

0172-35 Level 3 Advanced Technical Certificate in Equine Management
0172-37 Level 3 Advanced Technical Extended Diploma in Equine Management (720)

0172-002/502 Level 3 Equine Management – Theory exam (1)

March 2022 Mark Scheme

Q no.	Acceptable answer(s)	Guidance	Max mks	Ref
Q1	<p>1 mark each for any of the following, to a maximum of 4 marks:</p> <p>Shoes:</p> <ul style="list-style-type: none"> • Loose shoe • Lost shoe • Twisted shoe • Risen clenches • Nail bind • Nail Prick <p>Feet:</p> <ul style="list-style-type: none"> • Thrush • Abscess • Lameness • Laminitis • Overgrown feet • Hoof wall cracks (grass cracks/sand cracks) • Seedy toe/white line disease • Bruised sole • Puncture wound • Sidebones • Quittor • Navicular • Cracked heels • Over reach injuries • Poor hoof conformation • Incorrect hoof pastern angles • Corns • Contracted/collapsed heels • Quitter • Bone cysts • Keratoma • Pedal Osteitis • Pyramidal disease/Buttress foot/Fractured extensor process of pedal bone • Side bone 	<p>Do not accept terms:</p> <ul style="list-style-type: none"> • collapsed hoof – has to be heels • Needs a change of shoe – to generic • Bruised hoof/foot - needs to be sole • Greasy heel/scratches • Heat in the hoof • Loose nails – must be shoe/risen clenches 	4	350 2.3 AO1

Q no.	Acceptable answer(s)	Guidance	Max mks	Ref
	<ul style="list-style-type: none"> • Canker • Sheared heels • Navicular bone fracture • Pedal bone fracture • Foreign body in the foot <p>Accept any other correct answer.</p>			
Q2	<p>2 marks for the importance and 1 mark each for a practical example to a maximum of 2 marks. 4 marks total.</p> <p>Working with horses/on a yard can be dangerous [1], certain serious workplace accidents must be reported to RIDDOR to be compliant / allow investigation to prevent further occurrences [1].</p> <p>Examples: Any specified injury eg:</p> <ul style="list-style-type: none"> • broken bone, • fractures • loss of consciousness from a head injury, • over 7 days incapacitation of a worker, • death. • Amputation • Crush injury • Injury leading to loss of sight • Severe burns • Any other suitable answer 	<p>The explanation must be clear that RIDDOR is implemented after an accident is reported to RIDDOR and is not a general health and safety legislation (eg like COSHH, HSAWA, PPE). Actions are put in place to avoid the same accident reoccurring in the future after RIDDOR have investigated.</p> <p>Do not award marks for generic statement eg keeps people safe, use of PPE, storage of chemicals etc.</p> <p>Do not accept fractures of fingers/thumbs or toes.</p>	4	350 4.1 AO2
Q3	<p>2 marks available for each explanation, to a maximum of 4 marks:</p> <p>a) Size and dimensions –</p> <p>not adequate room for the horse to move around [1] so it can't display natural behaviours. [1]</p> <p>Not enough room for horse to lie down and roll [1] could lead to horse getting cast and injuring itself. [1]</p> <p>The horse could become stiff [1] because of the lack of movement in the stable. [1]</p> <p>The horse could get filled legs [1] due to the lack of movement in the stable. [1]</p> <p>The horse could display aggressive/excited behaviours [1] due to a lack of room in the stable. [1]</p> <p>Must be the correct height for the horse [1] to avoid horse banging their head [1]</p>	<p>For each explanation award 1 mark for the 'what' and 1 mark for the 'why/how'.</p>	4	350 3.1 AO2

Q no.	Acceptable answer(s)	Guidance	Max mks	Ref
	<p>b) Ventilation – can contribute to the rapid spread of disease within the stable block. [1] due to lack of air movement/fresh air [1]</p> <p>Build-up of ammonia in a poorly ventilated stable [1] can cause respiratory/breathing problems. [1]</p> <p>Existing respiratory/breathing related problems could be made worse by poor ventilation [1] due to lack of air movement/fresh air [1]</p> <p>If too much/too little ventilation [1] could get draughts and chills in cold weather / sweating/overheating in hot weather [1]</p> <p>Any other appropriate answer</p>			
Q4	<p>1 mark for management system and 1 mark for each explanation (up to 3 marks), to a maximum of 4 marks:</p> <p>Grass kept/ field kept [1]</p> <ul style="list-style-type: none"> • This is because there is less risk of dusty bedding and forage. [1] • More access to fresh air/ Stale/ dust laden air in the stable environment can exacerbate respiratory problems.[1] • Less exposure to concentrated levels of ammonia found in the stable. [1] <p>Combined Management system [1]</p> <ul style="list-style-type: none"> • Has regular access to fresh air [1] • Less risk from dusty bedding/stale air/dusty air/ammonia to exacerbate respiratory problems [1] • Time spent in the stable will provide rest/bite from adverse weather conditions [1] 	<p>Either grass kept or combined management is acceptable, but explanation must match chosen system</p> <p>Allow marks for an explanation (up to 3 marks) if action would improve the respiratory problem but the management system is not named.</p>	4	350 3.3 A02
Q5	<p>1 mark each for any of the following, to a maximum of 2 marks:</p> <ul style="list-style-type: none"> • May become injured [1] due to herd hierarchy/fighting [1]. • May lose weight [1] if at the bottom of the pecking order [1]. • May lose weight [1] due to field becoming horse sick/lack of quality of grazing [1]. • Increase risk of field related health conditions (e.g. mud fever, rain scald) [1] due to increased number of horses in field/ limited access to shelter etc. [1] • Increased risk of worm burden [1] due to increased numbers of horses in field [1]. 	<p>Do not award marks for answers that try and resolve the problem. The answer should discuss what problems can occur and why.</p>	2	350 03.02 AO2

