4292-30 – Level 3 Advanced Technical Certificate in the Automotive Industry

June 2018

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 2018 academic year. It will explain aspects which caused difficulty and potentially why the difficulties arose.

The document provides commentary on the following assessments;

  - March 2018 (Spring)
  - June 2018 (Summer)
Qualification Grade Distribution

The grade distribution for this qualification during the 2017/2018 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: 4292-030/530
Series: March 2018

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

<table>
<thead>
<tr>
<th>Total marks available</th>
<th>80</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pass mark</td>
<td>35</td>
</tr>
<tr>
<td>Merit mark</td>
<td>45</td>
</tr>
<tr>
<td>Distinction mark</td>
<td>56</td>
</tr>
</tbody>
</table>

The graph below shows the distributions of grades and pass rate for this assessment;
Assessment: 4292-030/530  
Series: June 2018

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

<table>
<thead>
<tr>
<th>Total marks available</th>
<th>80</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pass mark</td>
<td>36</td>
</tr>
<tr>
<td>Merit mark</td>
<td>46</td>
</tr>
<tr>
<td>Distinction mark</td>
<td>56</td>
</tr>
</tbody>
</table>

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

4292-030/530 Advanced Technical Certificate in the Automotive - Theory exam

Series 1 – March 2018

The exam generally went well; most learners attempting all the questions with only a minority missing some answers.

There were some large variations between the papers, with some learners giving good detail showing knowledge and understanding, some learners only give a minor amount of information, so not reading the question and not allocating sufficient time to read all questions carefully to understand where they are going with their answers.

The importance of the command verb in the question remains an issue for a number of learners. And the centres should prepare learners in knowing what the relevance of the command verb means in answering the question, knowing the command verb and what this is asking will allow learners acquire more marks.

Learners were not reading the whole question carefully this prevented learners from accessing some of the available marks. The following examples should reinforce the importance of extracting the detail from the question in order to answer the question effectively.

The subject areas covered in the questions were of the level required for this qualification.

There were some spelling and grammar errors in the majority of answers; however some answers were well constructed making it easy to follow what the learners were explaining.

The majority of learners received no marks on transmission question, centres need to ensure learners have an understanding of not only light vehicle but also heavy and motorcycle transmission systems, so learners have the full breadth of knowledge of these alternative systems.

The use of oscilloscopes and measurements that are used when checking systems and components with them, also calibration of electrical equipment before use.

The area of the test which learners answered well was on metals and the dangers of high voltage electrical systems, this is important to know this and it was good to see such detailed responses.

The stretch and challenge question, showed the learners ability to make comparisons on different engine types, it had some well written answers from some learners showing a good depth of knowledge, some structured their answer well, it had a natural flow to it, and it followed a logical thought process making it easy to read and follow, there were also some good answers and detail on emissions and power outputs.

It came across that certain learners had much more knowledge on two stroke engines, and some had more knowledge on four strokes.
Series 2 – June 2018

The exam was generally well received with learners showing some good knowledge; most learners attempted all the questions with only a minority missing some answers.

There were some large variations between the papers, with some learners giving good detail showing knowledge and understanding, some learners only give a minor amount of information, so not reading the question and not allocating sufficient time to read all questions carefully to understand where they are going with their answers.

The importance of the command verb in the question remains an issue for a number of learners. And the centres should prepare learners in knowing what the relevance of the command verb means in answering the question, knowing the command verb and what this is asking will allow learners acquire more marks.

Learners were not reading the whole question carefully this prevented learners from accessing some of the available marks. The following examples should reinforce the importance of extracting the detail from the question in order to answer the question effectively.

The subject areas covered in the questions were of the level required for this qualification.

There were some spelling and grammar errors in the majority of answers; however some answers were well constructed making it easy to follow what the learners were explaining.

Knowledge of other vehicle types
It became apparent that some learners were showing their frustration at questions that were not light vehicle related, it has been mentioned in previous reports, that this qualification covers a range of vehicles, and that centres should be looking at the handbook to ensure full coverage.

The majority of learners received no marks on engine related questions
Combustion engines are a fundamental part of a vehicle, not only was the lack of knowledge of simple component identification, but also on the principles of an engine such as compression ratio.

