EXAMINATIONS COUNCIL OF ESWATINI

Junior Certificate Examination

Agriculture (516)

Examination Report for 2024

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Paper 120/02 Theory

Questions that were accessible to candidates

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Section B: **Question 1 (b)**

Question 2 (a), (b)

Question 3 (a)

Questions that were challenging to candidates

Section A: **Questions 1 (b), 3 (a), 3 (b), 4 (a), 4 (c), 5 (b), 6 (a), 6 (b), 6 (c), 7 (b), 7 (c), 8 (a), 8 (b), 8 (c), 9 (a), 9 (b), 9 (c), 10 (c), 11 (a), 11 (b), 11 (d), 12 (a), 12 (b)**

Section B: **Question 1 (a), (c)**

Question 2 (c)

Question 3 (b), (c)

JC Agriculture Paper 2 consists of two (2) sections, **Section A:** - Structured Questions and **Section B**: - Essay questions. This paper contributes 40% of the overall mark.

General Comments on Paper 2

The general performance of candidates for Agriculture Paper 2 was relatively poor as the majority of the candidates could not get 50%. The majority obtained scores ranging between 20% – 40% There were very few candidates who obtained very good marks (above 60%) and a reasonable number scored below 20%. Most candidates attempted the questions, but failed to attend the command words, that is, discuss, explain and describe. Some candidates had challenges with both sections, thus few candidates left gaps or unanswered questions especially in Section B. The paper was balanced in terms of syllabus coverage. In terms of language used, it was appropriate and relevant to the grade level of the candidates. The candidates had serious challenges on certain questions and these included questions 1 (b), 3 (a), 3 (b), 4 (a), 4 (c), 5 (b), 6 (a), 6 (b), 6 (c), 7 (b), 7 (c), 8 (a), 8 (b), 8 (c), 9 (a), 9 (b), 9 (c), 10 (c), 11 (a), 11 (b), 11 (c), 12 (a), 12 (b). There were few candidates with very poor spelling and grammar which made some of the answers provided to be difficult to understand. Some handwriting for the candidates were very difficult to read.

B. Comments on Specific Questions

Section A - Structured Questions

Question 1

(a) Outline any **three** advantages of subsistence farming.

Expected responses:

- Poverty alleviation strategy/provide jobs in rural areas/reduces dependence on buying food/selling surplus/feeding family/family consumption;
- For food security/provide food for household;
- Income creation/generation of income to the family;
- Preservation of traditional knowledge/easy to get seeds from previous crops;
- Low financial risk/cheap to do.

Comments

This part of the question was well answered by most of the candidates. Those that provided correct answers mentioned providing food for homes and job provision in rural areas. Common incorrect answers included: easy to manage; small scale production; less inputs and making money.

(b) Describe how crop rotation controls pests and diseases.

Expected responses:

- Breaks life cycle of pests; shortage of food supply for pests and disease causing organisms: interrupts pest habitant; crops are pest specific/planting different crops not affected by the same crops

Comments

Most candidates performed poorly in this question as they simply defined crop rotation whilst the question required them to articulate how crop rotation controls pests and diseases. Some simply outlined the advantages of crop rotation. Some candidates repeated the question as the answer. Common wrong answers included: crops sharing the same pests and diseases should not follow each other; growing crops that are affected by different pests and diseases; legumes fix nitrogen to the soil; pests run away because the soil is fertile; different crops follow each other; and improve soil fertility.

Question 2

(a) Give any **two** reasons for keeping tools under shelter.

Expected response:

- Prevent rust; prevents theft.
- To prolong life span/tools remain in good condition for a long time

Comments

This question was well answered, and a large number of candidates attempted this question. Common incorrect responses included: avoid accidents; damaging soil structure; and rust can cause diseases to the user.

(b) Discuss any **two** effects of using faulty tools in the garden.

Expected responses:

- Can break; cause injury to users; may cause delay in work progress; may damage the crop and reduce yield.

Comments

This question was generally well answered, although most of the candidates did not discuss. Common wrong responses provided included: rust can cause disease; destroy soil structure; spread diseases, reduce soil fertility; cause damage to the soil; and rust can cause acidic soil.

Question 3

(a) Discuss how high humidity affects plant growth.

