**Equines management:**

1. Horses are widely used for **races, equestrian sports, hunting and polo**. In the medical field horses are used for the manufacturing of **antitoxins** for diseases such as tetanus.
2. **Zoological names:**

Horse *- Equus caballus,*

Ass - *Equus asinus,*

Mule- *E. Caballus + E. Asinus*

1. **Pack** : Group of Animals
2. Adult uncastrated male Horse :- **Stallion**
3. Adult female horse :- **Mare**
4. Young one of horse below 1 year **:- Foal**
5. Young male horse under 3 years of age :- **Colt**
6. Young female horse :- **Filly**
7. A horse over one year and under two year **:- Yearling**
8. Castrated male horse :- **Gelding**
9. Castrated female horse :- **Spayed**
10. Female horse with its offspring :- **Foal at foot**
11. Act of parturition in horse :- **Foaling**
12. Act of mating in horse:- **Covering**
13. Mare kept for breeding :- **Brood mare**
14. Male horse in which one or both the testicles are failed to descend :- **Rig/ Cryptorchid**
15. A hybrid of male donkey (Jack) and female horse (Mare) :- **Mule (Mules are usually sterile)**
16. A hybrid of male horse (Jack) and female donkey (Jennet):- **Hinney (Hinny is smaller in size than mule)**
17. A building where horses are kept and cared **:- Stable**
18. The characteristic vocalization or sound made by horse :- **Neighing**
19. The female horse used for breeding**:- Brood mare**
20. A well trained horse is called as:- **Broken horse**
21. **Blood horse** - A pedigree horse
22. **Stud** - Male horse kept for breeding.
23. **Stud book** - The permanent book for breeding records.
24. **Galvayne's Groove** normally appears near the gum at 10 years, is half way down at 15 years, extends down the whole length of tooth at 20 years, has grown half way out at 25 years, and has disappeared at the age of 30 years.
25. Full mouth is seen in the case of horses at **4.5 to 5 years**. A horse is said to be aged, when it is **over 15 years**.
26. The stallions require **l'/2 hours** exercise daily.
27. The area of exercise should be away from the brood mares stables and no brood mare should be visible while the stallions are being exercised.
28. Weaning of foals **4-6 months.**
29. Sex ratio **1 : 30-40**; Age at puberty **12-15 months**;
30. Optimum age and weight at first mating Male: **3-4 years**; Female: **2 ½ - 3 years** Weight **300-350 kg**.
31. Length of estrus cycle **21-23 days;** Duration of estrus **4-6 days;** Ovulation **3-4th day of cycle.**
32. Optimum time for breeding **2-3 days after** appearance of heat; Productive life period **14-16 years of age or 10 foals.**
33. Foaling heat **9-11 days;** Gestation period **335-345 days.**
34. Normal reaction time should be **1 to 5 minutes** during breeding season and up to **15 minutes** during winter.
35. Average number of mounts per ejaculate should be about **1.5**; time of copulation **30 second to 2 or 3 minutes**; Ejaculation can usually determine by **“tail flagging”.**
36. The Central Government has issued the **Draught and Pack Animals Rules 1965** and the **Registration of Farriers Rules 1965.**
37. The “age” of a horse in India is reckoned from **1 January** as per International norms applicable to the Northern Hemisphere irrespective of its date and place of foaling.
38. Breeders or their authorized Agents are required to report to the **S.B.A.I. ( Stud book authority of India)** on occurrence of deaths, Pregnancy Casualties, arrivals and departures of stallions, broodmares, yearlings and foals within **90 days and** Stallions and broodmares discarded from breeding shall be reported within **30 days.**

**Q.1.Multiple choices:**

1. Horses which are registered with Jockey Club, mainly used for racing and crossbreeding whose immediate ancestors are used with stallion and mare record are known as.