Q no.	Acceptable answer(s)	Guidance	Max mks	Ref
	<ul style="list-style-type: none"> • More difficult to monitor horses in a herd (daily health checks) [1] so greater risk of health conditions developing and going unnoticed [1]. • May gain too much weight [1] due to constant access to grass [1]. • May suffer from Laminitis (1) due to constant access to grass (1) • Increased risk of disease transmission [1] due to contact/direct contact/close contact with other horses [1] • Increased likely hood of eating poisonous plants and becoming unwell (1) due to lack of grass 			
Q6	<p>1 mark each for any of the following, to a maximum of 4 marks:</p> <ul style="list-style-type: none"> • Appetite • Water intake • Behaviour • Appearance of eyes • Appearance of ears • Appearance of nose • Appearance of mouth/teeth • Mucous membranes • Appearance of the skin • Temperature • Pulse /heart rate • Respiration • Capillary refill time • Limbs/feet • Faeces/urine • Genitals/anal area • Signs of coughing, sneezing, discharge • Body condition/body condition score • Weight • Pinch test/capillary refill time • Movement/gait/soundness <p>Any other suitable answer</p>		4	351 1.1 AO1
Q7	<p>1 mark each for any of the following, to a maximum of 4 marks:</p> <ul style="list-style-type: none"> • Equine Infectious Anaemia • Equine Viral Arteritis • Contagious Equine Metritis • Equine viral Encephalomyelitis • Warble fly • Rabies • African Horse Sickness • Glanders and Farcy • Vesicular Stomatitis 	Abbreviations without recognisable full name will not be accepted.	4	351 2.2 Ao1

Q no.	Acceptable answer(s)	Guidance	Max mks	Ref
	<ul style="list-style-type: none"> • West Nile Virus • Dourine • Epizootic Lymphangitis 			
Q8	<p>1 mark for the following, to a maximum of 1 mark:</p> <p>a. Gastric ulcers [1]</p> <p>1 mark each for any of the following, to a maximum of 3 marks:</p> <p>b. Ulcers occur in the stomach when digestive acids come in to contact with upper part of stomach lining [1]. Reduced fibre/prolonged periods without food in the horse's diet increases the acidity in the horse's stomach and increases risk of ulcers [1]. Training that includes fast work increases the risk of acid splashing resulting in damage to the upper part of the stomach / Stress can also be a factor /Mixing groups of horses can lead to ulcers [1],</p> <p>1 mark each for any of the following, to a maximum of 2 marks:</p> <p>c.</p> <ul style="list-style-type: none"> • Increase time at pasture [1]. • Continuous access to forage when stables [1]. • A reduced level of training [1]. • Reduced level of grain/ concentrate in the diet [1]. • Increase levels of fats and oils in diet [1]. • Reduce starch in the diet [1]. Reduce stress [1]. • Feed a suitable feed/supplement specific for ulcer treatment [1]. • Give medication/Omeprazole eg Gastroguard before feeding [1]. • vet management/use of endoscope/following vet advice [1] <p>Accept any other appropriate answer.</p>		6	351 2.3 AO2
Q9	<p>1 mark each for naming the method of spread and 1 mark for explaining it, to a maximum of 6 marks:</p> <ul style="list-style-type: none"> • Direct [1] – an animal becomes exposed to infection through physical contact with the infected horse [1] • Indirect [1] – infected discharges are deposited where other horses can come into contact with them [1]. 	<p>Accept answers which are description only (for 1 mark each max) without naming the transmission route.</p> <p>As the explanation of Indirect, Fomites and Environment can be very similar, if different examples are given but not named award 1 mark each (up to 3 marks max).</p>	6	351 2.1 AO2

