



0174-38 Level 3 Advanced Technical Extended Diploma in Forestry and Arboriculture (1080)

2022

Qualification Report

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Foreword

Results August 2022

As you will likely be aware, Ofqual has announced that grading for General Qualifications this summer will be more generous than prior to the pandemic. This is partly due to managing the impact of disruption and learning loss on learner performance and also managing fairness between learners in different years who had different methods of determining their grades. Therefore, for A levels and GCSEs, grading will seek a midway position between 2019 and 2021, meaning, in general, results will be somewhat higher than prior to the pandemic. This year, 2022, is a transitional year and outcomes and standards will likely return to pre-pandemic levels in 2023.

Similarly, for Vocational and Technical Qualifications (VTQs), this summer will be a transitional year and Ofqual has now been clear that for VTQs “we should expect that this summer’s results will look different, despite exams and assessments taking a big step towards normality.” Ofqual has published a blog [What’s behind this summer’s VTQ results](#)

In acknowledgement of the disruption to learning and to support fairness for all learners certificating this summer (some of whom will be competing against learners taking General Qualifications for the same progression and higher education opportunities), we will be taking loss of learning into consideration, whilst still acknowledging the need to uphold the validity of the qualifications. On this basis, we have made the decision to apply a form of ‘safety net’ through some additional ‘generosity’ to both the theory examinations and synoptic assignments within our Technical Qualifications wherever appropriate, (noting that it may not be appropriate to apply where there is a clear impact on knowledge and skills to practice, particularly health and safety requirements or other relevant legislation). We are therefore also reviewing candidate work a few marks below (equivalent to 5% of maximum marks) the Pass and Distinction notional boundaries – the boundaries used during the awarding process as the best representation of maintaining the performance standard from 2019.

The reason for lowering boundaries, where appropriate, by 5% of the maximum marks available, is that it is broadly commensurate with the level of generosity learners are likely to see in General Qualifications at level 2 and level 3. Providing that senior examiners can support the quality of learners’ work seen below the notional boundaries and agree it is sufficient to maintain the integrity, meaning and credibility of the qualifications, the grade boundaries will be lowered across the full set of grades – e.g Pass, Merit, Distinction and Distinction Star.

Given the circumstances, this is the best approach to take into account the disruption to teaching and learning across every learner in a fair and transparent way, and at the same time maintain the integrity and meaning of qualifications. This approach helps to level our Technical Qualifications awarding approach with that adopted for General Qualifications and other qualifications awarded in England and in the wider UK.

Spring examination series 2022

Having taken this decision, we are also mindful of learners who have taken components in **Spring 2022** and believe they should also have access to the same level of generosity. For these learners, we wish to adopt a similar approach. Therefore, for learners taking Technical Qualification assessments in spring there will be similar generosity, through the addition of 5% of the maximum mark available for the assessment. It is a different mechanism to that we are using for the summer assessments but provides the same level of generosity to those learners taking assessments in the summer.

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 2022 academic year. It will explain aspects which caused difficulty and potentially why the difficulties arose.

The document provides commentary on the following assessments:

Year 1

- Pathway 1 (Forestry) and Pathway 2 (Arboriculture)
 - 0174-012/512 Level 3 Forestry and Arboriculture – Theory exam (1)
 - March 2022 (Spring)
 - June 2022 (Summer)
 - 0174-011 Level 3 Forestry and Arboriculture – Synoptic Assignment (1)

