

0171-31/33— Level 3 Advanced Technical Extended Diploma in Agriculture

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 – eg 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

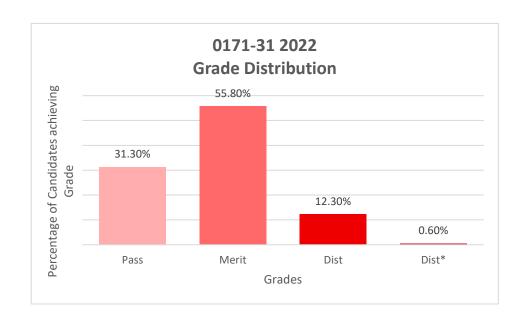
- Pathway 1
 - o 0171-002/502 Level 3 in Agriculture Theory exam
 - March 2022 (Spring)
 - June 2022 (Summer)
 - o 0171-001 Level 3 in Agriculture Synoptic Assignment

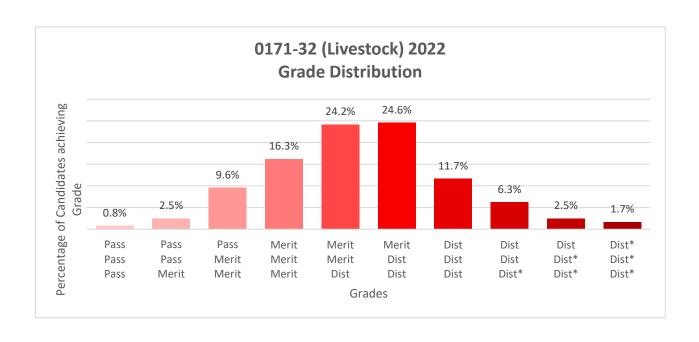
Year 2

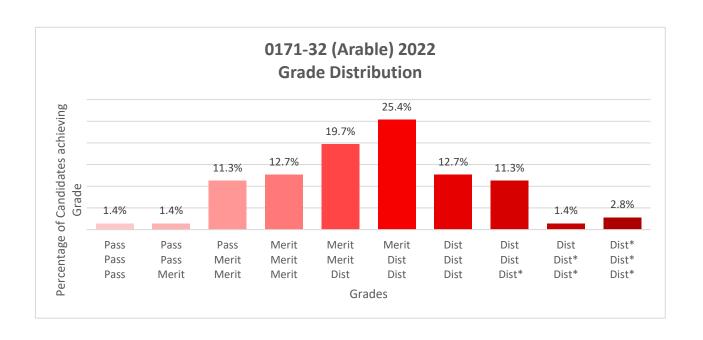
- Pathway 1
 - 0171-010/510 Level 3 in Agriculture (Livestock) Theory exam
 - March 2022 (Spring)
 - June 2022 (Summer)
 - 0171-009 Level 3 in Agriculture (Livestock) Synoptic Assignment
- Pathway 2
 - o 0171-012/512 Level 3 in Agriculture (Arable) Theory exam
 - March 2022 (Spring)
 - June 2022 (Summer)
 - o 0171-011 Level 3 in Agriculture (Arable) Synoptic Assignment
- Pathway 3
 - 0171-014/514 Level 3 in Agriculture (Farm Mechanisation) Theory exam
 - March 2022 (Spring)
 - June 2022 (Summer)
 - o 0171-013 Level 3 in Agriculture Farm Mechanisation) Synoptic Assignment

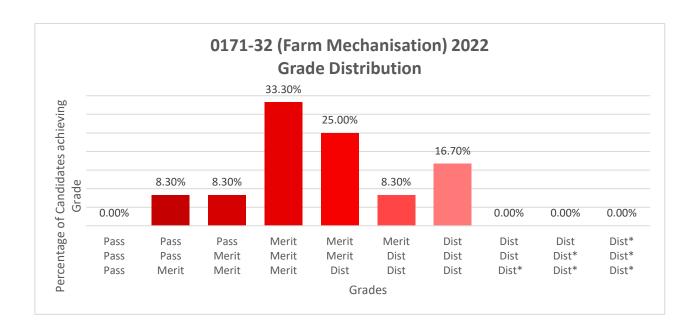
Qualification Grade Distribution

The grade distribution for this qualification is shown below:









This data is based on the distribution as of 16.08.2022.