The majority of learners received no marks on motorcycle geometry question, centres need to ensure learners have an understanding of not only light vehicle but also motorcycle systems, this should also include heavy so learners have the full breadth of knowledge of these alternative system, all-terrain vehicles share a lot with motorcycle systems.

The use of composite materials needs to be looked at, learners have a good knowledge of metals, but limited on other materials used in vehicle manufacturer.

The area of the test which learners answered well was on health and safety, this is generally answered well, as it is an important part of working in the automotive industry, and the learners fully understood this.

Most learners had a good knowledge of electrical components but more detail in to different types, would help in attaining a higher mark.

The stretch and challenge question showed the learners ability to make comparisons on different clutch types. It had some well written answers from some learners, however the depth of knowledge and understanding was not as detailed as it could have been. There was some structure to some answers, and some had a natural flow and followed a logical thought process making it easy to read and follow. Some responses were sporadic and very repetitive, some learners had more knowledge on clutch types, and understood the basics of single and multiplates, but detail was lacking.
Synoptic Assignment

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

Assessment: 4292-030
Series: 2018

<table>
<thead>
<tr>
<th>Total marks available</th>
<th>60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pass mark</td>
<td>27</td>
</tr>
<tr>
<td>Merit mark</td>
<td>37</td>
</tr>
<tr>
<td>Distinction mark</td>
<td>47</td>
</tr>
</tbody>
</table>

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

The approach to each of the tasks was generally very good and in the majority of cases appropriate documentation and records were submitted. Learners do need to ensure that the documents are clear to third parties. Learners need to be encouraged to present their evidence as clearly and logically as possible, especially when completing job cards as this is one of the main pieces of evidence the moderator has. Some centres submitted photographs and in most cases these did have some reference to what was being shown, this is important.

When completing the Candidate Recording Forms (CRF) there needs to be some reference to how the learners met the criteria to show why they were placed in that particular marking band. There were phrases similar to ‘Good knowledge’ however examples of what this ‘good knowledge’ was would be beneficial. Some centres gave comments similar to ‘Good knowledge’ to several of their learners and then placed them in different marking bands. If ‘Good knowledge’ puts one learner in the middle band, then surely all learners that have ‘good knowledge’ should be in the same band. This applied to grading in several of the assessment objectives. Again without any justification it is difficult for moderators to see why there is a difference.

Centres included various documents for the learner’s evidence, but many were not fully completed, particularly where centres were using their own documentation. If submitting a form that asks for a signature, date, vehicle, etc., than it should be provided. If they are not required then please amend your forms. When moderating we do not know if this information is expected or not so learners could lose marks.

In some cases the detail on the recording forms was good, and most were word processed making them easy to follow. A number of the observation records were very comprehensive and this is very useful for moderators, however very few Centres made any reference to Task 3, only to the practical task (1 and 2). The marks awarded are for all tasks, not just the practical tasks. There were some good attempts at Task 3 and the presentations were well thought out, with some very good detail. In some cases learners had taken phrases from their research and used them directly in their presentations, the language used not being consistent with their other work.

AO1 – Recall of knowledge relating to the qualification
In most cases this was well evidenced with learners achieving towards the higher end of the mark range. They were well aware of health & safety and the procedures necessary to carry out the tasks. The majority appeared to follow logical sequences when completing the tasks.

AO2 – Understanding of concepts, theories and processes relating to the Los
Learners performed well in showing evidence for this AO, with the majority scoring in the higher mark range. They showed a good understanding and appreciation of health & safety and adopting appropriate working practices. There was some good detail provided in the presentations for Task 3, with the presentation being well thought out.

AO3 – Application of practical/technical skills
Most learners scored well with this AO, they all seemed fairly comfortable with the practical/technical requirement. They showed a good understanding of safe and correct use of tools and equipment.

AO4 – Bringing it all together – coherence of the whole subject
This also produced some good scores; the standard of the practical tasks was good and learners were able to link correct and safe working practices. There was a good understanding of the approach to diagnostic procedures and linking this with general technical knowledge. The information provided in some of the presentations showed learners were able to apply their knowledge.
AO5 – Attending to detail/perfecting
Most learners scored in the mid marking range. There was evidence to show that learners understood that they should carry out tasks fully and use the correct and safe working procedures. There were a few minor issues with Task 3 where learners had not corrected some obvious errors in their presentations but the general presentation was good.