



BOTSWANA
EXAMINATIONS
COUNCIL

HORTICULTURE

2022



PAPER 1 (1257/01)

General Comments

The performance for the 2022 cohort indicated that the scores were ranging from 15 % to 58 %. Most of the candidates (43.59%) were scoring between 31 to 40 %, followed by 20.51% of the candidates scoring between 21 to 30 %, 12.82% of the candidates scoring between 41 to 50 %, 12.82% of the candidates scoring between 51 to 58%, and 10.26% of the candidates scoring between 15 to 20 %. The quality of work of the 2022 cohort was somewhat better as evidenced by the presentation of their work, whereby most candidates did not have any gaps where questions were left not attempted. There was a logical presentation of responses by most candidates and most candidates were able to observe rubrics. Most of the work presented by candidates was fairly neat, for example, Question 2 (a) (iii) for calculating mass of double superphosphate and Question 3 (a) (iii) on calculating spray rate. Candidates who scored points in these questions presented their computations logically and placed the final answer on the space provided for the answer. Although there was logical presentation of points, most of the work presented by candidates on the ability to do mathematical computations was poorly done as most candidates failed to convert SI units, for example, Question 2 (a) (iii) on calculation of the amount of superphosphate, Question 2 (b) (iii) where students failed to give reasons for the methods suggested, and Question 4 (c) (i) where only 1 candidate managed to score marks on listing examples of records to be kept when managing lawn.

Comments on Individual Items

Question 1

- (a) i. Most candidates did very well in this question, they were able to name the correct class of horticultural crops such as vegetables; fruits; ornamentals;
- ii. Most candidates gave correct responses; plant X haptotropism and plant Y phototropism. Only a few candidates wrote stimulus such as touch and light instead of the tropic response.
- iii. This question was fairly done. Some candidates labelled a palisade cell instead of a palisade layer (a group of palisade cells).
- (b) i. The question was fairly answered. A few candidates gave responses such as photosynthesis instead of translocation.
- ii. Most candidates gave response such as 'osmosis is the movement of water molecules from high concentration to low concentration' instead of 'osmosis is the movement of water molecules from high water concentration to low water concentration'. Some candidates failed to show the differences but responded as if they are describing the two processes separately.
- iii. This question was not well answered by most candidates; they failed to come up with ways to solve the problem. Some candidates gave responses such as adding fertilizer and soil analysis instead of mulching; planting seeds to a correct depth; control soil pests; break soil caps; control of birds and mice eating seeds; making sure the soil has a fine tilth;
- (c) i. Fairly done. Some candidates wrote responses such as morning and late afternoon instead of shaded greenhouse/glasshouse; net tunnel / shade tunnel; misting unit; cold store/room; nursery;



- ii. Fairly done. A few candidates gave responses such as drip irrigation system instead of hybridisation in plants; rain water harvesting for irrigation / watering crops; selection of improved crop varieties; use of fertilizers; addition of organic matter; use of drones to control pests;
- iii. Most candidates gave the correct response under list of vegetable: tomato; onion; For reasons most candidates gave response such as because demand is high instead of because demand is higher than supply/ their deficit is higher.

Question 2

- (a) i. Fairly done. Few candidates gave responses such as cultivation and turning the soil instead of Ploughing;
 - ii. Well done by most candidates. They gave the correct responses such as inverting the soil; to a depth of 25-30 cm; improves aeration / drainage / infiltration/ incorporate organic matter into the soil/ controls weeds/ improves root pénétration ;
 - iii. Poorly done. Most candidates failed to convert SI units, wrote part of working such as 240kg : 1ha instead of 240kg:10 000m²
X : 50m X :50m²
- (b) i. Well done by most candidates. Those who lost a mark in this question gave a response such as transferring seedlings from initial place of growth instead of transfer of seedlings to their final plot / to where they are going to complete cycle;
 - ii. Well done by most candidates. They gave responses such as improved health of the plants; increased yield/growth; improves air circulation; improves light penetration;
 - iii. Fairly done. Most candidates managed to give responses such as Mechanical;
Reason: aerate the soil; improves infiltration; incorporates organic matter into the soil.