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

0171-30/31/32/33- Level 3 Technicals in Agriculture

Grade Boundaries - Spring 2022

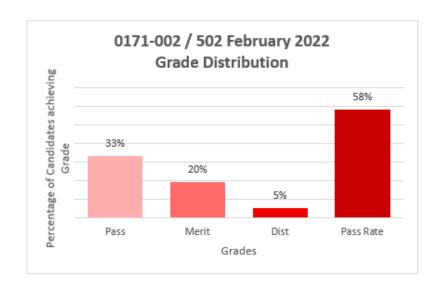
Assessment: 0171-502

Series: February 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	42

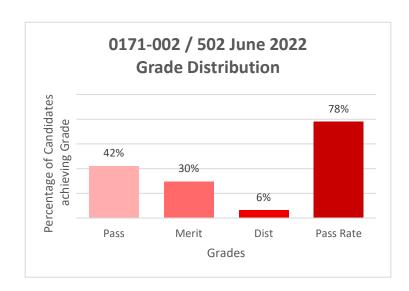


Grade Boundaries - Summer 2022

Assessment: 0171-002 / 502 Series: June 2022 (Summer)

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

Total marks available	60
Pass mark	21
Merit mark	30
Distinction mark	39



Chief Examiner Commentary

0171-502 Level 3 in Agriculture - Theory exam

Series 1 – February 2022

The standard of the candidates' responses was as expected in line with the varied levels. Candidates performed well on recall questions on dairy and sheep breeds. However, recall questions on plant science and harvesting were poorly answered.

There was a wide range of accuracy and depth within questions requiring understanding and application of knowledge. The candidates who achieved higher marks were able to demonstrate breadth and depth of knowledge, backed up by relevant examples and including explanation and justification where needed. Lower achieving candidates tended to give brief responses and listed answers in most of their questions. There was evidence of candidates not fully reading questions, which meant they missed out on marks by not responding in the way needed or providing the level of detail needed to access the full range of marks available. Candidates also did not always engage with the command verbs, for example simply stating rather than explaining. This meant they did not always provide enough detail when asked for explanations or discussions. The understanding of soil structure, such as capping and plough pans, and plant science terminology, especially in plant development, was identified as particular areas of weakness in Unit 305.

Extended Response Question (ERQ)

In the extended response question, candidates were asked to discuss how a farmer may reduce the environmental impact of their silage making operation for a herd of 200 high yielding dairy cows. There were a wide range of responses with several candidates at the top of Band 2 but the majority were around the top of Band 1. Candidates tended to give limited information which did not answer the question, and, in many cases, there was a lack of technical language and disorganised and ambiguous answers.

Series 2 – June 2022

The standard of the candidates' responses demonstrated a good understanding of the questions in the paper. Candidates' performance was stronger in the livestock questions and those linked to practical tasks.

The plant science questions were poorly answered with many having limited understanding of the term 'diffusion' in plants or the stages of plant seed germination, in this question many were confusing it with the complete plant life cycle from sowing to harvest – significantly reducing the opportunity to pick up marks.

The question on live sheep output was at times misunderstood with candidates providing answers about gross margins and financial outputs rather than the live outputs requested of the question.

Extended Response Question (ERQ)

In the extended response question, candidates were asked to discuss how a farmer could reduce the environmental impact of growing a spring cereal crop. There were a wide range of responses with several candidates at the top of Band 2 but the majority were around the top of Band 1. Candidates tended to give limited information which did not answer the question and, in many cases, was missing key solutions regarding the reduction impact on the environment.

Theory Exams – Year 2

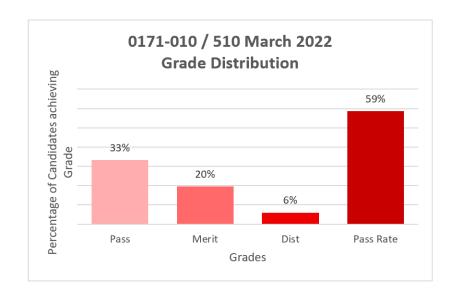
0171-33 – Level 3 Advanced Technical Extended Diploma in Agriculture (1080) (Livestock)

Grade Boundaries - Spring 2022

Assessment: 0171-010/510 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	28
Merit mark	36
Distinction mark	44

