

8202 — L3 Advanced Technical Diploma in Plumbing

2016/17

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.

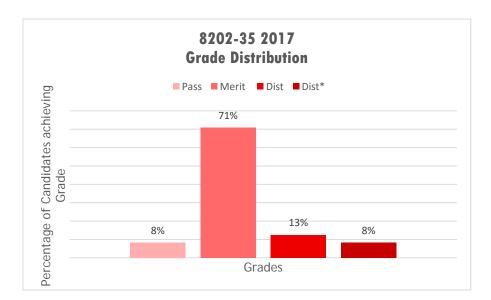
This report provides general commentary on candidate performance in both the synoptic assignment and theory exam. It highlights common themes in relation to the technical aspects explored within the assessment, giving areas of strengths and weakness demonstrated by the cohort of candidates who sat assessments in the 2017 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
 - o April 2017
 - o June 2017
- 8202-036 Level 3 Plumbing Synoptic Assignment

Qualification Grade Distribution

The grade distribution for this qualification during the 2016/2017 academic year 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.

Theory Exam

Grade Boundaries

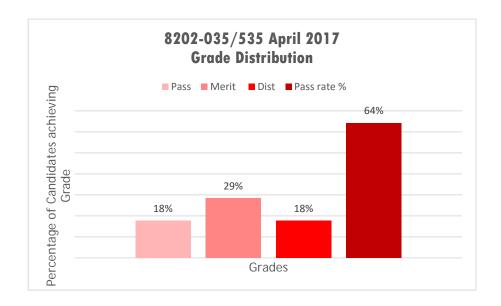
Assessment: 8202-035/535

Series: April 2017

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

Total marks available	60
Pass mark	24
Merit mark	34
Distinction mark	45

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

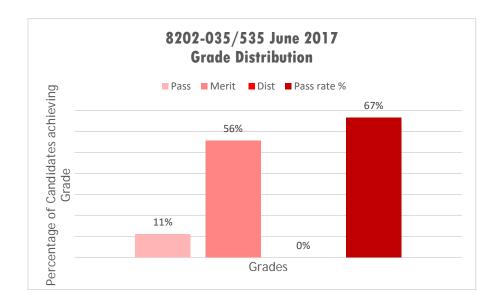


Assessment: 8202-035/535

Series: June 2017

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



Chief Examiner Commentary

8202-35 - 035/535 Level 3 Advanced Technical Diploma in Plumbing - Theory Exam

Series 1 - April 2017

The exam paper was prepared with an even balance of questions and questioning techniques to allow learners to demonstrate knowledge and understanding of the subject matter. Candidates demonstrated a good range of knowledge on the broad spectrum of the L3 Plumbing theory exam.

There were some clear gaps that showed limited understanding in Operating Principles. The majority of candidates showed a lack of ability to interpret information from charts and tables. This was most evident in the topic of selecting backflow protection.

Another area that candidates did not demonstrate a sound knowledge of understanding was sanitation. More specifically installation size and selection criteria of sanitation systems. Higher marks were awarded where a learner displays depth of knowledge and provides reasoning to their answers.

Within central heating systems candidates displayed clear knowledge in recognition of system types but the majority of candidates were unable to demonstrate a depth and breadth of understanding of how a system operates. An example of this was an S plan plus system - Candidates supplied answers that, although were technically correct, did not relate to the question being asked and therefore received no or limited marks.

Furthermore candidates need to develop skills in providing written responses that ask them to describe or explain and many learners failed to explain or give reasoning to their answers and instead opted to provide a list of bullet points that failed to demonstrate the depth of understanding required.

Extended Response Question

It is clear centres have worked well with candidates in many cases to prepare them for this type of question; however, this does not appear in all candidate responses.

The results from the extended response questions varied widely and some candidates need clearer guidance on completing this type of question response. The extended response question gives the candidate an opportunity to display their breadth and depth of understanding of the subject to achieve numerous marks to support the overall points awarded.

Higher achieving candidates produced a well-structured and logically sequenced response. These candidates were able to talk around the topic of installing central heating systems and discussed cause and effect of a variety of installations and gave justifications for their responses.