Cultural:

- ✓ Reason: controls parasitic weeds; breaks life cycle of pests/diseases; inclusion of legume in crop rotation increases soil fertility; reduces occurrence of dry land weeds;
 - ✓ Biological; controls weed without damaging the crop;
- (c) i. Well answered. Candidates gave correct responses such as branding; refrigeration / proper storage; cleaning; packaging; sorting / grading; pricing;
 - ii. Most candidates lost marks in this question. They gave responses such as advertising instead of advertising in media/billboards/posters.
 - iii. Fairly done. Few candidates gave responses such as delay harvesting and harvest when there are customers instead of proper storage; improve mode of transportation; advertise products; produce quality products; improving branding; promotion / reduce price; sell clean products; market research; processing;

Question 3

- (a) i. Well done by most candidates. They gave responses such as aphids; mealy bugs; scale insect; bagrada bug; red spider mites; tuta absoluta;



- ii. Poorly done. Some candidates gave responses such as a pest is killed when it sucks the plant instead of pest comes in contact with the chemical; chemical absorbed through cuticle killing a pest; pest eats chemical/ leaf with chemical;
 - iii. Poorly done. Some candidates gave working such as $120-35=85$ litres instead of $(120 \text{ litres} - 35 \text{ litres}) \div 100 \text{ m}^2$; $0.85 \text{ litres} / \text{m}^2$;
- (b)
- i. Most candidates gave the correct response. Few candidates gave responses such as grafting and budding instead of stem; branch; cuttings; buds; suckers; leaves;
 - ii. Fairly done. Some candidates described asexual propagation as the use of plant parts to produce individual plants instead of the use of vegetative parts to produce individual plants.
 - iii. Most candidates managed to name the correct methods grafting/budding. For grafting some gave responses such as combining the root stock from variety B and scion from variety A, joining the two parts with a grafting tape instead of identify the root stock from variety A and scion from variety B of plants of the same species; cut both root stock and scion with a slanting / V-shaped cut; unite the root stock and the scion at the graft union; bind the union using a grafting tape; apply / cover the union with a protective/grafting wax;
- (c)
- i. Fairly done. Few candidates gave responses such as overhead and sub surface irrigation instead of trickle/drip; basin; Ebb and flow; spaggetti tube; capillary matting; furrow;
 - ii. Poorly answered. Most candidates gave responses such as shading, watering, making seedlings get used to final place of growth instead of gradually making seedlings adjust to final plot / place of growth; gradually increase duration of exposure to high temperature; gradually reducing the frequency and amount of water/watering;
 - iii. Poorly done. Some candidates gave responses such as wearing protective clothing and washing hands instead of sterilise growth media; sterilise tool; clean hands regularly; use disease free propagating material; use sterile pots / trays;

Question 4

- (a)
- i. Few candidates gave correct response. Most candidates gave responses such as potting and bedding plants instead of tree / shrub / herbs; erect / climbing / trailing; annuals / biennials / perennials; deciduous / evergreen;
 - ii. Well done. Candidates gave correct responses such as reduce evaporation; conserves soil moisture; modifies soil temperature;
 - iii. Poorly done. Some candidates gave responses such as to show beautiful pattern, to straighten the plant and to attract customers instead of help plants to grow upwards; to enable them to reach sunlight; to prevent pest/ disease damage; keep crops clean from soil; allows air circulation; easy pruning/ fertilizer application/ watering;
- (b)
- i. Poorly done. Most candidates gave responses such as kikuyu grass, sprigs, sods instead of sodding/plugging;



