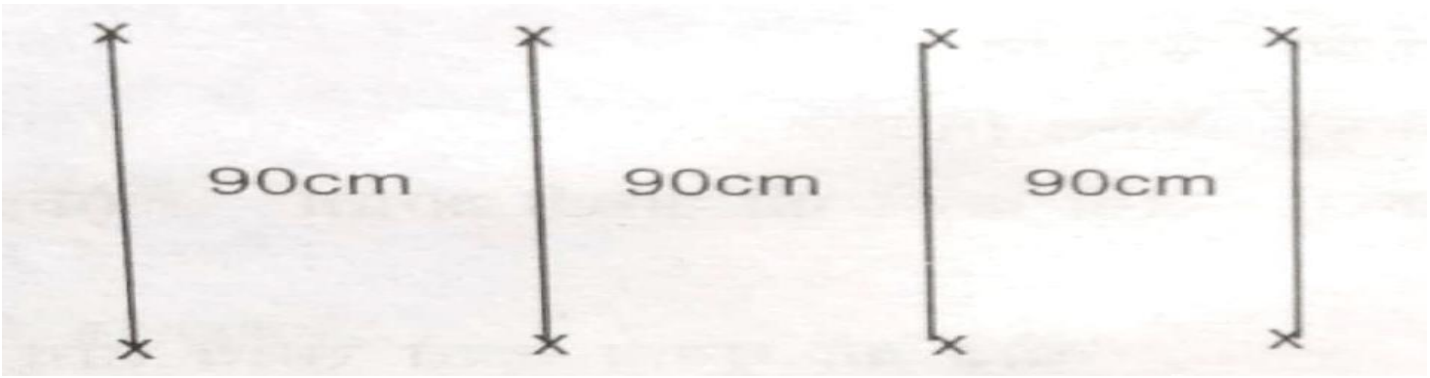
VARIOUS TYPES OF JUMPS/ OBSTACLES IN SHOW JUMPING ARE: -

4. (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.

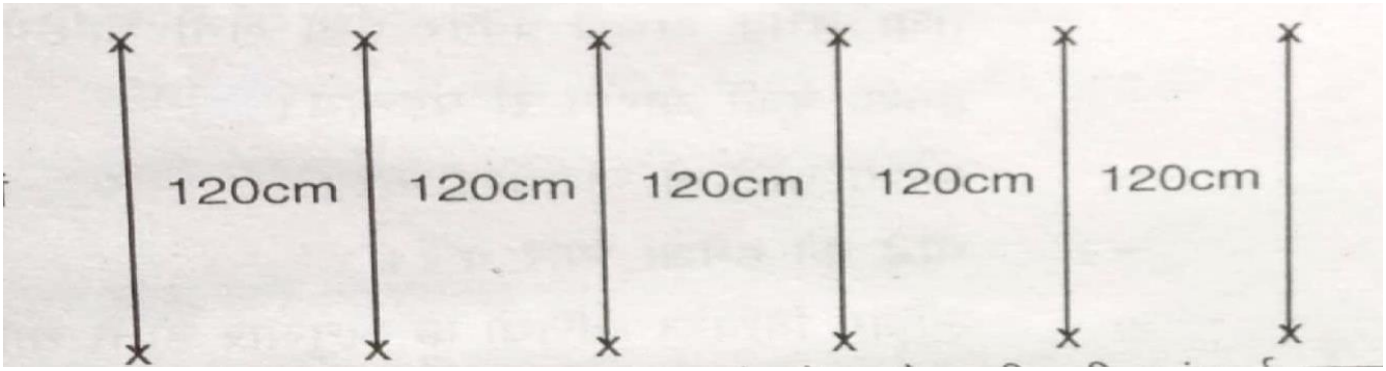
(b) **Spread obstacle**: - A spread obstacle is an obstacle, which is built in such a manner that it requires an effort both in spread and in height. Approved safety cups must be used for the back poles of spread obstacles. Elements of the jump are in 2 vertical planes with a spread between them. Spread 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 then 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 meters minimum and 12 metres 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.

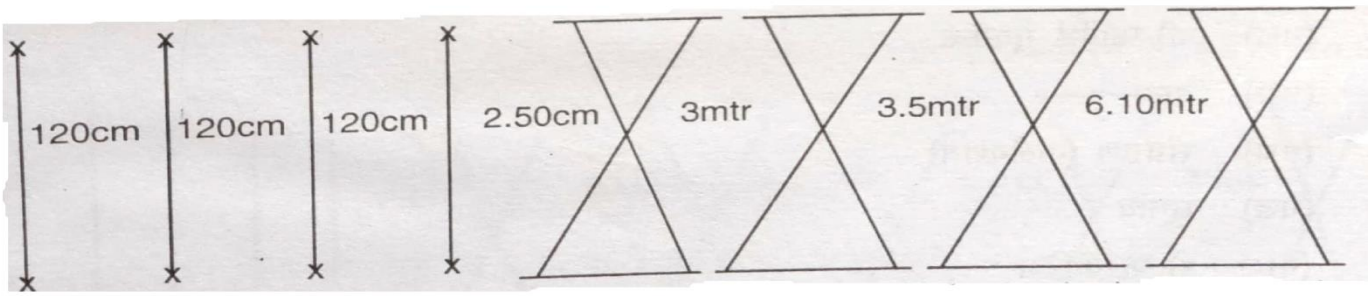
Recommended Distance for Training of Show Jumpers



WALKING POLES



TROT POLES



GYMNASTIC GRID

IMPORTANT PHASES OF SHOW JUMPING

(a) Correct Approach
(b) Slipping Point
(c) Take off zone
(d) Over the Jump
(e) Landing zone

The rider should train the horse on grid & then negotiate the individual obstacles followed by a small course of 5 to 6 fences.

21 - OBJECTIVE OF SHOEING – S 1

Code - S 1
Period - One
Type - Lecture and demo

Training Aids

Black board, chalk, horse and various types of shoes.

Time Plan

(a) Introduction-05 mins
(b) Shoeing of horse -30mins
(c) Conclusion -05 mins

INTRODUCTION

Knowledge of shoeing of Horses is very important aspect of animal management and helps student understand the technicalities of shoeing and its importance in ensuring functional efficiency of the horse. .

AIM

To aquaint the cadets about shoeing of Horses.

PREVIEW

The lecture will be conducted in the following parts:-
(a) Part I - Shoeing and its methodology -theory
(b) Part II - Demonstartion of Shoeing –demo

OBJECTIVE OF SHOEING

The Aim Of Horse Shoeing

1. 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 horse shoes can give the horse a secure grip, due to the groove called a fular. which runs around the surface of the shoe, grip can also be aided when the use of studs are correctly used. Horses with hoof ailments and poor conformation can be assisted with the use of specific horse shoes which are specially designed to help with that ailment. This is the process in which horse shoes are applied to the bottom of the horses hoof by a qualified farrier, the farrier will either hot or cold shoe depending on their preference and the shoe will be held in place by using nails or in some cases glue. In order for the farrier to apply the shoe the horses hooves must first be prepared, this involves trimming and balancing the insensitive structure of hoof and from there the horse shoe can be tailored to fit the prepared hoof. The type of shoe chosen will be shaped to the needs of your horses foot.

2. 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.

3. The following be always attended to:-
   (a) When the horse is groomed, the feet should be carefully cleaned.
   (b) The foot should be examined for incidence of injury from nails penetrating the frog or

sole or stone lodged between the branch of the shoe and frog.
(c) Examine the shoe for evidence of wear and position on the foot security of nail and smoothness of the clenches.
(d) When the horny frog becomes dry and hard the moisture can be supplied externally by packing the front feet with white rock or clay.
(e) Hoof ointment may be applied to the horny sole and wall, to prevent evaporation of moisture.