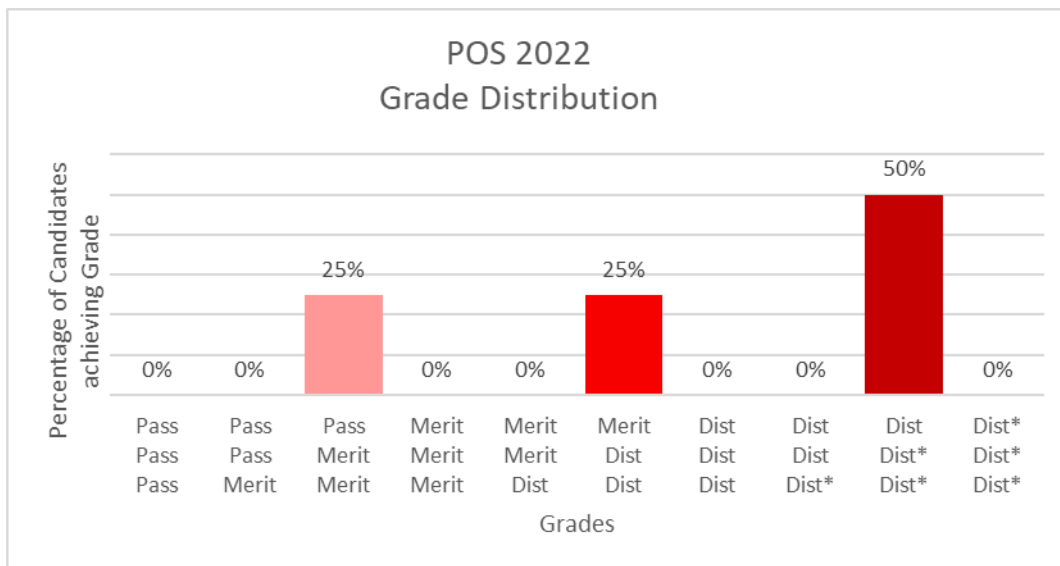
Year 2

- Pathway 1 (Forestry) and Pathway 2 (Arboriculture)
 - 0174-014/514 Level 3 Forestry and Arboriculture - Theory exam (2)
 - March 2022 (Spring)
 - June 2022 (Summer)
 - 0174-013 Level 3 Forestry and Arboriculture - Synoptic assignment (2)

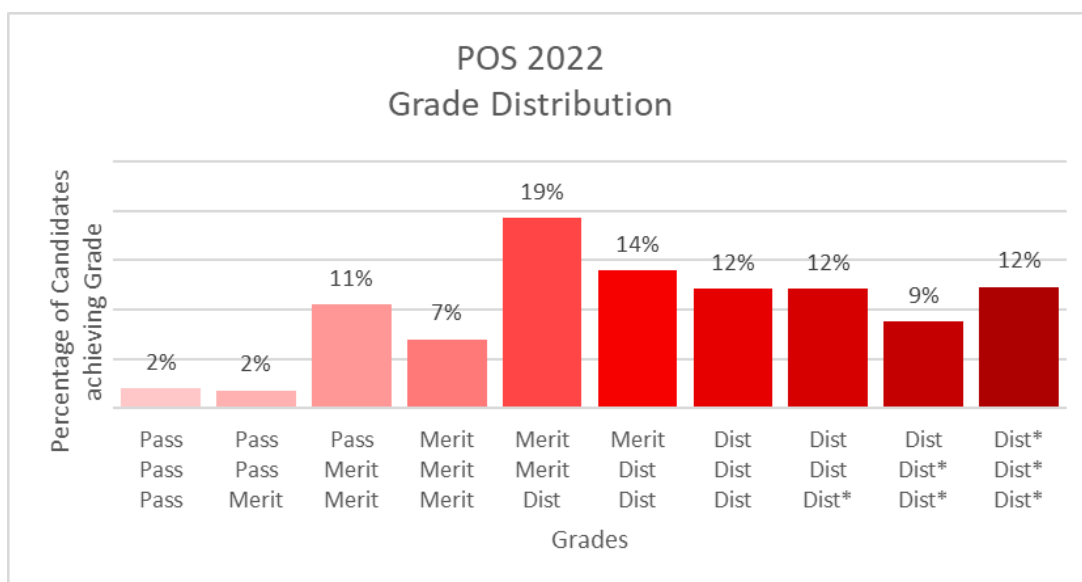
Qualification Grade Distribution

The grade distribution for this qualification is shown below:

Pathway 1 - Level 3 Advanced Technical Extended Diploma in Forestry and Arboriculture (Forestry) (1080)



Pathway 2 - Level 3 Advanced Technical Extended Diploma in Forestry and Arboriculture (Arboriculture) (1080)



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 Exams – Year 1

Grade Boundaries

Assessment: 0174-012/512

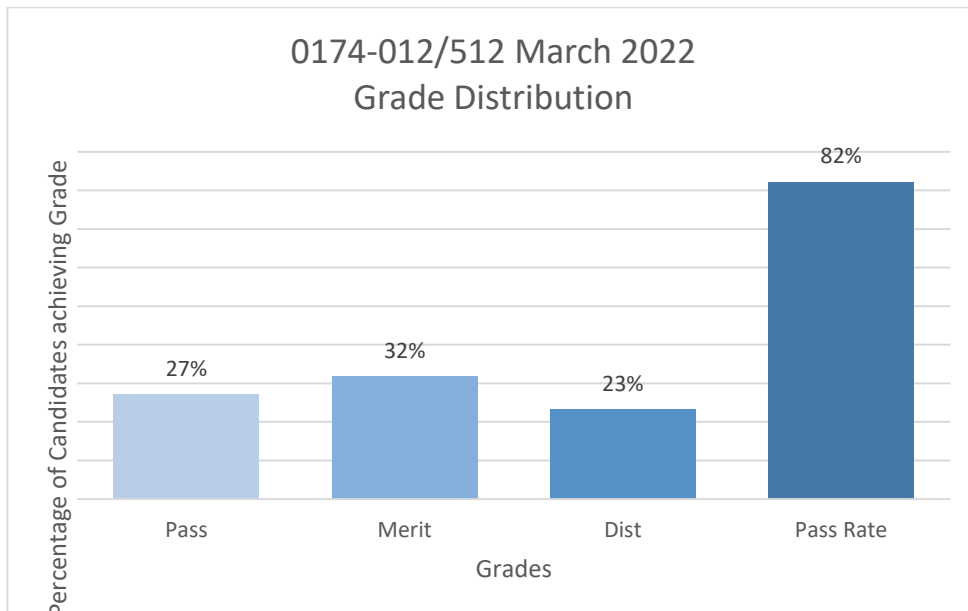
Series: March (Spring)

