

8202-35 Level 3 Advanced Technical Diploma in Plumbing (450)

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.

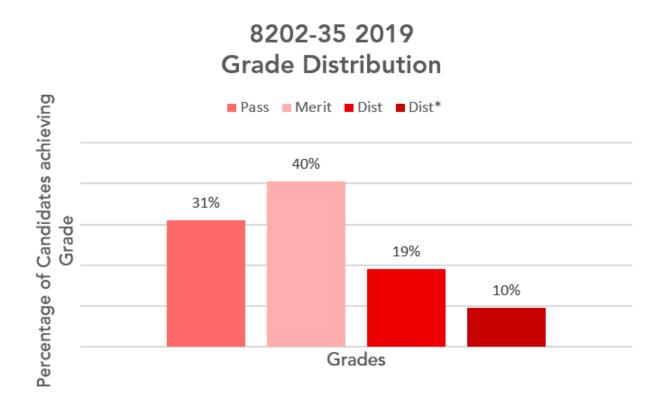
This report provides general commentary on candidate performance in both the synoptic assignment and theory exam. It highlights common themes in relation to the technical aspects explored within the assessment, giving areas of strengths and weakness demonstrated by the cohort of candidates who sat assessments 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:

- 8202-035/535 Level 3 Plumbing Theory Exam (1)
 - o March 2019 (Spring)
 - June 2019 (Summer)
- 8202-036 Level 3 Plumbing Synoptic Assignment (1)

Qualification Grade Distribution

The approximate grade distribution for this qualification is shown below:



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

Grade Boundaries

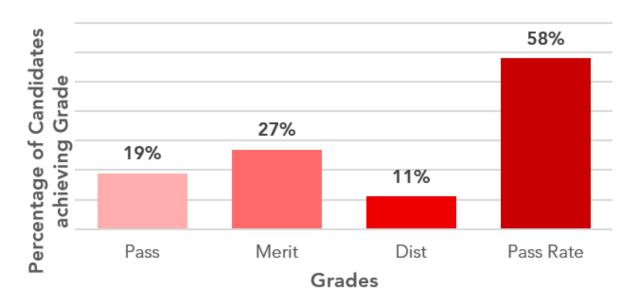
Assessment: 8202-035/535 Series: March 2019 (Spring)

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

Total marks available	60
Pass mark	24
Merit mark	33
Distinction mark	43

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

8202-035/535 March 2019 Grade Distribution



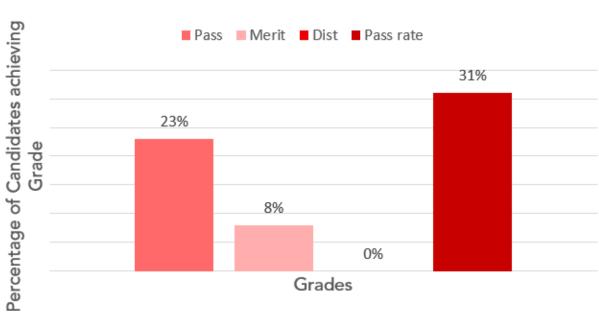
Assessment: 8202-035/535 Series: June 2019 (Summer)

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

Total marks available	60
Pass mark	22
Merit mark	32
Distinction mark	42

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





Chief Examiner Commentary

8202-035/535 Level 3 Plumbing - Theory Exam (1)

Series 1 - March 2019

The March 2019 Theory Exam had a format of 22 short answer response questions that assessed a range of topic areas across the specification and concluded with an extended response question that assessed the candidate's breadth and depth of knowledge from across the whole of this plumbing qualification.

Centres and candidates have both worked hard to improve the overall standard of answers for the extended response question. This resulted in more learners being able to access higher mark bands for both the extended response question and the assessment.

Questions on the Sanitation system planning and design performed very well, specifically the commissioning process and trap seal loss.

Questions assessing Environmental technology systems gave mixed results with basic aspects of system performance giving clear and concise responses but explanations regarding the working principles of components should be an area for further development for candidates. An additional focus for candidates should be applied to making sense of what is being asked of them in the question, so the candidate can identify if the question is asking about a component's individual function or the component's function within a system.

Candidates demonstrated a strong ability to diagnose and rectify faults for a range of plumbing systems. There was also strong evidence of embedded maths skills, demonstrated by candidates scoring well on converting scale measurements accurately.

Very good progress has been made by centres and candidates when answering the extended response question. Some candidates showed evidence of planning their extended response, and this resulted in a basic scaffold for their answers to be built from. The depth of knowledge demonstrated has improved, with more candidates accessing higher marks on the extended response question.

There was clear differentiation between candidates scoring higher marks and the candidates scoring lower marks through the discussions in their answers and providing justifications for and against the question presented to them.

Overall, delivery of the qualification seemed holistic as more candidates provided good answers to the short answer questions and accessed higher marks.

