

0172-502 June 2017

**Level 3 Advanced Technical Certificate in Equine Management**

Level 3 Equine Management – Theory Exam (1)

- 1 Identify **four** features which are important to consider when assessing the suitability of a new field for a horse. (4 marks)

**Guidance**

*1 mark for each correct feature up to 4. Accept any other appropriate/relevant answer.*

- surrounding areas – secure (1) and safe (1)
- fencing and boundaries, including litter secure safe (1) and appropriate type for horses (1) and height of at least 4ft (1).
- drainage and ground conditions suitable for grazing not water logged (1)
- soil type (if applicable) (1)
- shelter: shade trees (1) hedges (1) manmade (1)
- water availability (1), access (1) and cleanliness (1)
- poisonous plants (1) and weeds (1) including trees (1)
- size/acreage in relation to number of horses (1), ideally one horse per acre (1)
- quality and quantity of grazing and alternatives (1)

- 2 Explain the impact **each** of the following types/designs of stable on the welfare of a horse. (8 marks)

- American barn
- Traditional yard
- Surrounding environment
- Size and dimensions

**Guidance**

*Up to 2 marks for each correct explanation, accept any other appropriate/relevant answer.*

- American barn, plenty of other horses to socially interact with (1), being so close allows disease to spread quickly (1), can be dusty when mucking out or replacing bedding or sweeping (1) as horses enclosed in with less ventilation than an outdoor box (1) which can lead to respiratory issues (1).
- Traditional yard Good ventilation with outside view (1) so horse has fewer respiratory issues (1) and less invasive from other horses as horses have own space (1), due to no direct contact disease spread not as easy (1). Can be stressful for horses who prefer social interaction (1).
- Surrounding environment can make a big different to horses if in busy/noisy location ie near a bus/lorry park, airport/shooting area could cause mental stress (1). Could be cold windy exposed cause physical stress (1). Hot, no air flow would cause horse to be uncomfortable (1). Lots of distractions cause stress (1), no distractions could cause boredom (1), lots to look at to keep the horse interested (1).
- Size and dimensions If stable small less than 12x12 horses could get cast more easily due to lack of space (1) , become stiff as less movement (1), become upset and anxious (1). Larger space would allow more movement lessen stiffness problems (1) create happy environment as more natural (1). Horse could build up more speed if became anxious (1).

3 State the **main** purpose for **each** of the following pieces of legislation applicable to the equine sector:

- Welfare of Animals (Transport) Order 2006
- The Welfare of Animals Regulations 1999 (slaughter or killing)
- Horse Passport Regulations 2009

(3 marks)

**Guidance**

*1 mark for each correct summary, accept any other appropriate/relevant answer.*

- Welfare of Animals (Transport) Order 2006  
This law is to protect horses/animals whilst in transit [1]
- The Welfare of Animals Regulations 1999 (slaughter or killing).  
To protect horses from entering the food chain if had recent medication (1) and the welfare during slaughter [1]
- Horse Passport Regulations 2009  
to give each horse an identification to allow monitoring of horses to help with credible sale and competition. [1]

4 When conducting a routine health check, it is important to record information that could indicate a potential health concern with a horse.

Give **two** examples of information for **each** of the following:

- behaviour
- faeces
- urine

(6 marks)

**Guidance**

*1 mark for each correct example, up to two for each, that would indicate a possible problem. Accept any other appropriate/relevant answer.*

Uncharacteristic **behaviour** such as :

- Grumpy (unlike themselves ie when groomed normally enjoy) [1]
- Listless and lethargic not as usual [1]
- Pawing - also could be looking at flanks [1]
- Quiet [1] – not eating or drinking [1]
- Sweating [1] or shaking [1] - Other than normal considering time of year, season, type of work etc.