4. Faulty shoeing is often the cause of preventable foot injuries and ailments. Personal supervision of the horse properly shod is necessary and the farrier must carry out a daily inspection of all horses' feet.

5. 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 obtain 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

Knowledge of shoeing of Horses is very important aspect of animal management and helps student understand the technicalities of shoeing and its importance in ensuring functional efficiency of the horse.

22 - FARRIER TOOLS & THEIR USES – S 2

Code - S 2
Period – One
Type - Lecture and demo

Training Aids
Black board ,chalk, farrier tools and horse.

Time Plan
(a) Introduction-05 mins
(b) Demonstration odf use of farrier tools -30mins
(c) Conclusion -05 mins

INTRODUCTION
Knoledge of use of farrier tools is very important aspect of animal management and helps student understand the technicalities of shoeing and its importance in ensuring functional efficiency of the horse. .

AIM
To aquaint the cadets about use of farrier tools in shoeing of Horses.

PREVIEW
The lecture will be conducted in the following parts:-
(a) Part I - farrier tools in shoeing of Horses -theory
(b) Part II - Demonstartion of Shoeing and farrier tools -demo

FARRIER TOOLS & THEIR USES

TRIMMING THE HOOF gone wrong

Hoof Pick – Yes, it counts. Farriers need these to clean out the horse‘s feet before they can get to work with all the other fancy tools.
Shoe puller – These tools look like giant pliers, and pretty much do what the name suggests—the shoe puller will let the farrier get the shoe off of the hoof without damaging the foot.
Nailpuller – With little jaws on the end of it, this tool can 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 or one that‘s gone wonky during the shoeing.
Hoof testers – A hoof tester 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.

Nippers – Like a giant pair of nail clippers, nippers are used to trim around the hoof wall until the foot is the right length.

Knife – The knife pares away excess sole, and gets rid of loose, dead frog so that healthy tissue can breathe. There are lots of different kinds of knives—loop knives, curved blade knives, double-edged knives, etc.—and every farrier has their own preference.

Rasp – Think of it like a nail file. A huge one. 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 so the foot won't catch on anything. 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.

SHAPING THE SHOES

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.

Anvil – The anvil is where the action is. 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.

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.

Straight pein or cross pein 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 pein. If it faces the other way, it's called a cross pein.

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.

Note on Hammers – There are actually loads of different kinds of hammers, each with their own specific purpose. Like any good craftspeople, farriers will use the kind of hammer that suits them best.

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.

PUTTING SHOES ON

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.

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.

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.

Clinchers – Once the shoe is nailed on, these plier-like tools bend the nail down over the hoof wall a bit to help keep the shoe in place.

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.

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.

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

Knowledge of use of farrier tools is very important aspect of animal management and helps student Understand the technicalities of shoeing and its importance in ensuring functional efficiency of the horse.

23 - PREPARATION OF FOOT & FAULTS IN PREPARATION – S 3

Code - S 3
Period - One

Type - Lecture and demo

Training Aids
Black board, chalk, farrier tools and horse.

Time Plan
(a) Introduction-05 mins
(b) Preparation Of Foot & Faults In Preparation-30mins
(c) Conclusion -05 mins

INTRODUCTION

Knowledge of Preparation Of Foot & Faults In Preparation is very important aspect of animal management and helps student understand the technicalities of shoeing and its importance in ensuring functional efficiency of the horse. .

AIM

To aquaint the cadets about Preparation Of Foot & Faults In Preparation in shoeing of Horses.

PREVIEW

The lecture will be conducted in the following parts:-
(a) Part I - Preparation Of Foot & Faults In Preparation -theory
(b) Part II - Demonstartion of Preparation Of Foot & Faults In Preparation -demo

PREPARATION OF FOOT & FAULTS IN PREPARATION

The following points are noted after a horse is shod: -

(a) When the foot is on the ground: -
- (i) Clenches are even, flat and broad and not too high or low and have not been driven into old nail holes.
- (ii) No rasping of the wall.
- (iii) No dumping of the wall.
- (iv) Clips are low and broad.
- (v) The shoe fits the foot.

(b) When the foot is lifted off the ground: -
- (i) Nails are driven home.
- (ii) No unnecessary paring of sole or frog.
- (iii) The heels are level in height and not opened out.
- (iv) No day light should pass between foot and shoe or uneven bearing.

(v) The shoe is properly finished off.
(vi) The shoe fits the foot; particularly, heels of the shoes are not too short.
(vii) The shoe does not interfere with the functions of the frog.Signs of lameness, which may be detected by trotting up the horse.

Like any discipline or profession, one must have the training, understanding and experience to be effective. A horse cannot tell you what hurts. He can communicate only through his way of going or behavior. If the horse is "off" it is most important to be able to identify the problem before corrective measures can be taken. This may be a trial-and-error pro cess.

Problems

I. Wall failure
II. Cracked hoof or Quarter crack
III. Laminitis
IV. Wall separation
V. Navicular Coffin bone rotation
VI. Ringbone and Sidebone
VII. Tendon, ligament and soft-tissue damage
VIII. Corns
IX. Inflammation Arthritis
X. Thrush
XI. Bursa problems
XII. Joint problems
XIII. Arthritis Stifle Hocks
XIV. Abscess and Tender Frogs
XV. Under Run heels and Contracted heels
XVI. Improper shoeing ,improper care by the owner
XVII. Incorrect Angles
XVIII. Unbalanced foot and Imbalance limbs
XIX. Congenital defects (Club feet,Developmental ortho disease)
XX. Excessive of length
XXI. Too Short toe
XXII. Improper Trimmimng
XXIII. Shock and concussion of the foot
XXIV. Punctured foot (by nail /sharp object injuries)
XXV. Bruising

DEFECTS OF UNSHOD FEET

(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 exercised 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

Knowledge of Preparation of foot & faults In Preparation is very important aspect of animal management and helps student understand the technicalities of shoeing and its importance in ensuring functional efficiency of the horse.

24 - SHOES & TYPES OF SHOES – S 4

Code - S 4

Period – Two
Type - Lecture and demo

Training Aids
Black board ,chalk and Horse hoes of different types.

Time Plan
(a) Introduction-05 mins
(b) Horse Shoes and its types -30mins
(c) Conclusion -05 mins

INTRODUCTION

Knowledge of Horse Shoes 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 .

AIM

To aquaint the cadets about Horse Shoes and its types.

PREVIEW
The lecture will be conducted in the following parts:-
(a) Part I - Horse Shoes and its types -theory
(b) Part II - Horse Shoes and its types -practical

SHOES & TYPES OF SHOES

Standard Horseshoe
The basic horseshoe consists of a solid section of aluminum 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. Your 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.

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 certain gait and movement problems. The design of corrective shoes remedies flaws and corrects the hoof. Some horses need corrective shoes for life while others only require corrective shoeing for a limited period.

Performance Shoes

Modifications to the basic horseshoe can provide better traction. Horses regularly used in speed events, such as barrel racing and pole bending, or ridden through rugged terrain, are outfitted with shoes that provide additional grip. Your farrier may also modify corrective shoes to provide additional traction, if your horse has hoof health issues that require treatment as well as a need for extra traction.

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.

Specialist Horse Shoe
There are many variations to the traditional horse shoe 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. Often used for horses with Laminitis.

