5220-21 Level 2 Technical Certificate in Digital Technologies

Qualification Report

Contents

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:

5220-21 Level 2 Technical Certificate in Digital Technologies

Pathways:
- Network and Infrastructure
- Software and Applications
- Web and Social Media

April 2017 Series:

- 5220-022/522 Level 2 Technical Certificate in Digital Technologies (Network and Infrastructure) Theory exam
- 5220-024/524 Level 2 Technical Certificate in Digital Technologies (Software and Application) Theory exam
- 5220-026/526 Level 2 Technical Certificate in Digital Technologies (Web and Social Media Development) Theory exam

June 2017 Series:

- 5220-022/522 Level 2 Technical Certificate in Digital Technologies (Network and Infrastructure) Theory exam
- 5220-024/524 Level 2 Technical Certificate in Digital Technologies (Software and Application) Theory exam
- 5220-026/526 Level 2 Technical Certificate in Digital Technologies (Web and Social Media Development) Theory exam
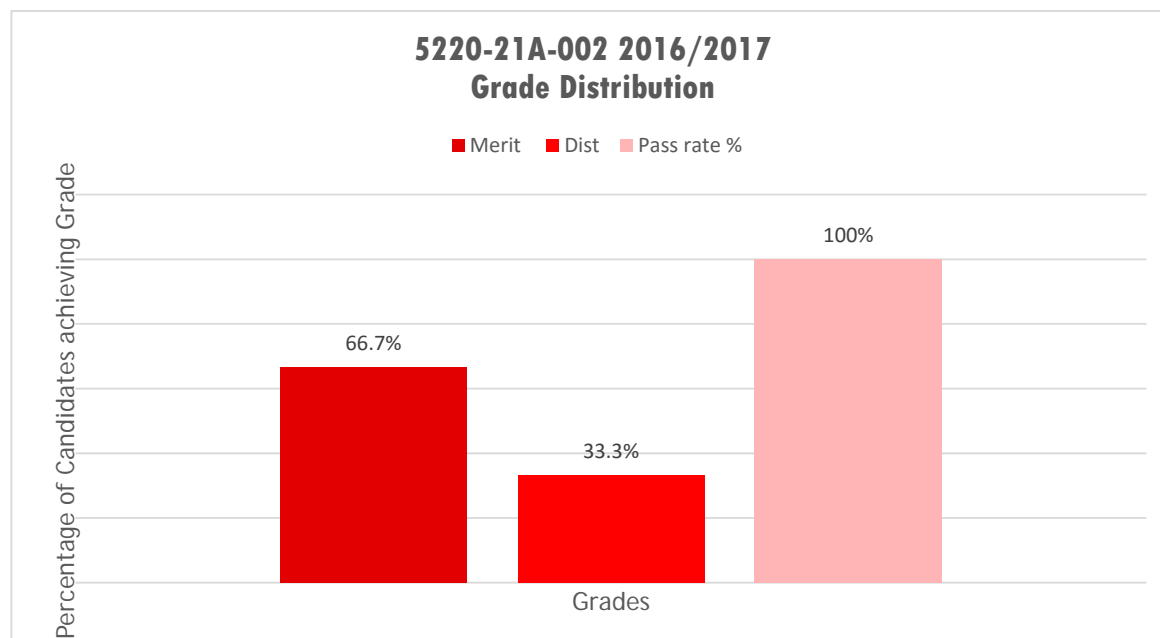
Synoptic Assignments:

- 5220-023 Level 2 Technical Certificate in Digital Technologies (Network and Infrastructure)
- 5220-025 Level 2 Technical Certificate in Digital Technologies (Software and Application)
- 5220-027 Level 2 Technical Certificate in Digital Technologies (Web and Social Media Development)

Qualification Grade Distribution

5220-21 Level 2 Technical Certificate in Digital Technologies (Network and Infrastructure).

The grade distribution for this qualification during the 2016/2017 academic year is shown below;

5220-21A-002 2016/2017
Grade Distribution

■ Merit   ■ Dist   ■ Pass rate %

Percentage of Candidates achieving Grade

100%

66.7%

33.3%

Grades

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: 5220-022/522 Network and Infrastructure
Series: April 2017

The data below identifies the final grade boundaries for this assessment, as agreed by the awarding panel;