- ii. Most candidates gave the correct response. Some gave responses such as for aeration instead of improved aeration; improved infiltration; enables nutrient to reach grass roots; alleviates soil compaction; reduce surface flooding/water;
 - iii. Poorly answered. Some candidates gave responses such as add fertilisers, cultivation, avoid land which is prone to flooding instead of install drainage system / digging trench / install French drains; ploughing / cultivation to appropriate depth; add organic matter to amend poor soils; plant turf grass on raised land; add fungicide to turf to prevent fungi/diseases;
- (c)
- i. Poorly done. Almost all the candidates gave responses such as production and financial records instead of fertiliser; mowing; spiking; irrigation; scarification; weeding; pest control; disease control;
 - ii. Well done. Candidates gave correct responses such as cultural; mechanical; biological; mowing; slashing; scarification;
 - iii. Well done. Most candidates gave correct responses such as Edging; to control horizontal growth of lawn; to beautify the lawn; Scarification; to control pest / diseases; improve air circulation; Mowing; encourages new growth of grass.

Question 5

- (a)
- i. Well done. Almost all the candidates gave correct responses such as rockery; garden; formal / informal; park;
 - ii. Well done. Candidates gave responses such as concrete; for surfacing walkways / pathways ; Bricks/ rocks / stones / pebbles; for making rockeries / paving/fencing; Clay; for making pots;
 - iii. Fairly done. Most candidates gave reasons such as to reduce dust and erosion instead of establishing lawn; paving; planting trees / shrubs;
Reason: *trees act as wind breakers; Lawn / paving acts as ground cover.*
- (b)
- i. Fairly done. Candidates gave responses such as proportion; dominance;
 - ii. Poorly done. Candidates gave responses such as how something look like, roughness and smoothness of things instead of Form - shape of plants / upright/ground cover/spreading; Texture - incorporate variety of plants / pavements / features;
 - iii. Poorly done. Most candidates couldn't access marks especially for reasons. They gave responses such as cutting, topiary to make trees beautiful instead of pruning; controls growth/ brings plant to required size; gives plant shape; Training; maintains size / brings plant to required size/giving shape to plant/control growth.
- (c)
- i. Well done. Candidates gave correct responses such as wood; concrete; plants; stones/ pebbles; metal; soil;
 - ii. Poorly done. Most candidates failed to explain. They gave responses such as wood for making benches instead of Wood- making benches; for sitting; Concrete/slabs/stones- pavement; erosion control; Trees with canopy; provide shade/ erosion control;
 - iii. Poorly done. Candidates gave responses such as wood and stone instead of benches/chairs; pavement; fence; metal post; plants/herbs/trees; building; flower beds.



PAPER 2 (1257/02)

General Comments

The performance for the 2022 cohort indicated that it was somewhat better as evidenced by the following:

- ✓ The scores were mainly ranging from A RAW SCORE OF 7 to 38. Most of the candidates (46.15%) were scoring raw marks between 30-38, followed by 35.09% of the candidates scoring 25-29, 10.26 % of the candidates scoring 21-24, 5.12% of the candidates scoring between 17-19 and 2.56% of the candidates scoring 7.
- ✓ The quality of work of the 2022 cohort was somewhat better as evidenced by the presentation of their work, most candidates did leave any gaps where items/questions were left not attempted except one candidate. There was a coherent presentation of responses by most candidates most and were able to observe most of the rubrics.

Most of the work presented by candidates was fairly neat, for example, Question 2 (a) the translation of information from the extract to the expense table was well done. Question 2 (b) the translation of the data in the extract to an input record was also well done. Although there was a sound presentation of points, most of the work presented by candidates that required **SI units** some of the candidates failed to include the **SI units**. Question 2 (a) (iii) on calculation of the amount of superphosphate, Question 2 (b) (iii) where candidates failed to give reasons for the methods suggested, and Question 4 (c) (i) where only 1 candidate managed to score marks on listing examples of records to be kept when managing lawn.

