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

April 2022

Examiner Report

Contents

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 2022** 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 Level 3 Anatomy and Physiology Knowledge test Paper 3.

Theory Exam – March 2022

Grade Boundaries and distribution

Assessment: **7457-402**
Series: **March 2022**

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	36%

Chief Examiner Commentary

General Comments on Candidate Performance

Assessment component: 7457-402

Series: March 2022

Candidates displayed a similar ability to read and understand the questions to the previous series. Many answers to the recall of facts questions (AO1) clearly answered the question with their responses relating to the content and demonstrating a decent breadth of knowledge. This particularly applies to the more straightforward anatomy questions. However, where the questions required fuller descriptions or explanations to demonstrate understanding of topics (AO2), candidates missed out on accessing the higher marks.

Some candidates offered facts, one and two-word answers, 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 explain a function of something, where a function may have been given but a supporting explanation was not supplied.

100% of the cohort for this series was made up of candidates resitting this exam, many for the third or fourth time.

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 these questions were attempted reasonably effectively. The strengths came with recalling modes of joint movements in the hip. Candidates showed a mixed ability to correctly define commonly used physiological terms with two out of three answered well. These questions were testing recall of knowledge.

Learning outcome 2

This outcome focuses on anatomical landmarks. Performance on this question was varied with the identification of one anatomical boundary reasonably well answered, and two anatomical boundaries poorly attempted. Only 15% of candidates could define the Coelom.

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 with 48 marks available over 12 questions including the Extended Response Question. The questions were attempted with variable degrees of effectiveness. Strengths were demonstrated in the naming of the components of the upper respiratory system, the enzymatic breakdown of food and the different groups of blood cells. Weaknesses were demonstrated when asked for an explanation on the topic of cell structure, physiology and division of the bone, when explaining the regulation of sugar and when identifying the location of a key part of the digestive system. This outcome had a mix of questions testing knowledge and understanding. The questions which relied upon explanations being given, to demonstrate a depth of understanding, were poorly answered 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. This question was moderately addressed by candidates with weaknesses shown by candidates unable to recall more than two correct answers. The majority of candidates (67%) scored 2 out of the available 4 marks for this.

Extended Response Question

The question focused on the passage of blood through the heart/systemic/pulmonary system including gaseous exchange. Most candidates demonstrated at least a basic knowledge and understanding of the passage of blood thorough the heart and onwards, but as demonstrated in previous series the biggest limiting factor was the breadth and depth of the discussion. The higher achieving candidates showed a greater depth of understanding and an ability to bring all the information together. Many candidates were able to state the passage blood and the various cardiac components, but there was a general lack of depth and an inability to fully explain points stated with some omissions/inaccuracies or confusion as to the process of gaseous exchange with omissions at cellular level. Performance was improved from the last series with 46% of candidates accessing marks within Band 2 and 12% of candidates accessed marks in Band 3.

Overall comments

Candidates are still demonstrating that exam technique may be lacking. It is advisable that candidates take care when reading the questions and need to be familiar particularly with the variety of command verbs and the types of responses that will be expected of them to access the full range of marks available. Often these were not responded to correctly, or were misinterpreted, especially the 'explain' verb used to prompt a greater demonstration of knowledge. Some candidates did however give greater detail to the 'state' and '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.

Previous papers and examiner reports are available to support candidates with preparation for future exams here:

https://www.cityandguilds.com/qualifications-and-apprenticeships/land-based-services/animal-management/7457-veterinary-nursing#tab=documents

For any candidate wishing to appeal their result, centres can find information regarding the process for this here:

www.cityandguilds.com/delivering-our-qualifications/centre-development/centre-document-library