Total marks available	80
Pass mark	30
Merit mark	43
Distinction mark	56

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

5220-022/522 April 2017
Grade Distribution

■ Pass ■ Merit ■ Dist ■ Pass rate %

22%

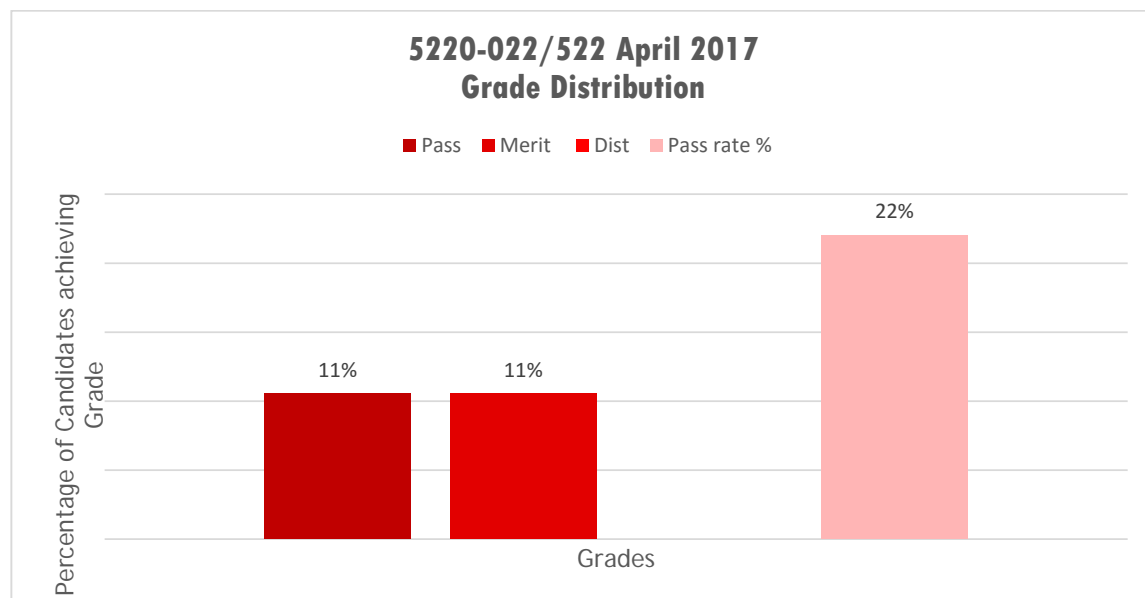11%   11%

Percentage of Candidates achieving Grade

Grades

Assessment: 5220-022/522 Network and Infrastructure
Series: June 2017

The data below identifies the final grade boundaries for this assessment, as agreed by the awarding panel;

Total marks available	80
Pass mark	31
Merit mark	43
Distinction mark	56

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

Chief Examiner Commentary

**5220-022/522 Level 2 Technical Certificate in Digital Technologies
(Network and Infrastructure) – Theory exam**

Series 1: April 2017

Generally, the quality of the language used in responses was precise. However, some candidates failed to answer questions in the manner required by the command verbs in the stem of questions. Candidates should be clear about the type of answers required when asked to 'state', 'explain', 'describe' and 'discuss'.

Where candidates were asked to state or identify from the range outlined in the qualification syllabus, some offered more than was required by attempting explanations rather than just providing the fact. It was noted by examiners that candidates lacked detail in the answers provided and relied on generalised commentary based on their

own understanding and experience rather than precision in recall of the topics covered in the syllabus. Many answers lacked depth and often resulted in partial award of the available marks.

Many candidates demonstrated a lack of knowledge in key areas. Through discursive answers, because of generalisation and a failure to use correct precise technical language it was not always clearly demonstrated that candidates had the correct understanding. Too often, candidates seemed to rely on their own experience and background knowledge, rather than demonstrating understanding of the topics from the qualification syllabus.

In several questions, candidates failed to answer the question asked. For example, candidates gave a description of something instead of its purpose where this was required in the question.

Candidates failed to demonstrate understanding of the differences between technologies despite having some understanding of the technologies considered. They were unable to give the details required.

In extended answer questions, most candidates made an attempt indicating they were aware of the different expectations of such questions and that the time allowed for the test was appropriate. In most cases, candidates achieved marks in these questions but did not provide sufficient depth to access higher mark bands.

In extended questions, candidates were unable to follow arguments through when expanding content. In some cases, good opportunities were missed when candidates proposed several themes for their answer but focussed on a single aspect of the proposals, rather than expanding on all of them. Candidates failed to provide recommendations based on the arguments they proposed and this limited the marks gained to the lower marking bands.

Series 2: June 2017

Some candidates failed to answer questions in the style required by the command verbs in the stem of questions. Candidates should be clear about the type of answers required when asked to 'state', 'explain', 'describe' and 'discuss'. Where candidates were asked to state or identify from the range described in the qualification syllabus, some offered more than was required by giving explanations rather than just providing the fact.

Some candidates across demonstrated a lack of knowledge in key areas where factual questions were set. It was notable that few candidates answered correctly in the use of network modes, messaging, Lightweight Directory Access Protocol (LDAP) and network services using cloud infrastructures. Many candidates mistook the bodies providing governance of the cloud for the commercial companies offering services using the cloud.

It was noted by examiners that candidates lacked detail in the answers provided and relied on generalised commentary based on their own understanding and which were sometimes confused in the structure of the answer. This led to imprecision in the answers provided and so answers lacked depth, leading to partial award of the available marks.

As in the theory exams for April series, a failure to use correct precise technical language meant it was not always clearly demonstrated that candidates had the correct

understanding. Once again, candidates seemed to rely on their own experience and background 'casual' knowledge, rather than demonstrating understanding of the topics from the qualification syllabus.

In extended answer questions, most candidates made an attempt indicating they were aware of the different expectations of such questions and that the time allowed for the test was appropriate. In most cases, candidates achieved marks in these questions but did not provide sufficient depth to access higher mark bands, having failed to build on topics they proposed.

