

0171-28 – Level 2 Technical Certificate in Land-based Engineering

March 2023

Examiner Report

Contents

Introduction	3
Theory Exam – March 2023.....	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 2023** 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:
0171-023/523 Level 2 Land-based Engineering – Theory Exam.

Theory Exam – March 2023

Grade Boundaries and distribution

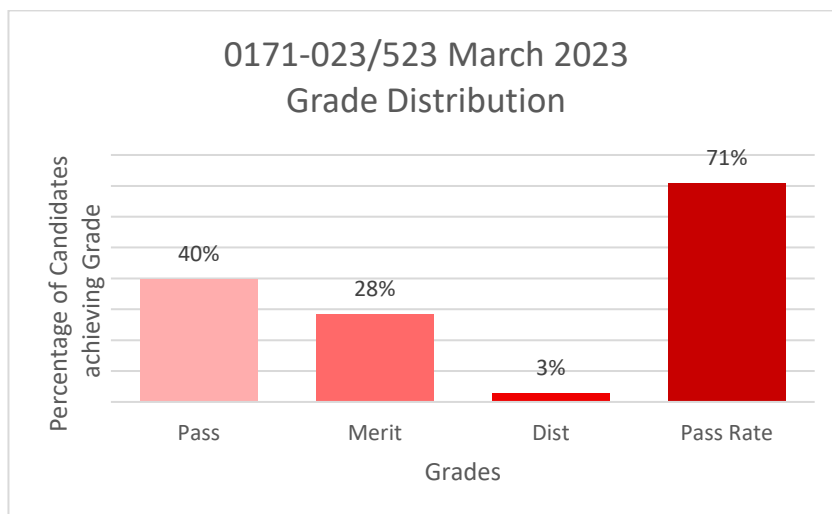
Assessment: **0171-023/523**

Series: **March 2023**

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

Total marks available	50
Pass mark	25
Merit mark	32
Distinction mark	40

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: 0171-023/523

Series 1 (March)

The March 2023 paper exhibited similar characteristics of those sat in previous series with commonality across the range, suitability and level. Overall, candidates' performance was comparable with the March 2022 series; candidates demonstrated strong recall when identifying fundamental components in most topic areas and there was evidence of strong knowledge and understanding relating to health and safety. Candidates were, however, unable to identify common electrical and hydraulic symbols, something which differs from previous series where candidates tended to respond well to this area.

Following previous trends, candidates were able to identify machinery and demonstrated good knowledge of what warning lights in different systems indicate. High scoring candidates were able to show breadth and depth of knowledge, as they performed well across all identification questions and accessed marks on a regular basis when responding to AO2 questions.

Candidates across the cohort showed gaps in knowledge and understanding when faced with electrical questions. This was particularly evident when required to recall electrical units of measure and when identifying electrical symbols. A similar trend could be seen across the hydraulic questions too, when asked to identify symbols and common components which may wear during use. As was the case with other series, candidates' performance demonstrated a lack of knowledge and understanding of emission control systems and recall of common terminology, and there was little understanding of what specific systems were reducing in the exhaust system.

Candidates were set applied knowledge questions based around the diagnostic process for finding faults on a starting and charging system. They were given a scenario which provided information gathered from tests and the manufacturer's specification for comparison. High scoring candidates performed well, demonstrating a depth and breadth of understanding and a knowledge of occupational terminology. They were able to apply a consistent level of logic. Lower scoring candidates did access marks within this section, however there were inconsistencies in comparison to the higher scoring candidates.

Centres are continuing to prepare students to a good standard, and this is supported by the overall pass rate. To allow for further enhancements, candidates would benefit from a greater depth of knowledge around electrical and hydraulic systems. In particular, the identification of common symbols used within workshop manuals and the basic diagnostic tasks carried out on a regular basis within the sector. Knowledge and understanding of engines and their components are strong, however greater breadth of emission control and aftertreatment systems would be beneficial.

All documents are available to download from [Technicals in Agriculture and Land-based Engineering qualifications and training courses | City & Guilds \(cityandguilds.com\)](https://www.cityandguilds.com/qualifications/technical-qualifications)

Past papers and marking schemes: Documents – Level 2 – Assessment materials – Past Papers tabs

Exam guide: Documents – Level 2 – Assessment materials