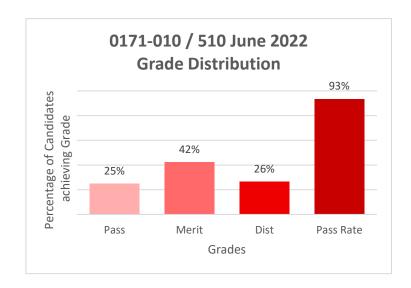


Grade Boundaries – Summer 2022

Assessment: 0171-010/510 Series: June 2022 (Summer)

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

Total marks available	60
Pass mark	25
Merit mark	33
Distinction mark	41



Chief Examiner Commentary

0171-33 – Level 3 Advanced Technical Extended Diploma in Agriculture (1080) (Livestock) - Theory exam

Series 1 - March 2022

Most candidates performed well on recall questions on practical based questions and waste legislation. However, questions on reproductive systems and the operation and application of All-Terrain Vehicles (ATV) and Rough Terrain Telescopic Forklifts (RTFL) were poorly answered.

There was a wide range of accuracy and depth within questions requiring understanding and application of knowledge. The candidates who achieved higher marks were able to demonstrate breadth and depth of knowledge, backed up by relevant examples and including explanation and justification where needed. Lower achieving candidates tended to give brief responses and listed answers in most of their questions. There was evidence of candidates not fully reading questions, which meant they missed out on marks by not responding in the way needed or providing the level of detail needed to access the full range of marks available. Candidates also did not always engage with the command verbs, for example simply stating rather than explaining. This meant they did not always provide enough detail when asked for explanations or discussions.

Extended Response Question (ERQ)

For the extended response question, candidates were asked to discuss digestive processes and dietary requirements for both cattle and pigs. There were a wide range of responses with several candidates at the lower end of Band 3 but the majority were around the top of Band 2 and Band 1. Candidates in the higher band demonstrated confident knowledge of the ruminant digestion, as well as the theory and practices of ruminant nutrition.

Series 2 – June 2022

Most candidates demonstrated a good recall of knowledge, gaining marks in topics such as practices within farm animal health and nutrition. Higher scoring candidates demonstrated the ability to recall knowledge across all the mandatory units and evidence their understanding, through accurately targeted justification and reasoning. The combination of these skills, supported by the accurate use of industry specific terminology, enabled them to gain high marks in the Extended Response Question (ERQ).

In terms of areas that were not so well answered, there was mixed responses in pollution and waste control management and farm machinery. An area where many struggled was on the physiological system of livestock, which held a large number of marks. Some answers indicated that candidates had not fully read and understood the focus of some questions, whilst other responses lacked justification and/or reason, meaning they were unable to gain full marks.

Extended Response Question (ERQ)

Full range of answers included much scope for demonstration of knowledge. This question was based around biosecurity and notification procedures, which was very topical, and also included disease prevention and this is where most candidates did well.

Theory Exams – Year 2

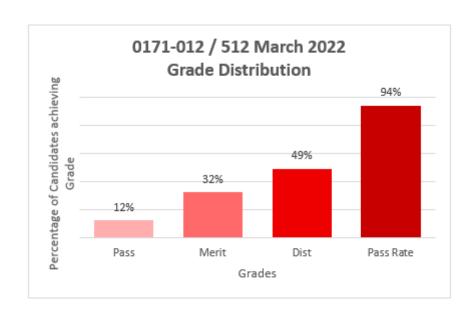
0171-33 – Level 3 Advanced Technical Extended Diploma in Agriculture (1080) (Arable)

Grade Boundaries - Spring 2022

Assessment: 0171-012/512 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	42

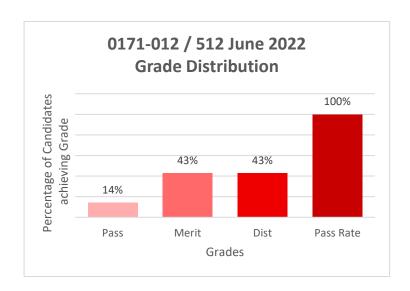


Grade Boundaries – Summer 2022

Assessment: 0171-012/512 Series: June 2022 (Summer)

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

Total marks available	60
Pass mark	21
Merit mark	30
Distinction mark	39



Chief Examiner Commentary

0171-33 – Level 3 Advanced Technical Extended Diploma in Agriculture (1080) (Arable)

Series 1 - March 2022

The standard of the candidates' responses were very strong and many were able to score in the higher bracket of the boundaries. A topic where candidates were able to gain many marks were questions related to agricultural spreaders and sprayers. However, candidates were not able to provide sufficient responses on questions based on farm habitat management and this is an area where they struggled with the understanding and contextualising of farm habitat surveys.