Summary

In both series of the tests, candidates lacked depth and precision in their responses and this meant that the range of marks accessed was limited. In specialist units, examiners noted gaps in the knowledge of understanding of physical devices used in networks, and the use of logical (software) tools in the diagnosis of network functionality and integrity.

Centres are reminded of the City & Guilds Technicals support material available here www.cityandguilds.com/techbac/technical-qualifications/resources-and-support#teaching

They are strongly advised to be familiar with the Teaching, Learner and Assessment guide which refers to the command verbs their learners may encounter during examinations and the type of responses expected along with an indication of the qualities that will be looked for during marking.
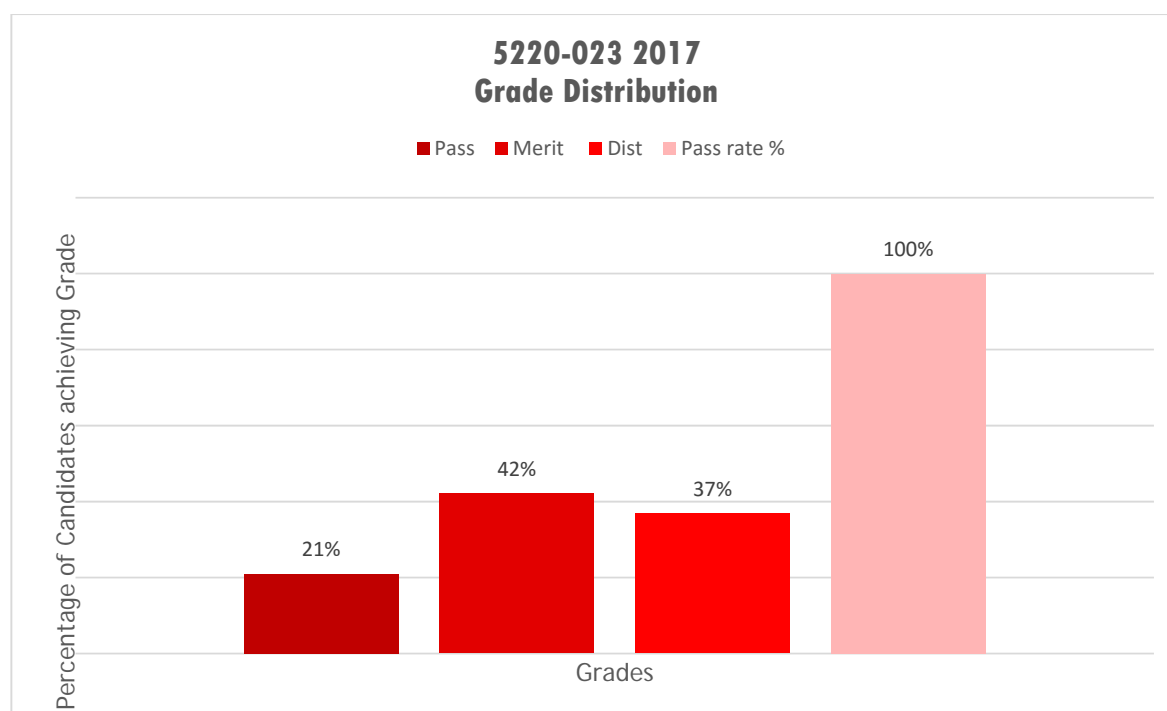
Synoptic Assignment

Grade Boundaries

The data below identifies the final grade boundaries for this assessment, as agreed by the awarding panel;

Assessment: 5220-023 Network and Infrastructure
Series: 2017

Total marks available	60
Pass mark	24
Merit mark	33
Distinction mark	42

Principal Moderator Commentary

The performance of candidates was very good in the great majority of cases. The grades achieved against assessment objectives considering Knowledge, Understanding, Creativity and Communication were consistently good indicating strong involvement with this pathway.

Candidate performance against the objectives dealing with Integration and Attention to Detail were variable across the cohort and the grades achieved against these objectives were a good indicator of the grade achieved overall in the Synoptic Assignment.