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

Total marks available	60
Pass mark	28
Merit mark	35
Distinction mark	42

The generosity applied to the summer assessments will also retrospectively be applied to candidates who achieved their best result in spring. 5% of the base mark of the assessment will be added to their score rather than applied to boundaries.

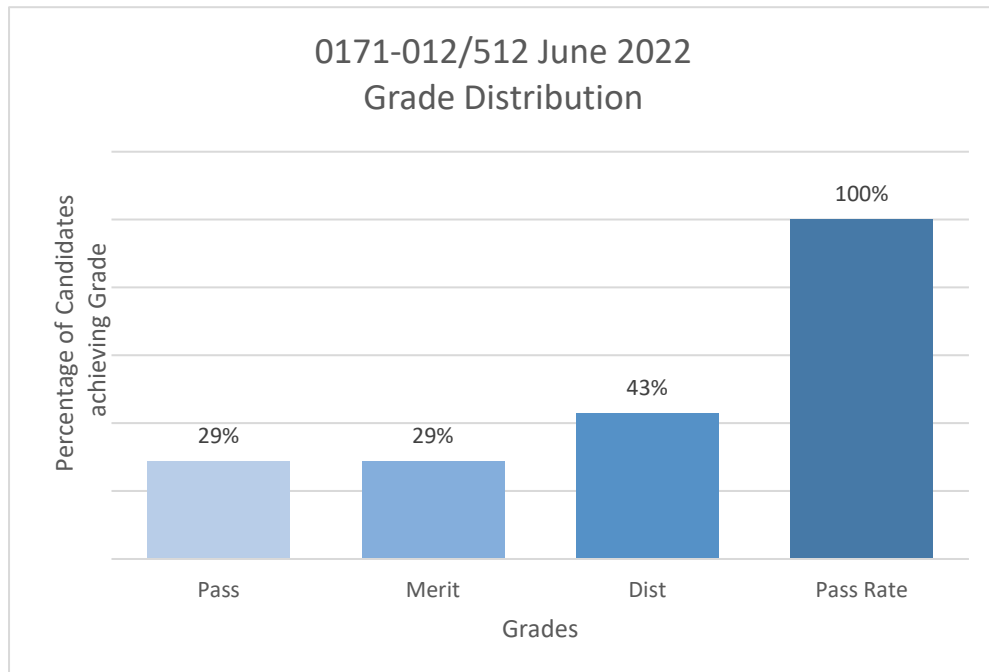
The graph below shows the approximate distributions of grades and pass rate for this assessment, it does not account for any marks that have been amended due to generosity:



Below identifies the final grade boundaries for this assessment.

Total marks available	60
Pass mark	25
Merit mark	32
Distinction mark	40

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



Chief Examiner Commentary

0174-512 Level 3 Forestry and Arboriculture - Theory exam

Series 1 – March 2022

Candidates showed a good range of knowledge across the exam and produced a wide range of responses within the units being assessed. Most questions were answered with some degree of accuracy and depth, but not in all areas.

The paper compared well to previous series in the spread of marks and the range of responses elicited from candidates. There was good coverage of the unit content addressing a wide range of topics.

Candidates have previously performed well on questions which are more practical in nature, however on this occasion, errors were seen on questions around parts of a chainsaw and felling methods. This is unusual and may demonstrate a misunderstanding of either terminology or the command verb within the question. Some marks were awarded in topics that have been weaker in previous years.

There was a lack of knowledge demonstrated regarding plant science which has been seen in previous exam series. A question on the topic of plasmolysis was overall not answered well which continued the theme of previous years where candidates have struggled with the more detailed areas of unit 307.

The higher marked candidates performed well in the Extended Response Question, many gained marks for demonstrating knowledge, however few demonstrated depth of knowledge focusing instead on causes or actions. Most candidates only focused on one aspect while a few candidates drew the information together.

Themes where most candidates did well:

- Almost all candidates identified three faults on a chainsaw
- Many candidates could name at least two pests affecting timber production.
- Most candidates scored quite well on a question focused on tomography
- Pests for trees (to some extent).

