

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

January 2022

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

Theory Exam – December 2021

Grade Boundaries and distribution

Assessment: **7457-402** Series: **December 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	31
Pass rate	11%

Chief Examiner Commentary

General Comments on Candidate Performance

Assessment component: 7457-402

Series: December 2021

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

Generally, the 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 more fuller descriptions or explanations to demonstrate an understanding of topics (AO2) there was a missed opportunity to access 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.

94% of the cohort for this series was made up of candidates resitting this exam, many of them for the second or third time.

Learning Outcome 1

This outcome focuses on anatomical and physiological terminology and there were five marks available in two questions which were attempted reasonably effectively. The strengths came with the definitions of the medical terms and the modes of joint movements in the elbow, whereas just under half of the candidates correctly defined the term peritonitis.

Learning Outcome 2

This outcome focuses on anatomical landmarks and there were three marks available over one question. Only 10% of candidates accessed the full marks for this particular Learning Outcome. This was down to either an inability to recall a specific pulse point or a misreading of the question to give an answer of a vein instead of an artery.

Learning Outcome 3

This outcome focuses on the normal form and function of the body systems, and 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 mostly attempted with variable degrees of effectiveness. Strengths were demonstrated in the acid-base balance question, the function of the large intestine and the kidney nephron. Candidates did not perform as well on questions involving hormonal control mechanisms and a question assessing the structure and physiology of the eye. This outcome

had a mix of questions testing knowledge (AO1) and understanding (AO2). The questions which relied upon explanations being provided to demonstrate a depth of understanding were 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. None of the candidates were able to access three or four marks for this question, with candidates unable to recall more than two correct answers.

Extended Response Question

The question focused on the function of the lymphatic system. Most candidates demonstrated a very basic knowledge of the components, but as demonstrated in previous series the biggest limiting factor was the breadth and depth of the discussion. Only 21% of candidates were able to access band 2 marks for this question. The best answers showed a greater depth of understanding and an ability to bring all the information together in a holistic way in the response. Many candidates were able to state the link with lymphocytes and immunity, but there was a general lack of depth and an inability to fully explain many points stated, with some inaccuracies or confusion as to the function of the lymphatic system and its link to the circulatory system. Some instances discussed the system in terms of the circulatory system.

Overall comments

The mean average score by a candidate for this exam is 20.4, which is some distance from that required to pass. 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.

There are a number of past papers and examiner reports available on the City & Guilds website here, to support centres and candidates with their preparation for future exams:

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 on the City & Guilds website available here:

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