2017 WBFSH Young Breeders World Championships Theory Database
Without Answers
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While compiling these questions every effort has been made to ensure they are fair and correct. If you find any questions that you think are not either fair or correct please let either the President or the Secretary to the Board of the International Young Breeders Organisation know immediately. Your input can help us achieve this goal.

For the purpose of the WBFSH Young Breeders World Championships Competition both juniors and seniors will be asked to complete a theory test comprising 25 multiple choice questions which will be taken from the following bank of questions. Separate Tests will be used for Junior and Senior Teams and both tests will include 3 questions from the Sports and Studbook Questions which are the same for both age groups.

Age of competitors
The age groups are 16 to 19 (Juniors) and 20 to 25 (Seniors). Competitors who are aged 16 to 19 on January 1 of the year of the Championships are eligible for the Junior team and those who are aged 20 to 25 on January 1 of the year of the Championships are eligible for the Senior team regardless of the date of birth.
3 Junior and Senior Questions

3.1 Breeding

3.1.1 A colt is:
(a) A young female horse three year of age and under
(b) A gelding 10 to 12 years old
(c) A horse between 1.48m and 1.58m in height
(d) An entire male horse three years of age and under

3.1.2 A filly is:
(a) A young female horse three year of age and under
(b) A female 10 to 12 years old
(c) A horse between 1.48m and 1.58m in height
(d) An entire male horse three years of age and under

3.1.3 An embryo is:
(a) The foetus during the first month of pregnancy
(b) The foetus during the last month of pregnancy
(c) The unfertilised egg
(d) The colt foal immediately after birth

3.1.4 A maiden mare is a mare that:
(a) Has bred two foals
(b) Is lactating
(c) Is barren
(d) Has never been covered

3.1.5 The average length of pregnancy in a mare is:
(a) 340 days
(b) 390 days
(c) 400 days
(d) 425 days
3.1.6 A barren mare is a mare that:
(a) Is in foal
(b) Is one year old
(c) Was covered but is not in foal at the end of the breeding season
(d) Has never been covered

3.1.7 Scanning a mare for twin pregnancies should ideally take place:
(a) 5 days after ovulation
(b) 10 days after ovulation
(c) 16 days after ovulation
(d) 21 days after ovulation

3.1.8 Following ovulation in the mare the ruptured follicle produces the hormone:
(a) Follicle Stimulating Hormone
(b) Progesterone
(c) Oestrogen
(d) Luteinising hormone

3.1.9 Fertilisation of the egg with the sperm takes place in the:
(a) Ovary
(b) Vagina
(c) Uterus
(d) Fallopian tube

3.1.10 The average length of the breeding cycle in mares is:
(a) 5 days
(b) 12 days
(c) 21 days
(d) 44 days

3.1.11 One of the symptoms of a mare ‘in season’ is:
(a) Constantly lying down
(b) Kicking out at a stallion
(c) Frequently urinating
(d) Having a very high temperature
3.1.12 One of the symptoms of a mare ‘in season’ is:
(a) Constantly lying down
(b) Kicking out at a stallion
(c) Receptive to the stallion
(d) Having a very high temperature

3.1.13 One of the symptoms of a mare not ‘in season’ is:
(a) Constantly lying down
(b) Kicking out at a stallion
(c) Frequently urinating
(d) Having a very high temperature

3.1.14 Which of the following breeds is a breed of sport horse?
(a) Hanoverian
(b) Fell
(c) Exmoor
(d) Connemara

3.1.15 At the beginning of the breeding season, a mare comes into season as a result of:
(a) Access to stallions
(b) Cold temperature
(c) Increasing hours of daylight
(d) Pregnancy

3.1.16 Ovulation is:
(a) The passing of the first dung
(b) When a mare is not in season
(c) The release of the egg from the follicle
(d) Fertilisation of the egg

3.1.17 A mare’s period of extended sexual inactivity in the winter months is known as:
(a) Dioestrus
(b) Oestrus
(c) Anoestrus
(d) Sub oestrus
3.1.18 When does ovulation in the mare occur in relation to the period she is in heat?
   (a) At the beginning of the heat
   (b) At the middle of the heat
   (c) At the end of the heat
   (d) None of these

3.1.19 Which of the following mares has never had a foal?
   (a) Barren mare
   (b) Maiden mare
   (c) Lactating mare
   (d) Foster mare

3.1.20 Under natural circumstances the majority of horses become sexually active during what period?
   (a) Spring
   (b) Summer
   (c) Autumn
   (d) Winter

3.1.21 How much of a horse’s genetic inheritance comes from each parent?
   (a) 60% from dam, 40% from sire
   (b) 40% from dam, 60% from sire
   (c) 50% from dam, 50% from sire
   (d) 70% from dam, 30% from sire

3.1.22 Which of the following chromosome pairs results in a female foal?
   (a) XY
   (b) YY
   (c) XX
   (d) YX

3.1.23 Which of the following chromosome pairs results in a male foal?
   (a) XY
   (b) YY
   (c) XX
   (d) YX
3.1.24 In the following pedigree identify the sire of horse A

Horse A
---
Horse B
Horse C
Horse D
Horse E
Horse F
Horse G

3.1.25 In the following pedigree identify the dam of horse A

Horse A
---
Horse B
Horse C
Horse D
Horse E
Horse F
Horse G

3.1.26 In the following pedigree identify the paternal grandsire of horse A

Horse A
---
Horse B
Horse C
Horse D
Horse E
Horse F
Horse G

3.1.27 In the following pedigree identify the paternal grandam of horse A

Horse A
---
Horse B
Horse C
Horse D
Horse E
Horse F
Horse G

3.1.28 In the following pedigree identify the maternal grandsire of horse A

Horse A
---
Horse B
Horse C
Horse D
Horse E
Horse F
Horse G

3.1.29 In the following pedigree identify the maternal grand-dam of horse A

Horse A
---
Horse B
Horse C
Horse D
Horse E
Horse F
Horse G
3.1.30 What is the foal heat?
(a) The first heat period in a filly after puberty
(b) The last heat period in the breeding season
(c) The new born foal
(d) The first heat period in a mare after foaling

3.1.31 Beads of wax will appear on the teats of a mare on average approximately:
(a) 24 hours before foaling
(b) 56 hours before foaling
(c) 7 days before foaling
(d) One month before foaling

3.1.32 A breeding index for a stallion is:
(a) An expression of the competitive success of progeny of a stallion as compared to other stallions
(b) An expression of the success the stallion has had in competition as compared to other stallions.
(c) An expression of the number of offspring of a stallion as compared to other stallions.
(d) An expression of the number of mares covered by a stallion as compared to other stallions.

3.1.33 What is the best time to cover a mare to optimise fertilisation using artificial insemination and chilled semen?
(a) 48 to 72 hours before ovulation
(b) 24 to 48 hours before ovulation
(c) 24 to 48 hours after ovulation
(d) 48 to 72 hours after ovulation

3.1.34 What is the best time to artificially inseminate a mare with frozen semen to achieve fertilisation?
(a) 24 to 36 hours before ovulation
(b) 12 to 18 hours before ovulation
(c) 12 to 18 hours after ovulation
(d) 24 to 36 hours after ovulation
3.1.35 A non-pregnant mare which has never been bred is termed:
   (a) A barren mare
   (b) A pregnant mare
   (c) A maiden mare
   (d) An open mare

3.1.36 A mare that was bred during the breeding season but is not in foal at the end of the breeding season is:
   (a) A lactating mare
   (b) A barren mare
   (c) A maiden mare
   (d) An open mare

3.1.37 Which of the following is not a typical sign of a mare in oestrus (season)?
   (a) Winking her vulva
   (b) Urinating frequently
   (c) Sweating
   (d) Squatting

3.1.38 The ovary in a mare produces the:
   (a) Saliva
   (b) Urine
   (c) Follicle
   (d) Heart beat

3.1.39 Which of the following is part of the reproductive system of a mare:
   (a) Caecum
   (b) Cervix
   (c) Colon
   (d) Cranium

3.1.40 In the stallion, sperm is produced in the:
   (a) Colon
   (b) Rectum
   (c) Penis
   (d) Testicle
3.1.41 ‘Teasing’ a mare with a stallion means:
(a) Checking to see if she is in season
(b) Checking to see if she is close to foaling
(c) She has foaled
(d) She is about to foal

3.1.42 The mare’s vulva is:
(a) The bone above the knee in the foreleg
(b) At the junction of the uterus (womb) and the fallopian tube
(c) The external area of the mare’s reproductive system
(d) Another term used to describe her udder

3.1.43 Which of the following is ideal conformation in relation to the position of the mare’s vulva?
(a) 20% of the mare’s vulva below the pelvic floor
(b) 40% of the mare’s vulva below the pelvic floor
(c) 60% of the mare’s vulva below the pelvic floor
(d) 80% of the mare’s vulva below the pelvic floor