Expected responses:

- More moisture in the atmosphere leads to less transpiration: plants cannot take up new nutrients/plants have difficulty in cooling.
- High moisture: promote pets and diseases; promote the growth of fungi

Comments

This question was very poorly answered by a majority of the candidates. Some candidates simply defined humidity. A majority of them could not link high humidity to plant growth. Some linked high humidity to photosynthesis and respiration. Common wrong answers provided included: high temperatures affect plant growth; increases photosynthesis; plants wilt; more evapotranspiration;

spread diseases; evaporation increases; loss of water leads to drought; loss of water will affect plant growth; high humidity makes the plants to grow slowly; increase transpiration; less photosynthesis; and causes pollution.

(b) Discuss any **two** effects of air pollution on plant growth.

Expected responses:

(i) Air pollution may result in acid rain; kills/burn plants/ may cause soil to be acid.

(ii) Air pollution may cause global warming/climate change/greenhouse effect; - pest and disease outbreak; drought; invasive weeds; floods; high temperature

Comments:

This question was poorly answered by most candidates as they could not link air pollution and plant growth. Some simply defined air pollution. Common incorrect answers included: wind breaks the plant when it is polluted; increase carbon dioxide making plants not to grow well; reducing the amount of air which is needed in photosynthesis; reduces photosynthesis because carbon dioxide is polluted; no air for plants; contaminates water; contaminates plants; air pollution affects photosynthesis and respiration; and dirty air disturbs the plants.

Question 4

(a) State **two** disadvantages of using herbicides to control weeds.

Expected responses:

- They are very expensive
- They are toxic/dangerous/harmful/pollutes the environment/kill useful insects or organisms/kill useful plants
- Needs technical skill
- Development of super weeds

Comments:

This question was fairly answered by a majority of the candidates and those who did not get it right seemed not to understand the use of herbicides to control weeds. Some simply defined herbicides. The most commonly written responses included: damage soil structure and fertility; cause soil erosion; cannot kill weeds; increases soil acidity; herbicides reduce nutrients in the soil; damage hands; and cause soil erosion.

(b) Discuss the importance of replacing transplants.

Expected response:

- Full utilization of available land/reduce gaps/avoid space wastage; increases yield of vegetable or crop.

Comments:

This part of the question was well answered by most candidates. Common wrong answers included: they have enough space to grow; no competition for nutrients and water; to make profit, seedlings to mature at the same time; if one crop fails the other will survive; does not reduce plants from the field; reduce weed growth; helps plants to get enough nutrients; and plants cannot be able to breath.

(c) Explain how mulching conserves the soil.

Expected response:

- Covering the soil; encourages infiltration; reduces run off; rain droplets are made finer.

Comments:

This question was poorly answered by a majority of candidates and they stated the benefits of mulching, that is, avoid capping, make soil moist, and make soil fertile. Incorrect answers written by the candidates included: prevent soil erosion; add organic matter; prevents direct sunlight; encouraging leaching of nutrients; keep the soil moist for a long time; and improve soil structure.

Question 5

(a) Discuss any **two** factors affecting the rate of photosynthesis.

Expected responses:

(i) Light - longer day length and high intensity increases the rate of photosynthesis

(ii) Water - less water, the plant wilt and the rate of photosynthesis drops

(iii) Carbon dioxide - high carbon dioxide levels in the air, the rate of photosynthesis increases.

(iv) Temperature - a rise in temperature increases the rate of photosynthesis.

(v) Chlorophyll – more chlorophyll, rate of photosynthesis will increase

(vi) Leaf size – small leaves less photosynthesis

Comments:

This question was correctly attempted by most candidates. Some candidates stated that carbon dioxide affect photosynthesis instead of discussing the direction of the effect. Common wrong responses provided included: wind; high humidity; oxygen and waterlogging

(b) Discuss how waterlogging affects respiration in plants.

Expected response:

- Reduce respiration; water takes space for oxygen reduced amount of oxygen for roots.

Comments:

This question was challenging for most of the candidates resulting in poor performance. Most of the candidates simply defined waterlogging without any link to the effect on respiration. Some stated that waterlogging affects respiration without elaborating on how. The candidates mixed respiration with transpiration and photosynthesis. Some candidates simply defined waterlogging and respiration. Common wrong answers written by candidates included: plants fail to absorb water and nutrients from

the soil, so they wilt and die; reduce the rate of photosynthesis; respiration is affected; change in climate; plants die; more water will make the plants to grow well and not die; cause plants to grow slowly; death of roots, leads to erosion; and water increases the rate of respiration.

Question 6

(a) Name a grain crop that grows best in the Lowveld of Eswatini.

Expected response:

- Sorghum

Comments:

This question was poorly answered by most candidates and the majority of them had no idea on a grain crop and which is grown best in the Lowveld. Common incorrect responses were; maize; beans; sweet potatoes; sugarcane; cotton; dry beans; and ground nuts.