A. Light horse

B. Crossbred horse

C. Thoroughbred horse

D. Halt breed horse

1. Horse entered in stud book maintained by a breed society

A. Purebred horse

B. Crossbred horse

C. Thoroughbred horse

D. Halt breed horse

1. Race horse with no pedigree is called as

A. Purebred horse

B. Crossbred horse

C. Thoroughbred horse

D. Halt breed horse

1. The practice of artificially altering the teeth of older horses in an attempt to make them to look younger

A. Bishoping

B. Debeaking

C. Disbudding

D. None of the above

1. Horse whose ears are at 90º axis and can rotate at 180º angle. Ear tips are pointed and curved inward like a sickle.

A. Bhutia

B. Kathiawari

C. Marwari

D. both A & B

1. Horse with triangular forehead and poll, smaller ear.

A. Marwari

B. Kathiawari

C. Spiti

D. Bhutia

1. The horse with almond shaped ears known for beauty, fastness and are famous for polo and riding purpose

A. Manipuri

B. Zanskari

C. Manipuri

D. Kathiawari

1. largest and heaviest of all Asiatic wild Ass

A. Indian wild ass

B. Kiang

C. Indian grey ass

D. both A & C

1. largest of pony breed

A. Connemara

B. Shire Pony

C. Shetland pony

D. Ireland pony

1. Shortest of pony breed

A. Connemara

B. Shire Pony

C. Shetland pony

D. Ireland pony.

1. \_\_\_\_\_\_\_\_\_\_ is the angle of the hoof wall should approximate the angle formed by the shoulder and the pastern in horse.

A. 45-55 degrees

B. 50-60 degrees

C. 30- 40 degrees

D.90 degrees

1. The required cellulose percentage in horse feed is

A. 60-70 per cent

B. 30 per cent

C. 50-80 per cent

D. 50 per cent

1. \_\_\_\_\_\_\_\_\_\_not commonly used in feeding of horses as it contains gluten

A. Maize

B. Oats

C. Wheat

D. Sorghum

1. Triangular forehead and poll, smaller ear are Charecteristics of \_\_\_\_\_\_\_\_\_horse breed.

A. Marwari

B. Kathiawari

C. Spiti

D. Zanskari

1. Spiti ponies are mainly used for \_\_\_\_\_\_\_\_\_\_\_\_

A. Polo game

B. Race purpose

C. Pack and Riding Purpose

D. All of the above

1. \_\_\_\_\_\_\_horses are known for their hardiness and ability to work at high altitude and are used for draught, transport, riding and polo.

A. Marwari

B. Kathiawari

C. Spiti

D. Zanskari

1. The Ponies known for their beauty, fastness and mainly for polo riding purpose are\_\_\_\_\_\_\_\_\_.

A. Manipuri

B. Kathiawari

C. Spiti

D. Zanskari

1. The Horse ovary resembles \_\_\_\_\_\_\_\_\_ shape.

A. Oval

B. Round

C. Bean or kidney

D. Circular

1. Frequent urination, winking of clitoris, raising of tail, flexing of pelvis are the signs of heat in \_\_\_\_\_\_\_.

A. Mare

B. Cow

C. Buffalo

D. Cat

1. Spring and autumn breeding season of Horse respectively

A. Jan to till the end of May and Sep-Oct and Dec.

B. May to July and Aug to Nov.

C. March to June and Sep to Dec.

D. Feb till the end of June and Sep- Nov.

1. Foal heat is also called as\_\_\_\_\_\_\_\_\_\_\_.

A. Calving heat

B. Serving heat

C. Dhaman

D. Musth

1. Udder filling waxing of mare teat is sign of\_\_\_\_\_\_\_\_.

A. Conception

B. Flehmen reflexes

C. Nearing Foaling

D. Nearing Foal heat

1. Excitement, pacing the foaling box, profuse sweating and pawing the ground are

A. Signs of foaling

B. Signs of foal estrus

C. Signs of conception

D. Signs of Musth

1. No equine is made to walk for more than \_\_\_\_\_\_\_on any hilly/mountainous track in a day.

A. 12kms

B. 18kms

C. 20kms

D. 30kms

1. No animal shall be made to work for more than \_\_\_\_\_\_\_\_\_\_at a stretch without giving adequate halts and rest.