Comments on Individual Items

Question 1

- (a) Most candidates did fairly well in this question. They were able to give the correct common names of the pests in specimen display 1. Majority of the candidates were not able to give the feeding features (mouth parts) of the displayed pests specimen but instead gave damages caused by the pests specimen in display 1.
- (b) Most candidates performed fairly well. The candidates mostly gave the names of the pesticides specimen in display 2 but not the chemical specimen number whilst some gave their mode action e.g. contact. A few candidates lost marks due to inability to include concentration levels in their responses e.g. AVI klorpirifors 19.2 EC but not just AVI klorpirifors.
- (c) This question was fairly done. They were only a few candidates who could not pick the correct protective clothing from the protective clothing specimen display 3. This led to loss of marks as they selected items that are not part of protective clothing require before handling farm chemicals.



- (d) The question was poorly answered. Majority of the candidate failed to attain marks here because they could not give the damages caused by pest in specimen display 1. Majority of the candidates could not state how the damages caused by the pests in specimen display 1 affects the plants.

Question 2

- (a) This question was well one by majority of the candidates. Those candidates that did not perform well are those who did not include SI units for those items whose entry required SI units to be there. Some candidates lost marks due to inability to compute the total costs for some of the expense items from the extract.
- (b) This item/question was well attempted by the candidates and did very well in it. The candidates were able to extract the inputs from the extract correctly and their quantities too. A fair number of candidates though lost marks due to inability to include SI units where they are needed. Some of the candidates lost marks due to inclusion of monetary value of the inputs rather than the quantities.



PAPER 3 (1257/03)

General Comments

This was the first group of candidates to be assessed under the new Horticulture syllabus. The syllabus has four components of which three were subjected to external moderation. The three components which were externally moderated were Farm diary, Field Practical Training and Field Observation. The Field Practical task was un-moderated. Summary mark sheet was submitted together with the Centre order of merit. Attendance register was missing.

Total candidature was 38.

- Highest overall mark from the centre: 88
- Highest overall moderated mark: 85
- Lowest overall mark from the centre: 68
- Lowest overall moderated mark: 61
- Average centre mark: 78
- Average moderated mark: 74
- Difference: - 4

Individual Scored Items Reports:

Farm diary

- Total candidature: 38
- Highest mark: 41/50
- Lowest mark: 27/50
- Component Weight (15%)

Less than half of the candidates typed their Farm diaries. There was no penalty for diaries which were not typed. Candidates used a photocopied template which had a lot of stray marks and compromised on neatness of the project. Lined papers or a clean template should be used. It is however advisable to type the whole document of the Farm diary. The papers were stapled together and also presentation was not neat, some templates were stapled upside down, therefore proper binding of papers is advised (use of quotation files).

The most common enterprise selected by candidates was on Vegetable production.



PART B:

General presentation of the candidates' work:

1. Cover page

- ✓ Name of production enterprise [½] – well done by all
- ✓ Name of candidate [½] – well done by all
- ✓ Candidate number [½] - well done by all
- ✓ Name of centre [½] - well done by all
- ✓ Starting and completion date of enterprise [1] - well done by all. Starting and ending dates should go together and not be 'stand-alone' as some candidates have presented them far apart from each other.

2. Enterprise details

- ✓ variety grown [1] – well done by all candidates
- ✓ Age [1] – well done but some candidates put down figures without being specific to show whether its months, weeks or days.
- ✓ plant population [1] – most candidates did not show number of crops/plants.

3. Sequence of activities

- ✓ Activities carried out in correct order [2] – well done as the main activities /operations were outlined clearly and logically.
- ✓ Dates reflected for every activity [1] – some of the activities were not dated especially those which appeared to have been done on the same day, e.g planting/ mulching/watering. Candidates should be encouraged to show dates for all activities.

4. Activities / operations

- ✓ Relevant activities reflected in the diary [3] – well done by most candidates. There were many and exceeded the required threshold of 10.
- ✓ 3 marks if all are reflected,
- ✓ 2 marks if more than half are reflected and
- ✓ 1 mark if less than half are reflected

5. Tools used

- ✓ Tools used for every operation reflected [3] – well done.
- ✓ Appropriate tool used for each activity [4] – well done



6. Importance of activity

Significance of carrying out each operation [10] – generally well done by all, however some reasons were misplaced into the comments/observations column.