Lower achieving candidates struggled to provide a logical response and most provided a limited amount of information in their answers which did not indicate that the candidates had the breadth and depth of understanding in this topic area to answer the question.

Candidates in general performed very well in the June series whereby learners have produced answers that displayed both knowledge and understanding of the subject areas across the range of the qualification. A limited amount of candidates struggled with providing logical answers and therefore achieved few marks again indicating that understanding across the range of the qualification was limited.

Although candidates attempted all questions the responses across the range show there may be an issue of candidates not reading or understanding the question and there is also some clear gaps in the candidates ability to provide logical sequence of activities for example question 4 and question 11 that required a response detailing understanding of selection and sequence performed poorly with only limited number of candidates achieving high marks.

Further areas for consideration is the candidates responses to question expecting explanations - most learners could detail recall of knowledge to their responses but did not go on to explain their answers and therefore achieved few or no marks.

Candidates in general were not able to provide sound knowledge and understanding in a limited number of areas and clear gaps of knowledge appear in responses relating mainly to sanitation, hot water and heating components including processes - candidates performed poorly in these areas.

Extended response question

In most cases it was clear that the centres have clearly prepared the candidates for this style of questioning as all candidates attempted the question and provided correct responses. However, in a number of cases the responses have been insufficient to provide the candidate with high marks as although some candidates could detail the number of considerations they missed the opportunity to provide reasoning and understanding whereby providing a list of possible items to consider thus achieving limited marks.

The extended response question is designed to allow the candidate to display true knowledge and understanding. A number of candidates provided highly structured and logical responses displaying true depth of knowledge that has been embedded throughout the qualification - those candidates that could display and articulate their reasoning achieved highest marks.

Synoptic Assignment

Grade Boundaries

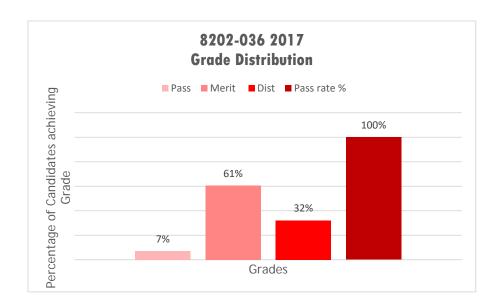
Below identifies the final grade boundaries for this assessment, as agreed by the awarding panel;

Assessment: 8202-036

Series: 2017

Total marks availible	60
Pass mark	27
Merit mark	35
Distinction mark	43

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



Principal Moderator Commentary

The synoptic assignment enables the learner to put into practice the skills they have mastered and the underpinning knowledge they have gathered and display them through practical application.

- System design
- Installation practice
- Fault diagnosis rectification and commissioning

Candidate's performances against each AO were as follows;

AO1- Recall

Candidates scored high marks in this AO, showing a good ability to relate regulatory and statutory information. Candidates recalled key safety information and component features.

AO2- Understanding

High scoring candidates demonstrated a good level of understanding when working on design layouts and key features. Candidates also showed a good level of understanding in the processes of fault finding and rectification techniques.

Candidates who achieved lower range scores struggled with accuracy and understanding of safety feature layouts.

Candidates who scored low seemed to lack understanding of key concepts of fault rectification and could not interpret information effectively.

AO3- Technical skills

A large number of candidates scored within the high range in this AO, demonstrating a high level of practical ability in using tools and equipment effectively. Those candidates who scored lower needed assurance and work produced contained errors and inconsistencies.

AO4- Bringing it all together

Candidates that achieved high marks were able to produce clear logical answers and informed judgments enabled them to perform clear fault finding and rectifications process and confident installations supported by clear design concept understanding.

Lower scoring candidates lacked confidence and needed reassurance on numerous aspects and where unable to justify and complete tasks without minimal guidance.

AO5- Attending to detail

The vast majority of candidates scored in the high range in this AO it was clear from the work sampled that candidates took pride in the practical tasks and underpinning activities and produced submissions to a good standard.

AO8- Communication

Candidates scored mid-range in this AO with production of well-presented written work to support answers along with clearly annotated drawings.

Candidates who scored high displayed an excellent use of technical terminology as well as communications through high level answers and supported annotated drawings.