Qualification: 0172-504/004 Level 3 Equine Management – Theory exam (1)

June 2018

<table>
<tr><td>1</td><td colspan="3">State four routine measures that should be included when producing an annual preventative care schedule for a horse. (4 marks)</td></tr>
<tr><td></td><td>Acceptable answer(s)</td><td>Guidance</td><td>Max mks</td></tr>
<tr><td></td><td>1 mark each for any of the following, to a maximum of 4 marks:
• Parasite control [1]
• Vaccinations [1]
• Foot care [1]
• Dental care [1]
• Feeding and watering [1]
• Tack and equipment checks [1]
• Stable checks [1]
• Field checks [1]
• Fitness schedule [1]
• Physio therapy schedule [1]
• Checks of horse’s back
• Medication plan</td><td>Do not accept:
• pulse, respiration, temperature
• health check
• vet visits.

Accept specifics eg field being rolled</td><td>4</td></tr>
<tr><td>2</td><td colspan="3">Explain the impact that each of the following stable/yard features can have on the health and welfare of the horse.
a) Poor ventilation. (3 marks)
b) Isolated from other horses. (3 marks)</td></tr>
<tr><td></td><td>Acceptable answer(s)</td><td>Guidance</td><td>Max mks</td></tr>
<tr><td></td><td>1 mark each for any of the following, to a maximum of 3 marks per part:
a) Poor ventilation.
• Respiratory problems can be caused by high levels of dust. [1]
• Existing respiratory problems can be made worse due to high levels of dust. [1]
• Environmental irritants (dust/ammonia) can cause illness. [1]</td><td>Do not accept:
• Lack of oxygen/air
• Chemicals, paint, disinfectant

Examples of specific correct diseases are acceptable for a mark.</td><td>6</td></tr>
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	• Disease can be spread easier in a poorly ventilated environment [1] • Poor ventilation may cause extremes in temperature which can affect horse's health [1] • Too much ventilation could make the horse cold [1] **b) Isolated from other horses.** • Restricted social interaction can impact on the horse's welfare and health. [1] • Horse may become distressed when isolated which could potentially lead to injuries in the stable/field. [1] • Isolated horses may develop stereotypic behaviour to cope with a restricted environment. [1] • Isolated horses may have higher levels of stress which can impact on health. [1] • Lack of socialisation from a young age will cause problems in later life [1] • Beneficial to isolate ill horses to prevent spread of disease [1] • Restricts the ability to carry out natural behaviours. [1]		
3	State **two** vaccinations that are administered to horses to prevent diseases. (2 marks)		
	Acceptable answer(s)	**Guidance**	**Max mks**
	1 mark each for any of the following, to a maximum of 2 marks: • Equine Flu [1] • Tetanus [1] • Strangles [1] • Herpes [EHV] [1]	Accept correct vaccination names Other acceptable diseases should be awarded marks.	**2**
4	Identify **two** items found in an equine first aid kit that would be used when treating a horse with a foot abscess. (2 marks)		
	Acceptable answer(s)	**Guidance**	**Max mks**
	1 mark each for any of the following, to a maximum of 2 marks: • bandages [1] • cohesive bandage (vet wrap) [1] • adhesive tape [1] • poultice/ sterile dressing materials [1] • scissors [1] • cotton wool [1] • Epsom salts / salts [1] • Gloves [1]	Do **not** accept • items from other kits e.g. grooming kit. • Hibi scrub/bacterial wash Accept correct brand names.	**2**

