

0171-016/516 – Level 3 Advanced Technical Extended Diploma in Land-Based Engineering (1080)

March 2020

Examiner Report

Contents

Introduction.....	3
Theory Exam – March 2020	4
Grade Boundaries and distribution.....	4
Chief Examiner Commentary.....	5

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 for City & Guilds Technical qualifications.

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 2020** 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;
0171-016/516 Level 3 Land-Based Engineering-Theory Exam (1)

Theory Exam – March 2020

Grade Boundaries and distribution

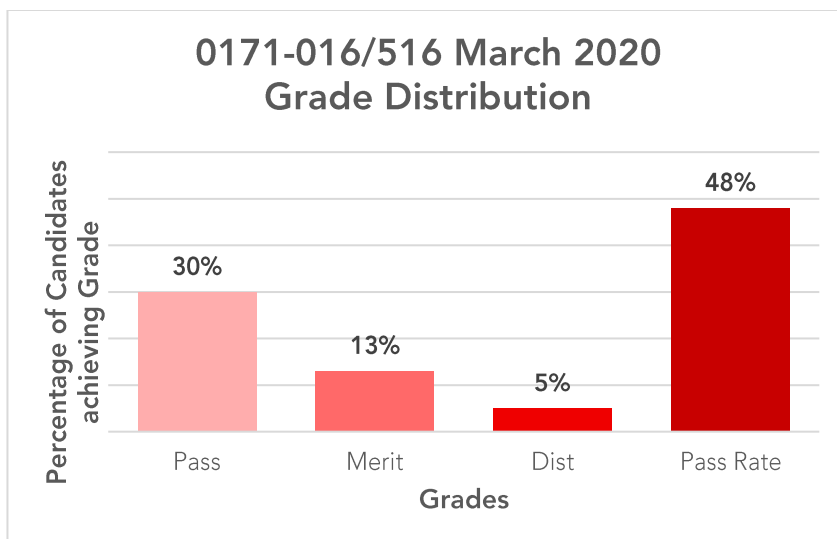
Assessment: **0171-016/516**

Series: **March 2020**

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

Total marks available	60
Pass mark	25
Merit mark	33
Distinction mark	41

The graph below shows the approximate distribution of grades and pass rates for this assessment:



Chief Examiner Commentary

General Comments on Candidate Performance

Assessment component: 0171-016/516

Series 1 (March)

The examination paper covered a good range of learning outcomes across the qualification and was similar to the comparable previous series in terms of range, suitability and level. Overall, candidates' performance on the paper was marginally better than last year, although the achievement is still lower than expected for this exam.

One question on the paper version of the exam did not contain sufficient space for candidate answers. Image quality for one question on the online platform may have been unclear to some candidates. This was taken into account in the marking and awarding to ensure no candidates were disadvantaged.

Most candidates showed strong knowledge of component identification. The knowledge of hydrostatic braking systems and electronics was particularly evident for higher performing candidates. PTO clutch pack was also another area where candidates showed solid knowledge. It is noted that a proportion of candidates planned their answers well showing some improvement in the exam technique. This was especially evident in some questions requiring candidates to show depth and breadth of knowledge and understanding. However, this area still requires further work as many candidates failed to provide the required answers due to not focusing on reading the questions. The topic of steering geometry showed a positive differentiation between the high and low scoring candidates.

Candidates failed to show their knowledge and understanding in the topic related to hydraulic valve and its operation. A number of candidates did not attempt to provide an answer for some questions, especially in relation to electronic components. This area seems to have been problematic for most candidates including those higher performing who mostly scored lower marks. The same pattern was observed for the hydraulic pump topic.

A number of candidates did not seem to read the questions carefully as responses in some areas did not relate to what was being asked. One example of this was the topic of internal ECU components and their functions; many responses referenced external parts of an electrical system, which is not relevant to the inner workings of the ECU. The same was applicable to the subject of the actions of differing types of vehicle batteries; many candidates responded with no comprehension of the effect of adding calcium to a lead-acid battery construction.

The extended response question provided an opportunity for candidates to demonstrate their knowledge and understanding of diagnostic assessments, typical readings and related faults for a power-operated land-based vehicle's steering. It showed a range of performances, as expected for this type of question, showing an appropriate level of discrimination between candidates. It is evident that high scoring candidates were more able to apply technical knowledge to practice.

Centres are advised to help candidates develop their use and understanding of technical terminology across the qualification. Candidates would further benefit from practising examination

techniques when preparing for this exam to fully understand the requirements of the question before attempting to answer, particularly those that require candidates to demonstrate reasoning. Explain type of questions require candidates to demonstrate reasons and justifications to support the statements or cause and effect.

Centres are reminded of the City and Guilds Technicals exam guides available here

https://www.cityandguilds.com/-/media/productdocuments/land_based_services/agriculture/0171/level_3/assessment_materials/0171-016_and_516_technicals_exam_document_2019_v2-pdf.ashx