Egg Bar Shoe
Shaped like an egg this shoe increases the ground bearing surface of the heel often used for horses with Navicular disease.

Bar Shoe
The continuous circle of this shoe increases the ground bearing surface of the heel.

Rolled Toe Quarter Clips
Assists in the horses break over action and reduces pressure on the toe

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.

Racing Plates
These are lighter than traditional shoes and are often made of aluminium.

Polo Shoes
These have often been tailored to help reduces the shoe from causing speedy cuts.
Regular Shoe
The regular ol‘ 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 nailheads to sit so they are more secure.

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.

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.

Fullered Front Horseshoe

Fullered front horseshoes are the most common shoes, used on colts, trail horses and recreational horses. The center crease, made by a process called "fullering," fills with dirt, providing more traction and grip.

"It's a lot of work to learn to make this horseshoe properly, and to tell you the truth, a custom shoe is not much better than a plain creased horseshoe you can buy from the store," Roth says. "It might seem like plenty of extra work for not much additional benefit, but once a young horseshoer learns this one, the rest are not quite so difficult. If he doesn't, then the others are just about impossible."

CONCLUSION

Knowledge of Horse Shoes 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.

25 - FITTING OF SHOES – S 5

Code - S 5
Period - Two
Type - Lecture

Training Aids
Black board ,chalk and various types of Shoes.

Time Plan
(a) Introduction-05 mins
(b) Fitting of Shoes -70mins
(c) Conclusion -05 mins

INTRODUCTION

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 keep thehorses fit for duty as well as treat foot ailments.

AIM

To aquaint the cadets about various types of shoes and the methods of fitting them on the Horses.

PREVIEW
The lecture will be conducted in the following parts:-
(a) Part I - various types of shoes and the methods of fitting -theory
(b) Part II - various types of shoes and the methods of fitting -practical

FITTING OF SHOES

Two systems of shoeing are 'HOT SHOEING' and 'COLD SHOEING'

(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.

CARE BETWEEN SHOEING PERIODS

5. 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.

6. The following be always attended to:-
(a) When the horse is groomed, the feet should be carefully cleaned.
(b) The foot should be examined for incidence of injury from nails penetrating the frog or sole or stone lodged between the branch of the shoe and frog.
(c) Examine the shoe for evidence of wear and position on the foot security of nail and smoothness of the clenches.
(d) When the horny frog becomes dry and hard the moisture can be supplied externally by packing the front feet with white rock or clay.
(e) Hoof ointment may be applied to the horny sole and wall, to prevent evaporation of moisture.

HORSE SHOEING PROCEDURE

The horse has a shoe already on, then it must first be removed.
 This is done by using Pincers to lever the horse shoe off from the heel to the toe.
 The hoof wall is then trimmed down to the correct length using nippers, this is important because if the hoof becomes too long then undue stress will be placed on the heels and lower leg.
 The sole of the foot and the frog are trimmed back using a Paring Knife or Hoof Knife.
 The foot is re-assessed for balance and trimmed using a Rasp.
 The farrier will then either hot or cold shoe.

HOT SHOEING

 If the 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.

 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 lye 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.

 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.

 The remaining nail edge is bent over using a Clincher so that it lye'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.

 The hoof is then rasped and smoothed over.

 The hoof will now have been trimmed and re balanced and will have no nail protrusions and a smooth surface.

CONCLUSION

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 keep the horses fit for duty as well as treat foot ailments.

26 - INJURIES DUE TO FAULTY SHOEING – S 6

Code - S 6
Period - Three
Type **-** Lecture and demo

Training Aids
Black board and chalk.

Time Plan
(a) Introduction-05 mins
(b) Stable vices -70mins
(c) Conclusion -05 mins

INTRODUCTION

Knowledge of injuries due to faulty shoeing leads to over come many different hoof problems that can occur in horses .Thus the practical knowledge helps student understand the methods to handle the injuries well to keep horses safe from injury .

AIM

To aquaint the cadets about various injuries due to faulty shoeing of Horses..

PREVIEW
The lecture will be conducted in the following parts:-
(a) Part I - Injuries due to faulty shoeing -theory
(b) Part II - Remedy to control injuries due to faulty shoeing -practical

INJURIES DUE TO FAULTY SHOEING
There are many different hoof problems that can occur in horses. To reduce hoof problems, follow these recommendations:
1. Regular trimming or shoeing
2. Maintain good hoof balance
3. Maintain the correct hoof pastern angle, break over, and medial-lateral balance
4. Give heel support if needed
5. Use appropriate shoeing for different weather and footing conditions
6. Use appropriate treatment if disease process occurs.

Poor shoeing or trimming. Long toes can results in strain on flexor tendons, the navicular bone, and collapsed heels. If the horse is "too upright" it can cause trauma to the coffin bone. An imbalanced hoof can cause stress on the collateral ligaments and joints.

Hoof cracks. Horizontal cracks or blowouts are usually caused by an injury to the coronary band or a blow to the hoof wall. Horizontal cracks or blowouts do not usually case lameness.

Grass cracks are usually seen in long, unshod horses, and can be corrected with trimming and shoeing.

Sand cracks results from injury to the coronary band or white line disease that breaks out at the coronary band. Sand cracks can be a cause of lameness. Treatment for sand cracks includes determining the cause and removing it, floating, and/or fixation or patching. It usually takes nine to twelve months for the hoof to grow out.

Thrush.
Thrush is a foul-smelling black exudate usually found around the frog that is associated with wet, soiled conditions. Thrush can invade sensitive tissue and cause lameness. Keeping stalls or barn clean and dry can help eliminate thrush.Solar abscess. Solar Abscess is an infection in the sole of the hoof that can lead to acute or severe lameness. Solar Abscess can be caused by trauma, bruising, or a foreign body. Treatments include removal of the foreign body (if possible), soaking the hoof in warm water and Epsom salt, and keeping the hoof bandaged, clean and dry.

Hot nail or street nail.
A hot nail is a horseshoe nail that is driven into the sensitive structures of the hoof wall. Hot nails will usually cause lameness. Treatments include flushing nail hole with antiseptic, packing the hole or bandaging the foot, and Tetanus booster. A street nail is any foreign object that enters the foot. This is an emergency, and your veterinarian should be called immediately. Treatment depends on what hoof structure is affected.

Laminitis.
Laminitis is inflammation of the sensitive lamina. Founder is rotation (coffin bone rotates downward inside hoof capsule) and/or sinking (coffin bone sinks downward) of the coffin bone. There are several causes of laminitis. Treatments include regular shoeing or trimming, maintaining short toes, using heel wedges, and frog and sole support.

Navicular Disease process involving the navicular bone, bursa, ligamentous, or soft tissue structures. Horses will usually land their toe first due to pain in the heels. Causes of navicular include hereditary predisposition (Quarter Horses and Thoroughbreds), faulty conformation, hoof imbalance, and exercise on hard surfaces. Treatments include shoeing, maintaining a short toe, elevating the heels and good break over, and pads.

Finally, in the winter, special care should be taken if your horse lives outside or is turned out. If your horse is normally barefoot, leave the shoes off in the winter (horses usually slip less when barefoot). Horses that are prone to sole bruising may need shoes. If your horse is shod through the winter, have snow pads placed under the shoes and small cogs or nails placed at the heels. Winter weather can dry out the hoof wall, so a hoof moisturizer may be needed.