Themes where most candidates struggled:

- Very few candidates could explain plasmolysis.
- Some candidates confused parts of a chainsaw with 42% of candidates who sat the paper-based exam accessing full available marks for a question that topic.
- Candidates tended to describe the process rather than justify the method on a question around felling methods, with just 20% of candidates who sat the paper-based exam accessing the top two marks available for that question

Themes that discriminated between candidates:

- The stronger candidates performed well across all areas. They read the question and gave appropriate responses.
- The Extended Response Question discriminated well between the higher and lower marked candidates. At the lower end, there was little detail. 72% of the candidates who sat the paper-based exam accessed higher Band 1 or lower Band 2 marks. Many candidates' responses demonstrated a lack of breadth or depth which prevented them from accessing higher marks for this question. There was also some evidence of candidates focusing their response incorrectly. Some responses were very thorough with a good range of depth and breadth though, and therefore a small number of candidates were able to access higher Band 2 or lower Band 3 marks

Centres are advised to help candidates develop their use and understanding of technical terminology across the qualification.

Candidates are also strongly advised to practice examination techniques when preparing for this exam to fully understand the requirements of the question before attempting to answer, particularly those that require candidates to demonstrate reasoning. Explain type of questions require candidates to demonstrate reasons and justifications to support the statements or cause and effect.

Past papers and marking schemes are available on the City and Guilds website which should be used for exam practice.

City & Guilds also offers a technical exam guide to support the work on the exam technique.

All documents are available to download from [Technicals in Horticulture and Forestry & Arboriculture qualifications and training courses | City & Guilds \(cityandguilds.com\)](https://www.cityandguilds.com/qualifications/technical-qualifications)

Past papers and marking schemes: Documents – Level 3 – Assessment materials – Past Papers tabs

Exam guide: Documents – Level 3 – Assessment materials

Series 2 – June 2022

Candidates showed a fair range of knowledge across the exam and produced a good range of responses within the units being assessed. Most questions were answered with some degree of accuracy and depth, but not in all areas.

The paper compared well to previous series in the spread of marks and the range of responses elicited from candidates. There was good coverage of the unit content addressing a wide range of topics.

Most candidates attempted all questions. There was a wide variety in the range of answers with knowledge-based questions answered best. This was especially evident where the question was testing AO1 or of a practical nature e.g. chainsaw faults / sharpening or indications of ill health.

As with previous series, there was a lack of understanding around plant biology; in this case meristems and water movement were examined but few candidates offered answers that displayed much knowledge of the topic.

The higher marked candidates performed well in the Extended Response Question, many gained marks for demonstrating knowledge, however few demonstrated depth of knowledge focusing instead on practical approaches to managing Chalara. Most candidates only focused on one aspect while a few candidates drew the information together.

Overall, candidates showed strength in:

- Almost all candidates identified three methods of seed dispersal.
- Many candidates could explain the consideration of escape routes when felling.
- Most candidates scored quite well when stating common faults found on chainsaws.
- Signs of ill health in trees were identified well.

Candidates appear to require further support in:

- Plant biology. Meristems and water movement were described briefly with few papers demonstrating depth or breadth of understanding.
- Control of pests and diseases and discussion of life cycles tended to be answered with vague statements.

Extended Response question:

- Many candidates did not provide the depth of detail required of the AO4 question. Only a few candidates achieved marks in the high band because there was insufficient consideration of the wider context (legal, environmental or practical issues). Some elements were generally well understood (sanitation of tools and clothing) but the discussion of the broader context was too brief to award more the higher marks. Many candidates concentrated on the practical consideration of dealing with Chalara rather than the wider context which resulted in few achieving the higher band.
- The extended response question gives the opportunity to show an understanding of the qualification and to apply this knowledge and understanding in a situation. The better answers did this to a certain extent, but some responses were simply a list of statements rather than a structured, well considered discussion.