5	For **each** of the following transmission routes, explain the management practices which should be put in place to prevent the spread of diseases on a busy yard. a) Vectors. (3 marks) b) Airborne. (3 marks)		
	Acceptable answer(s)	**Guidance**	**Max mks**
	1 mark each for any of the following, to a maximum of 3 marks per part: **a) Vectors** • Vaccination [1] • monitor other horses for signs of infection [1] • reduce stagnant water sources where vectors can easily breed [1] • control the muck heap areas to reduce vector numbers [1] • use protective clothing for horses, e.g. fly rugs, fly masks [1] • use of fly spray on horses to reduce the risk of vectors [1] **b) Airborne** • Vaccination [1] • ensure all staff wash their hands and change clothing before managing non-infected horses [1] • ensure infected horses are isolated away from the main yard to prevent spread [1] • ensure biosecurity procedures are set up on the yard [1] • monitor other horses for signs of infection [1] • exercise infected horses away from non-infected horses [1] • If no isolation available move horse to another yard/vets. [1]	Do **not** accept general terms such as 'monitor daily' without stating it is for signs of infection.	**6**
6	Explain the methods used to prevent mud fever in horses prone to the condition. (4 marks)		
	Acceptable answer(s)	**Guidance**	**Max mks**
	1 mark each for any of the following, to a maximum of 4 marks: • Ensure bedding is clean / dry [1] • stabling might be the only option to prevent reoccurrence [1] • Periodically disinfect all equipment / stable surfaces, as they could harbour dermatophilus spores [1] • Consider topical barrier creams to protect the skin from mud [1] • Try using waterproof leg wraps for turnout to protect the legs from contact with mud [1]		**4**

	• Consider nutritional supplements for promoting a healthy skin, [1] • Rotate paddocks to avoid poaching to prevent build-up of mud [1] • Use electric fencing to block off muddy areas [1] • concreting or hardcoring the areas where horses congregate helps keep legs dry [1] • reduce the amount of leg washing / let mud dry and brush mud off [1] • turn out horse in a sand/bark paddock [1] ensure legs are thoroughly dried after washing [1]		
7	State where in the horse's body the following digestive processes occur. a) Enzymatic. (1 mark) b) Microbial. (1 mark) c) Mechanical. (1 mark)		
	Acceptable answer(s)	**Guidance**	**Max mks**
	1 mark for each process location a) Enzymatic – mouth / stomach / small intestine [1] b) Microbial – large intestine / stomach [1] c) Mechanical – in the mouth / throughout the whole digestive tract [1]		**3**
8	State **three** items of feed/forage that would be appropriate to give a pregnant mare in her last trimester. (3 marks)		
	Acceptable answer(s)	**Guidance**	**Max mks**
	1 mark each for any of the following, to a maximum of 3 marks: • haylage [1] • grass [1] • high protein concentrates [1] • high energy concentrates [1] • stud mix [1] • balancer [1] • high quality hay [1] • alfalfa [1] • sugar beet [1] any other appropriate answer	Do **not** accept: • hay • competition mix • conditioning mix • feeds high in calcium • supplements	**3**
9	Explain the importance of **each** of the following factors when designing a feeding plan for a severely underweight horse. a) Digestibility. (2 marks) b) Palatability. (2 marks)		

	Acceptable answer(s)	Guidance	Max mks
	1 mark each for any of the following, to a maximum of 2 marks per part: **a) Digestibility** • provides a measure of a foods nutrient value and quality [1] which is important to consider when feeding an underweight horse [1] • the higher the digestibility level of a feed the more nutrients will be available for the horse to use [1] • higher digestibility will provide the horse with more energy in the diet [1] which makes it an important factor for weight gain [1] **b) Palatability** • affects how appealing a feed is to a horse [1] • the higher the palatability of a feed the more likely a horse is to eat the feed [1] this in turn will allow the horse to gain more nutrients in its diet [1] • this is why it is important for weight gain [1]		**4**
10	Explain why hay is the **most** suitable forage type to feed a horse which has a tendency to easily put on weight. (4 marks)		
	Acceptable answer(s)	**Guidance**	**Max mks**
	1 mark each for any of the following, to a maximum of 4 marks: • hay generally contains less energy than other types of forage [1] • energy is an important factor as the higher the energy content of the roughage the more easily a horse can put on weight [1] • hay generally requires more chewing than other types of forage which will keep a horse occupied for longer [1] • hay is generally high in fibre and low in sugar content which mean less calories [1] • will provide stimulation / enrichment [1] • it takes longer to digest [1]	Do **not** accept information relating to the method of feeding e.g. small holed hay nets, soaking hay. Sugars and starch will be treated as one concept.	**4**
11	Describe **three** anatomical adaptations that have occurred in horse limbs during evolution. (3 marks)		
	Acceptable answer(s)	**Guidance**	**Max mks**