**Faeces**

- Amount of faeces (more [1] or less frequent [1] could be a sign of digestive problems)
- colour of faeces (very dark can alert problems) [1]
- consistency of faeces (too hard [1] or too loose [1])
- smell of faeces (strong smell) [1]

**Urine**

- regularity of urination (lack could be dehydration) [1]
- concentration of urine (could be thick) [1]
- colour of urine (could be very dark in colour if problem) [1]
- smell of urine (strong pungent smell is an indication of a problem) [1]

- 5 Describe **five** ways disease can spread between horses and give **one** example of how **each** disease spread could be prevented. (10 marks)

**Guidance**

1 mark for each correct description of disease spread & 1 mark for an explanation of prevention.  
Assessor guidance –Any other appropriate/relevant answer

- **Direct** – actual physical contact spreads during contact with other horses in field or social interaction [1]  
prevention is to isolate the horse [1] and take bio security measures immediately. [1]
- **Indirect** – When a horse drinks from the same water, the infected horse did. [1]  
Prevent by ensuring all areas and contaminated equipment is sterilised ie foot bath disinfection of stables, feed buckets, tools and other equipment. [1]
- **Airborne** – when a disease/virus is transmitted in the air [1]  
Prevent by isolating horses away from any other horses immediately introduce bio security measures and no travelling to minimise risk of spread. [1]
- **Vectors** – a biting insect that bites an infected horse then bites another infecting the horse with disease. [1]  
Prevent by spraying areas with pesticides/ fly spray to reduce insects in the area [1]. Cover the horses in flysheets and masks and fly repellent to prevent bites. [1]
- **Fomites** - objects or materials which are likely to carry infection e.g. on a person caring for the infected animal infected fluid is on coat and another horse touches that. [1]  
Prevention is to immediately carry out bio security measures and disinfect all areas and have foot baths, overalls etc. [1]
- **Inhalation**- the breathing in of vapour/airborne/infection microbes. [1]  
Prevention is to isolate away from other animals (1) and use sheets on stable bars to prevent ease of airflow. [1]
- **Ingestion** – the eating of a contaminated source of food. [1]  
prevention by ensuring cleanliness of all equipment (1) and the care and checking of sources of the horse feed. [1]
- **Environment** – The infection or disease is on wood in stables or similar and infects new horse that arrives in. [1]  
Prevention by bio security including creosoting all wood and disinfecting all areas [1]

- 6a Explain **one** cause for **each** of the following nutritional disorders:

- Laminitis
- Gastric ulcers

(2 marks)

**Guidance**

1 mark for an appropriately explained cause for each disorder, Accept any other appropriate/relevant answer

**Laminitis**

**Cause** Rich diets with too many soluble carbohydrates. [1] Excess concentrated feed and /or too much new spring or autumn / frosty grass [1]

**Gastric ulcers**

**Causes** are by domestication we have reduced the time that the horse spends eating decreasing saliva production [1], exercising the horse splashes contents around the lining [1] and reduces blood flow to the wall. [1] Reduced the amount of forage fed in the diet and restricted feed intake causing acid levels in stomach to be high. [1]

6b Give **two** possible ways to manage **each** of the nutritional disorders in part 6a) within the horse's daily routine. (4 marks)

**Guidance**

*Up to 2 marks for correct explanation for the management of the cause for each disorder Accept any other appropriate/relevant answer*

**Laminitis Management**

changes include feeding low calorie high fibre diet. [1] Low intensity exercise with close monitoring of pain. [1] No turn out when rich grass or frosty and limited access to grass. [1] Corrective farriery if needed and X-rays. [1]

**Gastric ulcers Management**

changes include reduce hard feed and cut out grains. [1] Feed a digestive aid [1] Be aware not to over stress the horse in competition. [1] Always ensure the horse has plenty of roughage even when turned out and before exercise. [1] Ensure when giving medicine a pre and probiotic is also given to line the stomach. [1]

7 State the importance of keeping information updated in **five** of the records that should be used when monitoring the health of a sick horse. (5 marks)

**Guidance**

*1 mark for each relevant record and explanation. Accept any other appropriate/relevant answer*