3.1.44 How many fallopian tubes does the mare have?
(a) 1
(b) 2
(c) 3
(d) 4

3.1.45 What is the term used to describe the object released from the follicle at ovulation?
(a) Embryo
(b) Ovum
(c) Sperm
(d) Zygote

3.1.46 One of the symptoms of a mare approaching foaling time is:
(a) Increase in udder size
(b) Decrease in udder size
(c) Prolonged discharge from the vulva
(d) Nasal discharge
3.1.47 Which of the following hormones may be administered to mares with retained placenta?
   (a) Oestrus
   (b) Oxytocin
   (c) Progesterone
   (d) Prolactin

3.1.48 At what stage is weaning of foals normally conducted in modern sport horse breeding enterprises?
   (a) months after foaling
   (b) 6 months after foaling
   (c) 9 months after foaling
   (d) 12 months after foaling

3.1.49 Colostrum (the mare’s first milk) contains a relatively high concentration of which of the following proteins?
   (a) Keratin
   (b) Haemoglobin
   (c) Casein
   (d) Immunoglobulin

3.1.50 Which of the following body conditions is most desirable at the time of covering?
   (a) Thin mares with visible rib cage
   (b) Mares with good covering of flesh and ribs can be felt with some pressure
   (c) Mares whose ribs cannot be felt with light fingertip pressure
   (d) Mares with cresty necks

3.1.51 A speculum is used to?
   (a) Sharpen horse’s teeth
   (b) Clean tack
   (c) Examine the mare’s cervix
   (d) Unscrew studs from horse’s shoes
3.1.52 Which of the following is not a form of veterinary examination undertaken to examine the mare’s reproductive tract?
(a) Rectal palpation
(b) Stethoscope examination
(c) Speculum examination
(d) Ultrasonic ovarian examination

3.1.53 An A.V. is an:
(a) Ancient vagina
(b) Artificial vagina
(c) Artificial vacuum
(d) Anterior vagina

3.1.54 The vagina is:
(a) The organ in which the foal develops
(b) The birth canal, between the cervix and vulva
(c) The opening through which the foal is expelled
(d) The cord which takes waste from the bladder during pregnancy

3.1.55 What is the average duration of second stage labour in the mare?
(a) 20 minutes
(b) 40 minutes
(c) 60 minutes
(d) 80 minutes

3.2 **Feeding**
3.2.1 Protein in the diet supplies
(a) Energy for work
(b) Calcium for bone development
(c) Amino Acids for growth of new tissues
(d) Water for fluid regulation

3.2.2 Which of the following feeds has the highest content of carbohydrates (energy)?
(a) Oats
(b) Barley
(c) Hay
(d) Bran
3.2.3 What does the term ‘creep’ feeding a foal mean?
(a) Feeding meal during the winter
(b) Feeding a foal while still suckling the dam
(c) Feeding after weaning
(d) Feeding milk during the first week of life

3.2.4 A horse should be fed at regular intervals because they
(a) Are fussy eaters
(b) Otherwise they will stop producing acid in their stomach
(c) Can swallow it better
(d) Have a small stomach

3.2.5 What section of the digestive tract has the largest capacity?
(a) Rectum
(b) Large intestine
(c) Stomach
(d) Mouth

3.2.6 Which of the following is a mineral?
(a) Biotin
(b) Calcium
(c) Niacin
(d) Riboflavin

3.2.7 Which of the following has the highest energy content?
(a) Fats
(b) Carbohydrates
(c) Proteins
(d) Minerals

3.2.8 The major sources of which vitamin is sunlight and sun-cured hay:
(a) Vitamin C
(b) Vitamin A
(c) Vitamin D
(d) Vitamin E
3.2.9 Beet pulp should be soaked before feeding to horses. What temperature should the water be in fair/warm weather?
(a) Hot
(b) Cold
(c) Boiling
(d) Luke warm

3.2.10 Which of the following is a type of grass used for horses?
(a) Timothy
(b) Horse tail
(c) Nettle
(d) Ragworth

3.2.11 Which of the following is a good source of protein for horses?
(a) Soya Bean Meal
(b) Sugar Beet Pulp
(c) Molasses
(d) Oats

3.2.12 In a 10% Cool and Cooked coarse mix what does the 10% stand for?
(a) The amount of protein in the feed
(b) The amount of Carbohydrates in the feed
(c) The amount of fat in the feed
(d) The amount of calcium in the feed.

3.2.13 Calcium and phosphorus are mainly found in which body tissue?
(a) Skin
(b) Bone
(c) Muscle
(d) Fat

3.2.14 What is colostrum?
(a) A supplement
(b) An electrolyte
(c) The foals first droppings
(d) The mare’s first milk after foaling
3.2.15 Which of the following is a vitamin?
(a) Biotin
(b) Cobalt
(c) Iodine
(d) Manganese

3.2.16 Which of the following is a vitamin?
(a) Vitamin B
(b) Vitamin G
(c) Vitamin M
(d) Vitamin T

3.2.17 Which of the following is a vitamin?
(a) Vitamin N
(b) Vitamin Y
(c) Vitamin M
(d) Vitamin E

3.2.18 Which of the following is a major mineral?
(a) Zinc
(b) Magnesium
(c) Manganese
(d) Selenium

3.2.19 Which of the following is a major mineral?
(a) Chromium
(b) Sodium
(c) Iodine
(d) Cobalt

3.2.20 Which of the following is a major mineral?
(a) Sulphur
(b) Selenium
(c) Iron
(d) Manganese
3.2.21 Which of the following is a major mineral?
(a) Manganese
(b) Fluorine
(c) Phosphorus
(d) Selenium

3.2.22 Which of the following is a trace mineral?
(a) Sulphur
(b) Sodium
(c) Phosphorous
(d) Zinc

3.2.23 Which of the following is a trace mineral?
(a) Magnesium
(b) Manganese
(c) Calcium
(d) Potassium

3.2.24 Which of the following is a trace mineral?
(a) Copper
(b) Calcium
(c) Chloride
(d) Potassium

3.2.25 Which of the following is a trace mineral?
(a) Cobalt
(b) Chloride
(c) Calcium
(d) Magnesium

3.2.26 Which of the following is a trace mineral?
(a) Calcium
(b) Phosphorus
(c) Magnesium
(d) Selenium
3.2.27 Which of the following vitamins functions as an antioxidant?
   (a) A  
   (b) D  
   (c) E  
   (d) K

3.2.28 Which of the following vitamins is required in blood clotting?
   (a) A  
   (b) D  
   (c) E  
   (d) K

3.2.29 Which of the following vitamins regulates calcium and phosphorous balance?
   (a) A  
   (b) D  
   (c) E  
   (d) K

3.2.30 Which of the following vitamins functions in vision?
   (a) A  
   (b) D  
   (c) E  
   (d) K

3.2.31 Microbial fermentation in the hind gut supplies which of the following vitamins?
   (a) A  
   (b) B  
   (c) D  
   (d) C

3.2.32 Folic acid belongs to which of the following nutrient groups?
   (a) Proteins  
   (b) Fats  
   (c) Vitamins  
   (d) Minerals
3.2.33 Protein is made up of:
   (a) Amino acids for growth and repair
   (b) Starch for heat and energy
   (c) Glucose for energy
   (d) Minerals for general health and wellbeing

3.2.34 The essential vitamin E, which cannot be made by the horse itself, must come from the feed. What kind of feed contains sufficient E-vitamin (α-Tocopherol) for the horse?
   (a) Green feeds
   (b) Protein grain feeds
   (c) Carbohydrate grain feeds
   (d) Electrolytes

3.2.35 Which of the following cereals may be fed without processing?
   (a) Barley
   (b) Oats
   (c) Maize
   (d) Wheat

3.2.36 Sugar beet pulp pellets/cubes in order to be fed safely to horses should be
   (a) Soaked in hot water for 12 hours
   (b) Soaked in cold water for 12 hours
   (c) Soaked in hot water for 24 hours
   (d) Soaked in cold water for 24 hours

3.2.37 Which of the following is not a good source of protein?
   (a) Soya bean
   (b) Carrots
   (c) Peas
   (d) Bean

3.2.38 A horse must be fed plenty of roughage because
   (a) The stomach is small
   (b) Hay is a cheap feed
   (c) Horses are constantly eating
   (d) It keeps the digestive process working efficiently
3.2.39 Which of the following minerals is found mainly in the skeleton?
   (a) Iron
   (b) Cobalt
   (c) Iodine
   (d) Calcium

3.2.40 A bale of good quality hay is:
   (a) Dust free
   (b) Dark brown in colour
   (c) Warm to the touch
   (d) Mouldy