A. 5hours

B. 6hours

C. 2hours

D. 8hours

1. No horse/mule must be made to carry more than a total of \_\_\_\_\_\_\_\_of weight including the weight of the passenger, supplies, and saddle.

A. 200kgs

B. 100 kgs

C. 500kgs

D. 800kgs

1. For donkeys the maximum weight carrying in hilly/mountainous regions should be more than \_\_\_\_\_\_\_.

A. 40kgs

B. 50kgs

C. 30kgs

D. 25 kgs

1. The volume of a stallion’s semen in one ejaculation is \_\_\_\_\_\_

A. 50-150 ml

B. 150-200ml

C. 200-300ml

D.300-400ml

1. The concentration of sperms in stallion’s semen is

A. 10-20millon per ml

B. 20-30 million per ml

C. 50-200 million per ml

D. 250-300 million per ml

1. \_\_\_\_\_\_\_\_\_\_\_is the functions of S.B.A.I.( Stud book authority of India)

A. To register broodmares and stallions for breeding purposes and to register breeding establishments.

B. To issue Passports and Export Certificates for the stock on its records when required

C. To register names of horses on behalf of the Turf Authorities of India (TAI).

D. To publish Indian Stud Book every four years.

E. All of the above

1. Application for registration of a horse for breeding is refered as\_\_\_\_

A. Stud registration form

B. Breed registration form

C. Pink form

D. Green form

1. For inclusion of a horse in the Indian Stud Book, a horse must be \_\_\_\_\_\_\_

A. Parentage validated at an ISAG accredited laboratory designated by S.B.A.I. and must pass the parentage test.

B. Parentage validated at any of the laboratory designated and must pass the parentage test.

C. Parentage validated at any of the laboratory designated and no need to pass the parentage test.

D. Parentage validated at an ISAG accredited laboratory designated by S.B.A.I. and no need to pass the parentage test.

1. The horse standing still and viewed from the lateral side, the hoof‐pastern axis (HPA) should form\_\_\_\_\_\_\_.

A. 45 degree angle

B. Right angle

C. A straight line

D.A inclined line

1. Trimming and shoeing of hoof is known as

A. Shoe making

B. Farriery

C. Both A & B

D. none of the above

1. A smith who perform trimming and shoeing of hoof is known as

A. Cobbler

B. Farrier

C. Shoe maker

D. all of the above

1. The outer side of the sole – hoof wall junction is known as\_\_\_

A. White Line

B. lamina

C. Frog

D. Heel

1. The hoof capsule is composed of\_\_\_\_\_\_\_\_\_\_ from front to back side

A. Sole, frog, hoof wall, white line and heels

B. Heels, white line, bulbs, sole and white line

C. Hoof wall, sole, frog, and bulbs of the heels

D. Heels, frog, white line and hoof wall

1. When the angle of the dorsal hoof wall is greater than the angle of the dorsal pastern is known as\_\_\_\_\_\_\_\_\_

A. White line disease

B. Club foot

C. Sheared Heels

D. None of the above

1. \_\_\_\_\_\_\_\_hoof has a high hoof angle associated with a flexural deformity of the DIP joint

A. White line disease

B. Club foot

C. Sheared Heels

D. None of the above

1. \_\_\_\_\_\_\_\_\_\_ a hoof capsule distortion resulting from displacement of one heel bulb proximally relative to the adjacent heel bulb.