Theory Exams – Year 2

Grade Boundaries

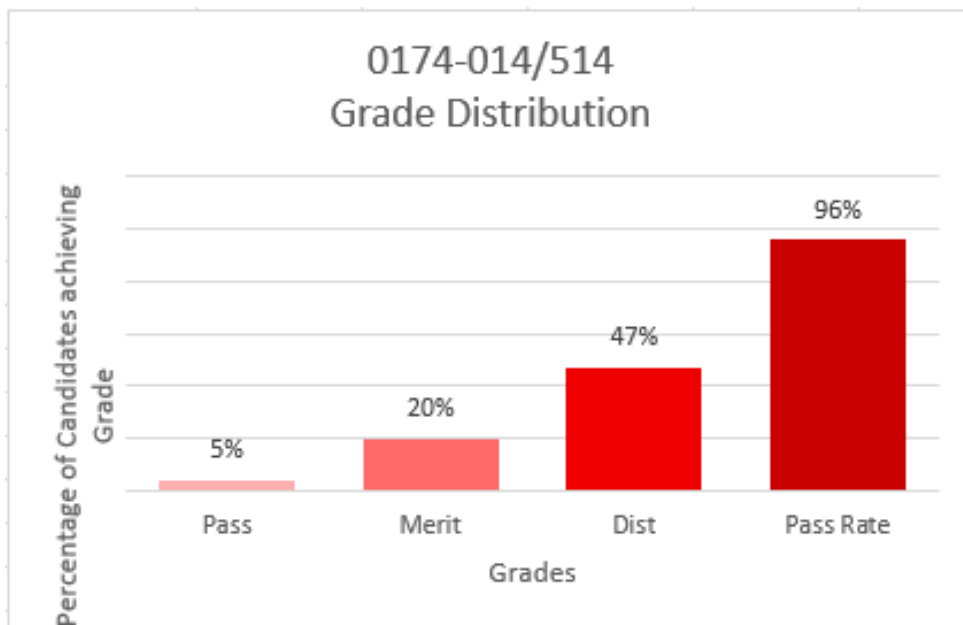
Assessment: 0174-014/514
Series: March 2022 (Spring)

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 generosity applied to the summer assessments will also retrospectively be applied to candidates who achieved their best result in spring. 5% of the base mark of the assessment will be added to their score rather than applied to boundaries.

The graph below shows the approximate distributions of grades and pass rate for this assessment, it does not account for any marks that have been amended due to generosity:

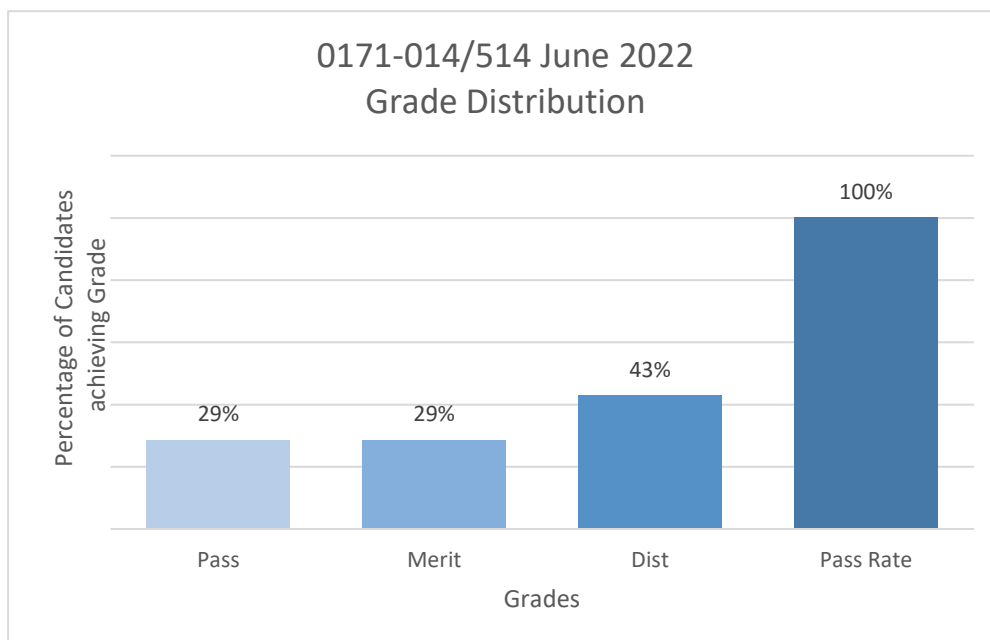


Assessment: 0174-014/514
Series: June 2022 (Summer)

Below identifies the final grade boundaries for this assessment.

Total marks available	60
Pass mark	21
Merit mark	30
Distinction mark	40

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



Chief Examiner Commentary

0174-514 Level 3 Forestry and Arboriculture - Theory exam

Series 1 – March 2022

The question paper had an appropriate balance of questions with varied levels of demand, and it accurately sampled the knowledge and understanding from across the qualification.

The majority of candidates made an attempt at all questions with greater success achieved in the knowledge – based questions (AO1) than those requiring explanations / descriptions (AO2), where some candidates failed to provide the level of detail required to demonstrate understanding.

Strengths and weaknesses

Although there was a good range of knowledge and understanding shown across the units being tested, areas of particular strength included principles of tree science, with good knowledge and understanding of response to environmental conditions, decay detection, wound response and structural assessment demonstrated in both the short and extended answer questions.

