

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

August 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 **June 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 – June 2021

Grade Boundaries and distribution

Assessment: **7457-402/602**

Series: **June 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	32%

Chief Examiner Commentary

General Comments on Candidate Performance

Assessment component: 7457-402/602

Series: June 2021

Recall questions were clearly answered with one/two-word answers relating to the content and demonstrating a decent breadth of knowledge. However, when the question required a greater depth of understanding to be demonstrated there was a missed opportunity to gain marks by giving generic answers or one-word answers. The 'stretching' questions in this series largely relied upon more detailed descriptions or explanations to clearly demonstrate a depth of knowledge, therefore one and two-word answers were not sufficient to access the full range of marks available.

As with previous series, the candidates gave a wide range of responses ranging from poor to excellent with a stronger performance being demonstrated where the recall of facts were required (AO1) especially on the straightforward anatomy questions. The questions which required descriptions or explanations to demonstrate an understanding of topics (AO2) were where candidates lost the most marks – a feature in previous exam series for this paper. Some candidates were offering basic facts or a brief statements instead of a sufficient explanation, 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 candidates to describe a function of something and where neither a description nor a function was supplied.

This paper was comprised of questions from **Unit 361** only which consists of four learning outcomes.

Learning outcome 1

This outcome focuses on anatomical and physiological terminology and there were 6 marks available in two questions which were attempted reasonably effectively. The strengths came with the definition of the directional term ventral and the medical terms dyspnoea and polydipsia. The weaknesses came with the definition of the terms transverse plane and haematochezia. A poor understanding of these terms was demonstrated.

Learning outcome 2

This outcome focuses on anatomical landmarks and there were 2 marks available in one question. The question was attempted effectively with the strengths being demonstrated with their ability to recall at least the wing of the ilium as an anatomical landmark. The weakness came from an inability to recall more than one correct palpable landmark. This was either an inability to recall a specific palpable landmark or a miss reading of the question to give an answer of an anatomical landmark but not necessarily on the pelvis.

Learning outcome 3

This outcome focuses on the normal form and function of the body systems and as it contains the majority of the marks to be gained in this outcome with 48 marks available over 10 questions including the Extended Response Question (ERQ). The questions were mostly all attempted with variable degrees of effectiveness. Strengths were demonstrated when asked to state the functions of a lysosome or to recall an anion and cation or to state the structures involved in pulmonary circulation. Weaknesses were demonstrated when asked to name and demonstrate the function of the three extrinsic muscles and naming and function of the enzymes of the pancreas where candidates lost marks by naming hormones produced in the pancreas and

therefore subsequently lost marks for their function. This unit had a mix of AO1 and AO2 questions. The AO2 questions largely relied upon descriptions or explanations being required 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, with four marks being available in one question. Strength was demonstrated in most candidates' being able to state at least one difference between the urinary system of a bird and a rabbit. This question was largely addressed well and any weakness demonstrated came in identifying the difference in a bird.

Extended Response Question (ERQ)

This question addressed topic 3.8 in learning outcome 3. The question focused on the components that make up blood and the role and function of the inter cellular and extracellular components. 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 could successfully state the components and had a basic understanding as to what intercellular and extracellular is and their role and function. However, there was a general lack of depth and an inability to fully explain points with some inaccuracies or confusion as to the intercellular and extracellular aspect.

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 and probe a greater demonstration of knowledge and understanding. However, some candidates did give greater detail to the 'state' and 'name' verbs than was required, which unfortunately did not increase marks in this type of question and may have wasted some time for them during the exam.

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.