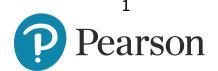


L3 Lead Examiner Report 2001

January 2020

L3 BTEC Nationals in Equine Management: Equine Diet and Nutrition



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Grade Boundaries

What is a grade boundary?

A grade boundary is where we set the level of achievement required to obtain a certain grade for the externally assessed unit. We set grade boundaries for each grade, at Distinction, Merit and Pass.

Setting grade boundaries

When we set grade boundaries, we look at the performance of every learner who took the external assessment. When we can see the full picture of performance, our experts are then able to decide where best to place the grade boundaries – this means that they decide what the lowest possible mark is for a particular grade.

When our experts set the grade boundaries, they make sure that learners receive grades which reflect their ability. Awarding grade boundaries is conducted to ensure learners achieve the grade they deserve to achieve, irrespective of variation in the external assessment.

Variations in external assessments

Each external assessment we set asks different questions and may assess different parts of the unit content outlined in the specification. It would be unfair to learners if we set the same grade boundaries for each assessment, because then it would not take accessibility into account.

Grade boundaries for this, and all other papers, are on the website via this link:

http://qualifications.pearson.com/en/support/support-topics/results-certification/grade-boundaries.html

Equine Diet and Nutrition 20109K

Grade	Unclassified	Level 3			
Grade		N	Р	M	D
Boundary Mark	0	13	22	31	41

Introduction

This was the second series of the new specification for the Level 3 Diploma in Equine Management, and as such, the second time that this mandatory unit has been assessed via an external assessment, rather than via centre based internal assessment.

The task paper followed the format identified in the both the sample assessment material, and the additional sample assessment materials published on the Pearson website.

The paper had four activities. Learners were required to demonstrate knowledge and understanding of a range of specification topics and to apply this knowledge to the specific task scenarios. The intention was to offer as broad coverage as possible for all areas of the unit content. Activities had varying weightings attached to them and these weighting were consistent with the sample assessment materials.

There was also a focus on the use of suitable technical and vocational language and terminology within each activity response.

Introduction to the Overall Performance of the Unit

The overall performance of the paper and standard of the work produced was good and most of the activities were well answered, the activities allowed for good differentiation between pass, merit and distinction candidates.

This activity asked learners to talk about the management of an alfalfa order to be fed in addition to hay, to a number of field kept brood mares. They were given minimal information about the load size and asked how they would manage this additional feed.

At a basic level this activity gave learners the opportunity to show general knowledge and understanding of alfalfa and how it should be stored, as well as methods of feeding it to a group of horses in a field. Learners generally identified correct storage procedures in relation to health and safety and to prevent spoiling through stock rotation.

Some learners failed to identify problems associated with feeding a number of horses in a field. Others created information about stock control by fabricating diet plans to provide an estimated order size and frequency of delivery.

One to my row at Biossom Stud Cenecking stock levels, food

storage and preperation) it is vital I know how much and often

each of our broad mares is eating. After having a long dry

summer, our grazing is very limited, therefore cutting a loss

in the broad mares diet. We now have stortion started

putting piles and sections of hay out into the field, to keep

the encouragment of trickle feeding. Allongside given the

mares hay and limited grazing, we are feeding them altalifa

ready grass

gross peed to give them the extra boast of forage and

concernitates. Storing the hay is vital and it can get damp and

become mouldy, creating a waste. This is why we store the

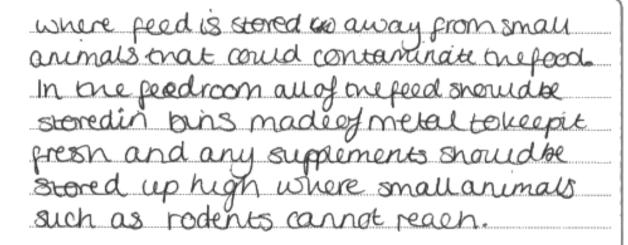
hay = in a speltered two wall building off of the floor and

sor ou worked in a metal pro to bronde is brotection again obened it is should in a metal pro to brough it brotection again

from rodents and dampness. We present our hay by placing it in many different piles everyday, so that each mare has a chance to but the may. Our ready gross larganta) is measured and placed unto a feed bursel lane per horsel, it is the slightly wet and placed again different spots so much each horse has a chance to eat their feed. At Biossom Stud we have a feed board a which their feed. At Biossom Stud we have a feed board a which this way I am able to calculate how much feed is going to be used and how much feed is needed to buy. When the feed burs or that board the hay barn is getting quite iow I then place in my next pood order, so that we are using all of our feed but never have not enough.