A. White line disease

B. Club Heels

C. Sheared Heels

D. None of the above

1. Mismatched Feet is characterized by\_\_\_\_\_\_\_

A. Back feet conformations that have a high or upright hoof angle on one foot and a low hoof capsule angle on the contralateral foot

B. feet Conformations that have a high or upright hoof angle on front foot and a low hoof capsule angle on the back foot

C. Back feet conformations that have a high or upright hoof angle on both feet

D. Forefeet conformation that have a high or upright hoof angle on one foot and a low hoof capsule angle on the contralateral foot

1. White Line Disease (WLD) is Characterized by\_\_\_\_\_\_\_

A. Progressive separation of the inner zone of the hoof wall from the sole.

B. With poor palmar foot conformation secondary to lack of foot mass

C. low or underrun heels

D. All of the above

1. WLD is a keratolytic process which is caused due to toxicity of \_\_\_\_\_\_\_\_\_\_\_\_\_

A. Sodium

B. Magnesium

C. Selenium

D. Zinc

1. \_\_\_\_\_\_\_\_\_\_\_\_\_ is an infectious disease of hoof results in the development of a chronic hypertrophy of the horn‐producing tissues

A. Club foot

B. White line disease

C. Equine canker

D. sheared heel

1. Chronic hypertrophic moist pododermatitis of the frog with loss of tissue is

A. Canker

B. Thrush

C. white line disease

D. Frog injury

1. The frog should fill the space between \_\_\_\_\_\_\_\_\_ and helps to absorb concussion

A. Hoof capsule and sole

B. Heels of hoof capsule

C. white line and hoof capsule

D. Hoof capsule and sole

1. The frog width should be at least \_\_\_\_\_\_\_\_\_ of its length.

A. 70%

B. 90%

C. 50%

D. 35%

1. The process of filling down sharp points and uneven surfaces on the horse’s teeth is \_\_\_\_\_

A. Tooth filling

B. Floating teeth

C. Gap filling

D. None of the above

1. periodontal disease cause due to abnormalities of wear on central molars is\_\_

