0171-028 Level 2 Technical Certificate in Land-Based Engineering

2019

Qualification Report
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Introduction

This document has been prepared by the Chief Examiner and Principal Moderator; it is designed to be used as a feedback tool for centres in order to enhance teaching and preparation for assessment. It is advised that this document is referred to when planning delivery and when preparing candidates for City & Guilds Technical assessments.

This report provides general commentary on candidate performance in both the synoptic assignment and theory exam. It 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 assessments in the 2019 academic year. It will explain aspects which caused difficulty and potentially why the difficulties arose.

The document provides commentary on the following assessments:

- 0171-523/023 Level 2 Land-Based Engineering – Theory Exam
  - March 2019 (Spring)
  - June 2019 (Summer)
- 0171-024 Level 2 Land-Based Engineering – Synoptic Assignment
Qualification Grade Distribution

0171-028 Level 2 Technical Certificate in Land-Based Engineering

The approximate grade distribution for this qualification is shown below:

![Grade Distribution Chart]

Please note City & Guilds will only report qualification grades for candidates who have achieved all of the required assessment components, including Employer Involvement, optional units and any other centre assessed components as indicated within the Qualification Handbook. The grade distribution shown above could include performance from previous years.
Theory Exam

Level 2 Technical Certificate in Land-Based Engineering - Theory exam

Grade Boundaries

Assessment: 0171-523 (multiple choice)
Series 1: March 2019 (Spring)

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

<table>
<thead>
<tr>
<th>Total marks available</th>
<th>50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pass mark</td>
<td>25</td>
</tr>
<tr>
<td>Merit mark</td>
<td>32</td>
</tr>
<tr>
<td>Distinction mark</td>
<td>40</td>
</tr>
</tbody>
</table>

The graph below shows the approximate distributions of grades and pass rate for this assessment:
Assessment: 0171-523 (multiple choice)
Series 2: June 2019 (Summer)

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

<table>
<thead>
<tr>
<th>Total marks available</th>
<th>50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pass mark</td>
<td>25</td>
</tr>
<tr>
<td>Merit mark</td>
<td>32</td>
</tr>
<tr>
<td>Distinction mark</td>
<td>40</td>
</tr>
</tbody>
</table>

The graph below shows the approximate distributions of grades and pass rate for this assessment:
Chief Examiner Commentary

0171-523 Level 2 Technical Certificate in Land-Based Engineering - Theory exam

Series 1 – March 2019

This paper was set at the appropriate level and was comparable to March 2018. It covered a range of topics, including the fundamentals across the qualification and was consistent with the test specification. The terminology and technical content assessed in the question paper were to the correct level 2 standard.

The following units were covered in this assessment:
Unit 209: Transmission and driveline operation principles
Unit 210: Engine operation principles
Unit 212: Land based vehicle electrics
Unit 213: Hydraulic systems
Unit 214: Land based vehicle and machinery operation

Overall, candidate performance was good, particularly on the integrated questions. These questions proved accessible to all candidates, while including significant technical depth to provide stretch and challenge and the opportunity for candidates to demonstrate deeper levels of knowledge.
Series 2 – June 2019

This paper was set at the appropriate level and was comparable to June 2018. It covered a range of topics, including the fundamentals across the qualification and was consistent with the test specification. The terminology and technical content assessed in the question paper were to the correct level 2 standard.

The following units were covered in this assessment:
Unit 209: Transmission and driveline operation principles
Unit 210: Engine operation principles
Unit 212: Land based vehicle electrics
Unit 213: Hydraulic systems
Unit 214: Land based vehicle and machinery operation

Overall, candidate performance was good. The questions proved accessible to candidates, with a high pass rate of over 90%. The paper included comparable levels of technical depth to the previous June 2018 series, providing the opportunity for candidates to demonstrate deeper levels of knowledge.
Synoptic Assignment

Grade Boundaries

Assessment: 0171-024  
Series: 2019

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

<table>
<thead>
<tr>
<th>Grade</th>
<th>Total marks available</th>
<th>60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pass mark</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Merit mark</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>Distinction mark</td>
<td>44</td>
<td></td>
</tr>
</tbody>
</table>

The graph below shows the approximate distributions of grades and pass rate for this assessment:

![Grade Distribution Graph]

0171-024 2019  
Grade Distribution

- Pass: 34%  
- Merit: 35%  
- Dist: 28%  
- Dist*: 0%  
- Pass Rate: 98%
Principal Moderator Commentary

Overall the synoptic assignments were well written by the candidates with a range in quality of work as you would expect for Level 2 students. Some of the work was outstanding, so well-done candidates and centres. Overall the assignment had over a 95% pass rate.

The synoptic assignment contained a good spread of practical tasks enabling candidates to demonstrate their skills and background knowledge at the appropriate level, spread across machinery. There were challenges at some centres over the choice of machinery and tasks undertaken. These challenges were due to the centre interpretation of the task in terms of difficulty and differing machinery being chosen for candidates.

Overall, strength was demonstrated specifically in the repair task (task 3). Candidates are most comfortable during the practical test, generally doing well across the group, and this year was no exception. In terms of the synoptic element, more able candidates distinguished themselves by producing documentation that highlighted pertinent recommendations for the customer. It was noted that candidates that scored well in this area tended to effectively bring everything together in overview.

The attachment task (task 4) functioned as a discriminator, as it required a high level of accuracy to achieve linking at the first attempt and therefore candidates were differentiated by the number of attempts it took them to succeed.

In areas where very prescriptive templates are used, for example in the risk assessment, the response can be understandably formulaic. For future assignments, consideration should be given to marking candidates on how they apply a risk assessment, rather than just correctly completing one. Having said this, there was very good evidence from assessors observing the health and safety practices of their candidates.

The range of five assessment objectives were on the whole assessed across the range of tasks appropriately.

The marking was generally very accurate and within tolerance.

The centres used the forms for practical observation and marking, both of which were generally well completed. Centres are consistently using marking descriptors to enable clear differentiation on the Candidate Report Forms.

To assist in moderation when marking written material, please can markers insert comments on student scripts with regard to both strengths and weaknesses. This better enables the moderators to see how and where the marks have been derived.