3.2.41 What is the recommended % of body weight for the minimum amount of roughage a horse requires per day?
   (a) 2.5%
   (b) 1%
   (c) 3%
   (d) 7%

3.2.42 Digestively the horse despite the fact that it eats grass like a cow is more closely related to a pig so it is classified digestively as a:
   (a) Ruminant
   (b) Monogastric
   (c) Carnivore
   (d) Omnivore

3.2.43 Which of the following is roughage?
   (a) Hay
   (b) Corn
   (c) Oats
   (d) Maize

3.2.44 Which of the following is part of the digestive system?
   (a) Caecum
   (b) Lung
   (c) Cervix
   (d) Ovary
3.2.45 Which of the following is not a risk factor for gastric ulcers?
(a) Low forage intake  
(b) Intensive exercise  
(c) Low starch diets  
(d) Periods of fasting

3.2.46 Which of the following areas is not assessed when body condition scoring?
(a) Shoulder  
(b) Ribs  
(c) Abdomen  
(d) Spine

3.2.47 Hay is made from:
(a) Straw  
(b) Grass  
(c) Oats  
(d) Leaves

3.2.48 Which of the following weeds is poisonous if eaten by horses?
(a) Nettle  
(b) Dock  
(c) Daisy  
(d) Ragwort

3.2.49 A horse should not be given water:
(a) First thing in the morning  
(b) Before midnight  
(c) After hard work when the horse is hot  
(d) Before feeding

3.2.50 Sugar beet pulp is an excellent source of:
(a) Energy  
(b) Water  
(c) Vitamin E  
(d) Fat
3.2.51 Salt is important for the horse in the summer when it is
   (a) Cold
   (b) Working hard
   (c) Out in the field
   (d) Lying down

3.2.52 Which of the following is not digested in the small intestine?
   (a) Sugar
   (b) Starch
   (c) Lipids (fats)
   (d) Fibre

3.2.53 If given the choice, how much of their time would horses spend in feeding-related behaviours?
   (a) 10%
   (b) 30%
   (c) 70%
   (d) 100%

3.2.54 Which of the following is not a source of energy to the horse?
   (a) Carbohydrates
   (b) Fats and oils
   (c) Vitamins
   (d) Proteins

3.2.55 Hay may be soaked with water before feeding to
   (a) Clean it
   (b) Improve the colour
   (c) Ensure it is the correct temperature
   (d) Help horses with a respiratory problem

3.3 **Stable Management**

3.3.1 A coat colour consisting of large irregular patches of black and white is described as
   (a) Piebald
   (b) Skewbald
   (c) Appaloosa
   (d) Grey
3.3.2 Skipping/mucking out a stable/stall involves:
(a) Power hosing
(b) Removing all the bedding
(c) Removing the droppings only
(d) Removing the shavings only

3.3.3 Identify this piece of tack
(a) Cavesson
(b) Bridle
(c) Roller
(d) Surcingle

3.3.4 When grooming a horse which brush is used for removing mud and dried sweat and has coarse stiff bristles?
(a) Body brush
(b) Dandy brush
(c) Water brush
(d) Yard brush

3.3.5 Which of the following bandages typically covers the largest area of the leg?
(a) Stable bandages
(b) Exercise bandages
(c) Travel bandages
(d) Tail bandage

3.3.6 Which is not a typical location for hair whorls?
(a) Midline of the neck
(b) Forehead
(c) Withers
(d) Chest

3.3.7 Which of the following brushes usually has short, close-set bristles?
(a) Dandy brush
(b) Curry comb
(c) Body brush
(d) Mane comb
3.3.8 A gelding is which of the following?
(a) An uncastrated male under four years of age
(b) A castrated male of any age
(c) An uncastrated male of any age
(d) A female horse under four years of age.

3.3.9 A horse whose coat colour varies from mouse colour to dark gold with black points on black skin with a dark line along the back bone is:
(a) Palomino
(b) Cream
(c) Appaloosa
(d) Buckskin

3.3.10 A broad white marking extending from between the eyes and down the face over the nasal bones is termed:
(a) A Star
(b) A Snip
(c) A Blaze
(d) A Stripe

3.3.11 If you were using the following tools to groom a horse, which would you use last?
(a) Currycomb
(b) Body brush
(c) Dandy brush
(d) Mane comb

3.3.12 Which of the following is not a part of a snaffle bridle?
(a) Snaffle bit
(b) Browband
(c) Curb Chain
(d) Reins

3.3.13 A piece of tack fitted to prevent the saddle or roller from slipping forward is termed
(a) A wither pad
(b) Grass reins
(c) Crupper
(d) Numnah
3.3.14 Which of the following is described as a horse ‘lashing out’ with his front hooves?
(a) Kicking
(b) Rearing
(c) Striking
(d) Bucking

3.3.15 Which of the following vices involves the horse gulping air
(a) Bolting
(b) Cribbing
(c) Wood chewing
(d) Weaving

3.3.16 Which of the following is described as a spotted or splotched coat pattern?
(a) Dappled grey
(b) Skewbald
(c) Bay
(d) Appaloosa

3.3.17 Which of the following coat colours is accompanied with a black mane and tail?
(a) Chestnut
(b) Grey
(c) Liver chestnut
(d) Bay

3.3.18 Which of the following types of bits is designed to be used with two sets of reins?
(a) Snaffle
(b) Curb
(c) Pelham
(d) Breaking bit

3.3.19 The ‘snip’ colour marking on the head is:
(a) A white marking between the nostrils
(b) A white mark on the forehead
(c) A wide covering of white hair running down the face
(d) A continuous narrow white mark down the face
3.3.20 The recommended size of a stable for a large hunter is:
   (a) 1m x 1m [3.3ft x 3.3ft]
   (b) 2.4m x 2.4m [7.9ft x 7.9ft]
   (c) 3.7m x 3.7m [12.1ft x 12.1 ft]
   (d) 5.0m x 5.0m [16.4ft x 16.4ft]

3.3.21 Where the inside of the leg below the knee or hock is hit by the opposite foot this is termed:
   (a) Brushing
   (b) Over Reach
   (c) Tread
   (d) Speedicut/Clipped Heels

3.3.22 On turning a horse out into a field the handler must
   (a) Turn him towards the gate and release him
   (b) Face him towards the centre of the field and release him
   (c) Release him before entering the field
   (d) Walk him to the centre of the field and release him

3.3.23 Brushing boots are designed to:
   (a) Protect the knee
   (b) Protect the inside of the leg below the knee
   (c) Protect the hoof
   (d) Protect the outside of the leg below the knee

3.3.24 How does the horse lie down?
   (a) With the forelegs and the hind legs at the same time
   (b) With the near fore and near hind together
   (c) First with the forelegs
   (d) First with the hind legs

3.3.25 Hair whorls in the coat of horses are used as an aid to:
   (a) Identification
   (b) Grooming
   (c) Clipping
   (d) Tack fitting
3.3.26 The height of a horse is measured in hands. How many inches in a hand?
   (a) 3
   (b) 4
   (c) 5
   (d) 6

3.3.27 What type of rug would you put on a horse that is living out?
   (a) Cooler
   (b) Stable
   (c) Travelling
   (d) New Zealand

3.3.28 The 'off' fore leg in a horse is the
   (a) Left front leg
   (b) Right front leg
   (c) Left hind leg
   (d) Right hind leg

3.3.29 The 'near' fore leg in a horse is the
   (a) Left front leg
   (b) Right front leg
   (c) Left hind leg
   (d) Right hind leg

3.3.30 The 'off' hind leg in a horse is the
   (a) Left front leg
   (b) Right front leg
   (c) Left hind leg
   (d) Right hind leg

3.3.31 The 'near' hind leg in a horse is the:
   (a) Left front leg
   (b) Right front leg
   (c) Left hind leg
   (d) Right hind leg
3.3.32 Wide, high banks of bedding laid against the walls in a stable are designed to help prevent:
(a) Colic
(b) Horses becoming cast
(c) Horses eating the bedding
(d) Droppings being mixed with the bedding

3.3.33 A hunter clip has:
(a) The hair of the legs only removed
(b) The hair of the head and neck removed
(c) All the hair except on the legs and saddle patch removed
(d) The hair removed from the neck and belly leaving a blanket over the body

3.3.34 What is a twitch?
(a) A tool used for restraint
(b) Shaking of the coat
(c) A fly
(d) A parasite

3.3.35 A figure eight bandage is used on the:
(a) Stifle
(b) Fetlock
(c) Knee
(d) Coronet Band

3.3.36 What is the term used to describe the self-inflicted wounds on the inside of the fetlock joint?
(a) Cracked heals
(b) Brushing
(c) Over Reaching
(d) Speedicutting