A. Gingivitis

B. Malocclusion

C. Hooks and Ramps

D. “Wave” mouth

1. EOTRH ( Equine Odontoclastic Tooth Resorption and Hypercementosis) is seen in older horses especially in \_\_\_\_\_\_

A. Premolars

B. Molars

C. Incisors

D. Canines

1. Accumulation of mineralized plaque on teeth can lead to formation of \_\_\_\_\_

A. Tartar

B. Choke

C. Wave mouth

D. Dental abscess

1. Dropping partially chewed food from mouth is called as\_\_\_\_\_\_

A. Sneezing

B. Regurgitation

C. Quidding

D. Spitting

1. SOP-2010 for movement of thorough breed horses in India is Published by

A. SBAI

B. SPCA

C. Turf Authorities of India (TAI).

D. ISBC

1. Government approved tests for EIA are\_\_\_\_

A. Coggins test by DRL, Pune

B. Indirect / Competitive ELISA test

C. Spectrophotometry

D. Both A & B

1. Validity of EIA negative certificate is for \_\_\_\_\_\_\_\_ days

A.6 months

B.3 months

C.4 months

D.12 months

1. Movement of E.I.A infected Horse is restricted for \_\_\_\_\_\_\_ days after negative results certificate.

A. 60 days

B. 90 days

C.50 days

D. 30 days

1. The Movement restriction for Equine influenza affected horse is \_\_\_\_\_\_\_\_

A. 4 weeks

B. 2weeks

C.3 weeks

D.1 week

1. Treatment of Glanders disease is not allowed and elimination under the Act

A. Prevention and control of infectious and contagious disease Animal act 2009

B. Standard operating procedure of equine disease 2010

C. Draught and Pack Animals Rules 1965

D. Prevention of animal cruelty 1960

**Q.2.Fill in the Blanks:**

1. A broad white marking covering almost the entire forehead but not including the eyes or nostrils of horse. **\_\_\_\_\_\_\_\_\_\_\_**
2. Thewhite mark on fore head of horse is called as **\_\_\_\_\_\_\_\_**
3. Thenarrow white marking down the face of horse is **\_\_\_\_\_\_\_\_\_**
4. **\_\_\_\_\_\_\_\_\_** is an isolated white marking between nostrils of horse.
5. Thewhite colour extends between nostrils is **\_\_\_\_\_\_\_\_\_\_**
6. **\_\_\_\_\_\_\_\_\_\_\_\_** is acondition where the upper saw overshoots the lower jaw.
7. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_**is acondition in which the upper jaw is shorter than the lower jaw (Under shot jaw).
8. **\_\_\_\_\_\_\_\_** first appears on the lower central and intermediate incisors when the horse is about 8 years of age.
9. **\_\_\_\_\_\_\_\_\_\_\_** - Inflammation of sensitive laminae under the horny wall of the hoof.
10. **\_\_\_\_\_\_\_\_\_** a vertical split in the horny wall of the inside hoof, which extends from the coronet.
11. **\_\_\_\_\_\_\_\_\_** is a deep seated running sore which occurs on the coronet bar or hoof head.
12. **\_\_\_\_\_\_\_** is a condition in which there will be decrease in size of group of muscles of shoulder area.
13. **\_\_\_\_\_\_\_\_\_\_\_** is the puffy swelling that occurs on either side of the (Wind gall or Road gall) tendons above the fetlock or knee.
14. **\_\_\_\_\_\_\_\_\_\_** deposits of bone that occur on the upper, inside part of the cannon bone.
15. **\_\_\_\_\_\_\_\_**  is the condition where growth of bone on either or both of the bones of the pastern is observed.
16. **\_\_\_\_\_\_\_\_\_\_** is the inflammation of sensitive laminae of foot.
17. **\_\_\_\_\_\_\_\_\_** is the disease of the frog of the foot caused by filth.
18. **\_\_\_\_\_\_\_\_** is the condition in which there is a sudden involuntary flexion of one or both hocks.
19. **\_\_\_\_\_\_\_\_** is the swollen vein over the front and inside the hock, it does not cause lameness.
20. Hoof trimming should be done at about **\_\_\_\_\_\_\_\_** intervals on horse kept in stall or paddocks or about **\_\_\_\_\_\_\_\_** interval for horse used heavily or running in pastures.
21. The front arch of the saddle is called as **\_\_\_\_\_\_\_\_\_\_** the rear arch is called as **\_\_\_\_\_\_\_**
22. Part of the side bar which projects in front of the saddle is called the **\_\_\_\_\_\_\_** whereas the one projecting behind the saddle is called the **\_\_\_\_\_\_\_.**
23. In Horse stable width of the passage should be **\_\_\_\_\_\_\_\_\_\_** in single row system and **\_\_\_\_\_\_\_\_\_\_\_\_\_** in double row system (horses should not face each other).
24. Height of the stable from the floor to the roof should be at least **\_\_\_\_\_\_\_\_** in the case of flat roof and **\_\_\_\_\_\_\_\_** from the floor level to the tie beam in gabled roof.
25. Dimension for **small horse**: \_\_\_\_\_\_\_\_\_\_\_ (length\*width\*height) **Light/ average/ medium horse :** \_\_\_\_\_\_\_\_\_\_\_\_ (length\*width\*height) **Large:**  \_\_\_\_\_\_\_\_\_\_\_(length\*width\*height)
26. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_** is ideal size for the stallion box.
27. Required boxes for mares with a foal at foot: **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
28. An ideal size for foaling box is **\_\_\_\_\_\_\_\_\_\_\_\_\_**
29. The required slope in horse stable is of **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
30. **\_\_\_\_\_\_\_\_\_\_**mountain pony is ideal for young children to play as a pet animal.