Extended Response Question (ERQ)

For the extended response question, candidates were asked to discuss the methods of minimising the environment impact of spraying pesticides to crops. This was well attempted by nearly all candidates and demonstrated that many of them were able relate to the question as it is a topic based around a workplace activity.

Series 2 - June 2022

The standard of the candidates' responses were very strong as all candidates were able to achieve a pass mark and above. The question paper had an appropriate balance and coverage of questions with plenty of scope for the more able candidates to demonstrate their knowledge and understanding.

Extended Response Question (ERQ)

For the extended response question, candidates were asked to discuss using a specific piece of machinery and the advantages of using this equipment, and how to minimise any given damage to the environment it may have. It was generally well answered as learners were able to relate to the question around a workplace activity.

Theory Exams – Year 2

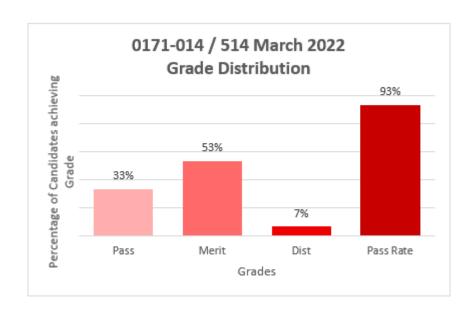
0171-33 – Level 3 Advanced Technical Extended Diploma (1080) (Farm Mechanisation)

Grade Boundaries - Spring 2022

Assessment: 0171-014/514 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

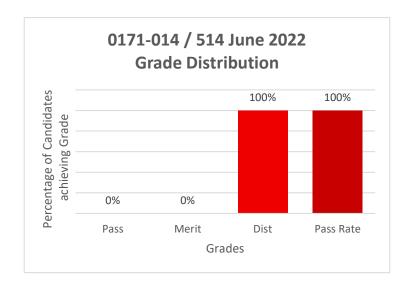


Grade Boundaries – Summer 2022

Assessment: 0171-014/514 Series: June 2022 (Summer)

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

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



Chief Examiner Commentary

0171-514/014 Level 3 in Agriculture -Theory exam (Farm Mechanisation)

Series 1 - March 2022

This paper was well answered and candidates performed strongly on those questions that involved the workshop. Service sheet information, workshop facilities and the ERQ, on the procedure for changing points on a cultivator, are good examples of this and as it allowed the candidates to pick up marks on the core topics they are most familiar with.

Extended Response Question (ERQ)

For the extended response question, candidates were asked to discuss the safety implications of changing the point on a large cultivator on a tractor. There were a wide range of responses with several candidates at the lower end of Band 3 but the majority were around top of Band 2 and Band 1. To access higher marks, candidates need to focus on understanding the more technical areas of the qualification.

Series 2 - June 2022

The standard of the candidate's responses demonstrated a good understanding of the questions in the specific pathway of this qualification. The candidates were able to demonstrate strong practical knowledge of machinery used in the industry.

Extended Response Question (ERQ)

For the extended response question, candidates were asked to discuss a machinery task and the procedures to safely carry out an activity in accordance with current legislation and codes of practice. Candidates were able to gain high marks as this topic has a range of sources to evidence and reference.

Synoptic Assignments – Year 1

0171-30/31/32/33 -Level 3 Technicals in Agriculture

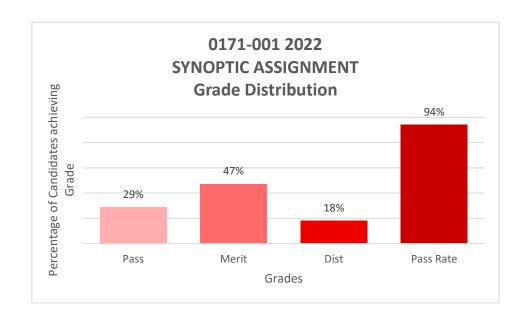
Grade Boundaries - 2022

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

Assessment: 0171-001

Series: 2022

Total marks available	60
Pass mark	24
Merit mark	33
Distinction mark	43



Principal Moderator Commentary

0171-30/31/32/33 -Level 3 Technicals in Agriculture

Overall, the synoptic assignments were well written by the candidates with a range in quality of work as you would expect for Level 3 students. Practical tasks were of a good standard as candidates were able use their previous years theory understanding and practical workplace skills which they gained as they went through the qualification.