3.3.37 Ermine Marks are:
(a) White marks on a black leg commonly near the coronet band
(b) Black marks on a white leg commonly near the coronet band
(c) White flecks throughout the body
(d) Black flecks throughout the body
3.3.38  A horse that toes inwards in the front feet is said to be:
   (a) Pigeon Toed
   (b) Crow Toed
   (c) Penguin Toed
   (d) Cow Toed

3.3.39  What is the recommended size for a stable doorway?
   (a) 2m high and 2.1m wide [6.6ft high x 6.9ft wide]
   (b) 1.2m high and 2.4 m wide [3.9ft high x 7.9ft wide]
   (c) 4.2m high and 2.1m wide [13.8ft high x 6.9ft wide]
   (d) 2.4m high and 1.2m wide [ 7.9ft high x 3.9ft wide]

3.3.40  Which is not an equine boot?
   (a) A Sausage Boot
   (b) An Over reach Boot
   (c) A Hock boot
   (d) A Stifle boot

3.3.41  What would a farrier use a 'buffer' for?
   (a) To clean the horses feet
   (b) To raise the clenches of the nails
   (c) To flatten the clenches of the nails
   (d) To polish the hoof

3.3.42  A crupper is designed to prevent the saddle from slipping:
   (a) Backwards
   (b) Forwards
   (c) Sideways
   (d) Under the belly

3.3.43  Which of the following is not a type of noseband?
   (a) Grackle
   (b) Figure Eight
   (c) Cavesson
   (d) Hackamore
3.3.44 Which of the following is a stable vice?
(a) Weaving
(b) Sleeping
(c) Drinking
(d) Eating

3.3.45 A poll guard is normally used:
(a) When jumping cross country
(b) For dressage competitions
(c) For hacking out on roads
(d) For traveling

3.3.46 What is the ideal slope of a horse’s shoulder?
(a) 25 – 35 degrees
(b) 50 – 55 degrees
(c) 35 – 40 degrees
(d) 45 – 50 degrees

3.3.47 When riding, what cloth is placed under the saddle?
(a) A blanket
(b) A rug
(c) A numnah
(d) A cloth

3.3.48 What type of fence is the safest choice for enclosing horses in a paddock?
(a) Barbed wire
(b) Chicken wire
(c) Post and rail
(d) Sheep wire

3.3.49 The colour marking described as a ‘stocking’ is:
(a) A white mark between the nostrils
(b) A white mark that goes no further than the fetlock
(c) A white mark between the eyes
(d) A white mark that extends up to the knee or hock
3.3.50 A ‘girth gall’ is caused by:
(a) A nail or sharp object penetrating the skin
(b) A kick
(c) Rubbing by dirty or ill-fitting tack
(d) Excessive grooming

3.3.51 When correctly fitting a bridle, how many fingers should fit between the throat lash and the horse’s jaw?
(a) 2
(b) 3
(c) 4
(d) 5

3.3.52 From which points on the horse would you measure to fit a rug?
(a) From the highest point of the wither to the dock
(b) From the point of the shoulder to the furthest point of the quarters
(c) From the centre of the chest to the furthest point of the quarters
(d) From the highest point of the withers to the brisket

3.3.53 The trot is a:
(a) Three time movement with a moment of suspension
(b) Two time movement with a moment of suspension
(c) Four time movement
(d) Four time movement with a moment of suspension

3.3.54 A coat colour consisting of large irregular patches of brown and white is described as:
(a) Piebald
(b) Appaloosa
(c) Cremello
(d) Skewbald

3.3.55 What piece of grooming equipment should not be used on a horse living out on grass
(a) Body brush
(b) Dandy brush
(c) Water brush
(d) Hoof oil brush
3.4  **Health and Welfare**

3.4.1 Which of the following is a part of the hoof?
   
   (a) Pedal bone  
   (b) Ergot  
   (c) Carpus bone  
   (d) Short pastern bone  

3.4.2 Small triangular bones at the back of the fetlock joint are called:
   
   (a) Splint bones  
   (b) Coffin bones  
   (c) Sesamoid bones  
   (d) Navicular bones  

3.4.3 Which of the following is not an illness suffered by foals?
   
   (a) Joint ill  
   (b) Septicaemia  
   (c) Bladder rupture  
   (d) Cushings  

3.4.4 Ringworm is caused by a:
   
   (a) Bacteria  
   (b) Fungus  
   (c) Virus  
   (d) Parasite  

3.4.5 Strangles is caused by a:
   
   (a) Bacteria  
   (b) Fungus  
   (c) Virus  
   (d) Parasite  

3.4.6 A congenital condition is:
   
   (a) Acquired in later life  
   (b) Clinical at birth  
   (c) Of nutritional origin  
   (d) Of hormonal origin
3.4.7 Wobbler syndrome affects:
(a) The limbs  
(b) The spine  
(c) The circulatory system  
(d) The digestive system

3.4.8 If a horse is suffering from choke you should:
(a) Arrange to have his stomach tubed  
(b) Observe and do nothing  
(c) Remove all hay, feed and water  
(d) Administer a drench

3.4.9 Which joint is not part of the forehand?
(a) Stifle  
(b) Fetlock  
(c) Shoulder  
(d) Short pastern

3.4.10 Which of the following statements is true about the ‘white line’ in the horse’s foot?
(a) It is found behind the frog  
(b) It is only found in the left hand hind foot  
(c) It is the junction between the sole and the hoof wall  
(d) It is a colourless film of soft horn

3.4.11 How many vertebrae are in the horse’s spinal column (backbone)?
(a) Seven  
(b) Eighteen  
(c) Forty five  
(d) Fifty four

3.4.12 How many neck vertebrae does the horse have?
(a) 4  
(b) 8  
(c) 7  
(d) 6
3.4.13 The normal respiratory rate at rest should be between:
(a) 16 and 32 per minute
(b) 10 and 16 per minute
(c) 5 and 10 per minute
(d) 4 and 8 per minute

3.4.14 What is an adult horse’s normal temperature?
(a) 36.9 – 37.6 degrees C [98.4 – 99.7 degF]
(b) 37.6 – 38.2 degrees C [99.7 – 100.8 degF]
(c) 38.2 – 39.5 degrees C [100.8 – 103.1 degF]
(d) 39.5 – 40.2 degrees C [103.1 – 104.4 degF]

3.4.15 The disease ‘laminitis’ can be caused by:
(a) Bacteria
(b) Virus
(c) Retained Placenta
(d) A knock on the Cannon bone

3.4.16 What are the premolars?
(a) The front molars
(b) The front teeth
(c) The lateral incisors
(d) The rear molars

3.4.17 At what age does the horse get canine teeth (tushes)?
(a) 6-12 months
(b) 2-3 years
(c) 4-6 years
(d) 6-8 years

3.4.18 At what age are the molars replaced?
(a) 6 years
(b) 6 months
(c) 4 years
(d) Never

3.4.19 At what age will the first teeth appear in a foal?
(a) When the foal is 1 - 2 weeks old
(b) When the foal is 3 - 4 weeks old
(c) When the foal is 5 - 6 weeks old
(d) When the foal is six months
3.4.20 What teeth are commonly called the milk teeth?
   (a) The hind molars
   (b) The temporary incisors
   (c) The canine teeth
   (d) The permanent incisors

3.4.21 Which is the most reliable indicator of the age of horses over 10 years?
   (a) Galvayne’s groove
   (b) First pre molar
   (c) First molar
   (d) Golden hoof

3.4.22 The ’stay apparatus’ allows the horse to:
   (a) Stand still
   (b) Rest while standing
   (c) Sleep
   (d) Stand on three legs

3.4.23 Which of the following is a sensitive part of the horse’s foot?
   (a) The wall
   (b) The laminae
   (c) The horn
   (d) The pedal bone

3.4.24 Which of the following is not a contagious disease?
   (a) Tetanus
   (b) Ringworm
   (c) Strangles
   (d) Contagious equine metritis

3.4.25 A horse with small isolated bumps under the skin of the buttocks, quarters and back or crusty scabs with sticky pus underneath is displaying signs of:
   (a) Sweet itch
   (b) Rain scald/rot
   (c) Mud Fever
   (d) Cushings
3.4.26 Which of the following statements is true?
(a) Foals have some immunity to disease at birth
(b) Foals have total immunity to disease at birth
(c) Foals have no immunity at birth
(d) Foals only have immunity against the bacteria in the mare’s stable at birth

3.4.27 The foal has maximum ability to absorb Colostrum antibodies through the digestive tract during what period after birth?
(a) The first 12 to 24 hours
(b) The first 8 hours
(c) The first 24-48 hours
(d) The entire first week of life

3.4.28 Lice usually affect horses at what time of the year?
(a) In the winter and early spring
(b) During the summer grazing season
(c) In the autumn
(d) In late summer

3.4.29 Internal Parasites are the most common cause of what disorder?
(a) Navicular
(b) Pneumonia
(c) Sweet Itch
(d) Colic