The above answer was awarded 5 marks out of 8. The learner has talked about ordering and monitoring stock levels, storage and feeding. They have extended their answer to discuss storage of hay which wasn't asked for however they have linked it to the storage of the alfalfa. For this answer to be awarded the full 8 marks it should contain different presentation methods for feeding horses at grass in association with problems that may arise. It should also give reference to personal safety, PPE, and safe handling of heavy objects. There was also opportunity to discuss different alfalfa products which could be offered

In order to meet one needs of one broodmans
the affelfa snowlabe duided equally or
according to the requirements of each
mare associated according to oneir weight, age,
stage in pregnancy if oney are wronfood
and their breeds. This ensures that along
with grazing on the limited grass and
one ir peeds, the broodmares still getall of
the nutherits oney need. The afalfa should
be given to be mares either asparted
whilst only grotte in best a self feedling
system such as a large bucket or breugh so
oney can maintain their brickle feeder'
habits, the feed should all be prepared in
a clean sanitary room, e.g. a feed room



Management of stock would mean order more stock when bins area quarter full and bins should be emptied before putting fresh feed in and what was emptied out should be putentop to be used first. Proords should be kept so that you know what was ordered when and therefore what is and set fresh

The above answer was awarded 6 marks out of 8. The learner has remained on topic, discussing feeding alfalfa, storage and stock rotation. To gain higher marks the learner needed to discuss alternative feeding methods, problems associated with feeding horses in a field sowing an awareness of personal safety. Alternative alfalfa products could have been discussed.

Indicative content

Answers will be credited according to the learner's demonstration of knowledge and understanding using the indicative content and level descriptors below. The indicative content that follows is not prescriptive and answers should be rewarded for other relevant answers.

- Storage: hygiene, security, vermin, e.g. reference to correct stacking procedures and restricting access to maintain health and safety, avoiding fire, protection from moisture/rain, avoiding contamination from vermin.
- Problems associated with incorrect storage, e.g. dust, mould, decrease in nutritional content, potential ill health, wastage.
- Feed records and resourcing, e.g. order history, feed charts and feeding boards.
- Feed stock control, e.g. monitoring usage, stock rotation, advanced ordering to prevent running out, sourcing reliable suppliers.
- Appraisal and selection, e.g. reference to availability, quality, cost, palatability.
- Preparation and presentation: feeders, soaking, methods of feeding horses in a field, equal access, preventing wastage.

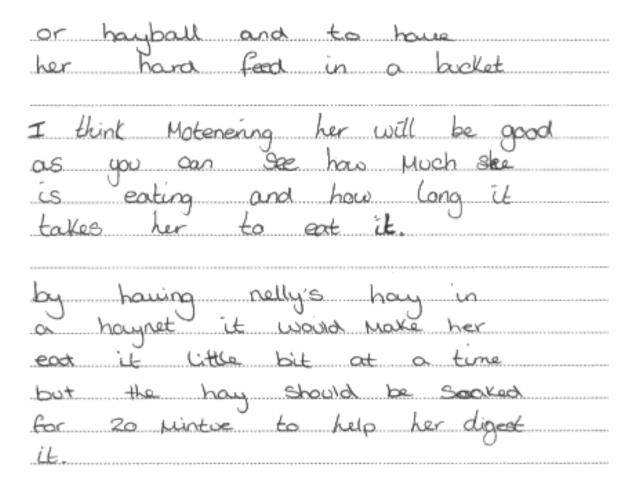
Level 0	0	No rewardable material.
Level 1	1–2	 Demonstrates isolated knowledge and understanding of principles and practices of feed management. Provides limited consideration of variables affecting feed management. Generic statements may be presented rather than connections being made so that lines of reasoning are unclear.
Level 2	3–5	 Demonstrates mostly accurate knowledge and understanding of principles and practices of feed management. Provides partial consideration of variables affecting feed management. Discussion evidences connections being made so that lines of reasoning are clear.
Level 3	6–8	 Demonstrates detailed knowledge and understanding of principles and practices of feed management. Provides detailed consideration of variables affecting feed management. Discussion evidences connections being made so that lines of reasoning are detailed and clear.

The activity asked learners to evaluate the suitability of a given diet in relation to the stated workload and lifestyle of a horse.

In general calculations were accurate, highlighting the horse is receiving less MCal per day then the stated recommendation. Learners were awarded for evaluating this however there was a lack of understanding relating the answer to the given information. Learners used their own calculations to make conclusions rather than use the information provided. Learners also created values to justify calculated results which caused them to digress from the question itself, therefore failing to evaluate the suitability of the diet.