Series 2 – June 2019

As the examination process is becoming more established in centres, it is clear that work has been carried out to prepare the candidates for this June series exam.

All questions were considered to be technically correct, and suitable for the level with no errors. This examination was considered to be similar to the March series in terms of range and level.

Candidates showed a clear understanding of the siting requirements for solar heating systems, and it is clear that candidates are well versed in the benefits and this is a strength of candidates' understanding.

There were signs of good delivery of complex hot water systems, however the responses from some candidates lacked clarity. Candidates were able to demonstrate some knowledge however, phrases were used without the depth of clarity required to answer the question fully and candidates' responses seemed disordered at times.

It is also clear that during revision there has been a large emphasis on the delivery of regulations and documentation but not necessarily as much emphasis placed on the content of each of the regulations and documentation. Candidates are expected to have a sound understanding of the regulations and documents.

Questions relating to components did not fare as well as would be expected, with very few candidates showing understanding of components for both cold water and heating systems. There appears to be a lack of knowledge of both the identification and function of components in cold water and heating systems.

Although candidates have shown good breadth and depth of knowledge, there are areas where improvements can be made, such as improving the technical terminology used in their responses, making sure it is present and relevant.

Responses to "Explain..." questions also need to be revisited by the candidates and centres need to place an emphasis on how candidates respond to the command verbs used in questions during their teaching and revision.

Another area for improvement is candidates' knowledge of the function of different system components and their interactions with each other.

These areas should be developed with centres devising their own targeted revision of short answer question and answer techniques, using the sample and past series questions on the City & Guilds webpages.

It is clear that candidates' extended response answer techniques also need to be further developed. Candidates did not supply sufficiently coherent content within their responses to gain access to the full range of higher marks.

Candidates should take particular care to read the extended response question carefully and ensure they answer all elements of the question. Many candidates focussed on particular elements of the extend response question, rather than holistically looking at the question as a whole.

As the extended response is a 9 mark question, this should be an area for revision for both candidates and centres, not only in the subject knowledge but also how to respond to the question.

Synoptic Assignment

Grade Boundaries

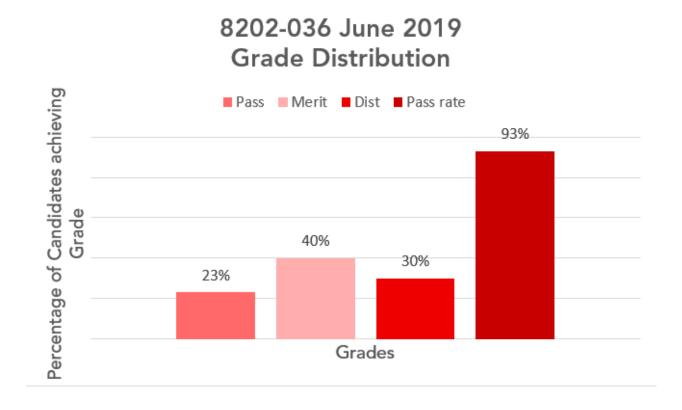
Below identifies the final grade boundaries for this assessment, as agreed by the awarding panel:

Assessment: 8202-036

Series: 2019

Total marks available	60
Pass mark	25
Merit mark	34
Distinction mark	43

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



Principal Moderator Commentary

In most centres undertaking the delivery of the Technical Qualification assessors embraced the assessment methods. The assignment model and quality of the uploaded evidence from the centres was in general good and clearly demonstrated the alignment of marks awarded by the assessors across a range of knowledge and understanding methods.

Candidates, in general, performed well across all of the Assessment Outcomes with few significant areas of weakness identified throughout the whole of the qualification cohort who undertook the synoptic assignment.

However, through the moderation and the high quality of feedback given in some centres, the following observations have been made:

- Candidates' largest area of weakness in skills and knowledge was observed within the
 designing and installation of the secondary return component including safe isolation –
 This should be an area that centres focus more teaching on in the future.
- Candidates with good pipework skills did not, in all instances, confidently perform safe
 isolation and therefore their marks and the corresponding assessor justifications resulted
 in candidates overall scoring lower marks for AO3.
 As safe isolation is an important aspect of the Health and Safety area, centres should
 ensure all candidates are able to safe isolate.

The design and completion of sizing activity, along with commission reports, lent themselves to be hand written by the candidate and in some instances this resulted in poor quality uploads and difficulty in understanding the candidate responses.

Marks awarded by centres were supported with strong justifications from the assessors for each of the AO bands. The marks clearly aligned with the knowledge and skills demonstrated by the candidate and, in most instances, the moderator marks awarded agreed with the centre marks. Centres have clearly understood the Technical marking criteria and accurately aligned candidates to the mark bands.

A particular area of good practice shown by one centre was in the design and upload of a photographic evidence pack, clearly depicting the whole assessment process and labelled accordingly; this clearly assisted the moderation process and should be viewed as best practice by centres.