Questions relating to tree identification, planting and establishment were answered less well, with many candidates appearing to be unfamiliar with hydraulic spades, struggling to identify species and unclear regarding methods of tree support for different types of stock. Another area of slight weakness relates to the historic influences which have shaped woodland cover in the UK

Extended Response question

The Extended Response Question was answered very well by some candidates, but most provided insufficient breadth and depth to access marks within Band 3; some providing a reasonable amount of depth over a very limited subject matter, whilst others covered a broad range of topics at a very superficial level. Most candidates linked their answers strongly to the scenario and many used some technical terminology, but many provided what amounted more to a list of facts than a considered, structured response. As a result, majority of candidates, 64.5% of the candidates who sat the paper-based exam, accessed higher Band 1 or lower Band 2 marks. It was encouraging however to see that a large number of candidates did plan their responses, using bullet points / mind maps, although not all then proceeded to follow these plans when writing their responses.

Centres are advised to help candidates develop their use and understanding of technical terminology across the qualification.

Candidates are also strongly advised to practice examination techniques when preparing for this exam to fully understand the requirements of the question before attempting to answer, particularly those that require candidates to demonstrate reasoning. Explain type of questions require candidates to demonstrate reasons and justifications to support the statements or cause and effect.

Past papers and marking schemes are available on the City and Guilds website which should be used for exam practice.

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Past papers and marking schemes: Documents – Level 3 – Assessment materials – Past Papers tabs

Exam guide: Documents – Level 3 – Assessment materials

Series 2 – June 2022

This June 2022 examination had only seven candidate entries. Through marking of the scripts, it appears that some candidates were better prepared than others for the exam. There were clear gaps in knowledge across the breadth of the question paper for the lower performing candidates, with some questions unanswered and/ or answers to AO2 questions lacking sufficient depth to gain many of the available marks.

The question paper had an appropriate balance of questions with varied levels of demand and it accurately sampled the knowledge and understanding from across the qualification.

The vast majority of candidates made an attempt at all questions with greater success achieved in the knowledge – based questions than those requiring explanations / descriptions, where some candidates failed to provide the detail required to demonstrate understanding.

Strengths and weaknesses

Although there was a good range of knowledge and understanding shown across the units being tested, areas of particular strength included woodland management techniques, use of cutting tools and some elements of principles of tree science.

Questions relating to tree identification, planting and establishment were answered less well, with most candidates struggling to identify species and some appearing to be unfamiliar with pit planting.

Extended answer question

The extended answer question was answered poorly by a number of candidates and even those who performed well across the rest of the paper failed to achieve many marks in this question, which responses lacking in both breadth and depth.

Synoptic Assignments – Year 1

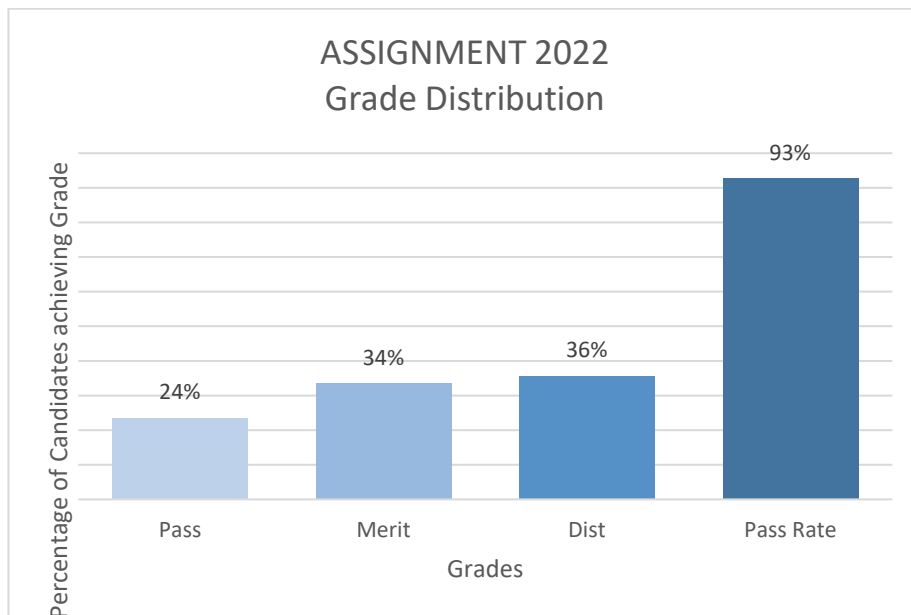
Grade Boundaries

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

Assessment: 0174-011
Series: 2022

Total marks available	60
Pass mark	22
Merit mark	31
Distinction mark	40

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



Principal Moderator Commentary

Comments on centre administration

Moderators noted that administration for most centres was good with occasional pieces of evidence missing and instances of declarations not being correctly completed when uploaded to the portal. Missing evidence however was quickly rectified by centres.