3.4.30 Which of the following is a common internal parasite in horses?
(a) Ticks
(b) Lice
(c) Tapeworms
(d) Maggots

3.4.31 Why should the worm dose chemical ingredient (not just the product brand name) used be changed on a regular basis?
(a) To prevent an increase of worm resistance to the drug
(b) It could cause abortion
(c) It may have an unpleasant taste
(d) To keep the cost of dosing down
3.4.32 How often should a horse’s hooves be trimmed in warm climates?
(a) Once per year
(b) Only when the horse is being worked regularly
(c) Every six to eight weeks
(d) Never as they wear down naturally

3.4.33 Which of the following is typified by blood spurting from a wound in pulses equal to the heart beat?
(a) Venous bleeding
(b) Capillary bleeding
(c) Skin graze
(d) Arterial bleeding

3.4.34 Which of the following is commonly characterised by enlarged lymph nodes under the jaw which swell and eventually rupture?
(a) Strangles
(b) Abortion
(c) Adenovirus
(d) Influenza

3.4.35 Which of the following trees are poisonous for horses?
(a) Beech
(b) Yew
(c) Ash
(d) Sycamore

3.4.36 The onset of which of the following diseases is associated with the feeding of mouldy hay?
(a) Haemolytic Disease
(b) Chronic Obstructive Pulmonary Disease
(c) Cushings
(d) Uterine infection

3.4.37 Which one of the following is commonly considered an unsoundness?
(a) Thoroughpin
(b) Capped Hock
(c) Ringbone
(d) Capped Elbow
3.4.38 Weaving refers to:
(a) A horse repeatedly shifting weight from one front foot to the other
(b) A horse arranging its hay across the stall
(c) A horse walking in criss-cross patterns around the field
(d) A horse trotting in circles

3.4.39 Where on the body is a curb found?
(a) On the interior of the front cannon
(b) On the fetlock joint
(c) On the heel
(d) Below the point of the hock

3.4.40 If a horse leans back, and not standing normally on the forelegs, what might be the problem?
(a) The horse might have problems with the kidneys
(b) The horse might have colic
(c) The mare may be foaling
(d) The horse might have laminitis

3.4.41 Which of the following vaccinations are necessary for your horse’s health and mandatory for travelling to equine events?
(a) Influenza
(b) Equine Herpes Virus
(c) Strangles
(d) Rotavirus

3.4.42 Where are the splint bones located?
(a) At the rear of the fetlock joint
(b) At the rear of the hoof joint
(c) On the inside of the hock
(d) At the sides of the cannon bone

3.4.43 A splint is a:
(a) Bony lump on the front leg below the knee
(b) Soft enlargement at the top of the hoof
(c) Bony lump on the lower jaw
(d) Thickening of the ligament about 15 cms below the point of the hock
3.4.44 Corrective trimming where necessary of a foal’s feet should begin at
   (a) Six weeks of age  
   (b) Six months of age  
   (c) 12 months of age  
   (d) 18 months of age

3.4.45 High Ringbone can be felt as hard areas located:
   (a) On the inside of the cannon bone  
   (b) Just below the point of the hock  
   (c) In the bulb of the heel  
   (d) In front of the pastern joint

3.4.46 In an attempt to eradicate bots the best time to dose your horse to prevent them is:
   (a) Early spring  
   (b) Mid-summer  
   (c) Late autumn / winter  
   (d) Late summer

3.4.47 When holding the horse for a vet or farrier where would you stand?
   (a) On the same side as the vet or farrier  
   (b) On the opposite side to the vet of the farrier  
   (c) Directly in front of the horse  
   (d) 60 cm in front of the horse

3.4.48 Which of the following clinical signs are not indicative of inflammation?
   (a) Heat  
   (b) Pain  
   (c) Rash  
   (d) Disturbance of function

3.4.49 Which of the following diseases are contagious in horses?
   (a) Tetanus  
   (b) Strangles  
   (c) Botulism  
   (d) Brucellosis
3.4.50 Which of the following insects causes the disease sweet itch?
   (a) The horse fly
   (b) The stable fly
   (c) The midge
   (d) The mite

3.4.51 Which of the following is not a common cause of septicaemia in foals?
   (a) Lack of hygiene in foaling boxes
   (b) Contaminated udder of the mare
   (c) Failure to absorb sufficient antibodies from colostrum
   (d) Keeping foals outside in cold, wet weather

3.4.52 A healthy horse will be:
   (a) Breathing regularly
   (b) Dull and listless
   (c) Lying down for long periods
   (d) Breathing irregularly

3.4.53 What condition would you suspect if you discovered a black, foul-smelling, moist material in the clefts of the frog?
   (a) Mud fever
   (b) Rain scald
   (c) Thrush
   (d) Seedy toe

3.4.54 What bones make up the tail section of the horse?
   (a) Cervical
   (b) Lumbar
   (c) Sacral
   (d) Coccygeal
4 Sports and Studbook Questions

4.1 Sport

Please Note:

(i) Sport questions will be taken from the WBFSH (eventing, dressage and show jumping) horse and studbook rankings
http://www.wbfsh.org/GB/Rankings/Horse%20and%20studbook%20rankings.aspx These include sire rankings
http://www.wbfsh.org/GB/Rankings/Sire%20Rankings/2016.aspx and horse and studbook rankings

(ii) Participants should have an outline knowledge of the top 50 horses in the individual horse rankings for dressage, eventing, and show jumping.

(iii) Participants will also need to know the breed codes and Studbook logos. These can be found at
http://www.wbfsh.org/GB/Rankings/Horse%20and%20studbook%20rankings.aspx

(iv) A general knowledge of sport is also required from:
- FEI Longine and other discipline rankings http://www.fei.org/fei/fei-partners/longines/rankings
- FEI Olympic Disciplines http://www.fei.org/events/rio-2016-olympics

4.1.1 Which studbook led the annual FEI/ WBFSH world rankings for producing show jumpers last year?

(a) HANN
(b) WESTF
(c) KWPN
(d) HOLST

4.1.2 The gold medal winner in dressage at the last World Equestrian Games belongs to which studbook?

(a) HANN
(b) KWPN
(c) OLD
(d) SF
4.1.3 The bronze medal winner in Eventing at the last Olympic Games belongs to which studbook?
   (a) SF
   (b) HOLST
   (c) KWPN
   (d) ISH

4.1.4 What is the name of the top ranking sire in show jumping in the annual FEI/WBFSH world rankings last year?
   (a) Cornet Obolensky
   (b) Diamant de Semilly
   (c) Kannan
   (d) Balou de Rouet

4.1.5 Which were the top two horses contributing to the points tally of the ZANG studbook in the annual FEI/WBFSH show jumping world rankings list last year?
   (a) HH Carlos Z and Casallo Z
   (b) Casade Liberte and Don VHP Z
   (c) Casallo Z and Papillon Z
   (d) Don VHP Z and HH Carlos Z

4.1.6 In the last annual FEI/WBFSH dressage stallion rankings who was the leading stallion?
   (a) Gribaldi
   (b) Negro
   (c) De Niro
   (d) Michellino

4.1.7 In the last annual FEI/WBFSH rankings the 2nd ranking top event horse is from which studbook?
   (a) SF
   (b) ISH
   (c) SHBGB
   (d) SATHU

4.1.8 In the last annual FEI/WBFSH eventing rankings the leading stallion as a sire of eventers is
   (a) Heraldik XX
   (b) Jaguar Mail
   (c) Contendro
   (d) Master Imp XX
4.1.9 The 2nd ranking studbook for eventing in the last annual FEI / WBFSH world ranking list is
   (a) ISH
   (b) KWPN
   (c) SF
   (d) HANN

4.1.10 The second-placed studbook for dressage in the last annual FEI/WBFSH world ranking list is
   (a) HANN
   (b) OLD
   (c) KWPN
   (d) DWB

4.1.11 In the last annual FEI/WBFSH showjumping world rankings list which studbook is in 2nd place?
   (a) HANN
   (b) DWB
   (c) HOLST
   (d) OLDBG

4.1.12 The individual eventing gold medal winning horse at the last FEI World Equestrian Games
   belongs to which studbook?
   (a) HANN
   (b) HOLST
   (c) ISH
   (d) SF

4.1.13 The bronze medal winner in dressage at the last Olympic Games belongs to which studbook?
   (a) KWPN
   (b) WESTF
   (c) HANN
   (d) OLDBG

4.1.14 The 3rd ranked horse in the last annual FEI/WBFSH world rankings for eventing horses belongs
   to which studbook?
   (a) ISH
   (b) DSP
   (c) SF
   (d) SHBGB
4.1.15 Which studbook was ranked 3rd in eventing in the last annual FEI/WBFSH rankings?
(a) ISH studbook
(b) HANN studbook
(c) HOLST studbook
(d) BWP studbook