The synoptic assignment contained a good spread of practical tasks and background knowledge, at the appropriate level, spread across machinery, estate skills, crops, livestock, environment and management.

Synoptic Assignments – Year 2

0171-33 – Level 3 Advanced Technical Extended Diploma in Agriculture (1080) (Livestock)

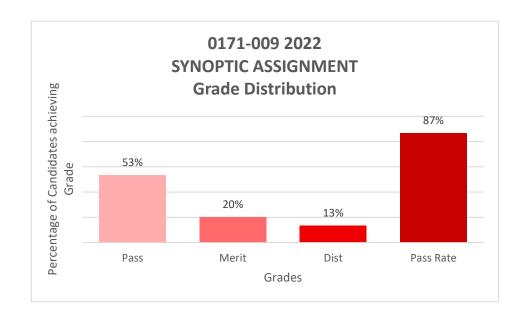
Grade Boundaries - 2022

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

Assessment: 0171-009

Series: 2022

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



Principal Moderator Commentary

0171-33 – Level 3 Advanced Technical Extended Diploma in Agriculture (1080) (Livestock)

Overall, the synoptic assignments were well written by the candidates with a range in quality of work as you would expect for Level 3 students. Practical tasks were of a good standard, especially livestock handling, as would be expected from candidates undertaking this qualification.

The synoptic assignment contained a good spread of practical tasks and background knowledge, at the appropriate level, spread across machinery, estate skills, crops, livestock, environment and management.

Synoptic Assignments – Year 2

0171-33 – Level 3 Advanced Technical Extended Diploma in Agriculture (1080) (Arable)

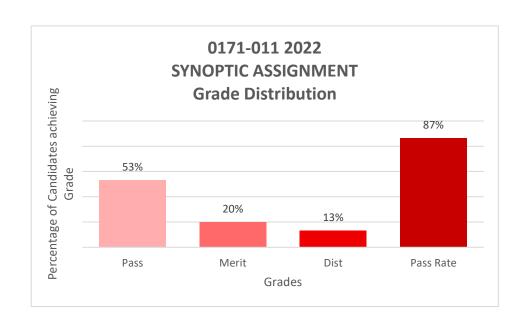
Grade Boundaries - 2022

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

Assessment: 0171-011

Series: 2022

Total marks available	60
Pass mark	25
Merit mark	34
Distinction mark	44



Principal Moderator Commentary

0171-33 – Level 3 Advanced Technical Extended Diploma in Agriculture (1080) (Arable)

Overall the synoptic assignments were well written by the candidates with a range in quality of work as you would expect for Level 3 students, some of the work was outstanding, so well-done candidates and centres.

The synoptic assignment contained a good spread of practical tasks and background knowledge, at the appropriate level, spread across machinery, the environment and arable management.

Synoptic Assignments – Year 2

0171-33 – Level 3 Advanced Technical Extended Diploma (1080) (Farm Mechanisation)

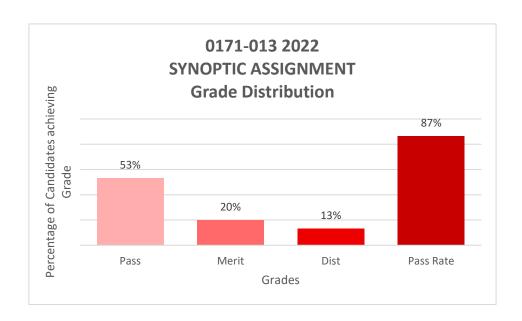
Grade Boundaries - 2022

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

Assessment: 0171-013

Series: 2022

Total marks available	60
Pass mark	24
Merit mark	33
Distinction mark	43



Principal Moderator Commentary

0171-33 - Level 3 Advanced Technical Extended Diploma (1080) (Farm Mechanisation)

Candidates were awarded a wide range of marks, and the marking was generally very accurate and within tolerance. Performance this year was of a good standard.

Overall, the synoptic assignments were well written by the candidates with a range in quality of work as you would expect for Level 3 students. Practical tasks were of a good standard, as would be expected form candidates undertaking this qualification. There were some mixed responses on the business unit, which is new for this year.

The synoptic assignment contained a good spread of practical tasks and background knowledge, at the appropriate level, spread across machinery and business management.