Overall performance of candidates compared to expectations

Candidates provided evidence that was fit for purpose and contained the expected range of ability that suggests they are operating at the appropriate level for some of the tasks if not all.

The synoptic assignment contained a good range of practical tasks allowing candidates to demonstrate a range of skills required in the work-place.

Provision of evidence for moderation

Photographic evidence was not used in all centres and in those that did, was not annotated effectively and added little enrichment to evidence. All of these could be improved by using captions or short narrative statements for each photo to say what is going on and how it relates to assessment or learning outcomes. Without a caption a photo is just an illustration.

Practical observation forms were used by tutors with varying degrees of success. Some observers are still not providing an adequate narrative to support judgements on practical performance. Some observers stated what the candidates did but did not qualify the performance by saying how or why the performance was good or very good.

There was a range of different risk assessment templates used which limited the candidates' ability to demonstrate a higher level of evidence. Some centres did not include emergency procedures within the template and some risk assessments were over complicated.

General overview of assessor alignment

Moderation showed that most centres and markers are in alignment with national standards, with the exception of AO3 which was, in some cases, noted as disproportionately marked either down or up within the CRF.

Performance of against Assessment Outcomes (AOs)

AO1 Recall of knowledge related to the qualification LOs

Candidates produced very good evidence to enable judgements to be made against this outcome. A range of written recall knowledge was available through task 1 (report on site conditions and pathology) and task 4 (Soil investigations) as this was candidate-created and enable the demonstration of knowledge within a written framework of studies and reports. While verbal recall was demonstrated through comments made on the POF. Task 3 (felling and stump removal) allowed observers to comment on candidates' recall during a technical practical exercise.

AO2 Understanding of concepts theories and processes relating to the LOs

The majority of marks available for this AO2 were from task 1 and task 4 and provided a good platform for the demonstration of understanding. Higher level candidates were able to make connections between recall and understanding and provided justifications.

Most candidates were credited with good understanding for task 3 during their practical demonstration of felling skills and dealing with arisings.

AO3 Application of practical/technical skills

This was mostly marked correctly and comments on the CRF mostly aligned with information in the practical observation forms. There were some instances where AO3 was disproportionately marked lower than comments within AO3 on the POF would suggest.

Task 3 required candidates to demonstrate practical skills for felling, stump removal and brush removal. Many provided photographs although a significant proportion did not and relied on the tutor notes and observer comments on the Practical observation form. Where photos were included in the evidence there was very little in the way of meaningful captions or descriptions of what was going on and how that linked to assessed outcomes or learning outcomes.

The majority of candidates were not fluid and practiced indicating they were not experienced in the practical activities they were undertaking. While this is to be expected, it is a recommendation that more time is allocated to practical skills where possible.

AO4 Bringing it all together- coherence of the whole subject

Overall there was good application of bringing theories into practice and stronger candidates demonstrated through task 1 and task 4 a higher-level ability to do so.

Task 1 (site investigations) provided the best opportunity for bringing the whole subject together as all aspects have an impact on tree health and management. Some candidates did not provide any control measures and or remedial actions and some did not describe how the tree would be affected.

For task 4 (soil investigations) there were many instances of candidates misinterpreting the question. Candidates did not produce a report in some cases on the affects of growth and development based on the investigations they undertook. Instead, detailed information was provided on a range of soil characteristics and the methodologies used to collect this information. This did not demonstrate an understanding of how these characteristics affect growth and development.

AO5 Attending to detail/perfecting

Markers noted that higher-level learners were able to continually check and correct during practical activities. This AO was generally marked correctly by centres. Conscientious candidates were able to gain additional marks through this.