This assignment focussed largely on the completion of practical tasks and relied on the evidence provided by Assessor Observations. This evidence indicated useful approaches to the tasks set and where candidates performed well overall, their grades here were very good.
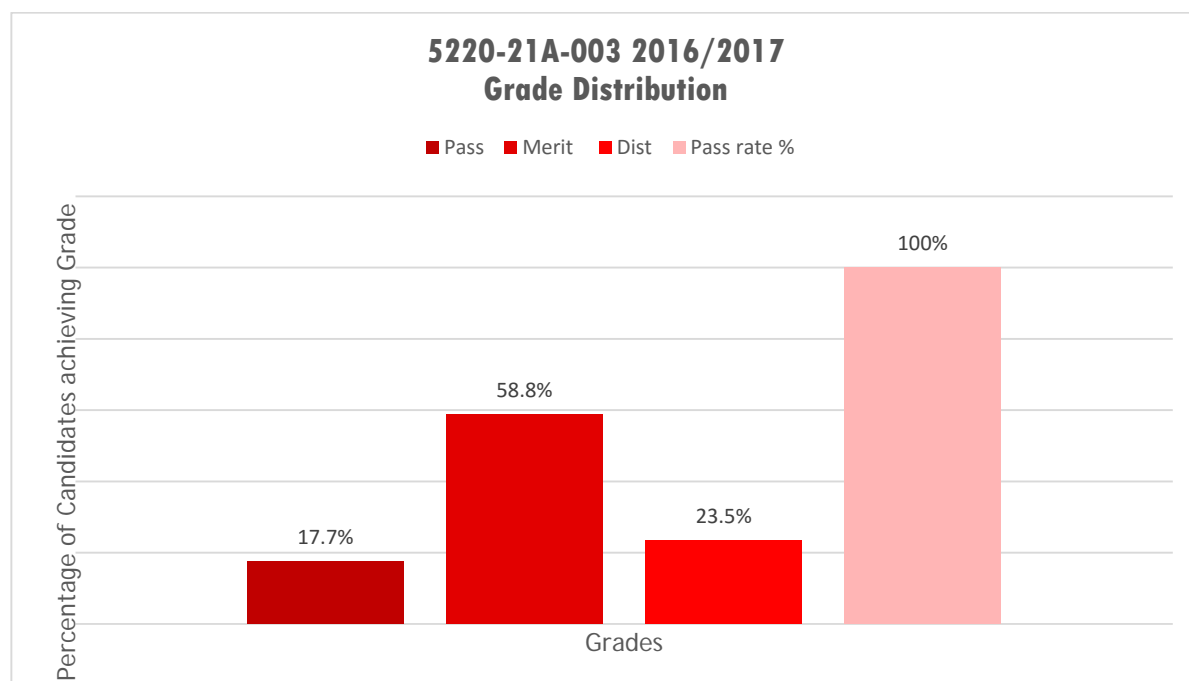
Centre marking was accurate and this indicated appropriate understanding of the requirements of the whole range of assessment objectives and effective rigour in internal standardisation processes. However, where candidates were asked to provide photographic evidence of completing tasks, the submissions were inconsistently named. Centres must ensure that candidates conform to a consistent approach to the naming of evidence files where such files are evidence of completing a task in a required order.

The structure of the evidence submitted was closely linked to the tasks set. This is recommended as best practice for centres.

Qualification Grade Distribution

5220-21 Level 2 Technical Certificate in Digital Technologies (Software and Application).

The grade distribution for this qualification during the 2016/2017 academic year is shown below;

5220-21A-003 2016/2017 Grade Distribution

■ Pass   ■ Merit   ■ Dist   ■ Pass rate %

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: 5220-024/524 Software and Application
Series: April 2017

The data below identifies the final grade boundaries for this assessment, as agreed by the awarding panel;

Total marks available	80
Pass mark	31
Merit mark	43
Distinction mark	56

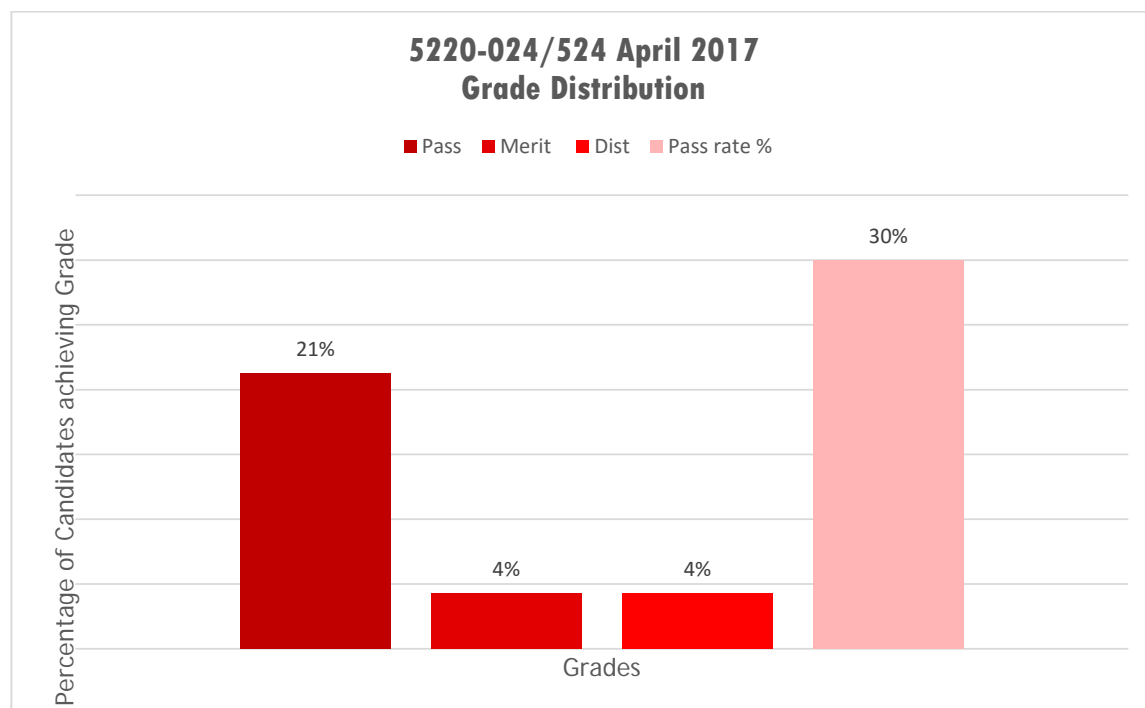The graph below shows the distributions of grades and pass rate for this assessment;

