

8202-020/520 Level 2 Electrical Installation – Theory Exam

March 2024

Examiner Report

Contents

Introduction	3
Theory Exam – March 2024	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 2024** examination series. It will explain aspects which caused difficulty and potentially why the difficulties arose, whether it was caused by a lack of knowledge, poor examination technique or responses that failed to demonstrate the required depth of understanding.

The document provides commentary on the following assessment:
8202-020/520 Level 2 Electrical Installation – Theory Exam.

Theory Exam – March 2024

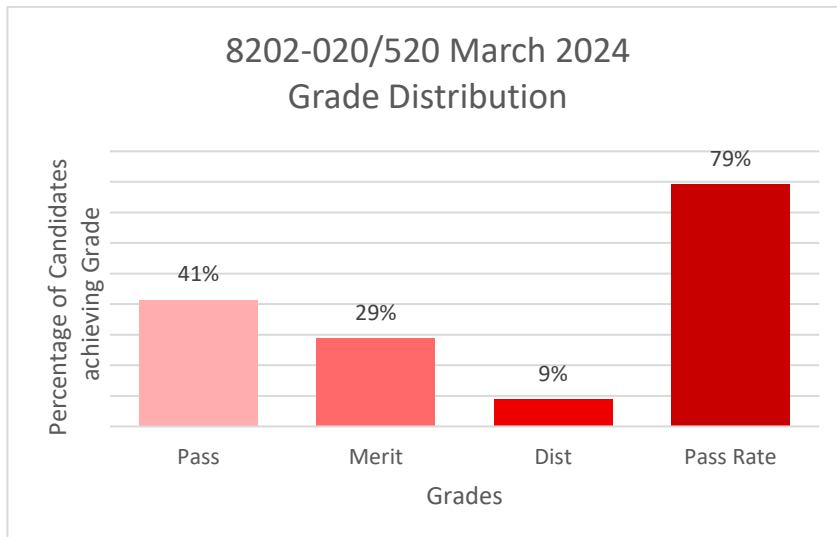
Grade Boundaries and Distribution

Assessment: **8202-020/520**
Series: **March 2024**

This series was completed on both the paper-based platform and online. Below identifies the final grade boundaries for this assessment, as agreed by the awarding panel:

Total marks available	59
Pass mark	26
Merit mark	34
Distinction mark	43

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



Chief Examiner Commentary

General Comments on Candidate Performance

Assessment component: 8202-020/520

Series: March 2024

The March 2024 multiple choice question (MCQ) paper was comparable to all series taken in 2023 and covered a good range across the specification. There was one question which contained a technical error and, as a result, was omitted from the assessment. The base mark was lowered by one and this was taken into consideration when the grade boundaries were discussed and set. Overall, the statistics indicate an improvement on previous series.

Most candidates demonstrated good levels of recall across the question paper including recall of formula. Questions based on understanding and applied knowledge seemed to provide more of a challenge to candidates in this series but, even then, responses indicated some improvement in these areas.

Areas of strength by candidates included subjects linked to health and safety, such as identifying responsibilities. Items involving mathematical calculations were also responded to well. These included indices, drawing scale, and Pythagoras' theorem. Identifying tools and atomic theory also indicated areas of strength in general. Areas of strength for high-scoring candidates included recall of transmission voltages, electrical components, basic protection and earthing arrangements.

Areas of weakness for all candidates included technical language skills for earthing and bonding arrangements, and some science and principles subjects such as Fleming's rules and sine waves. These are areas of weakness that commonly feature in this exam. Most candidates also seemed to be confused with SI units of flux with that for flux density, and this too is a regular weakness across many series.

All candidates demonstrated weakness in identifying common electrical support components and electrical terminations, as well as knowledge of ADS, protective devices and system earthing or bonding. Fixing devices/methods and external influences also proved a challenge for many candidates. Principles relating to series and parallel circuits proved to be a challenge for low-scoring candidates, but less so for high-scoring candidates.

Centres are encouraged to introduce candidates to as many fixing and supporting systems as possible, especially during practical sessions. These could be visual aids or examples for candidates to see rather than install.

Centres are encouraged to pay particular attention to the correct terminology of tools, materials or components, as slang or colloquial terms could often be used in workshop environments leaving candidates poorly prepared for examinations that use the correct term. Candidates are often confused when others refer to low voltage when they mean extra-low voltage as one example. Reinforcing terms such as 'open' and 'closed' instead of 'on' and 'off' will also help this.

Candidates generally seem to favour practical learning so linking some of the understanding into a practical environment can help reinforce learning in areas that are traditionally challenging. This could include calculating cable resistances before measuring them on installed circuits or measuring the effects of series and parallel conductors.

Candidates should be reminded that the Permitted Reference Materials for this examination are: BS 7671 and IET On-site Guide.

Centres are reminded of the City & Guilds Technicals 'Exam Guides' available [here](#)