[1 mark per activity to a maximum of 10]

7. Relevance of comments

- ✓ Comments made relevant to the activity [3] – fairly done, some comments were not adequate e.g some candidates would comment that there was shortage of mulching material without showing how this impacted on the practical exercise.
- ✓ 3 marks if all are relevant,
- ✓ 2 marks if more than half are relevant and
- ✓ 1 mark if less than half are relevant

8. Precautions observed

- ✓ Safety precautions observed for activities [3] – poorly done as only few candidates managed to have only one precaution
- ✓ 3 marks if all 3 are relevant,
- ✓ 2 marks if 2 are relevant and
- ✓ 1 mark if 1 is relevant
- ✓ Cleaning of tools after use [1] - fairly done as it was attempted by most candidates .
- ✓ Safe storage of equipment after use [1] - fairly done.

9. Project termination

- ✓ Description of how the project was ended [2] – most candidates did well.
- ✓ Description of how the products and residues were disposed of [4] – fairly done by some candidates but those who had more than one vegetable produce e.g. spinach, onion, beetroot, carrot only wrote about disposal of spinach and did not state where others ended up. Candidates should have a ‘feel’ of selling products they raised and attribute the returns to viability of the project.
- ✓ Observations about project viability [4] – not mentioned by all candidates assessed.

10. Neatness of work

- ✓ Very neat presentation [3] –no candidate got all the 3 marks because of some noticeable untidiness on the whole document.
- ✓ Neat presentation with negligible untidiness [2] – A mark lost due to template used which had some stray marks
- ✓ Neat with some untidiness reflected [1] – 2 marks lost due to some cancellations and template used which had some stray marks



COMPONENT 2: FIELD PRACTICAL TRAINING REPORT

1.0 General observations

- ✓ Total candidature: 38
- ✓ Highest moderated mark: 89/100
- ✓ Lowest moderated mark: 45/100
- ✓ Component Weight (35%)
- ✓ General presentation of the candidates' work:
- ✓ All reports were typed as per syllabus recommendation. The binding of projects was satisfactory. The needed attachments were also provided by all candidates. The range of marks indicate that candidates took their Field Practical Training seriously i.e. both on the field and during compilation of the report.

2.0 The report

1. Cover page
All candidates provided the expected details
2. Title page
All candidates provided expected details
3. Contents page
Almost all candidates outlined the main headings in correct order. Some candidates omitted some headings like 'Declaration of Originality' and hence lost marks for correct order. Some headings had no leader dots and page numbers.
4. Declaration of Originality
It was well done by almost all candidates
5. Acknowledgements
'who provided service' was well done by all candidates, however some candidates failed to specify the service provided, they thanked individuals for the knowledge acquired without specifying the exact knowledge learnt.
6. Introduction
 - ✓ Name of place of attachment was properly done.
 - ✓ Justification of selection of place of attachment was not clear. Candidates failed to clearly state why the place was chosen for attachment.
 - ✓ Most candidates did not state their expectations prior/before going for attachment but instead stated what they experienced /learnt at the place of attachment. The introduction was written in past tense instead of future tense.



7. Description of farm routine schedule
 - ✓ Most candidates failed to state the staff complement of the farm in terms of the number of workers.
 - ✓ The staff complement qualifications were inadequately done.
 - ✓ Tools and equipment used was well done.
 - ✓ The daily work schedule of the farm was not properly done, candidates should stipulate the daily tasks performed by workers.
 - ✓ Work place interaction description was not clear for majority of candidates in terms of who reports to who and the line of communication.
 - ✓ Farm records kept and their use- some candidates stated how the farm records were kept but failed to state their usefulness to the farm.
 - ✓ Most candidates outlined how products were prepared for the market but could not deduce the profitability of the farm.