Lameness After Shoeing

Horse shoeing is not a painful process and if your horse is lame directly after shoeing then there is a problem and your farrier should be contacted immediately to relieve the problem, for example if a nail is driven in too close to the sensitive structure it can cause a nail prick or nail bind to occur and once the nail is removed soundness usually returns very quickly.

CONCLUSION

Knowledge of injuries due to faulty shoeing leads to overcome many different hoof problems that can occur in horses .Thus the practical knowledge helps student understand the methods to handle the injuries well to keep horses safe from injury

27 - DISEASES OF THE FOOT– S 7

Code - S 7

Period - Nine

Type - Lecture

Training Aids
Black board and chalk.

Time Plan
(a) Introduction-30 mins
(b) Disease of the foot - 140mins
(c) Conclusion -30 mins

INTRODUCTION

Knowledge of Disease of the foot of Horses helps student understand the methods to handle various ailments of foot,their treatment and keep the horses in exercise fit condition. .

AIM

To aquaint the cadets about various Disease of the foot of Horses.

PREVIEW

The lecture will be conducted in the following parts:-
(a) Part I - Disease of the foot of Horses –theory
(b) Part II - Disease of the foot of Horses -practical

DISEASES OF THE FOOT

Like any discipline or profession, one must have the training, understanding and experience to be effective. A horse cannot tell you what hurts. He can communicate only through his way of going or 120 behavior. If the horse is "off" it is most important to be able to identify the problem before corrective measures can be taken. This may be a trial-and-error process.

Problems
Corns I
Inflammation Arthritis
Thrush
Bursa problems Arthritis Hock &Styfle
Joints Abscess and tender frogs Under run heels /Contracted Heels Congenital Defects (Club feet, bone deformities).
Shock and concussion to the foot .
Penetration injuries (nails, foreign objects, etc).
Bruising.

Navicular disease is a degenerative disease of the navicular bone, the deep flexor tendon that exists behind it, and the bursa (a sac between the bone and tendon). Although there is no cure for navicular disease--once the bones are damaged, they remain damaged--there is management. diagnosis can be done with the horse's past and recent history, a thorough physical exam of the whole body, and a detailed

exam of the musculoskeletal system including limbs, joints, and, using hoof testers, the feet, lameness and abnormal gaits or movement in the limbs as the horse is walked and trotted in hand, lunged, and, if necessary, ridden by the owner or trainer under tack.

.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. Foot bruising often is seen on horses subjected to very hard or rocky ground. Diagnosis relies on history, physical exam, and hoof testers to isolate the specific region of hoof pain. Sometimes nerve blocks are used to confirm the troubled area and radiographs to rule out other causes. Occasionally, areas of hemorrhage are visible.

Bruising,
especially deep bruising, can take weeks to heal.The most recommended treatment is rest. Horses with mild bruising can get by with reduced workouts, particularly on offensive surfaces, while more severe cases might require stall confinement.Additionally, Wildenstein recommends reducing trauma and concussion through shoes and pads.

Hoof cracks-
Have any number of causesd by an injury, whether the horse hits itself or is hit against something else may be he jumps repetitively, or has an imbalance or a limb deviation that puts unequal stress on the hooves. Maybe the hoof has been improperly trimmed or shod, creating an imbalance. Cracks also come from hoof abscesses and weakness in the laminae.Hoof cracks usually don't occur in normal hooves. They happen because there is an imbalance of the horse's foot or excessive length.Diagnosis is made through visual observation. Treatment means addressing the underlying cause--interference, injury, incorrect shoeing. This helps in repairing cracks and avoiding new ones.The most important thing is balancing the horse's foot.The cracks themselves can be treated in a variety of ways. Most often, if we correct the underlying cause, the cracks will grow out. We can stabilize minor cracks with clips on the shoe on either side of the cracks. In more serious cases, debride the cracks and rebuild the hoof wall with a hoof repair system such as Equilox.

Laminitis is one of the simplest and most obvious diseases to diagnose.Usually diagnosis is made by physical examination and demonstration of pain, particularly in the toe region. Signs are sore footed, with reluctance to walk or to pick up one foot and stand on the other one. Horses are often sore to hoof testers over the toe.Radiographs are useful for evaluating the alignment of the coffin bone and hoof capsule, and for looking at "sinking" or rotation of that bone. Generally, nerve blocking isn't necessary. Laminitis occurs in three distinct phases. In the development phase, the horse shows no symptoms, but vascular changes are occurring in the horse's hoof. The horses are starting to get pooling of the blood, some vaso-constriction, and some vaso-shunting, where the blood is diverted away from capillary beds in the laminae and being shunted back up to arteries to the main portion of the body. They (horses) are not painful, can turn well, and usually have increased digital pulses, but not always. The only thing we find is the feet are cold--no heat in the feet, whatsoever. This stage usually last 12-24 hours." Next, horses go into the acute phase.This is when the horses start to become very painful."The horse will point its feet out in front of them, very difficult to turn, increased digital pulses, and usually a lot of heat in the feet.It's very important that owners recognize when their horses are in acute laminitis, because laminitis is a life-threatening disease. As soon as suspectd horse may have laminitis call veterinarian immediately.The acute stage can last up to 72 hours, before the horse either improves or goes into chronic laminitis, the final stage. Chronic laminitis is signaled by any permanent change seen in the foot, such as rotation or sinking of the coffin bone. Once this occurs, the laminae are damaged and will never regenerate normal laminae again. Horses will be more likely to develop an abscess, subsequent bouts of laminitis, and will become higher maintenance and higher risk, although horses with minor rotation may become competitive again, depending upon severity of damage." After the

acute stage passes into the chronic stage, apply a glue-on shoe to provide sole or frog support.
Treatment should not require nailing shoes on foundered horses' feet,as the hoof wall is already compromised, and driving nails in traumatizes the horse's foot, tends to pry the hoof walls apart, and makes the hoof even more damaged and weakened.

SEEDY-TOE.

Definition.—A defect in the horn of the wall, usually at the toe, but occurring elsewhere, resulting in loss of its substance in either its internal or external layers
Causes.—The most common factor in the causation of this defect is undoubtedly disease of the sensitive laminæ. We have, in fact, just given an excellent example of the formation of a seedy-toe in the sections of this chapter devoted to laminitis The cavity here formed by the outpouring of the inflammatory exudate and the separation of the sensitive and horny laminæ persists. It becomes filled with the dried remains of the exudate and perverted secretions from the 124 horny and sensitive laminæ As yet, however, the cavity is closed below, and its existence only surmised. Later, with successive visits to the forge, the layer of solar horn forming its floor is cut away, and the cavity exposed to view. Its mealy-looking contents are removed, and the case reported by the smith. Although occurring in this way with an acute attack of laminitis, it must be remembered that seedy-toe may arise without previous noticeable cause. The first intimation the owner has is a report from the forge that seedy-toe is in existence. To refer to cases so arising a probable cause is far from easy. At one time it was believed to be due to parasitic infection of the horn. Others have blamed the pressure of the toe-clip, excessive hammering of the wall, or pressure from nails too large or driven too close. Others, again, say that seedy-toe may result from a prick in the forge, from hot-fitting of the shoe, from standing on a dry and sandy soil, or from the use of high calkins on the front shoes.
Treatment.—As with diseased structures elsewhere, the most rational treatment, when possible, is that of excision. The entire portion of the wall forming the anterior boundary of the cavity is thinned down with the rasp and afterwards removed with the knife, wholly exposing the hypertrophied, but usually soft layer of horn covering the sensitive structures. These hypertrophied portions are also removed, and every particle of the dust-like detritus cleaned away. After-treatment consists in dressing the parts with a good hoof ointment, protecting them, if necessary, with a pad of tow and a stout bandage. It may be that the removal of a large portion of the wall may for some time throw the animal out of work. Acting on Colonel Fred Smith's suggestion, this may be avoided by having made a thin plate of sheet-iron, slightly larger in circumference than the portion of horn removed, and shaped to follow the contour of the foot. This made, it is sunk flush with the wall by hot-fitting it, and kept in position by several small steel screws fixed into the sound horn, just as in the treatment for sand- This will serve the useful purpose of maintaining in position any dressing that may be thought necessary, of acting as a support to the horn left on each side of the portion removed, and of keeping the exposed structures free from dirt and grit. When excision is deemed unwise or unnecessary, treatment should be directed towards maintaining the cavity in a state of asepsis. To this end it should be thoroughly cleaned of its contents, and afterwards dressed with medicated tow. The ordinary tar and grease stopping is as suitable as any. This, together with the tow, is tightly plugged into the opening and kept in position by a wide-webbed shoe.