	1 mark each for any of the following, to a maximum of 3 marks: • the horse has evolved from having multiple toes to a single larger hoof / formation of splint bones [1] • the bones in the limbs fused together [1] • as the horse increased in height the limbs also lengthened [1] • the pads on the multiple toes were replaced by hooves [1] • the horse's limbs evolved to develop multiple gaits for speed [1] • limbs have become lighter [1] • more flexible limbs [1]	Do not accept, without link to anatomical changes: • limbs have become stronger. shock absorption	**3**
12	Explain why restricted exercise could cause a stabled horse to start weaving. (3 marks)		
	Acceptable answer(s)	**Guidance**	**Max mks**
	1 mark each for any of the following, to a maximum of 3 marks: • horses are animals which would naturally roam over vast terrain for many miles a day [1] • the modern day horse still has the instinct/need to spend large amounts of time moving [1] • restriction of exercise/movement can cause stress/anxiety in the horse [1] and this is considered to be the cause of weaving/stereotypies in the horse. [1] • too much energy which needs to be expelled [1]		**3**
13	Explain the importance of body language within a herd hierarchy in the horse's natural environment. (4 marks)		
	Acceptable answer(s)	**Guidance**	**Max mks**
	1 mark each for any of the following, to a maximum of 4 marks: • this communication method allows horse to live harmoniously in a herd environment [1] • herd hierarchy is maintained via various different types of body language [1] • the maintenance of the herd environment allows a greater chance of survival for horses in the natural environment. [1] • Body language establishes the pecking order in the herd which governs the social interaction between herd members [1] • Allows learning / social development in young stock [1] Any other appropriate answers	Do **not** accept: • information describing herd structure only • information relating to natural mating • anthropomorphic terms e.g. happy Accept explanations as appropriate examples.	**4**

14	Discuss how the stable environment and feeding routine can influence the horse's health and welfare. (12 marks)		
	Acceptable answer(s)	**Guidance**	**Max mks**
	Band 1: (1 – 4 marks) Basic discussion with minimal reference to how the stable environment and feeding routine can influence the horse's health and welfare. Daily tasks/routines are described with minimal detail of impacts on the horse. To access the higher marks in the band the response will include a wider range of daily tasks and will attempt to show how these influence/impact the horse's health and welfare. **Band 2: (5 – 8 marks)** A clear discussion to the way the stable environment and feeding routine influences the horse's health and welfare. Daily tasks are described with some detail and linked to health and welfare. To access higher marks in the band, the response will show some justification of the impact/influence of the environment and routine on the horse's health and welfare. **Band 3: (9 – 12 marks)** Detailed discussion on how the stable environment and feeding routine can influence the health and welfare of the horse. Daily tasks are described comprehensively with detail of how they can have a positive or negative influence on the horse. To access the higher marks in the band, the response will fully justify impacts, higher level students may link this to the five animal needs.	**Indicative content:** • A suitable diet and feeding routine (feed little and often, adhere to golden rules of feeding and watering, feed same time each day etc) • A suitable stable environment (safe, spacious and suitable stable environment with adequate grazing/turnout) • Linking to horses need to exhibit normal behaviour patterns (contact with other horses, freedom to exercise) • Linking to the horses needs as a herd animal i.e. housed with, or apart, from other animals (not over crowded, suitable selection of horses housed together (e.g. not more than one stallion in group) • need to be protected from pain, suffering, injury and disease (regular health checks, vaccination regime, veterinary compliance, preventative care measures, correct fitting equipment and tack). ***For no awardable content, award 0 marks.***	**12**