Some learners became focused on information not given to them in the activity, this distracted them from answering the question correctly. The information for them to give a comprehensive answer will be given in the scenario, and the focus must be on information available, they may make reference to additional information which could be helpful but it should not be the focus.

550 kg Should be 500kg no work as pregent = 100 - forage pregent 0 - concentrate Trish drought + thoroughbrea
no work as pregent = 100 - forage
pregent 0 - concentrate
Irish draught + thoroughbred
550 - 100 = 5.5 kg = forage
550 - 5.5 x 25= 13.75kg/
100
*
Nelly is a Irish draught x thoroughbod
That's pregnant with her second fool
Shes on Stud Mix to help the fool
grow I think Welly Should be Monitoo
of what she eots a because she
might not east enough as she should
be fed 13.75 kg of forage so
Should consider feeding her three times
a day and cheecking her teeth
to see if they are the problem
why shes underweight
J
Nelly should come in 4 a stable
to eat or her hay in a hayret



The above answer was awarded 6 marks out of a possible 20. The learner has discussed a possible reason for the horse to be underweight and suggest she is brought in and fed separately, this could be part of a correct answer and marks have been awarded however there is no reference to the data table. The learner has begun by working their own calculations for what should be fed rather than start by calculating the values given. The

suitability of the diet has not been evaluated.

You should spend approximately 50 minutes on this activity.

Nelly is given the of stud mix a day which provides her with 2.9 MCally day while her forage is estimated to provide her with 12.7 MCallday. When adding these together she is provided with 15.1 MCallday. This isn't enough. The daily nutrient requirement of a pregnant 550kg mare is 19.7 MCallday. To meet this requirement she needs another

To gain the extra 4.1 Mcallday she can be given an extra 0.5 kg of the stud mix in both her an and pm feed. With the remain required nutrient of Mcallday which can be fed through adlib for age of hay.

The above answer is a good example of the information being used from the data table. The learner hasn't included any of their own calculations to formulate their answer and has given a clear reason why the horse may be underweight. To achieve top marks the leaner could have referred to presentation and monitoring methods and alternative reasons for the horse being underweight. This is a good example of how simple this question can be answered if the learners use the information provided.

Indicative content

Answers will be credited according to the learner's demonstration of knowledge and understanding using the indicative content and level descriptors below. The indicative content that follows is not prescriptive and answers should be rewarded for other relevant answers, in their evaluation learners may refer to:

- calculations performed to check energy provided by feed
- analysis of data in relation to nutrient requirements
- the diet is appropriate for life stage, e.g. feeding a pregnant mare
- · unmonitored feeding of concentrates is not recommended
- reference to vitamin and mineral requirements in relation to stage of pregnancy
- always needs access to clean water, especially during hot weather.

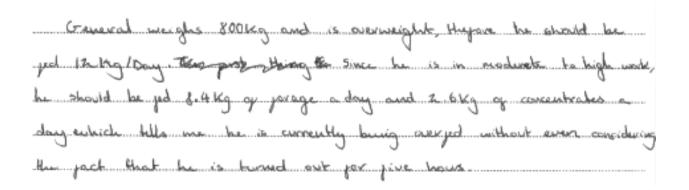
Learners may conclude that:

- rations are not correct based on analysis of data table and Nelly is being underfed
- presentation of feed unmonitored feeding may result in Nelly being bullied and prevented from eating her ration
- feed choice is correct for breed type
- calories provided are insufficient
- possibility of diet-related issues with foal development
- alternative feed strategies would be appropriate with examples of suggested feeding programmes.

Mark so	Mark scheme – refer to the guidance on the cover of the document for how to apply levels-based mark schemes *				
Level 0	0	No rewardable material.			
Level 1	1–5	 Demonstrates isolated knowledge and understanding, there will be major gaps or misconceptions. Attempts to break the scenario and data into component parts, with limited or arbitrary selection of factors. Makes generic assertions rather than interrelationships or linkages. Limited evaluation with conclusions that are superficial or unsupported. 			
Level 2	6–10	 Demonstrates some accurate knowledge and understanding, with occasional significant gaps or misconceptions. Breaks the scenario and data into component parts identifying some relevant factors. Some interrelationships or linkages are considered but lines of reasoning are not always sustained. Partially developed evaluation with conclusions that are occasionally supported with reference to the scenario and data. 			
Level 3	11–15	 Demonstrates mostly accurate and knowledge and understanding, any gaps or omissions are minor. Breaks the scenario and data into component parts identifying most of the relevant factors. Interrelationships and linkages are generally sound, with logical and generally sustained lines of reasoning. Mostly developed evaluation with conclusions that are generally supported with reference to the scenario and data. 			
Level 4	16–20	 Demonstrates accurate and detailed knowledge and understanding. Breaks the scenario and data into component parts, distinguishing the importance of relevant factors. Interrelationships and linkages are well-developed and secure lines of reasoning are sustained throughout. Comprehensive evaluation with conclusions that are fully supported with reference to the scenario and data. 			

