

7457-402/602 Level 3 Anatomy and Physiology knowledge test - Paper 3

March 2021

Examiner Report

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Introduction

This document has been prepared by the Chief Examiner, it is designed to be used as a feedback tool for centres to use in order to enhance teaching and preparation for assessment. It is advised that this document be referred to when preparing to teach and then again when candidates are preparing to sit examinations.

This report provides general commentary on candidate performance and highlights common themes in relation to the technical aspects explored within the assessment, giving areas of strengths and weakness demonstrated by the cohort of candidates who sat the **March 2021** examination series. It will explain aspects which caused difficulty and potentially why the difficulties arose, whether it was caused by a lack of knowledge, incorrect examination technique or responses that failed to demonstrate the required depth of understanding.

The document provides commentary on the following assessment:
7457-402/602 Level 3 Anatomy and Physiology Knowledge test Paper 3.

Theory Exam – March 2021

Grade Boundaries and distribution

Assessment: **7457-402/602**

Series: **March 2021**

Below identifies the final grade boundaries for this assessment, as agreed by the awarding panel and the pass rate for this series:

Total marks available	60
Pass mark	32
Pass rate	64%

Chief Examiner Commentary

General Comments on Candidate Performance

Assessment component: 7457-402/602

Series: March 2021

Generally, most candidates answered the recall questions clearly giving one/two-word answers relating to the content and demonstrating a decent breadth of knowledge. However, when the question required more knowledge to be demonstrated there was a missed opportunity to gain more marks by giving generic answers or one-word answers. The stretching questions in this series largely relied upon descriptions or explanations being required to demonstrate depth of knowledge, therefore one and two-word answers were insufficient.

As with previous series, the candidates gave a wide range of responses ranging from poor to excellent with a stronger performance being demonstrated where a recall of facts were required especially on the straightforward anatomy questions. The questions which required descriptions or explanations to demonstrate an understanding of topics were as with previous series where candidates lost the most marks. Some candidates were offering facts or a brief statement instead of a sufficient explanation for an answer, this was in some instances linked with the focus of the question being incorrectly addressed. The least effective answers were seen in the questions that asked to describe a function of something where neither a description nor a function was supplied.

Learning outcome 1

This outcome focuses on anatomical and physiological terminology. The strengths came with the definition of the directional terms and the weaknesses came with the definition of the term median plane. This was question requiring recall of knowledge and therefore did not require a demonstration in understanding, however the poor definition of the median plane did demonstrate a poor understanding of this directional term.

Learning outcome 2

This outcome focuses on anatomical landmarks. Questions were attempted effectively with the strengths being demonstrated with their ability to recall anatomical boundaries to the thoracic cavity. The weakness came from an inability to recall more than one correct palpable artery in the hind limb. This was either an inability to recall a specific artery other than the femoral or a miss reading of the question to give an answer of a palpable artery but not necessarily noting that it was specific to the hind limb.

Learning outcome 3

This outcome focuses on the normal form and function of the body systems and as it contains the most subject topics the majority of the marks were to be gained in this outcome. The questions were mostly all attempted with variable degrees of effectiveness. Strengths were demonstrated when asked to state the functions of skin and the attempt on stating the differences between internal and external respiration were more successful than when a similar question was attempted in a previous series as was the description of the functions of various vessels of the heart. The weaknesses were demonstrated when asked to demonstrate the function of the three muscle types where a description of the muscle rather than function was largely given and the description of the function of the two parts of the brain given was very poorly executed, where neither a description was given nor a function. This unit had a mix of recall of knowledge questions and understanding questions. The understanding questions largely

relied upon descriptions or explanations to demonstrate depth of knowledge which was poorly demonstrated in this outcome.

Learning outcome 4

This outcome focuses on the significant differences in anatomy and physiology of birds and reptiles compared to dogs, cats, small mammals. A strength was demonstrated in most candidate's ability to state two components of the digestive system in a bird that differ to a rabbit but were weak in identifying two differences in a rabbit to a bird, but most could at least name one difference.

Extended response question

This question focused on the function of the kidney nephron to include ultrafiltration, reabsorption and secretion. The majority of candidates demonstrated a good basic knowledge of the components, but as demonstrated in previous series the biggest limiting factor was the breadth and depth of the discussion. The best answers showed a greater depth of understanding and an ability to bring all the information together. Many candidates were able to state the components and a basic understanding as to what was occurring where, but there was a general lack of depth and an inability to fully explain points stated.

Overall comments

The candidates, as in previous series are still demonstrating that exam technique is still lacking. Command verbs are still being ignored or misinterpreted, especially the describe/explain verbs used to prompt a greater demonstration of knowledge. Some candidates did however give greater detail to the 'state' name' verbs which unfortunately did not increase marks in this type of question.

In preparation for the extended response question, the key areas of focus to improve candidates marks over a range of abilities are:

1. Plan the answer to aid a focused discussion
2. Include a wide range of descriptive information that relates to the topic. A wider range of basic information will improve marks in the lower bands.
3. Improving the candidate's ability to explain and justify their comments will improve their marks in the higher bands.