Assessment: 5220-024/524 Software and Application
Series: June 2017

The data below identifies the final grade boundaries for this assessment, as agreed by the awarding panel;

Total marks available	80
Pass mark	31
Merit mark	43
Distinction mark	56

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

Chief Examiner Commentary

**5220-024/524 Level 2 Technical Certificate in Digital Technologies
(Software and Application) - Theory exam**

Series 1: April 2017

Generally, the precision of language used in responses was to a good standard. Some candidates failed to answer questions in the manner required by the command verbs in the stem of questions. Candidates should be clear about the type of answers required when asked to 'state', 'explain', 'describe' and 'discuss'.

It was noted by examiners that candidates lacked detail in the answers provided and relied on generalised commentary based on their own understanding and experience,

rather than precision in recall of the topics covered in the qualification syllabus. In questions where candidates were asked to demonstrate understanding of knowledge recalled, the answers lacked depth and often resulted in partial award of the available marks. This was particularly evident in questions dealing with networking technologies and the underlying principles that support them.

Through discursive answers, generalisation and a failure to use correct precise technical language it was not always clearly demonstrated that candidates had the correct understanding. Once again, candidates seemed to rely on their own experience and background knowledge rather than demonstrating understanding of the topics from the syllabus. Some candidates demonstrated a lack of knowledge in fundamental areas. It was notable that candidates lacked certainty about data handling in application development.

In several questions, candidates failed to answer the question asked. For example, candidates described programming languages rather than styles of programming. Many failed to demonstrate an understanding of the differences between technologies despite having some underlying awareness of the technologies considered.

In extended answer questions, most candidates made an attempt, indicating they were aware of the different expectations of such questions and that the time allowed for the test was appropriate. In most cases, candidates achieved marks in these questions but did not provide sufficient depth to access the higher mark bands.

In extended questions, candidates were unable able to follow arguments through when expanding content. In some cases, good opportunities were missed when candidates proposed several themes for their answer but focussed on a single aspect of the proposals, rather than expanding on all of them.

Series 2: June 2017

As in the April series theory exam, some candidates failed to answer questions in the style required by the command verbs in the stem of questions indicating that that may not have fully prepared for the requirements of the test and the question types used. Where candidates were asked to state or identify from the range described in the qualification syllabus, some offered more than was required by giving explanations rather than just providing the fact. Conversely, in questions where candidates were asked to demonstrate understanding of knowledge recalled, the answers lacked depth and often resulted in partial award of the available marks. This was particularly evident in questions dealing with software development models and techniques.

It was noted by examiners that candidates lacked detail in the answers provided and relied on generalised commentary based on their own understanding and experience, rather than precision in recall of the topics covered in the qualification syllabus.

Some candidates demonstrated a lack of knowledge in key areas. It was notable that candidates lacked certainty about the application of Cascading Style Sheets Candidates seemed to rely on their own experience and background knowledge rather than demonstrating understanding of the topics from the syllabus.

In extended answer questions, most candidates made an attempt indicating they were aware of the different expectations of such questions and that the time allowed for the

test was appropriate. In most cases, candidates achieved marks in these questions but did not provide sufficient depth to access the higher mark bands.

In extended questions, candidates were unable able to follow arguments through when expanding content. In some cases, good opportunities were missed when candidates proposed several themes for their answer but focussed on a single aspect of the proposals, rather than expanding on all of them.

Summary

Candidates must be prepared for the examination through rigorous revision of the facts so that they are easily recalled. They must be able to demonstrate the importance of the facts they know, and how they might be practically useful. By developing a depth of knowledge and understanding, candidates will be able to relate them to the scenarios in the questions. In specialist units, examiners noted gaps in the knowledge and understanding of different development strategies and development life-cycles.

Centres are reminded of the City & Guilds Technicals support material available here www.cityandguilds.com/techbac/technical-qualifications/resources-and-support#teaching