THRUSH Thrush is an unpleasant infection of the horse‘s frog, which is predisposed by moist, damp, dirty ground or stable conditions. What causes thrush? Thrush 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. Long heel conformation encourages the development of deep narrow frog sulci, which are more prone to the development of thrush, if environmental conditions are right. If the horse has an imbalanced foot in the lateromedial (inside-outside) plane then this also predisposes the horse to thrush.

How is thrush diagnosed? Thrush produces a foul smelling black discharge in the affected sulcus of the frog. There is pain on 125 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.

How is thrush treated?
The horse should be moved to a dry clean environment. The foot should be thoroughly cleaned out, removing debris from within the affected frog sulcus, and then the horn is pared out down to healthy tissue, allowing air to reach any remaining damaged tissues. The frog and its sulcus should be scrubbed daily with dilute iodine solution or other antiseptic solutions. Thereafter, the horse should be kept in clean, dry stable conditions and the frog should be cleaned and treated regularly until the infection is controlled and the tissues heel.
How can thrush be prevented? Prevention is better than cure and thrush can be avoided by good stable management and regular foot care and inspection. Stable your horse in clean dry conditions and have your horses' feet regularly trimmed and shod to avoid the development of long heel conformation and to keep the frog healthy. Any mediolateral foot imbalance should also be addressed by the farrier. Caution With early treatment and good stable and environmental management, the prognosis for complete recovery for cases of thrush is good. Treatment will usually be required for 7-14 days. The prognosis for complete resolution is good unless the infection has been allowed to become chronic and/or there is extensive involvement of deeper tissues.

CORNS.
In veterinary surgery the term 'corn' is used to indicate the changes following upon a bruise to that portion of the sensitive sole between the wall and the bar. Usually they occur in the fore-feet, and are there found more often in the inner than in the outer heel. The changes are those depending upon the amount of hæmorrhage and the accompanying inflammatory phenomena occasioned by the injury. Thus, with the hæmorrhage we get ecchymosis, and consequent red staining of the surrounding structures. As is the case with extravasations of blood elsewhere, the hæmoglobin of the escaped corpuscles later undergoes a series of changes, giving rise to a succession of brown, blue, greenish and yellowish coloration. With the inflammation thereby set up we get swelling of the surrounding bloodvessels, pain from the compression of the swollen structures within the non-yielding hoof, and moistness as a result of the inflammatory exudate.

Predisposing Causes.—By the heading of this chapter we have already intimated that corns are due to faulty conformation of the foot. It is, therefore, merely a description of such shapes of foot as favour their formation that will need mention here. The wide, flat foot, with low heels, may be first considered. Here the posterior portions of the sole, those portions between the wall and the bars, fall very largely in the same plane as the wearing 126 surface of the bars and the wall. As a consequence, these portions of the sole are more prone to receive injury from stones and rough roads and from the pressure of the shoe. The low heels, too, favour a more than due proportion of the body-weight being thrown on to the posterior parts of the foot. Two evils, both inclining to the production of corn, result from this. In the first place, the sensitive structures of the posterior portions of the foot are subjected to undue pressure from above; secondly, the posterior half of the foot, by reason of the extra weight thrown upon it, is exposed also to greater effects of concussion than normally it should meet. Added to this we find that the abnormally flat condition of the sole has resulted in a great loss of resiliency. With undue pressure above, and a loss of resiliency and added effects of concussion below, the sensitive structures included between the opposing pedal-bone and the horny sole are bound to suffer more or less bruising each time the foot comes to the ground, especially if the animal is moved at a rapid pace. Writing here of the effects of pressure and concussion affords a fitting occasion to mention the fact that corns occurring in feet affected with side-bones are always worse than in feet with normal elastic cartilages. The explanation of this is simple, for there can be no doubt that the loss of resiliency in the diseased cartilage is only another aid to undue pressure and concussion. The sensitive structures are pinched between unyielding bone above and practically unyielding horn below. Feet with high and contracted heels are also predisposed to corn.

CORONITIS (SIMPLE). TREAD, OVERREACH, ETC.

1. Acute. Definition.—Under the heading of simple coronitis in its acute form we intend to describe those inflammatory conditions of the skin and underlying structures of the coronet occurring without specific cause.

Causes.—This condition is almost invariably set up by an injury—either a bruise or an actual wound—to the coronet. By far the most common among such injuries are those inflicted by the animal himself by means of the shoes. That known as 'tread' is caused by the shoe on the opposite foot, and may happen in a variety of ways. More often than not it is met with in the feet of heavy draught animals, and is there caused by the calkin, either when being violently backed or suddenly turned round. It may also occur in horses with itchy legs, as a result of the animal rubbing the leg with the shoe of the opposite limb.

CANKER Equine canker is described as an infectious process that results in the development of a chronic hypertrophy of the horn-producing tissues.1 It generally originates in the frog; may remain focal, but has the capacity to become diffuse and invade the adjacent sole, bars and hoof wall. Canker can occur in one foot or multiple feet may be involved. The disease is commonly seen in draft breeds but can affect any breed or sex.

LAMINITIS Laminitis results from the disruption (constant, intermittent or short-term) of blood flow to the sensitive and insensitive laminae. These laminae structures within the foot secure the coffin bone (the wedgeshaped bone within the foot) to the hoof wall. Inflammation often permanently weakens the laminae and interferes with the wall/bone bond. In severe cases, the bone and the hoof wall can separate. In these situations, the coffin bone may rotate within the foot, be displaced downward ("sink") and eventually penetrate the sole. Laminitis can affect one or all feet, but it is most often seen in the front feet concurrently. The terms "laminitis" and **"founder**" are used interchangeably. However, founder usually refers to a chronic (long-term) condition associated with rotation of the coffin bone, whereas acute laminitis refers to symptoms associated with a sudden initial attack, including pain and inflammation of the laminae.

CAUSES While the exact mechanisms by which the feet are damaged remain a mystery, certain precipitating events can produce laminitis. Although laminitis occurs in the feet, the underlying cause is often a disturbance elsewhere in the horse's body. The causes vary and may include the following:Digestive upsets due to grain overload (such as excess grain, fruit or snacks) or abrupt changes in diet.Sudden access to excessive amounts of lush forage before the horse's system has had time to adapt; this type of laminitis is known as "grass founder."Toxins released within the horse's system.High fever or illness; any illness that causes high fever or serious metabolic disturbances has the potential to cause laminitis, e.g., Potomac Horse Fever.Severe colic.Excessive concussion to the feet, often referred to as "road founder."Excessive weight-bearing on one leg due to injury of another leg or any other alteration of the normal gait.Various primary foot diseases.Bedding that contains black walnut shavings.Although controversial, prolonged use or high doses of corticosteroids may contribute to the development of laminitis in some horses.