Q no.	Acceptable answer(s)	Guidance	Max mks	Ref
	<ul style="list-style-type: none"> • Airborne [1] – infectious droplets spread through the air by infected horse [1]. • Vectors [1] – infections transmitted via the bite of an insect [1]. • Fomites [1] – objects that carry the infection from one horse to another e.g. sponges, brushes, tack, girths, medication applicators etc [1]. • Inhalation [1] – breathing in infectious particles that are in the air [1]. • Ingestion [1] – eating/drinking infectious particles [1]. • Environment [1] – heat/humidity can cause diseases to multiply quickly resulting in increased risk of the above ways of infection [1]. 			
Q10	<p>1 mark each for any of the following, to a maximum of 6 marks:</p> <ul style="list-style-type: none"> • Topical [1] – administered to the horse’s skin [1] • Enteral [1] – administered orally into the horse’s digestive systems [1] • Parenteral [1] – administer via injection directly into the horse’s body [1]. • buccal [1] – administered between the gums and lining of the cheek [1]. • inhalable [1] – medicine is dispersed via spray, mist or powder [1]. • infused [1] administered into the blood stream over a period of time [1]. • intramuscular [1] administered into the muscle tissue [1]. • intrathecal [1] administered into the spinal canal/space around the spinal cord [1]. • intravenous [1] administered into the blood stream/systemic circulation [1] • nasal [1] administered via the nostrils/nasal passages [1]. • Ophthalmic/optic [1] administered via the eyes [1]. • oral [1] administered via the mouth [1] • rectal [1] administered via the absorption through the rectum [1]. • subcutaneous [1] administered under the skin [1]. • sublingual [1] administered under the tongue [1] • transdermal [1] administered to the horse’s healthy skin [1]. 	<p>Accept descriptions for 1 mark each even if the route is not named/correctly named.</p> <p>Do not accept vague answers:</p> <ul style="list-style-type: none"> • mixed with feed • in the feed • give with food <p>Do accept if they discuss eating the food/orally/in the mouth – ie it is clear it will be digested.</p>	6	351 4.1 AO2

Q no.	Acceptable answer(s)	Guidance	Max mks	Ref
Q11	<p>1 mark each for any of the following, to a maximum of 2 marks:</p> <ul style="list-style-type: none"> • Worming programme [1] routine administration of wormer/anthelmintics to destroy any worms or larvae already in the horse's system / Different active agents should be used to prevent resistance / Different wormers should be used at different times of the year to destroy different types of worms [1] • Removal of droppings from the field [1] to prevent spread of worms by grazing horses ingesting the larvae.[1] • Faecal egg counts [1] undertaken to measure the level of worm burden in a horse to see if worming is necessary / Reduced administration of wormers helps prevent anthelmintic resistance [1]. 	<p>1 mark for naming the method and 1 mark for how it works.</p> <p>Maximum of 1 mark available for naming method with no further explanation.</p>	2	351 2.1 AO2
Q12	<p>Maximum 2 marks available for any 1 of the following management solutions:</p> <ul style="list-style-type: none"> • Keep horse at a healthy weight [1] to reduce the susceptibility to laminitis [1] • Reduce amounts of high energy concentrate feeds [1] to reduce the calorie and starch intake [1]. • Feed steamed or soaked hay [1] to reduce nutrient content of fibre ration [1]. • Feed hay instead of haylage [1] to reduce nutrient content. • Feed forage ration from small holed hay nets [1] to slow down rate of consumption [1]. • Reduce amount of time spent on grass [1] to reduce nutrient intake [1] • Wear muzzle when out at grass [1] to reduce nutrient intake [1]. • Careful consideration taken by the vet before administering steroids to an overweight horse [1] to prevent steroids causing a laminitic bout [1]. • Remedial shoeing for support (1) as provides support making them feel more comfortable (1) • 		2	351 2.3 AO2
Q13	<p>Band 1: 1 – 4 marks Basic discussion with minimal reference to how the health and welfare can be maximised on a busy yard. Strategies are described with minimal detail of impacts of health and welfare. To access the higher marks in the band the response will</p>	<p>Indicative content:</p> <ul style="list-style-type: none"> • Biosecurity • Health checking • Preventive medicines/care schedules • Diseases 	12	AO4

Q no.	Acceptable answer(s)	Guidance	Max mks	Ref
	<p>include a wider range of management strategies and will attempt to show how these influence/impact the health and welfare.</p> <p>Band 2: 5 – 8 marks A clear discussion to the way the health and welfare can be maximised on a busy yard. Strategies are described with some detail and linked to the impacts of health and welfare. To access higher marks in the band, the response will show some justification of the impact/influence on health and welfare.</p> <p>Band 3: 9 – 12 marks Detailed discussion on how the health and welfare can be maximised on a busy yard. Strategies are described comprehensively with detail of how they can have an influence on health and welfare. To access the higher marks in the band, the response will be up to date and fully justify the impact/influence on health and welfare taking into consideration both positive and negative impacts. It will take a holistic approach to discuss the topics.</p> <p>For no awardable content, award 0 marks</p>	<ul style="list-style-type: none"> • Transmission • Monitoring health/health records • Management systems • Safe working practices with new horses. • Isolation area and procedure • Horse accident and injury prevention through staff training • Staff recognition of different behaviours and how this affects management • Stable designs and yard layout 		