- veterinary records – to ensure all medication is recorded in the event of an allergic reaction or if surgery was required [1]
- feeding and water intake records – to ensure good health management of the horse [1] and well-being also prevent other conditions [1] i.e. dehydration
- monitoring of clinical signs against expected recovery to ensure that the horse is reacting as expected no worsening of condition [1]
- frequency of defecation and urination – to ensure good health management of the horse and quick reaction to other conditions that could occur [1]
- pain management to ensure the horse is as comfortable as possible [1]
- adverse reactions to be quick to recognise any negative reactions to medication or other [1]

8 Explain the importance of grooming a horse that is kept at grass. (3 marks)

**Guidance**

*1 mark per correct explanation/statement – up to 3. Accept any other appropriate/relevant answer.*

- Importance of grooming to assist in health and wellbeing [1]
- Improves circulation especially when thick hair [1]
- Cleanliness to keep free from disease parasites lice etc. [1]
- Check for injury sores or other [1]
- Ensure shoes are secure and foot health and growth [1]
- Build relationship with horse and maintain human contact [1]
- Prevent matting of hair from weather conditions and conditions like rain scald and mud fever [1]
- Ensure not to use body brush to take natural oils from skin so a dandy brush used only [1]

- 9 State the recommended preventative care schedule for farrier requirements in grass kept horses and give **two** reasons for the frequency. (3 marks)

**Guidance**

1 mark for the correct frequency recommendation & 1 mark each for 2 correct explanations. Accept any other appropriate/relevant answer.

Frequency of farrier visits for a grass kept horse:

Foot care – reshod/trim every 5-6 weeks [1]

To ensure foot balance so not to strain tendons or limb due to foot growth [1] this must only be done by a qualified registered farrier. [1]

To ensure foot health to prevent cracks and poor health which can lead to lameness and possible infections. [1]

To ensure the frog has constant contact with the ground to ensure circulation [1]

*(Comparing a wild horse with the domestic horse due to the ground cover by a wild horse over varied terrain would naturally keep the hoof trimmed down) whereas a domestic horse does not travel the distance over varied terrain so it is necessary to trim the horse's hooves to prevent over growth. [1]*

- 10 Discuss the ethics of keeping horses in isolation stables whilst sick nursing takes place. (12 marks)

**Integration Question - Guidance**

Band 1: (0 – 4) marks; basic explanation showing some knowledge of the impacts to health and welfare, including some technical terms. Basic information given with little or no connection between the overall needs of the horse and its welfare. Little or no justification for impacts given.

Indicative content for answer – to aid band grading

Knowledge of horses' isolation and why it is important for health and an understanding of health checks and sick nursing. (Band 1)

Identifying impact of keeping horses in a stable (Band 1)

Identifying impact of isolation on behaviour (Band 1)

Band 2: (5-9) clear explanation showing knowledge and understanding of the impacts to health and welfare, including correct use of most technical terms. Detailed information given demonstrating some connection between the overall needs of the horse and its welfare. Some justifications for impacts given with reasonable detail

Indicative content for answer – to aid band grading

Relating isolation in a stable to specific nutritional and behavioural needs of the horse. (Band 2)

Discuss the physical and psychological health impacts of a lack of social interaction in the horse – linking to signs of health. (Band 2)

Can discuss different management systems e.g. isolate with another horse and the benefits of this system on welfare over isolated on own. (Band 2)

Can bring in information regarding the five animal needs relating to welfare. (Band 2)

Band 3: (10-12) marks; comprehensive explanation showing accurate knowledge of the impacts to health and welfare, correct use of all technical terms. Thorough information given demonstrating a

detailed connection between the overall needs of the horse and its welfare. Clear and accurate justification for impacts given.

Indicative content for answer – to aid band grading

Link this to knowledge of the domestic environment and the evolution of the horse as a trickle feeding prey species. (Band 3)

Can bring in welfare organisations and their importance to horse welfare and educating/helping animals whose welfare is compromised. (Band 3)