The activity askes learners to plan a more suitable diet for a horse. They are given the horse's current diet plan and work load and told he is losing weight.

Some learns appeared to bring the calculations from Activity 2 across to Activity 3, this confused the answer as specific nutritional values of the feed were not given in this separate activity. Learners then went on to used guideline feed ratios between forage and concentrate as immobile values which resulted in correct forage reduction however a decision the compound feed was correct. This confused answers.



Eirstly, his be jeeds will be split in to jour per day in which he gets 0.5kg of concentrates and 2.1kg of jorage the will be torned set jax an how per day on the days which he is not ridden on which will allow him to gour the large amount of energy contained in grass without garging himself and garring a large amount of weight.

his bowl year olive to being jud jew times a day. This is bother than putting a larger conservat in a single book jesola as housed one rathing animals who may become distressed a due to sudden change, too bearing this in wind, his add justing rathing with goodwally shange to avoid this stock day he will be just to be total of lifting of house and to total of lifting of house which contains made in every that will have a total of the sixty of the total of the sixty of house of his super best care of his super best care of house of his super best care of house of his super best care of house of house

The above answer was awarded 10 marks out of 12. The learner has considered the horse's lack of energy and the fact it is overweight. They have given an alternative diet suggesting ways to increase energy and to lose weight. They have also recognised that the horse is eating too much grass in addition to its feed ration. To gain full marks the learner could have suggested alternative concentrated feeds designed for the work required e.g. replacing the conditioning cubes with a more suitable feed.

Indicative content

Answers will be credited according to the learner's demonstration of knowledge and understanding using the indicative content and levels descriptors below. The indicative content that follows is not prescriptive and answers should be rewarded for other relevant answers.

- Review of levels of concentrates in the diet.
- Adapting diet content, e.g. reducing feed levels.
- Reduce opportunity for additional feeding by restricting grazing.
- Remove concentrate feed or reduce to bare minimal with balancer using grass to provide the majority of nutritional needs.
- Review of diet planning, e.g. feed less but in more meals.

Level	0	No rewardable material.
0		
Level	1–3	Limited knowledge and understanding of diet issue evident in the context.
1		Limited accuracy in suggested solutions.
		Limited justification of recommendations for changes to diet.
Level	4–8	Partial knowledge and understanding of diet issue evident in the context.
2		Partial accuracy in suggested solutions.
		Partial justification of recommendations for changes to diet.
Level	9–12	Detailed knowledge and understanding of diet issue evident in the context.
3		General accuracy in suggested solutions.
		Well-reasoned justification of recommendations for changes to diet.

The activity asks learners to discuss the management of a horse's diet who has a stated diet related disorder, laminitis. The pony had not had this condition before so it was important learners gave reference to future monitoring and diet control.

Generally, this activity was answered well with full answers covering the digestive system, the disorder and diet modification. Learners with gaps in knowledge could gain marks by discussing the digestive system in detail or just the disorder.

As pippa has laminitus, this could have

be caused by the stress of morning yards.

and the gradity of grass change, as she

ness cost of good, sugary grass to eat

all the time, because shes out 24 hours.

a day, shes eating it all the time.

My recomendation is to pring pippa in

and make a fluffy bed for her. Avoid

feeds with a cost of sugar in them. Stick

to jorage based feeds like pony nuts which

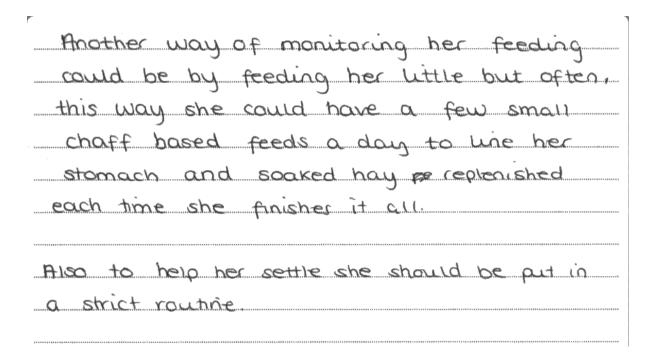
is what shes jed now. And snich to normal

chaff or real grass Instead of motorised

chaff.