(b) Describe any **two** methods of planting field crops.

Expected responses:

- Furrow; seeds planted in rows
- Broadcasting: seeds scattered over land
- Interval; seeds planted in holes at correct spacing; two to three seeds per hole

Comments:

This question was poorly answered as the majority of candidates did not get a mark in this question. They misunderstood the methods with ways of planting which are direct and indirect planting. Common wrong answers given by the candidates included: direct planting; indirect planting; intercropping, transplanting; harrowing; and planting using a tractor.

(c) Describe any **one** farm practice which minimize crop losses after harvesting.

Expected response:

- Clean storage area; store thoroughly dry crops/keep free from moisture; separate old and new produce; stake sacs correctly; check stored crops regularly; use pesticides carefully; use a well-designed maize crib; use a tank that is in good condition

Comments:

This question was poorly answered by most candidates. Common wrong answers written included: storage of crops; harvesting crops; subsistence farming; maize crib instead of well-designed crib; monocropping; storage tanks; late harvesting; crop rotation; intercropping; and mixed farming.

Question 7

(a) Give any **two** reasons why eggs are polished with cooking oil after cleaning.

Expected responses:

- It makes them look better.
- To keep them fresh for longer/avoid rotting

Comments:

This question was well answered by the candidates as they mentioned better appearance and longer shelf life. Common incorrect answers included: to maintain colour; to prevent breaking; to avoid cracks; makes eggs to be clean; to make them okay; to prevent them from diseases.

(b) Explain why eggs must be packed in a tray with the sharp end pointed down

Expected responses:

- To keep the inside of the egg in position/keep air space at the top for air circulation; to prevent spoilage; prevent absorption of bad smell

Comments:

This question was fairly answered by the candidates. Those who did not get it correctly, wrote answers that included: so the eggs to fit or balance well; avoid falling; avoid cracking; to prevent air from entering; to prolong expiry; easy to carry; so that cannot fall from the tray; to void breakage/damage; and avoid cracking when transporting.

(c) Discuss the importance of changing the position of a waterer in a poultry house.

Expected response:

- Keep litter dry; prevent disease buildup.

Comments:

This part of the question was poorly performed by a majority of the candidates. Some of the candidates lack the understanding of a waterer. Most common incorrect answers included: so that chickens could walk freely in the poultry house; so that the chickens could exercise; chickens will have enough water to drink; for chickens to active; chickens to stretch legs; to avoid damping off; to ensure chickens have access to drinking water; and to make the birds to be able to feed.

Question 8

(a) State any **two** situations where bees communicate with sound.

Expected responses:

- To expel intruders e.g. ants; fighting; collecting pollen/honey/food

Comments:

This question was poorly answered. Common incorrect responses included: dancing; drones; when queen is mated; when they work; when they are ready to mate; tail waggle dance; alarm; pheromone; when they are in the meeting.

(b) Explain how placing a beehive under shade improves honey production.

Expected response:

- More bees collect nectar; no need to cool hive; the water drank by the bees to be used to make honey

Comments:

This question was poorly answered by the candidates and a large number mentioned that it is done to avoid making the bees angry. Some candidates repeated the question as the answer. Common incorrect responses included: to protect hive from thieves; and they work well when there is no light.

(c) Explain stimulative feeding in honeybees.

Expected response:

- Giving bees a more diluted syrup to rear the brood

Comments:

This part of the question was poorly performed as most candidates did not have an idea on stimulative feeding. Common wrong responses provided included: planting colorful flowers around or near hive for the bees to get food close by; giving concentrated syrup; workers looking for food.

Question 9

Fig 9.1 shows the digestive system of a rabbit.

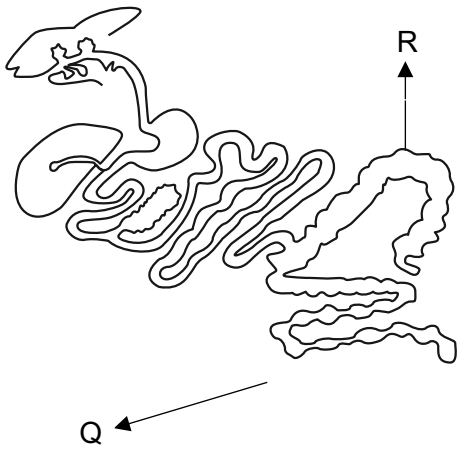


Fig 9.1

(a) Name part Q.

Expected response:

- Q – colon/large intestines

Comments:

This question was averagely answered by the candidates. Common incorrect responses included: caecum; small intestines; colony; pancreas; duodenum; rectum; reticulum; and rumen.