4.1.16 Which studbook was ranked 3rd in the last annual FEI/WBFSH studbook rankings for dressage?
(a) WESTF
(b) HANN
(c) OLDBG
(d) HOLST

4.1.17 What stallion was ranked 3rd in the last annual FEI/WBFSH world rankings for eventing through progeny performance?
(a) Jumbo
(b) Contendro I
(c) Courage II
(d) Jaguar Mail

4.1.18 What is the name of the 5th ranking stallion on dressage progeny performance points in the last annual FEI/WBFSH world rankings?
(a) Floristan
(b) Jazz
(c) Sandro Hit
(d) Come Back II
4.2 Studbooks

QUESTIONS WILL BE TAKEN FROM THE INFORMATION CONTAINED IN THE WEB SITE OF THE WBFSH:
http://www.wbfsh.org/GB/Members/The%20Members%20and%20Associate%20Members.aspx

4.2.1 Which of the following is a Swedish bred of sport horse
   (a) SF
   (b) HOLST
   (c) SBS
   (d) SWB

4.2.2 Which of the following German Studbooks finished in the top 2 in the last annual FEI/WBFSH studbook rankings for eventing?
   (a) OLDBG
   (b) HOLST
   (c) WESTF
   (d) HANN

4.2.3 Which of the following studbooks had more than one horse in the top six in the last annual FEI/WBFSH individual jumping horse rankings?
   (a) HANN
   (b) HOLST
   (c) SBS
   (d) OLDBG

4.2.4 Which of the following sires had two offspring in the top 15 in the last annual FEI/WBFSH individual jumping horse rankings?
   (a) Caretino
   (b) Kannan
   (c) Diamant de Semilly
   (d) Casall

4.2.5 Which of the following sires had two offspring in the top five in the last annual FEI/WBFSH individual dressage rankings?
   (a) De Niro
   (b) Gribaldi
   (c) Sandro Hit
   (d) Dimaggio
4.2.6 Which of the following is the sire of the 4th ranked individual dressage horse in the last annual FEI/WBFSH rankings?

(a) Don Ruto
(b) Florett AS
(c) Rotspon
(d) Jazz

4.2.7 Which of the following abbreviations does not represent a German studbook?

(a) HOLST
(b) HANN
(c) BHHS
(d) WESTF

+ 4.2.8 Which of the following pairs of studbooks are based in North America?

(a) BHHS and WBSUK
(b) SBHGB and AES
(c) AWR and CWHBA
(d) ISH and NRPS

4.2.9 Which of the following studbook abbreviations represents a Belgian studbook?

(a) SATHU
(b) SF
(c) SHBGB
(d) SBS
5 Senior Questions

5.1 Breeding

5.1.1 Which of the following is not a type of artificial vagina?
   (a) Colorado
   (b) Missouri
   (c) French
   (d) Texas

5.1.2 Cervical Star is the term used to describe:
   (a) The shape of the mare’s cervix
   (b) The top of the fallopian tube
   (c) The thinnest area of the placenta
   (d) The shape of the mare’s cervix

5.1.3 Which of the following acts as a protector and cleanser of the reproductive system?
   (a) The udder
   (b) The mandible
   (c) The vagina
   (d) The fetlock

5.1.4 What is the average number of semen jets when a stallion ejaculates?
   (a) 1-3
   (b) 3-6
   (c) 6-9
   (d) 9-12

5.1.5 The perineum is:
   (a) The period when a mare is receptive to the stallion
   (b) A part of the horse’s digestive system
   (c) The outer vulva and adjacent skin along with the anus and surrounding skin
   (d) A part of the horse’s respiratory system
5.1.6 How long on average will an egg remain viable in the mare after ovulation and before fertilisation?
   (a) 9 to 12 hours
   (b) 24 to 28 hours
   (c) 3 to 6 days
   (d) More than 6 days

5.1.7 What is the average length of time the stallion’s sperm will remain viable for fertilisation in the mare after natural covering?
   (a) 1 to 3 hours
   (b) 6 to 12 hours
   (c) 12 to 24 hours
   (d) 36 to 48 hours

5.1.8 Which of the following is a fungus which can be a potential cause of abortion in mares?
   (a) Equine herpes virus
   (b) Candida
   (c) Leptospirosis
   (d) Streptococcus equi

5.1.9 The average length of survival of frozen semen post thawing is:
   (a) 12 hours
   (b) 24 hours
   (c) 36 hours
   (d) 48 hours

5.1.10 Which of the following is a common cause of infectious diarrhoea in foals?
   (a) Roundworm
   (b) Tapeworm
   (c) Rotavirus
   (d) Contagious equine metritis
5.1.11 On average how many days after fertilisation does the embryo travel from the fallopian tube and enter the womb
   (a) 2
   (b) 4
   (c) 6
   (d) 8

5.1.12 Meconium is/are the:
   (a) Tissues surrounding a new born foal
   (b) First milk of a mare after foaling
   (c) Cord connecting the foetus to the placenta
   (d) First dung of a new born foal

5.1.13 Colostrum has a high content of:
   (a) Magnesium
   (b) Antibodies
   (c) Vitamin K
   (d) Calcium

5.1.14 The estimated foaling date for a mare covered on the 30th May 2012 is:
   (a) 1st April 2013
   (b) 15th April 2013
   (c) 5th May 2013
   (d) 30th May 2013

5.1.15 What is the normal presentation of a foal at birth?
   (a) Two front legs together with the head resting on the knees
   (b) One hind leg and one front leg together
   (c) Head first with the front legs trailing
   (d) One front leg slightly ahead of the other with the head resting on the knees

5.1.16 How many days after ovulation is a mare generally scanned to detect the presence of a heartbeat in the foetus?
   (a) 10 days
   (b) 16 days
   (c) 21 days
   (d) 28 days
5.1.17 Reproductive tract infection will enter the mare through the:
   (a) Udder
   (b) Vulva
   (c) Mouth
   (d) Nostril

5.1.18 The period of time from the mare breaking water to delivering a foal on the ground is usually no longer than:
   (a) 30 minutes
   (b) 2 hours
   (c) 3 hours
   (d) 4 hours

5.1.19 When the foal is born what should you do with the umbilical cord?
   (a) Break it straight away
   (b) Allow it to break naturally
   (c) Cover it with iodine before it breaks
   (d) Cut it with a scissors

5.1.20 What is the first job you should do with a new born foal?
   (a) Break the umbilical cord
   (b) Clear the foal’s airways
   (c) Give the mare a drink of water
   (d) Milk the mare

5.1.21 After the umbilical cord breaks, what would you do to prevent infection entering the navel stump?
   (a) Give the foal a vitamin injection
   (b) Wash the stump with soap and water
   (c) Treat it with a 10% tincture of iodine solution
   (d) Give the foal an injection of 5% penicillin

5.1.22 How soon after the birth of the foal should the mare normally pass the placenta (afterbirth)?
   (a) Within three hours
   (b) 10 to 12 hours after birth
   (c) 24 hours after birth
   (d) 48 hours after birth
5.1.23 How soon should a foal be standing after a normal birth?
(a) After 6 hours
(b) Within 2 hours
(c) After 8 hours
(d) After 12 hours

5.1.24 How soon after a normal birth should a foal be suckling effectively?
(a) Within one hour
(b) Within 3 hours
(c) After 6 hours
(d) After 10 hours

5.1.25 If a foal is showing sign of colic within 24 hours of birth what would you suspect?
(a) The foal is unable to pass the first dung
(b) The foal has drunk too much milk
(c) The foal has not had enough milk
(d) The foal has eaten too much roughage

5.1.26 The Corpus Luteum produces which hormone?
(a) Follicle Stimulating Hormone
(b) Oestrogen
(c) Progesterone
(d) Prostaglandin

5.1.27 The white glistening tissue that a foal is normally born in is the:
(a) Placenta
(b) Amnion
(c) Connective tissue
(d) Umbilical cord

5.1.28 What can the breeder do to start the breeding season earlier than naturally?
(a) Leave the mare outside
(b) Use artificial lights to extend the length of daylight
(c) Give the mare a worm dose
(d) Keep the stable cool during the day
5.1.29 An enema is used for what purpose?
(a) To stop bleeding in the mare after foaling
(b) To assist with the passage of droppings in the foal
(c) To resuscitate a foal with breathing difficulties
(d) To encourage milk production in the mare

5.1.30 When using artificial lightening to bring the mare into season earlier in the breeding season the mare must have:
(a) 1 hour of darkness
(b) 4 hours of darkness
(c) 8 hours of darkness
(d) 24 hours of light