They are strongly advised to be familiar with the Teaching, Learner and Assessment guide which refers to the command verbs their learners may encounter during examinations and the type of responses expected along with an indication of the qualities that will be looked for during marking.
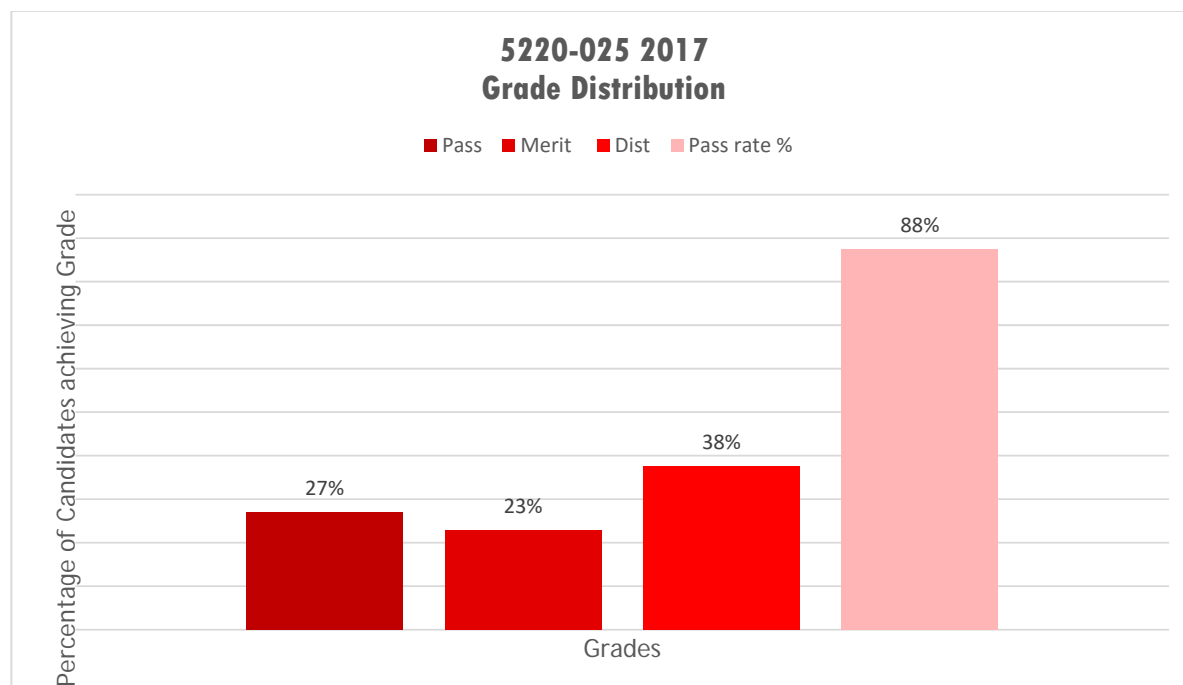
Synoptic Assignment

Grade Boundaries

The data below identifies the final grade boundaries for this assessment, as agreed by the awarding panel;

Assessment: 5220-025 Software and Application
Series: 2017

Total marks available	60
Pass mark	24
Merit mark	34
Distinction mark	44

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

Principal Moderator Commentary

The quality of the work submitted was generally good and this supported grades overall, especially where performance in the theory exam was weaker.

The grades achieved for assessment objectives covering Knowledge, Understanding, Creativity and Communication were mostly good indicating strong involvement with this pathway. It was notable that some of the evidence presented for the task specifying the design of the proposed mobile application was exemplary and above the standard expected of candidates at this level. Where this was the case, the candidates benefited

from the strong contribution this work made to their overall grades against several assessment objectives.

The assignment had a strong focus on practical tasks and candidates produced consistently good applications. The practical work for the website was much more variable and some work lacked detail and failed to cover the evidence required in the assignment brief and tasks. Where performance was weaker, poorer marks resulted from a lack of attention to detail and some lack of skill in this area of practical ability.

Where the marks in practical tasks were strongest, the evidence of design and development was accompanied by excellent evidence of robust test planning and logging. There were useful reflective comments on the effects of errors on the application functionality and descriptions of useful strategies to correct them.

The quality of language used in the candidate submissions was good in the majority of the work seen and the stronger submissions had a professional approach to presentation of work. In the stronger submissions, good use was made of screen capture images and these were used effectively to provide demonstration of understanding in support of the written submissions.

Centre marking was accurate and this indicated appropriate understanding of the requirements of the whole range of assessment objectives and effective rigour in internal standardisation processes. In some cases, the marking included exemplary feedback on the performance against the assessment objectives to support the grades given.

The structure of the evidence submitted to the portal was excellent and made the processes of moderation straightforward. Assessor observation forms were complete and informative. This is recommended as centre best practice.

Qualification Grade Distribution

5220-21 Level 2 Technical Certificate in Digital Technologies (Web and Social Media Development).

The grade distribution for this qualification during the 2016/2017 academic year is shown below;

Data is currently not available, this will be coming soon.