(b) Describe the process of digestion in part R.

Expected responses:

- R; contains bacteria; bacteria breakdown cellulose/cellulose broken down by bacteria to produce proteins

Comments:

This part of the question was poorly performed by most of the candidates. Most candidates wrote the function of Q instead of R, for example, absorption of water and minerals. Some even described normal digestion of food. Common incorrect responses included: absorption of water; food digested from the mouth to the small intestines then moves to the anus; food makes night feaces; undigested food is digested; stores feaces before they are passed out; breakdown of food; food moves from the small intestines to the large intestines; breakdown of food to cellulose; absorption of water; moves from mouth to anus; and completing digestion by enzymes.

(c) Describe the procedure of sexing a rabbit.

Expected response:

- Hold the rabbit by its loose skin at the back with one hand/placing on a flat surface; press the sex organ with the other hand

Comments:

This part of the question was poorly performed by most of the candidates. Some of the candidates simply described the mating process in rabbits. Some of the candidates defined sexing. Common wrong responses provided included: taking the doe to the buck's cage; put your hand on the sex organs; put finger in the anus; palpation; putting the hand into the vulva and anus; and press the vagina with hands.

Question 10

(a) State **two** factors to consider when buying a billy goat.

Expected responses:

- Health; well-developed testicles; not too fat; not too old; performance/productivity records; body condition/well placed legs/well-built legs

Comments:

Good performance by most candidates in most centers. This was one of the most well answered questions in the paper. Most of the candidates were able to state well-developed testicles and productivity records. Common wrong answers provided included: well developed udder/teats; choose a goat with 8 teats; choose a goat without horns; do not buy milking goats if you are not to use it; and shiny feathers.

(b) Describe the appearance of the following body parts of a goat a few days before giving birth.

(i) Udder

(ii) Vulva

Expected responses:

(i) The udder swells up

(ii) The vulva becomes swollen

Comments:

This question was well answered by most of the candidates. Common incorrect responses included: where most milk is produced; udder is firm; giving birth; vulva becomes pink in colour.

(c) Discuss the importance of hanging a goat with its hind legs after killing.

Expected response:

- Blood drains to improve meat quality; easy skinning/dressing; avoids physical contamination of carcass; prevents spoiled fur

Comments:

This part of the question was averagely performed by most of the candidates. Common wrong responses included: so that the goat cannot kick you; for blood to circulate; easy slaughtering; to avoid dogs eating it; and so that other goats are not scared.

Question 11

(a) Define a pasture.

Expected response:

- Land covered with grass and other low plants suitable for grazing.

Comments:

This question was fairly attempted and performed by most candidates. Common incorrect responses given included: natural plants that make silage and hay; where livestock feed; land kept for cultivation of crops; an area to feed animals; food given in winter; feeding animals with concentrates; and grass kept and cut for livestock.

(b) Give a reason for feeding small amounts of concentrates to livestock.

Expected response:

- To improve production

Comments:

Very poor performance by most candidates in most centres. Some candidates simply defined concentrates and also outlined the different types of feed that could be given to livestock. Most candidates mentioned the provision of nutrients. Common incorrect responses included; makes animals healthy; for the animals to get nutrients; reduce overgrazing; weaning purposes; give strength for winter feeding; and provide enough protein and energy.

(c) Describe any **two** ways of mechanical control of invasive plants.

Expected responses:

- Burning; uprooting; slashing/cutting

Comments:

This part of the question was poorly performed by most of the candidates. A sizeable number defined invasive plants. Common wrong responses included: Master 900; crop rotation; spraying with herbicides; releasing goats; biological and chemical control; spraying with pesticides; using cattle.

(d) Explain how fertilizer application improves a pasture.

Expected response:

- Add nutrients to soil; promote growth of pasture vegetation

Comments:

This part of the question was performed well by most of the candidates. A very large number were able to mention the addition of nutrients. Some of the candidates repeated the question as the answer. Common wrong answers written included: dissolve in water and get absorbed by the xylem; grass become fertile; health of the pasture; avoids bare patches; and improves soil structure.

Question 12

(a) Outline any **two** reasons for planning in a farm business.

Expected responses:

- To increase production in the farm/to know how to ration; to reduce the risk in the business; to acquire knowledge of the business/to know what to do; to understand the market environment.

Comments:

This question proved to be challenging for most candidates. The concept was not understood by the candidates. Most candidates gave reasons for doing marketing research. Common wrong responses included: good record keeping; income and expenditure; and to see profit and loss.