As shes never had this before she is propany
going to get it again as its on going. These
changes are not temporary to her diet they
will beed to stay that way to provent
her from getting it again.

The above answer was awarded 6 marks out of a possible 20. The learner has suggested the cause could be the grass and turnout. The recommendation to manage the disorder needs to be expanded on. Marks have been awarded as the principle ideas the learner is stating are correct however for this 20 mark question I would like to see reference to the digestive system and a clear understanding of what Laminitis is, immediate treatment and the important diet modifications.



The above response has scored 6 out of a possible 20. The learner has displayed some knowledge of the condition and given simplified suggestions on management. This answer has a good basic structure but much more depth is needed alongside detailed structure of the digestive system, linking all the behavior to the condition / pain related.

Pippa Should be be on restricted turnoutwith either little tono grass. This ensures that pipper is not getting too Much Sugar. If possible, pippa should be stabled a few hours a day with a so shavings bed that has been brought all the way to the front of the Stable to and padding and Support to her feet, keeping her as comfortable as possible Due to not being in work, she should not be fed concentrate feed as she closes not need it, however, if the needs sopplements or medication, she should

have non Starch or Sugar feed such as molassed chaff. Diopa could have unmolassea have developed laminitus

The above answer was awarded 17 out of a possible 20 marks. The learner has discussed the condition, its causes, possible treatment and diet considerations moving forward. To award full marks I would like to have seen a breakdown of the digestive system in relation to the disorder.

Indicative content

Answers will be credited according to the learner's demonstration of knowledge and understanding using the indicative content and levels descriptors below. The indicative content that follows is not prescriptive and answers should be rewarded for other relevant answers.

- Pippa needs a controlled forage-based diet.
- Low carbohydrate diet.
- Permanent restricted grazing using starvation paddocks, grazing muzzles and evening turnout.
- Reference to equine metabolic syndrome.
- Short, lush grass avoided, very little grazing in the spring, early morning turnout avoided.
- Reference to feeding a high sugar feed.
- Native breeds are prone to laminitis.
- Products designed for feeding ponies who are prone to laminitis.
- Feed laminitis approved feeds.
- Reference to high carbohydrate meals and effect on hind gut function which puts some ponies at higher risk of laminitis.
- Management of diet with bulk food that is low in sugar and carbohydrates but provides fibre for healthy gut function i.e. the pony should not be starved.

Mark scheme – refer to the guidance on the cover of the document for how to apply levels-based mark schemes *			
Level 0	0	No rewardable material.	
Level 1	1–5	 Demonstrates isolated elements of knowledge and understanding, there will be major gaps or misconceptions Few of the points made will be relevant to the context in the question Limited discussion which contains generic assertions rather than considering different aspects and the relationship between them. 	
Level 2	6–10	 Demonstrates some accurate knowledge and understanding, with occasional significant gaps or misconceptions Some of the points made will be relevant, but the link to the context in the question will not always be clear A partially developed discussion which considers some different aspects, with occasional consideration of how they interrelate. 	
Level 3	11–15	 Demonstrates mostly accurate knowledge and understanding with only minor gaps or omissions Most of the points made will be relevant, and there will be clear links to the context in the question. A developed discussion which considers a range of different aspects and considers how they interrelate in a generally sustained way. 	
Level 4	16–20	 Demonstrates accurate and detailed knowledge and understanding. Points made will be highly relevant, and there will be secure links to the context in the question. A comprehensive, well-developed and logical discussion which considers a broad range of different aspects and how they interrelate in a sustained way. 	

Summary

Summary

Based on the performance of this paper learners should be able to:

- Discuss feed management associated with feeding additional forage to field kept horses. Understand its storage to maintain a safe working environment and to prevent spoiling.
- Show an awareness that feed changes should be gradual to prevent digestive and behaviour issues.
- Evaluate the suitability of a given diet plan using the nutritional data provide. They should show an awareness of the work levels horses can be in and to show an understanding of feeding for purpose.
- Recognise feeding rations, calculations and ratios should be used as a guide, with a focus on monitoring condition and behaviour
- Modify a given diet plan to decrease calorie intake and increase energy
- Know the main diet related disorders and discuss laminitis covering cause, treatment and future prevention







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