5.2 Feeding

5.2.1 Which of the following is a trace mineral?
(a) Biotin
(b) Cobalt
(c) Lysine
(d) Riboflavin

5.2.2 The recommended amount of protein in a foal pellet is
(a) 12%
(b) 14%
(c) 10%
(d) 18%

5.2.3 Linseed is an excellent source of which of the following?
(a) Vitamin A
(b) Carbohydrates
(c) Omega 3 fatty acids
(d) Vitamin K

5.2.4 Which of the following statements about yeast is untrue?
(a) Live yeast is classed as a probiotic
(b) Live yeast is classed as a prebiotic
(c) Live yeast has beneficial effects on the hindgut
(d) Live yeast helps to remove excess sugar and starch from the hindgut
5.2.5 Which of the following supplements may be fed to a horse with hoof problems?
(a) Vitamin C
(b) Yeast
(c) Biotin
(d) Cod Liver Oil

5.2.6 Which of the following supplements may be fed to horses with respiratory problems?
(a) Vitamin C
(b) Vitamin D
(c) Methionine
(d) Copper

5.2.7 What two minerals does a horse require in the minimum amount, in the proper ratio, and in the presence of vitamin D for proper skeletal growth?
(a) K and Se
(b) Na and Cl
(c) Ca and P
(d) Mg and Mn

5.2.8 Foals and weanlings that have an irregular/abnormal rate of growth may suffer from:
(a) Epiphysitis
(b) Founder
(c) Colic
(d) Tying-up

5.2.9 The organ in the horse’s digestive system that allows the digestion of cellulose is called:
(a) Stomach
(b) Colon
(c) Liver
(d) Caecum

5.2.10 Which of the following enzymes acts in the digestion of starch?
(a) Lipase
(b) Lactase
(c) Amylase
(d) Pepsin
5.2.11 Which of the following enzymes acts in the digestion of protein?
   (a) Lactase  
   (b) Pepsin  
   (c) Lipase  
   (d) Sucrase  

5.2.12 Which of the following enzymes acts in the digestion of milk sugar?
   (a) Pepsin  
   (b) Lactase  
   (c) Lipase  
   (d) Sucrase  

5.2.13 Which of the following is not part of the large intestine?
   (a) Caecum  
   (b) Colon  
   (c) Duodenum  
   (d) Rectum  

5.2.14 The liver produces which of the following?
   (a) Pancreatic liquids  
   (b) Bile  
   (c) Saliva  
   (d) Blood  

5.2.15 Most digested food is held in the stomach for what period of time?
   (a) 10 minutes  
   (b) 20 minutes  
   (c) 18 – 24 hours  
   (d) 40 minutes  

5.2.16 Which of the following is not part of the small intestine?
   (a) Duodenum  
   (b) Jejunum  
   (c) Sacrum  
   (d) Ileum
5.2.17 Saliva contains a small amount of which of the following enzymes:
   (a) Amylase
   (b) Lactase
   (c) Maltase
   (d) Sucrase

5.2.18 Depending on the work load, feed and climatic conditions a stabled horse will normally drink how many litres of water per day?
   (a) 5 -10 litres [1.3 – 2.6 gallons]
   (b) 20 – 40 litres [5.3 – 10.6 gallons]
   (c) 80 -100 litres [21.1 – 26.4 gallons]
   (d) 120 – 140 litres [31.7 – 37.0 gallons]

5.2.19 How many teeth does a mature horse have?
   (a) 12 to 14
   (b) 24 to 26
   (c) 40 to 42
   (d) 60 to 65

5.2.20 Which of the following nutrients acts as an antioxidant?
   (a) Selenium
   (b) Phosphorous
   (c) Iron
   (d) Cobalt

5.2.21 When should colostrum be fed to a foal?
   (a) Five days after birth
   (b) Three days after birth
   (c) 36 to 48 hours after birth
   (d) Within 12 hours of birth

5.2.22 Each day a horse can eat hay and concentrates weighing about:
   (a) 2.5% of its body weight
   (b) 5.0% of its body weight
   (c) 7.5% of its body weight
   (d) 10.0% of its body weight
5.2.23 Fibre is essential in the horse diet because without it:
   (a) Blood would stop circulating
   (b) The mare would abort
   (c) The skin would dry up
   (d) The digestive system would cease to work

5.2.24 With which supplement do you associate the letters A, B, D, E and K with?
   (a) Minerals
   (b) Vitamins
   (c) Fibre
   (d) Electrolytes

5.2.25 A compound feed:
   (a) Contains no protein
   (b) Should not be fed to mares
   (c) Provides a constant, balanced diet
   (d) Must be mixed with a mineral supplement

5.2.26 Bacteria in the caecum help the horse by producing the enzyme cellulase that digests cellulose. In this process these bacterium produce a substance that is used as an energy source by the horse and is called:
   (a) Glucose
   (b) Starch
   (c) Volatile fatty acid
   (d) Fats

5.2.27 Rapidly changing a mare’s diet can cause:
   (a) Coughing
   (b) Diarrhoea
   (c) Azoturia
   (d) Premature foaling

5.2.28 Which of the following statements is true in relation to the digestive system of the horse?
   (a) The small intestine consists of the caecum, colon and rectum
   (b) The stomach has a capacity to cope with as much as 5 kg of concentrate feed at a time
   (c) The large intestine contains microbes which aid in digestion
   (d) The liver secretes enzymes
5.2.29 The ideal pH of soils for grazing is:
(a) 7.0 to 7.5
(b) 3.0 to 4.0
(c) 4.5 to 5.0
(d) 6 to 6.5

5.2.30 Where does the horse digest fat?
(a) In the stomach
(b) In the small intestine
(c) In the caecum and the large intestine
(d) In the liver

5.3 Stable Management

5.3.1 Which of the following is not a type of double jointed bit?
(a) Egg butt snaffle
(b) French bridoon
(c) Dick Christian
(d) Dr Bristol

5.3.2 When a horse is galloping and cuts into the leg just below the knee or hock with the opposite front or hind leg this is termed
(a) Brushing
(b) Over reach
(c) Tread
(d) Speedicut / Clipped Heels

5.3.3 What part of the horse’s foot bears most of the horse’s weight?
(a) The frog
(b) The sole
(c) The wall
(d) Seat of corn

5.3.4 Which of the following is not a type of Pelham bit?
(a) Vulcanite
(b) Kimblewick
(c) Jointed
(d) Banbury
5.3.5 A coat clip where the hair is removed from the head, neck, shoulder and belly and a narrow strip either side at the dock is termed
(a) Full clip
(b) Blanket clip
(c) Hunter clip
(d) Trace clip

5.3.6 A coat clip where hair is removed in a strip from the shoulder, belly, and thighs and the under part of the neck is termed:
(a) Blanket clip
(b) Trace clip
(c) Hunter clip
(d) Full clip

5.3.7 Which of the following is not a part of the saddle?
(a) Tree
(b) Skirt
(c) Pommel
(d) Bridoon

5.3.8 Which of the following is used to prevent a horse opening his mouth and evading the action of the bit?
(a) A cavesson noseband
(b) A drop noseband
(c) A curb chain
(d) A Pelham

5.3.9 A martingale secured to a neck strap and girth and also attached directly to a Cavesson noseband is:
(a) A running martingale
(b) A standing martingale
(c) An Irish martingale
(d) A bib martingale

5.3.10 The recommended size of a stable for foaling down a mare is
(a) 1m x 1m [3.3ft x 3.3ft]
(b) 2.4m x 2.4m [7.9ft x 7.9ft]
(c) 3.7m x 3.7m [12.1ft x 12.1ft]
(d) 4.5m x 4.5m [14.8ft x 14.8ft]
5.3.11 What is a metal curry comb used for?
(a) Cleaning the body brush
(b) Taking off hard mud on a horse’s coat
(c) Brushing out the tail
(d) Cleaning horses’ hooves

5.3.12 The foot sequence in a horse when walking is:
(a) Near hind, near fore, off hind, off fore
(b) Near hind, off fore, off hind, near fore
(c) Off hind, near fore, near hind, off fore
(d) Off fore, off hind, near fore, off fore

5.3.13 The foot sequence when the horse is trotting is:
(a) Near hind and near fore together, off hind and off fore together
(b) Near hind and off fore together; off hind and near fore together
(c) Near hind and off hind together; near fore and off fore together
(d) Near hind, off fore, off hind, near fore

5.3.14 The foot sequence in canter when the left foreleg is leading is:
(a) Near hind, off hind and near fore together, off fore, moment of suspension
(b) Near hind, near fore and off hind together, near fore, moment of suspension
(c) Off hind, near hind and off fore together, near fore, moment of suspension
(d) Off hind, off fore and near hind together, off fore, moment of suspension

5.3.15 The foot sequence in gallop is:
(a) Off hind, near hind, off fore, near fore, moment of suspension
(b) Off hind, off fore, near hind, near fore, moment of suspension
(c) Off hind, near fore, near hind, off fore, moment of suspension
(d) Near hind, near fore, off hind, off fore, moment of suspension