SIGNS

Signs of acute laminitis include the following: Lameness, especially when a horse is turning in circles; shifting lameness when standing.Heat in the feet.Increased digital pulse in the feet (most easily palpable over either sesamoid bone at the level of the fetlock).Pain in the toe region when pressure is applied with hoof testers.Reluctant or hesitant gait ("walking on eggshells").A "sawhorse stance," with the front feet stretched out in front to alleviate pressure on the toes and the hind feet positioned under them to support the weight that their front feet cannot. Signs of chronic laminitis may include the following: Rings in hoof wall that become wider as they are followed from toe to heel,Bruised soles or "stone bruises."Widened white

line, commonly called "seedy toe," with occurrence of seromas (blood pockets) and/or abscesses .Dropped soles or flat feet.Thick, "cresty" neck.Dished hooves, which are the result of unequal rates of hoof growth (the heels grow at a faster rate than the rest of the hoof, resulting in an "Aladdin-slipper" appearance).

TREATMENT The sooner treatment begins, the better the chance for recovery. Treatment will depend on specific circumstances but may include the following: Diagnosing and treating the primary problem (laminitis is often due to a systemic or general problem elsewhere in the horse's body).Dietary restrictions; stop feeding all grain-based feeds and pasture. Feed only grass hay until advised by your veterinarian.

Treating with mineral oil via a nasogastric tube to purge the horse's digestive tract, especially if• the horse has overeaten. Administering fluids if the horse is ill or dehydrated.• Administering other drugs such as antibiotics to fight infection; anti-endotoxins to reduce• bacterial toxicity; and anticoagulants and vasodilators to reduce blood pressure while improving blood flow to the feet.131 Stabling the horse on soft ground, such as in sand or shavings (not black walnut) and• encouraging the horse to lie down to reduce pressure on the weakened laminae. Opening and draining any abscesses that may develop.• Cooperation between your veterinarian and the farrier (techniques that may be helpful include• corrective trimming, frog supports and therapeutic shoes or pads). Your veterinarian may be able to advise you on new therapies that may include standing your• horse in ice water to prevent the onset of laminitis after a predisposing cause such as a retained placenta or a known grain overload.

CONCLUSION

Knowledge of Disease of the foot of Horses helps student understand the methods to handle various ailments of foot ,their treatment and keep the horses in exercise fit condition.

SURGICAL SHOEING – S 8

Code - S 8

Period - Two

Type - Lecture and demo

Training Aids
Black board, chalk, horse and various types of surgical shoes.

Time Plan
(a) Introduction-10 mins
(b) Surgical Shoeing of horse -60 mins
(c) Conclusion -10 mins

INTRODUCTION

Knowledge of surgical shoeing of Horses is very important aspect of animal management and helps student understand the technicalities of shoeing and its importance in ensuring functional efficiency of the horse. .

AIM

To aquaint the cadets about surgical shoeing of Horses.

PREVIEW

The lecture will be conducted in the following parts:-
(a) Part I - Surgical Shoeing and its methodology -theory
(b) Part II - Demonstartion of surgical Shoeing -demo

SURGICAL SHOEING

Surgical shoeing is usually carried out by a competent horses working in conjunction with a veterinary surgeon. Some horses during their lifetime will need surgical or remedial shoes on. 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 your farrier may help to return a horse to soundness much quicker than it would do in the wild. The veterinary surgeon, being scientifically trained in anatomy, physiology, and conforma tion of the horse, can explain to the shoeing smith the parts of the diseased foot capable of bearing weight, and the parts to be protected.

Surgical shoeing may be utilized to remove or reduce defects in the limbs due to faulty con formation; to prevent injuries; and to remove the causes of many forms of lameness. By applying a shoe so as to modify the distribution of the body-weight on a foot, or by protecting injured portions of the foot, horses which would otherwise be useless are rendered workable.

Stumbling.Stumbling, a defect in horses, is usually due to fatigue, over-driving, staleness, etc., but is sometimes also due to neglected or bad shoeing.

THE HEART BAR:
This shoe can save a horses life. Mainly used in the treatment of acute Laminitis to mechanically oppose pedal bone rotation, this shoe is also a good column support shoe.

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.

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.

THE HOSPITAL PLATE.
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 you can see is made from 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 you can see, when the dressing needs changing all you need 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.

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.

LATERAL EXTENSION
This shoe is used for many different things; they are very useful for horses that ‗Brush' its works by widening the horses gait during locomotion. It can also be used as a support shoe and in the treatment of bone spavin.

HIND BAR PREVENTER SHOE
A further type of bar shoe, this particluar example is aimed at 'preventing' interference (the horse knocking into itself) from the other hind foot. The outside is fullered whereas the has two plain-stamped nail holes.

PMC'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 breakover which should take stress off of the horses 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 preshaped with the t-bar built into the shoe. This will save the farriers time and cost of not having to make or buy the inserts and attach the inserts to the shoes. You can buy these shoes right off the shelf and go nail them on the horses foot. The farrier, the horse owner and the horse hould be well pleased with these shoes.

PMC'S Z-BAR SHOE Pmc's z-bar shoes are designed to eliminate pressure off of 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 breakover which should take stress off of the horses 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. You can buy thes shoes right off the shelf and go nail them on the horses foot.

CONCLUSION

Knowledge of surgical shoeing of Horses is very important aspect of animal management and helps student understand the technicalities of shoeing and its importance in ensuring functional efficiency of the horse. .

1 - TYPES OF SADDLE & ITS PARTS

Code - SF 1
Period - Four

INTRODUCTION

Knowledge of types 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 use as per the various events in optimum performance of the horse ,safety of the rider and also preventing the avoidable injuries to the horse

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TYPES OF SADDLE

(1) SADDLE UNIVERSAL

GENERAL DESCRIPTION OF SADDLE UNIVERSAL & ITS PARTS

The front and rear arches are made of steel, the front arch forms the pommel and the rear arch the cantle. Both arches are secured to the sidebars.

(a) The side bars are that portion of the saddle which rests on the horses' back, and to which both the arches are secured, thus distributing the weight of the rider along the animals' back. The sidebars are made of wood and are given a twist in the making, which suits the animals' back. The part of the side bar, that project in front of the saddle, is the "burr". The projecting portion behind the saddle is the "fan". Fastened to the side bar just behind the front are steel bars with a roller through, which the stirrup leather passes.

(b) THE NUMDAH PANEL

Side bars are fitted with detachable numdah panels. The object of the numdah panels is to give extra padding without filling up the channel of the saddle, to protect the sidebars and to give a surface, which grips the blanket and avoids slipping of the saddle.

(c) "V" ATTACHMENT

The "V" attachment consists of two straps (the front and rear straps) which connect the sweat flap to the side bar of the saddle meeting in a "V" shape on the sweat flap to which they are secured by rivets to a small brass plate. The front strap of the "V" attachment is in two parts. The upper part, secured to the side bar, has a buckle and the lower part,

secured to the sweat flap, is punched with three holes for adjustment to suit the conformation of different animals.

(d) SWEAT FLAP

The sweat flap consists of an oblong piece of leather to which the straps of the "V" attachment are secured and on which are sewn the girth straps. This is provided for the purpose of preventing the girth straps becoming saturated with sweat and consequently perishing, and also to protect the animal's sides from chaffing by the girth buckles.