**Q.3.Match the following:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sl.no | A | Sl.no | B | Answers |
|  | NRC on Equines |  | Fluorometry |  |
|  | Skin pliability test |  | Long day breeder |  |
|  | Doping test |  | Runn of Kutchi |  |
|  | Mare |  | Hissar, Haryana |  |
|  | Kathiawari |  | Dehydration |  |
|  | Wild Ass sanctuary |  | Known for beauty and Polo |  |
|  | Manipuri |  | Desert riding type |  |
|  | Bikaner camel |  | Best breed of Horse |  |
|  | No gall bladder |  | 4.5 years |  |
|  | Full mouth condition |  | Equines |  |
|  | No canine teeth |  | Doping agent |  |
|  | Equine infectious anemia (EIA) |  | Mare |  |
|  | Sympathomimeticamines |  | Coggins test |  |
|  | Glanders screening test |  | 17th August 2010 |  |
|  | Lenti Retrovirus |  | CFT ( Compliment fixation test) |  |
|  | Burkholderia mallei |  | Equine infectious anemia |  |
|  | Glanders Denotification |  | Glanders / Farcy |  |
|  | Dourine |  | Equine influenza |  |
|  | Silver Dollar plaques on skin |  | Trypanasoma equiperdum |  |
|  | Myxovirus |  | Glanders |  |
|  | Strangles |  | Culicoides |  |
|  | African Horse sickness |  | Streptococus equi |  |

Q.1.Multiple choice questions:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | C | 16 | D | 31 | C | 46 | B |
|  | A | 17 | A | 32 | A | 47 | A |
|  | D | 18 | C | 33 | C | 48 | B |
|  | A | 19 | A | 34 | C | 49 | D |
|  | C | 20 | D | 35 | B | 50 | C |
|  | B | 21 | C | 36 | A | 51 | A |
|  | A | 22 | C | 37 | C | 52 | C |
|  | B | 23 | A | 38 | B | 53 | C |
|  | B | 24 | A | 39 | B | 54 | A |
|  | C | 25 | C | 40 | C | 55 | C |
|  | A | 26 | B | 41 | D | 56 | B |
|  | B | 27 | D | 42 | A | 57 | A |
|  | C | 28 | A | 43 | C | 58 | A |
|  | B | 29 | C | 44 | C | 59 |  |
|  | C | 30 | E | 45 | B | 60 |  |

**Q.2.Fill in the blanks answers.**

1. **Blaze**
2. **Star**
3. **Stripes**
4. **Snip**.
5. **White muzzle**
6. **Parrot mouth** .
7. **Monkey mouth** .
8. **Dental star**.
9. **Laminitis / Founder**.
10. **Quarter crack**.
11. **Quittor**.
12. **Sweeny**.
13. **Wind puff**.
14. **Splints**.
15. **Ring bone**  .
16. **Founder**.
17. **Thrush**.
18. **Stringhalt**.
19. **Blood spavin**.
20. **4 weeks** intervals on horse kept in stall or paddocks

**6 weeks** interval for horse used heavily in pastures.

1. **‘pommel’** , **‘cantle’.**
2. **‘burr’** , **‘fan’.**
3. **1.5 to 2 m** in single row system and **2.5 to 3 m** in double row system.
4. **4 m** and **3 m**
5. : 3\*2.5\*1.9 (length\*width\*height)

3.5\* 3.0\* 1.9 (length\*width\*height)

4.0\*3.5\*1.9 (length\*width\*height)

1. **4.25 x 5 m**
2. **14 x 14 feet (4.27 m x 4.27 m)**
3. **4.25 x 5.50 m**
4. **5 cm in 3 m for the drainage**
5. **Welsh or welsh**

**Q.3.Match the following**

|  |  |
| --- | --- |
|  |  |
| 1 | d |
| 2 | e |
| 3 | a |
| 4 | b |
| 5 | h |
| 6 | c |
| 7 | f |
| 8 | g |
| 9 | j |
| 10 | i |
| 11 | j |
| 12 | m |
| 13 | k |
| 14 | o |
| 15 | p |
| 16 | q |
| 17 | n |
| 18 | s |
| 19 | t |
| 20 | r |
| 21 | v |
| 22 | u |