8. Description of activities carried out
Well done by candidates but they failed to state the duration of each operation carried out and the number of employees engaged.

9. Findings/ Observations
 - ✓ These should be related to the learner expectations as stated at the Introduction, however candidates failed to relate these two sections.
 - ✓ 'Learning experiences not met' and 'closing of gaps' was not addressed by candidates.
 - ✓ Only few students identified 'unexpected learning experiences gained' but still failed to deduce how the experiences will be useful to them.

10. Conclusion
 - ✓ The worth of the attachment exercise was not adequately articulated by most candidates.
 - ✓ The lessons learnt were stated by candidates but failed to relate how the experience will make them better producers. Candidates did not state what can be done as to improve their learning experiences.

11. Recommendations
 - ✓ Areas of improvement on the farm- some candidates did not highlight areas which need improvement on the farm.
 - ✓ Farm practices to be maintained- candidates failed to state farm practices to be maintained except a few who mentioned that 'teamwork' should continue in some of the farms they were attached to.
 - ✓ Farm practices to be discouraged- all candidates did not pick regressive practices which need to be discouraged even though some practices could be picked in other sections of the report.



12. Rating by Training Officer in the Industry (TOI)
It was well done by all candidates.
13. Overall report quality
- ✓ Creativity in presentation of information- only boarder lines and tables were evident in almost all candidates and a few presented organograms.
 - ✓ ICT skills/creativity demonstrated in compilation of the report-most candidates attempted to use their ICT skills like symmetry, bolding, underlining, punctuations and spacing when compiling their report. Some candidates used different fonts when writing the report and there was no uniformity. No candidate applied justification to paragraphs and no decorations were done.
 - ✓ Clarity of illustrations used and sequencing-well done
 - ✓ Quality of report binding- all reports were easy to flip and pages were secure.
14. Appendices
All required attachments were availed except for samples of farm records. Some farm records could be highly confidential and cannot be easily accessed by candidates. No candidate presented pictures of the farm, its operations and equipment.

COMPONENT 3: FIELD OBSERVATIONS

- 1.0 General observations
- ✓ Total candidature: 38
 - ✓ Highest moderated mark: 38/50
 - ✓ Lowest moderated mark: 22/50
 - ✓ Most common topics: scenario provided by Botswana Examinations Council.
 - ✓ General presentation of the candidates' work:
 - ✓ Most reports were typed and others were hand written. The binding of projects was satisfactory. The marks obtained by candidates show that most of them were above average.
- 2.0 The report
1. Title of investigation
Factor to be investigated reflected on title- well done
Comparison to be introduced to investigation- almost all candidates failed to deduce that this was a comparative study. They took it as a single treatment study even though they were provided with varying levels of treatment (phosphorus fertilizer). Most topics did not reflect the different levels of the fertilizer to be used.
Parameter measured- it was clearly spelt out
Neatness (no dirt/cancellations/overwriting/stains/grease) - most candidates work was neatly presented.



2. List of equipment / materials used for investigation / inputs
Where most materials / equipment used are suggested (Refer to list) - well done, some candidates however omitted one or two materials listed.
3. Objectives / aims of investigation
 - ✓ Relevant to title (crop/animal, parameter & treatment)- well done
 - ✓ Achievable (is it possible)- well done
 - ✓ Measurable (specific parameter)- well done
 - ✓ Specific (comparison, spec. parameter, crop/animal) – some candidates did not show that the fertilizer was applied in different quantities as per treatments.
4. Statement of factor to be investigated
 - ✓ Stating the factor / problem to be investigated- most candidates managed to come up with identification of the problem;
 - ✓ Possible causes of factor / problem investigated-poorly done as most candidates put it as if they knew the possible cause as well as the possible solution. Candidates did not show where the problem was observed or the individuals/farmers affected by the problem. The statement of the problem is formulated before carrying out the study;
 - ✓ Possible solutions to factor / problem investigated- Most candidates put it as if they knew the possible cause as well as the possible solution;
 - ✓ 2 benefits of the proposed solution –poorly done as no benefits were reflected.
5. Number of units per treatment / manipulation and size of unit /age
 - ✓ Stating how many replications / plots per treatment / no replications- well done
 - ✓ Justification on the number of replications/ no replications- candidates failed to justify the number of replications used
 - ✓ Size / age of units used- well done- size of plots used was well done
6. Layout / Sketch plan of investigation
 - ✓ Title of for the sketch plan (underlined)-most learners did not write titles for their sketch plans and few that attempted it did not underline nor bold or use upper case letters as expected;
 - ✓ Showing the treatment- well done;
 - ✓ Showing the control- well done;
 - ✓ Showing appropriate dimensions- well done, candidates should also show the distance between adjacent plots;
 - ✓ labelling = the layout was clearly labelled by all candidates, only a few diagrams lacked one of the dimensions;
 - ✓ Neatness of sketches (no dirt/stains/grease/cancellations) – well done.