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.
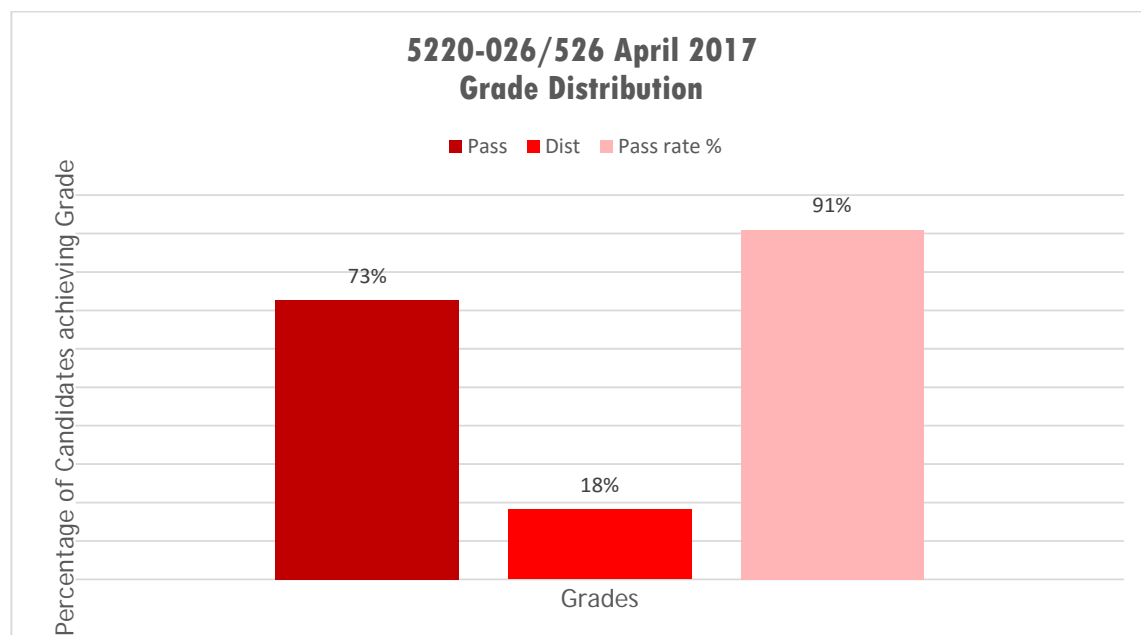
Theory Exam

Grade Boundaries

Assessment: 5220-026/526 Web and Social Media Development
Series: April 2017

The data below identifies the final grade boundaries for this assessment, as agreed by the awarding panel;

Total marks available	80
Pass mark	32
Merit mark	44
Distinction mark	56

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

Assessment: 5220-026/526 Web and Social Media Development
Series: June 2017

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

Total marks available	80
Pass mark	32
Merit mark	44
Distinction mark	56

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

5220-026/526 June 2017 Grade Distribution

■ Pass   ■ Pass rate %

100%   100%

Percentage of Candidates achieving Grade

Grades

Chief Examiner Commentary

5220-026/526 Level 2 Technical Certificate in Digital Technologies (Web and Social Media Development) - Theory exam

Series 1: April 2017

Generally, the precision of language used in responses was to a good standard. Some candidates failed to answer questions in the style required by the command verbs in the stem of questions. Candidates should be clear about the type of answers required when asked to 'state', 'explain', 'describe' and 'discuss'.

Some candidates demonstrated a lack of knowledge in key areas. It was noted by examiners that candidates lacked detail in the answers provided and relied on generalised commentary based on their own understanding and experience, rather than precision in recall of the topics covered in the qualification syllabus. In questions where candidates were asked to demonstrate understanding of knowledge recalled, the answers lacked depth and often resulted in partial award of the available marks.

Through discursive answers, generalisation and a failure to use correct precise technical language it was not always clearly demonstrated that candidates had the correct understanding. Once again, candidates seemed to rely on their own experience and background knowledge, rather than demonstrating understanding of the topics from the syllabus.

In several questions, candidates failed to answer the question asked. For example, candidates described threats instead of vulnerabilities or a description of something instead of its purpose where this was required in the question. Many failed to demonstrate an understanding of the differences between technologies despite having some appreciation of the technologies considered.

In extended answer questions, most candidates made an attempt indicating they were aware of the different expectations of such questions and that the time allowed for the test was appropriate. In most cases, candidates achieved marks in these questions but did not provided sufficient depth to access higher mark bands. In extended questions, candidates should be able to follow arguments through when expanding content. In some cases, good opportunities were missed when candidates proposed several themes for their answer but focussed on a single aspect of the proposals, rather than expanding on all of them

Series 2: June 2017

As in the April series theory exam, some candidates failed to answer questions in the manner required by the command verbs in the stem of questions indicating that that may not have been fully prepared for the test and the question types used. Where candidates were asked to state or identify from the range described in the qualification syllabus, some offered more than was required by giving explanations rather than just providing the fact. Where asked to state facts, some candidates gave a limited range of answers and some answers failed to use precise or correct technical terms.

Some candidates gave very brief answers in questions where they were asked to describe or explain a topic and were not able to access higher marks. In some cases, the candidates lacked underlying knowledge and in some others, they failed to give enough depth or failed to expand on the answers they gave.

In several questions, some candidates failed to directly answer the question asked. For example, candidates described threats instead of vulnerabilities or a generalised description of something instead of its purpose where this was required in the question. Many failed to demonstrate an understanding of the differences between technologies despite having some appreciation of the technologies considered.

In extended answer questions, most candidates made an attempt indicating they were aware of the different expectations of such questions and that the time allowed for the test was appropriate. In the great majority of the answers, the candidate failed to expand on the answers they gave, failing to capitalise on the good ideas they

presented initially. In some cases, a lack of technical accuracy limited the marks awarded.