Synoptic Assignments – Year 2

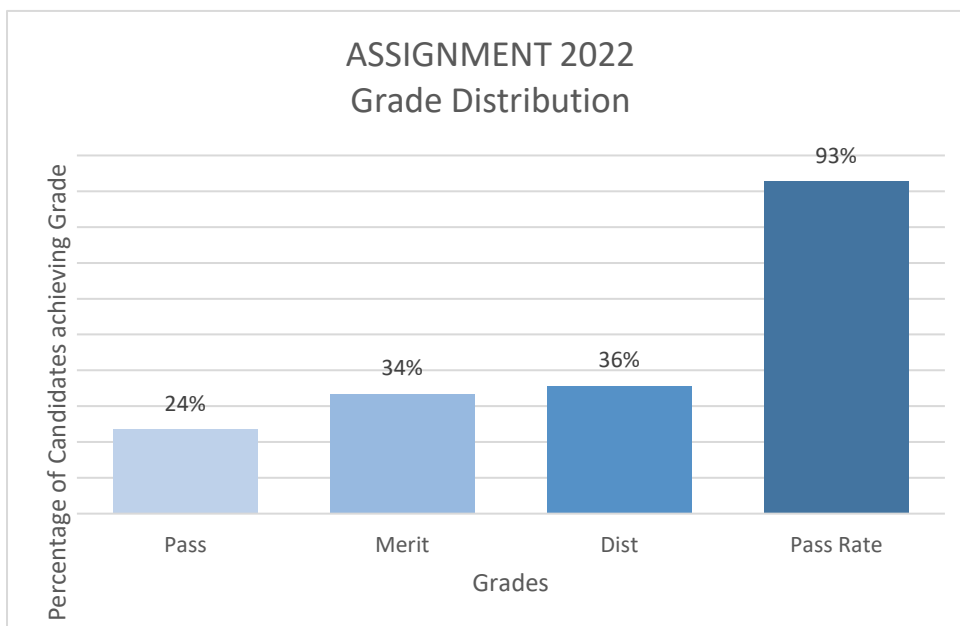
Grade Boundaries

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

Assessment: 0174-013
Series: 2022

Total marks available	60
Pass mark	21
Merit mark	29
Distinction mark	38

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



Principal Moderator Commentary

Comments on centre administration

Moderators reported that centre administration was generally good however some centre documents had to be requested as they were either missing or partially scanned. The majority of centre documents and candidate evidence was uploaded to the portal in a timely manner. Some candidate Practical observation forms were difficult to read by Moderators.

Overall performance of candidates compared to expectations

Candidate performance overall was good. Evidence from each candidate mostly met expectations across an expected range of ability. The quality of work for the woodland proposal was generally of a high standard and the practical evidence showed consolidation of skills learned in year 1.

Provision of evidence for moderation

Some POFs contained language, which did not align to banding language making moderation of these forms difficult. Language used within some CRF forms did not align with the banding language used with in the POF forms.

Photographic evidence was used within candidates work however some were not annotated effectively and added little enrichment to evidence. This could be improved by using captions or short narrative statements for each photo to say what is going on and how it relates to assessment or learning outcomes. Without a caption a photo is just an illustration.

General overview of assessor alignment

Assessor/moderator alignment was good in most cases with the exception of AO3 which was, in some cases, noted as disproportionately down-marked within the CRF

Performance against Assessment Outcomes (AOs)

AO1 Recall of knowledge related to the qualification LOs

A range of written recall knowledge was available through task 1 (Woodland Proposal), while verbal recall was demonstrated through comments made on the POF within the practical assessments for tasks 2 and 3. This allowed candidates to demonstrate knowledge and recall by selecting appropriate tools and equipment and by choosing suitable methods and practises for planting and boundary maintenance.

AO2 Understanding of concepts theories and processes relating to the LOs

Opportunities to evidence security of concepts, theories and processes was embedded in task 1 where candidates explored links between theoretical knowledge and understanding to causal links, reasons why choices were made and the consideration of alternatives. Those candidates operating at the lower of the bands within the marking grid made a few straight forward links and gave simple explanations whereas those at the upper end of the marking band showed greater understanding, consolidation and application of holistic knowledge.

AO3 Application of practical/technical skills

This AO was mostly marked correctly and comments on the CRF mostly aligned with information in the Practical observation forms. There were some instances where AO3 was disproportionately marked lower than comments within AO3 on the POF would suggest.

The majority of candidates were not fluid and practiced indicating they were not experienced in the practical activities they were undertaking. While this is to be expected, it is a recommendation that more time is allocated to practical skills where possible.

Photographs (where supplied) **must** be accompanied by adequate annotation, captions or direct links within the tutor notes to explain what the photograph is showing and how that provides evidence for assessed outcomes. Without narrative or captions it is difficult for moderators to assess the value of the photos against prescribed assessment outcomes. Going forward centres need to address this issue if they intend submitting photographs as evidence of performance against outcomes.

AO4 Bringing it all together- coherence of the whole subject

Task 1 (Woodland Proposal) provided the best opportunities for AO4 as it gave the candidates a wide range of site considerations, features, community needs, establishment challenges, feasibility and practical implications to explore and evidence.

AO5 Attending to detail/perfecting

Markers noted that higher-level learners were able to continually check and correct during practical activities. This AO was generally marked correctly by centres. In tasks 2 (Woodland maintenance) and 3 (plating and aftercare) attention to detail was generally evidenced by tutor narrative on POFs referring to the quality of finish and adjustments made to working techniques in response to changing conditions or unforeseen problems.

Candidates provided valuable evidence for this outcome in their community woodland proposals (task 1) and through tutor notes on POFs.