7. Analysis of findings / implications of findings
- ✓ Analysis of results / computations- computations of results were correctly done, however candidates failed to write the correct formula for calculations, some candidates did not indicate the units of measurements. The overview of the results was satisfactory even though some candidates failed to adequately show the trends, e.g. highest result obtained and the concluding statement.
 - ✓ Selecting statistical parameter for summarising the data- well done
 - ✓ Mention / naming the form of data presentation- well done
 - ✓ Relevance of presentation method- well done
 - ✓ Labelling (title / scale/ Y and X axis) – for some candidates the title of the presentation was not striking e.g. underlined, bolded or use of upper case letters. For those who used bar charts/graphs the scale was correctly done. Labelling of X and Y axis was incomplete for a few candidates.
 - ✓ Overview interpretation of the findings.

Trends = 1 mark- most candidates did not describe the noticeable trend of the results

Highest result = 1 mark- most candidates did not single out the highest figure obtained at the applied treatment level.

- ✓ Concluding statement = 1 mark-well done, though not specific to actual treatment which brought desired result.

8. Conclusion

- ✓ Re-stating purpose or question looking for answer-some candidates failed to repeat the purpose of the investigation
- ✓ Providing the answer to the investigation question- those who managed to re-state the purpose of investigation did well in providing the answer to the investigation question though some failed to single out the appropriate level of the fertilizer needed for the optimum output
- ✓ Stating the extent meeting aims / objectives of the investigation- few candidates managed to relate the conclusion to the objective though the objective was initially not clearly stated.

9. Recommendations

- ✓ State the actions to be taken based on investigation- candidates gave a general statement that farmers should apply phosphorus fertilizer without being specific on the amount to be used as different levels of fertilizer were used
- ✓ Relevance and consistence recommendations to findings- actions suggested were not specific to the treatment in question with highest value.
- ✓ Suggest any modification of investigation to ensure accurate results- not correctly done as candidates failed to state how they can change the investigation methodology in order to get accurate results.
- ✓ Alignment of recommendation to objectives – some recommendations was aligned to unclear objectives as stated at the beginning of the study.



COMPONENT 4: PRACTICAL TASK TEST

1.0 General observations

- Total candidature: 38
- Highest centre mark: 47/50
- Lowest centre mark: 40/50

The assessment for this component was not subjected to external moderation. The centre mark was retained as it is. The assessment forms were contained in the portfolio of evidence file for each candidate. The portfolio files were neatly presented in a durable file. Four practicals were assessed in each of the 3 modules (1{grow plants}, 2 {vegetables} and 3{fruit trees}), three practicals were assessed in module 5 (land scape) and only one practical was assessed in module 4 (ornamentals). Limited resources could have led to some practical tasks not being fulfilled.

1.1 Criteria for assessment

All candidates got more than the average marks for criteria assessed. The assessment was routinely done with candidates at the centre until they can perfect the skills assessed. The selected tasks were appropriate for the skills to be assessed.