(e) SEAT

The seat is the portion of the saddle on which the rider sits. The seat, which is made of leather covers the frame of the saddle between the front and rear arches, which are connected by a sling of webbing.

(f) FLAP

The flap is the covering to the side of the saddle, made of leather and of such a shape as to suit the bend of the rider's legs when his feet are in the stirrup.

(g) STIRRUP LEATHER

The stirrup leather is the support for the stirrup iron. It has a buckle at one end and is punched with holes at the other end for adjustment.

(h) STIRRUP IRON

The stirrup iron is made of steel. The top part is of semi-oval shape with a slot at the top, through which the stirrup leather passes.

(j) SURCINGLE

The surcingle consists of a plain leather strap, two inches in width, tapering to one inch towards the buckle. At the other end is sewn a strap one inch wide punched with holes for buckling.

(k) GIRTH

The girth of the saddle varies in length from two feet six inches to three feet. It is made of leather or cotton, with split openings. There are two buckles at each end to hold the girth straps. At three inches from each end is sewn a leather loop, through which the surcingle is passed before being fastened.

VARIOUS TYPES OF OTHER SADDLES

(2) 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 balace well on these

saddles They are often used in riding schools because there are so many riders of different abilities.

(3) DRESSAGE SADDLE

Dressage saddles are designed for advanced riders who are regularly competing in flat-work competitions. The saddles enhances the traditional straight-legged and upright torso dressage position.

(4) JUMPING SADDLE

Jumping saddles are designed to puch the rider slightly forward into the two-point jumping position for when they are going over fences

(5) 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 low a low cantle and pommel which makes jumps more comfortable.

(6) 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.

(7) 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 sturdy for ranch hands who spent long hours on horse-back often performing sharp turns.

(8) 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.

(9) RACING SADDLES

1.20 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.

FITTING OF SADDLES

Code - SF 2
Period - Three

INTRODUCTION

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.

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(1) FITTING OF SADDLES

(a) The following points should be particularly noted: -
The general condition of the leatherwork throughout should be examined, to see that no portion is in a perished or 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.
(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.

(2) PRINCIPLES OF SADDLE FITTING

(a) The following are the principles of saddle of saddle fitting :
(b) The withers must not be pinched or pressed upon.
(c) There must be no pressure on the horse's spine.
(d) The shoulder blades must have free and unimpeded movement.
(e) 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.
(f) The weight must be evenly distributed over a surface
(g) The saddle should be level on the horse's back neither dipped in front nor in rear.
(h) There are three sizes of saddle and to enable a proper choice to be made, the bare saddle-tree should be placed on the horses back so that the front arch is above the hollow behind the shoulder. The arches and seat should then be clear of the spine although this is not always possible with horses possessing high withers. The front arch must be wide enough to admit the hand on either side of the withers. The side bars must bear fairly evenly on the back and their edges must not press into the withers or ribs.

(j) The saddle is then taken off, fitted with numdah panels and replaced. The saddletree will now be considerably raised and the proper thickness of the blanket can be estimated. It must be remembered that the addition of a blanket reduces the width of the front arch and narrows the saddle across the top of the sidebars.

(k) The blanket is then folded and placed on the horse's back the tree being placed on it. The blanket must be well pressed up into the front arch, and before the girths are tightened, it should be noticed whether the burrs are off the shoulders and the fans off the loins; if they are not, the thickness of the blanket beneath the side bars must be increased by turning it up on either side.
(l) The fit of a saddle cannot be determined until the saddle is inspected with a rider sitting on it, for parts which appear well clear of the back when no weight is in the saddle may be brought dangerously close to it by the pressure of a man's weight.

(m) First ascertain that the withers are free from pressure. Make the rider carry his weight forward; then pass the whole hand beneath the blanket and over the top, and along both sides of the withers. If there is any difficultly in inserting the hand, the saddle does not fit. And the saddle must be raised by fitting thicker numda panels on the side bar or by making an extra fold in the blanket. Both sides must be tested.

(n) The fans should then be tested for loin pressure. With the man leaning back in the saddle, the flat of the hand should find ready admission under the fans.
(o) Then ascertain whether the pressure of the sidebars is evenly distributed. This can be done in the following way: -
The saddle, having been ridden in for about half an hour is carefully ungirthed and lifted from the blanket without disturbing it. The blanket will be found to bear the imprint of the sidebars and an examination will show at a glance whether they are pressing evenly from top to bottom and from front to rear. The examination must be made without delay as the elasticity of the blanket soon causes it to lose the impression of the sidebars. Any sign of uneven pressure may cause a sore back. Irregularity in the fit of the sidebars, which cannot

be removed by the saddler, may be remedied by the introduction of pieces of numdah to fill of the space between the side bars and blanket.

(3) POINTS TO BE OBSERVED WHILE SADDLE FITTING.

(a) While putting saddle on a horse following pts should be kept in mind:
(b) Proper size of saddle.
(c) Presence of injuries on the back of the Animal.
(d) Use clean blanket.
(e) Clean the horse before saddling.
(f) Girth should be fitted properly.
(g) Saddle should be soft and well maintained.
(h) Any nails are sharp metallic edges of the saddle if noticed; the saddle should not be used.

(4) THE SEQUENCE OF SADDLE FITTING:

(a) Saddle fitting should be completed in following sequence:-
Step One: Position of the Saddle
Step Two: Angle of the Points
Step Three: Panel Pressure and Contact
Step Four: Pommel to Cantle Relationship
Step Five: Level Seat
Step Six: Wither Clearance
Step Seven: Channel Clearance/Gullet Width
Step Eight: Saddle Stability
Step Nine: Seat Length
Step Ten: Horse Response

FITTING OF ADDITIONAL ACCESSORIES OF THE SADDLE

Code - SF 3

Period - Two

INTRODUCTION

Knowledge of assembling the complete saddle in a fitting manner so that the rider as well as the horse feels comfortable during exercise as well as of additional accessories of saddle is very important aspect of training during equestrian events. Improper assembling of accessories leads to discomfort to the horse ,disqualification in events too.

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(1) FITTING OF ADDITIONAL ACCESSORIES OF THE SADDLE

The general condition of the leatherwork throughout should be examined, to see that no portion is in a perished or partially perished condition.

(a) 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 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; prominent coarse or knotted stitching may cause bad chafes and galls.

(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.

(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.

(2) BLANKET FOLDS

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.

(a) DOUBLE FOLD

With a horse of normal shape and condition the following method of "double fold", is recommended:-

Double the blanket lengthwise and then double it again crosswise. It should then be placed lengthwise across the horse's back with the edges of the folds on the near side and to the rear. The size when folded is to 0.810 mtr by 0.700 mtr. The folding of the blanket may be modified to suit special horses to meet alteration in shape consequent to loss in condition, or from other causes.

(b) CHANNEL FOLD

In the case of a horse which has lost condition, and for certain shapes of back a useful method is the "channel fold". The blanket is folded lengthways in three equal parts, each end is then turned over and folded towards the centre (two or three folds may be taken as required to suit the horse's back leaving a channel in the centre).

(c) ENVELOPE FOLD

In cases where an extra thickness of blanket under the front arches is required the "envelope fold' may be found a useful method:-

The blanket is folded in three folds of equal width in the length of the blanket. A fold of two feet is then made at one end: the other end is 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. When this method is used, a second blanket is necessary to prevent rubbing of the 'V" attachment.

3. 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, The burrs and fans should bear no weight.

4. 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.The surcingle should lie flat over the girth and not be tighter than girth.

5. 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.