5.3.16 A Bridoon is:
(a) A type of bridle
(b) A type of saddle
(c) A type of bit
(d) A type of boot
5.3.17 Tendons are:
(a) Cords extending from the muscles, which attach to the bones
(b) Ligaments which protect the bones from injury
(c) Vessels which carry blood to the bones
(d) Vessels which carry blood to muscles

5.3.18 Which of the following is not a natural aid when riding?
(a) Leg
(b) Hand
(c) Whip
(d) Seat

5.3.19 Bandages over a joint should be applied:
(a) From above the joint spiralled downward
(b) From below the joint spiralled upward
(c) In a figure eight pattern over the joint
(d) From the top to the bottom

5.3.20 Weaving is generally thought to be a result of as:
(a) Improper diet
(b) Boredom
(c) Exercise
(d) Too much concentrate feeding

5.3.22 Which of these bits does not have an element which goes through the horse’s mouth?
(a) Pelham
(b) Hackamore
(c) Gag
(d) Snaffle

5.3.23 Which of the following is not a type of horse shoe?
(a) Egg bar shoe
(b) Heart bar shoe
(c) T Bar shoe
(d) Kidney Bar shoe
5.3.24 Loose housing systems are mainly used for what type of horse:
(a) Young horses
(b) Hard working horses
(c) Racehorses
(d) Competition horses

5.3.25 Which observed coat colour (phenotype) is most prevalent when both parents are homozygous for the dominant Agouti allele (genotype)?
(a) Black
(b) Cremello
(c) Chestnut
(d) Bay

5.3.26 What is the term used to describe the communication between a horse and rider?
(a) Horse language
(b) Riding lessons
(c) Aids
(d) Halts

5.3.27 When is the horse said to be ‘straight’ when being ridden or lunged?
(a) When going straight ahead
(b) When the front legs and hind legs are on the same track
(c) When the horse is flexed inwards
(d) When the horse is standing

5.3.28 When you ask the horse for a left lead canter, which leg strikes off first?
(a) Left fore leg
(b) Left hind leg
(c) Right fore leg
(d) Right hind leg

5.3.29 What word is used to describe the shape a horse makes over a fence when jumping in good style/form?
(a) Parabola
(b) Rounded
(c) Culbask
(d) Bascule
5.3.30 Normally, the correct number of nails used when shoeing is:
(a) 3 on the outside, four inside
(b) 3 on the outside, 3 inside
(c) 4 on the outside, 3 inside
(d) 6 on both sides

5.3.31 A white hair mark in the centre of the forehead is described as a:
(a) Star
(b) Stripe
(c) Flesh mark
(d) White face

5.4 Health and Welfare

5.4.1 Which of the following conditions affects cartilage of the foot?
(a) Stringhalt
(b) Side bone
(c) Cracked heels
(d) Navicular syndrome

5.4.2 A hot poultice would **not** be used in which of the following scenarios?
(a) To decrease inflammation associated with swelling and bruising
(b) To encourage an abscess to burst
(c) To draw out an infection
(d) To increase the blood supply to an area

5.4.3 Which of the following wormer chemical ingredients is effective in targeting encysted small red worms?
(a) Fenbendazole
(b) Pyrantel
(c) Ivermectin
(d) Praziquantel

5.4.4 Which of the following is **not** a cause of respiratory disease?
(a) Equine viral arteritis
(b) Equine herpes virus
(c) Adenovirus
(d) Clostridia
5.4.5 Excess of which of the following minerals may cause loss of the hoof wall?
   (a) Fluorine
   (b) Copper
   (c) Iron
   (d) Selenium

5.4.6 Cleft palate is a deformity which may be seen in foals. How would you recognise it?
   (a) Milk dribbling down the nostrils after suckling
   (b) Milk dribbling out of the mouth after suckling
   (c) Profuse diarrhoea after suckling
   (d) Straining to pass droppings after suckling

5.4.7 Which of the following does not affect the seriousness of infected wounds?
   (a) Site of injury
   (b) Timing of infection
   (c) Type of infection
   (d) Resilience of the tissues

5.4.8 Which of the following is a viral disease in horses?
   (a) Equine influenza
   (b) Salmonella
   (c) Contagious equine metritis
   (d) Laminitis

5.4.9 Which of the following diseases cannot be vaccinated against?
   (a) Rotavirus
   (b) Influenza
   (c) Contagious equine metritis
   (d) Equine viral arteritis

5.4.10 Where on the body is a curb to be found?
   (a) On the interior of the front cannon
   (b) On the fetlock joint
   (c) On the heel
   (d) Below the point of the hock
5.4.11 At rest, the normal adult horse heart rate is:
   (a) 35 – 45 beats per minute  
   (b) 70 – 80 beats per minute  
   (c) 50 – 60 beats per minute  
   (d) 10 – 15 beats per minute  

5.4.12 The yellow eggs attached to the hair on the legs of horses during late summer and early autumn are the eggs of:
   (a) The bot fly  
   (b) The horse fly  
   (c) The midget fly  
   (d) The warble fly  

5.4.13 Where on the body is a windgall to be found?
   (a) On the interior of the front cannon just below the knee  
   (b) Over the fetlock joint  
   (c) On the heel  
   (d) Below the point of the hock  

5.4.14 Mares should be vaccinated in the fifth, seventh and ninth month of pregnancy to prevent:
   (a) EHV Abortion  
   (b) Strangles  
   (c) Colic  
   (d) Azorturia  

5.4.15 A parrot mouth is where:
   (a) The top jaw is shorter than the bottom jaw  
   (b) The top and bottom jaws are the same length  
   (c) The top jaw is longer than the bottom jaw  
   (d) The top jaw has one extra tooth  

5.4.16 Grazing cattle and horses together helps to:
   (a) Reduce the level of worm infestation on the pasture  
   (b) Minimize harmful plants that horses may eat.  
   (c) Prevent horses breaking out of the field  
   (d) Prevent horses eating the fence
5.4.17 A part of the horse’s leg is called the cannon bone, but how is it defined?
   (a) From the elbow to the pastern
   (b) From the knee to the hoof
   (c) From the knee to the pastern
   (d) From the fetlock to the hoof

5.4.18 If the mare dies during the foaling and you need to get some milk in a hurry, what kind of milk can you use as a replacement?
   (a) From a goat
   (b) From a cow
   (c) From a sow
   (d) From a sheep

5.4.19 At the selection of stallions, the height of the body is measured, but how is it defined?
   (a) The body of the horse from the mane to the underline of the chest
   (b) The width of the horse compared to the length
   (c) The size of the body compared to its height and length
   (d) From the highest point of the wither to the ground

5.4.20 Which of the following parasites primarily affects foals and young horses?
   (a) The tapeworm
   (b) The bloodworm
   (c) The round worm
   (d) The lung worm

5.4.21 The disease strangles is very infectious. In what category is this disease in?
   (a) Virus Infection
   (b) Bacterial air way disease
   (c) An inflammation condition
   (d) An allergy

5.4.22 Haemoglobin is usually carried by which of the following components of blood in the healthy horse?
   (a) Plasma
   (b) Red blood cells
   (c) White blood cells
   (d) Platelets
5.4.23 Which of the following may cause abortion in mares as well as respiratory disease?
   (a) Equine rhinovirus
   (b) Equine pneumonia
   (c) Equine Herpes virus
   (d) Tetanus

5.4.24 What disease does EIA stand for?
   (a) Equine Infectious Anaemia
   (b) Equine Infectious Arthritis
   (c) Endogenous Interior Anaemia
   (d) External Infectious Arthritis

5.4.25 Equine Herpes Virus is **not** responsible for
   (a) Respiratory disease
   (b) Neurological disease
   (c) Skin disease
   (d) Abortion

5.4.26 The term "golden hoof" describes which of the following?
   (a) A soft substance covering foals feet in the uterus
   (b) A well conformed hoof
   (c) A deformity rarely seen with golden coloured hoofs
   (d) The hooves of palomino coloured horses

5.4.27 Which of the following foaling delivery positions may cause the umbilical cord to become trapped, starving the foal of oxygen?
   (a) Elbow caught on the pelvis
   (b) Hips stuck
   (c) Front leg above the head
   (d) Head catching on the pelvis

5.4.28 How would you recognise haemolytic disease in the newborn foal?
   (a) Bleeding from the nostrils
   (b) Swollen limbs
   (c) Jaundice
   (d) Lack of suck reflex
5.4.29 A condition in which yellow colour can be seen in the mouth, eye and vagina is called?
   (a) Venereal disease
   (b) Equine coital exanthema
   (c) Jaundice
   (d) Contagious equine metritis

5.4.30 Internal parasites are the most common cause of
   (a) Navicular disease
   (b) Colic
   (c) Pneumonia
   (d) Headshaking