Summary

Candidates must be prepared for the examination through rigorous revision of the facts so that they are easily recalled. They must be able to demonstrate the importance of the facts they know, and how they might be practically useful. In the questions dealing with the specialist units, examiners noted gaps in knowledge of HTML and CSS technologies and testing practices

By developing a depth of knowledge and understanding, candidates will be able to relate them to the scenarios in the questions.

Centres are reminded of the City & Guilds Technicals support material available here www.cityandguilds.com/techbac/technical-qualifications/resources-and-support#teaching

They are strongly advised to be familiar with the Teaching, Learner and Assessment guide which refers to the command verbs their learners may encounter during examinations and the type of responses expected along with an indication of the qualities that will be looked for during marking.
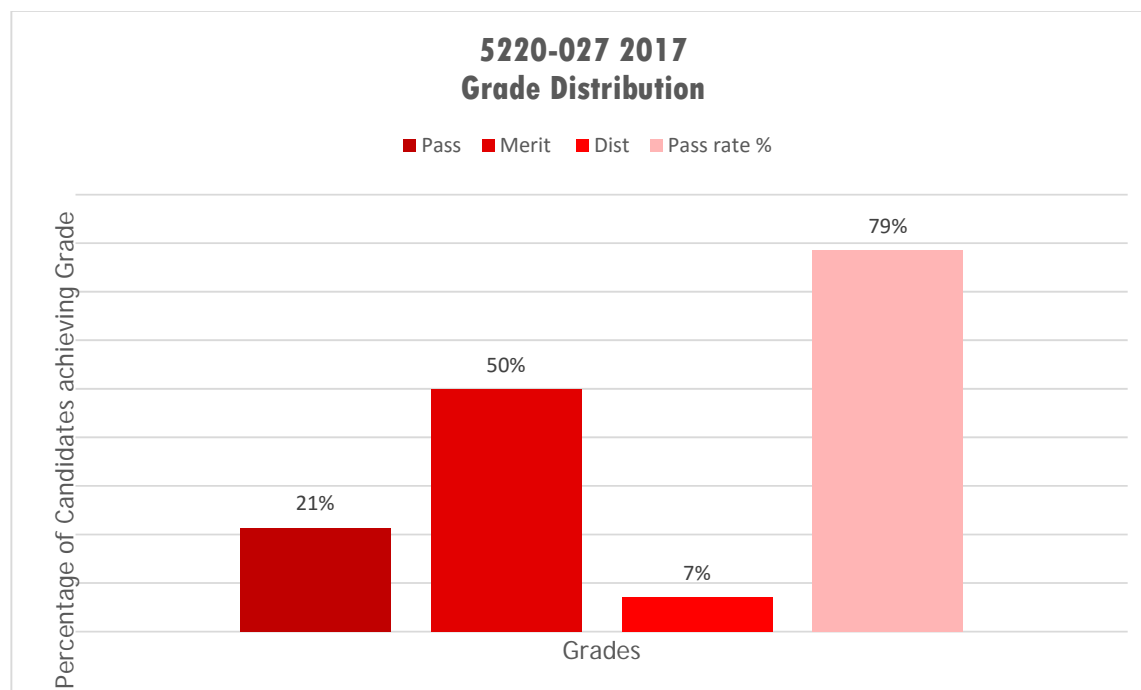
Synoptic Assignment

Grade Boundaries

The data below identifies the final grade boundaries for this assessment, as agreed by the awarding panel;

Assessment: 5220-027 Web and Social Media Development
Series: 2017

Total marks available	60
Pass mark	24
Merit mark	33
Distinction mark	42

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

5220-027 2017
Grade Distribution

■ Pass ■ Merit ■ Dist ■ Pass rate %

Percentage of Candidates achieving Grade

- 21%
- 50%
- 7%
- 79%

Grades

Principal Moderator Commentary

Overall the cohort performed adequately, but very few achieved marks from the higher mark bands. Candidate performance tended to be consistent across all Assessment Objectives, in that marks were assigned to the same band descriptor across the whole assessment.

Some of the design tasks were of a good quality and included a logical approach to test planning. There was some good use of graphics which had been carefully prepared.

The evidence for the website creation task was not at the standard expected and many candidates failed to demonstrate sufficient attention to detail to gain good marks against this assessment objective. Whilst most candidates scored marks within Band 2 as higher-level skills were not exhibited, they also lost marks for lack of attention to detail and brief attempts at tasks. Candidate evaluations were not completed to the standard expected, lacking depth of content and mostly factual in their nature.

Work submissions were logically structured, easy to access and presented in the required format.
Evidence submitted was well-structured and clearly followed the tasks from the assignment. However, many of the files submitted were poorly formatted in that the pages were upside-down or incorrectly rotated making it time consuming to moderate the marked work.

The quality of the marking submitted for moderation was variable and this emphasises the crucial role of internal standardisation in the quality assurance processes of centres offering the Technical qualifications. The assessment objectives covering Understanding, Research, Creativity, and Communication were awarded notably high marks in some centres. The marks awarded for Knowledge and Skill were more varied and balanced.