6. **Adjustment of the "V" Attachment** - The normal position of the attachment is with the buckle in the centre hole of the V attachment, 6 ½ inches from the rivet. This position will suit a very large number of horses. The upper and lower holes are provided for the adjustment; additional holes must not be punched. For animals with straight shoulders that carry the saddle too far forward, buckling it in the lower hole should shorten the front strap; on those that have deep chests or sloping ,the front strap should be lengthened. In no case will it be worn as a true "V", i.e. the front and rear straps of equal length.

MODIFICATIONS IN FITTING OF SADDLE

Code - SF 4

Period - One

INTRODUCTION

Knowledge of Modification in Saddle fitting of Horses helps student understand the methods to improve saddle fitting and provide comfort to horse as well as the rider. .

MODIFICATIONS IN FITTING OF SADDLE

SELECTING A SADDLE TYPE

Both horse and rider come in all shapes and sizes, finding a saddle that is a good fit for both can sometimes be tricky.. Saddles for riding can generally be categorized into three basic types, dressage, all-purpose and jumping The manner in which the saddle is structured has to accommodate both the horse and the rider., most riders should be able to find a saddle to fit themselves and their horse without resorting to custom options or the use of special pads.

FITTING THE HORSE AND RIDER

(a) FITTING THE HORSE:

The basics of fitting a saddle to the horse are fairly consistent for most of the saddles. In general the tree or bars should provide adequate protection to the horse's back and be designed to place the rider in the best balance for the type of riding undertaken; the panels underneath the saddle should conform to, and aid in protecting, the horse's back; the girthing system should be located in a manner to effectively hold the saddle on the horse; Saddle trees or bars come in various widths and may have special features. In general, horses with a wider build need wider trees or bars. The directions on evaluating saddle fit will explain the basics on how to tell if the tree size is correct for your horse.

(b) FITTING THE RIDER:

Saddles come in a variety of seat and flap or fender sizes and designs. It is important to find the correct seat and flap or fender size and shape. Determining the seat size varies depending upon the type of saddle, Selected saddle should suit the build of the rider.

(c) MODIFICATION IN SADDLE FITTING

(i) Place the saddle on the horse's back and slide it back to about two fingers width behind the shoulder blade.a.

(ii) Check to see that the pommel, gullet or fork clears the withers by at least a couple of finger widths.

(iii) Check to see that the front of the saddle panels/fenders are behind the shoulder blades.Check the panels/fenders to see if they are touching equally along the length. If they touch in the front and back, but not in the middle it is called "bridging".

(iv) If the saddle meets the requirements, girth or cinch it up.

(v) The lowest part of the seat should be in the middle of the saddle.

(vi) The pommel, gullet or fork should still easily clear the horse's withers by at least the height of about two to three fingers. But, it should not be so high that the lowest point of the saddle is towards the cantle.

(vii) The channel between the panels should provide sufficient width throughout its length for the horse's spine.

(viii) The cantle should be level with or higher than the pommel.

(ix) Lunge the horse at all gaits to see if the saddle shifts forwards, backwards or laterally. Check to see if the cantle tends to rock or bounce up and down at the trot. If any of these conditions are present, you may want to try another model.

(x) If it still looks good, mount up, making certain that you are not pulling the saddle out of position in the process, and try it out at all three gaits.

(xi) You should feel comfortable and well-balanced at all gaits.

(xii) Is your horse comfortable with you in the saddle? Is he moving freely in both directions?

(xiii) Ride in the saddle at least a couple of times prior to making a decision. If you and your horse are comfortable, you have made the correct selection. If not, try and analyze what doesn't feel correct so that you can try another model or seat or tree size that might work better.

(d) Modifications in Fitting Of Dressage Saddles

(i) The stirrup bar: For dressage this has been extended or moved further. A longer-legged person will usually need a longer bar, or one placed further back, than a short-legged person.

(ii) Panels, the padding underneath the seat, have been re-designed on many models to spread the weight of the rider over a broader portion of the muscling on either side of the horse's spine. The central channel (gullet) between the panels has also been broadened to accommodate the broader backs.

(iii) Fitting the rider: The width of the saddle flap should provide sufficient protection to the rider's thigh and upper calf while applying the aids. The length should be sufficient. Usually, the bottom of the flap should not be lower than mid-calf with your foot in the stirrup

(e) Modifications In Fitting Of Jumping Saddles

(i) The lowest part of the seat should be in the middle of the saddle.

(ii) The pommel, gullet or fork should still easily clear the horse's withers by at least the height of about two to three fingers. But, it should not be so high that the lowest point of the saddle is towards the cantle.

(iii) The channel between the panels should provide sufficient width throughout its length for the horse's spine.

(iv) The cantle should be level with or higher than the pommel

(f) Modifications In Fitting Of All Purpose Saddles

(i) The all-purpose saddle is just that, a saddle modified to allow the rider to lengthen the stirrup and ride with a longer leg for lower-level dressage, and yet has enough of a forward flap to allow enough of a bend in the leg for jumping.

(ii) While modification following points should be observed.

(iii) Check to see that the pommel, gullet or fork clears the withers by at least a couple of finger widths.

(iv) Check to see that the front of the saddle panels/fenders are behind the shoulder blades.

(v) Check the panels/fenders to see if they are touching equally along the length.

DEFECTS & DISEASES DUE TO ILL-FITTING SADDLES & METHODS TO OVERCOME THEM

Code - SF 5

Period - One

INTRODUCTION

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 in preventing the avoidable injuries to the horse.

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DEFECTS & DISEASES DUE TO ILL-FITTING SADDLES & METHODS TO OVERCOME THEM

SIGNS OF POOR SADDLE FIT

Although horses do not speak English, 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:

PHYSICAL SIGNS OF POOR SADDLE FIT

(a) Sores under the saddle area

(b) White hairs under the saddle area (which can also indicate past damage done by a saddle)

(c) Friction rubs in the hair

(d) Scars or hard spots

(e) Dry patches on the back or saddle pad while the rest is dampened by sweat

(f) Dropping of the back when it is palpated

(g) Muscle atrophy on either side of the withers

(h) Even if there are no physical signs, if your horse is behaving differently, it is wise to evaluate saddle fit as part of any exam. Behavioral signs of poor saddle fit can include:

BEHAVIORAL SIGNS OF POOR SADDLE FIT

(a) Hypersensitivity while being brushed

(b) Objecting to being saddled or cinched

(c) Fidgeting while mounting

(d) Uncooperative while being ridden

(e) Pinning ears, swishing tail and/or tossing head under saddle

(f) Reluctance to go forward and use the hind end

SEVEN POTENTIAL SIGNS OF A POOR SADDLE FIT :

A keen rider will be able to guage ill fit with following signs:-

(a) White hairs and friction rubs. A well fitting saddle will distribute the weight equally over the horse's back. An illfitting 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 or 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 behavior 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 Behavioral signs as enumerated above.

CARE, MAINTENANCE & PRESERVATION OF SADDLE & HARNES6

Code - SF 6

Period - Six

INTRODUCTION

Knowledge of care, maintenance & preservation of saddle & harness is very important aspect of animal management as working efficiency of horse and rider depends on proper saddlery ,its maintenance in preventing the avoidable injuries to the horse.

CARE, MAINTENANCE & PRESERVATION OF SADDLE & HARNESS

CARE OF SADDLERY AND HARNESS

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 injuery 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, so as to bring the wear on fresh holes. All exposed iron work should be kept bright

PRESERVATION OF LEATHER

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 rubbingis 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.

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