1145-530 Level 3 Engineering – Theory exam (1)

March 2020

Examiner Report
Contents

Introduction ........................................................................................................................................... 3
Theory Exam – March 2020 .................................................................................................................. 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 2020 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;

1145-530 – Level 3 Engineering – Theory exam (1)
Theory Exam – March 2020

Grade Boundaries and distribution

Assessment: 1145-530
Series: March 2020

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

<table>
<thead>
<tr>
<th>Total marks available</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pass mark</td>
<td>40</td>
</tr>
<tr>
<td>Merit mark</td>
<td>55</td>
</tr>
<tr>
<td>Distinction mark</td>
<td>70</td>
</tr>
</tbody>
</table>

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: 1145-530

Series 1 (March 2020)

The questions and paper as a whole met the requirements of the specification, were of a similar level to the previous papers and covered a good range of topics in the specification. There was a mixed response to this paper by candidates and statistically this cohort did not perform as well as the March 19 series.

Questions on CAD/CAM and rapid prototyping were answered well, similar to previous series’. The question on composite materials was also answered well.

The breadth of knowledge demonstrated by a notable proportion of candidates was not as broad as the previous series, with some gaps in areas of the specification, particularly hardening. A notable proportion of candidates did not attempt at least some of the maths questions. Of those that did, a proportion did not show their working. When questions asked for explanations, a significant proportion of candidates provided supporting reasons for only some of their statements.

There was a wide range of responses to the synoptic questions. Almost all candidates demonstrated an amount of appropriate knowledge, although some did not cover the relevant knowledge from the specification when responding to the question on quality. However, similar to previous series, in some cases the candidates did not consider the secondary implications of the subject matter in the synoptic questions and in many cases they did not draw conclusions when discussing the topic.

Centres are encouraged to help students develop knowledge and understanding of the mathematical areas of the syllabus. Candidates could gain additional marks in these questions by writing the equation to be used or showing working.

Candidates should be encouraged to explain and justify their answers where possible. Many candidates know the answers to the questions, but lose out on marks due to a lack of explanation or justification in their answers.