(b) Explain any **two** purposes of promotion of a product in a farm business.

Expected response:

- Increase sales; make customers aware of the product; differentiate your product from other products; assist in building customer interest; provide information to customers about the product

Comments:

This part of the question was poorly performed by most of the candidates. Some defined promotion. Common wrong responses included: advertising; packaging; provision of jobs; to make it look attractive; to sell products to other countries; to make the product last long; record keeping; and growth and expansion.

SECTION B: Essay Questions

Candidates answered any **two** questions from this section.

Question 1

(a) Outline the factors determining the amount of water needed by a crop.

Expected response:

- Weather; soil type; vegetable type; growth stage

Comment:

This part of the essay was fairly answered by most of the candidates, except for a few who outlined how they grew maize at school. Some outlined why growing maize is better in comparison to other crops. Others gave factors considered when choosing a garden site and also stated the effects of water and why crops must be grown in Highveld or Lowveld. Common wrong responses included: maize does not need rain because it relies on rainfall; climate change; water in the morning and afternoon; water source; and size of the land.

(b) Describe soil preparation for maize production.

Expected response:

- Primary tillage/digging/ploughing; use of appropriate tools
- Secondary tillage/harrowing; use of appropriate tools
- Organic matter application
- Add lime

Comment:

This part of the essay was performed well by a majority of the candidates. A few could not mention the proper tools for that activity. Some also described the land reclamation process (cutting, de-stumping and burning of trees or weeds). Common wrong responses included: planting of seeds; and marking of plots.

(c) Discuss any three factors considered when selecting a suitable crop varieties to grow

Expected responses:

- Favorable climate; suitable temperature/amount of water for proper plant growth
- Favorable soil type; for proper water drainage
- Best for your needs/consumer preference; provide the desired produce/high yield
- Resistant to diseases; to prevent crop loss due to diseases
- Good quality/geminates well; be viable
- Free from weeds and diseases; development of health free crops
- Time to reach maturity; reaches readiness early

Comment:

This part of the essay was poorly answered by a majority of the candidates. A large number outlined factors considered when selecting a site for a vegetable garden. Candidates did not have an idea on what the question required them to do or discuss. Common wrong answers included: near water source; good fertile soil; fenced to protect from animals; windbreaks to prevent wind from breaking crops; level land; access to roads; and must be near the market.

General Comments on Essay

Candidates performed poorly on this essay. They had challenges with part (a) and (c).

Question 2

(a) Outline the importance of indigenous chickens

Expected responses:

- Source of proteins;
- Income;
- Gender equality;
- Startup capital;
- Gifts;
- Appease ancestors;
- Pest control;
- Can be used as alarm;
- Provide manure/meat/eggs
- Source of feathers

Comments:

This part of the question was answered well by the candidates as they could outline the importance of indigenous chickens. Some commonly wrong responses included: lobola; kuteka; make house beautiful; used for boosting the economy; they can scavenge for food; and cheap to raise.

(b) Describe feeding of indigenous chickens.

Expected responses:

- Chickens are given concentrate/starter; grains; supplementary feeding/ mixed fowl; kitchen leftovers; scavenging; fresh clean water

Comments:

This part of the question was generally well answered by the candidates. Some of those who did not get it right, wrote the feeding programme for broilers. Common wrong answers included: feed twice a day; feeding indigenous chickens is easy; restricted feeding; and they feed themselves.

(c) Discuss the control measures of pests and diseases in indigenous chickens.

Expected responses:

- Isolation; prevent spread of diseases
- Herbal method/snuff powder and aloe/kabadust/sand bath/bluedeath; control diseases/external parasites
- Lasota/aloe; vaccinate against Newcastle /oil; used for fowl pox

Comments:

This part of the question was poorly answered by a majority of the candidates. Some candidates stated the preventative measures for broilers/layers. Some used siSwati names. Common wrong answers included: buy disease free birds; put a footbath; never mix old and new birds; they are strong; disinfect the house; use madubula, magazine and inhlaba; limit the number of people entering the poultry house; avoid overcrowding; hanging greens; and cleaning the poultry house.

General Comment on Essay

The overall performance on the essay by the candidates was fairly good. The performance showed that some candidates lack practical experience on indigenous chickens. They had challenges in the control measures for diseases for indigenous chickens and ended up discussing the preventative measures of broilers and layers.

Question 3

(a) Outline the processes involved in the marketing of agroforestry products.

Expected response:

- Harvesting/gathering; grading/sorting; packaging; processing; advertising; pricing; selling; storage; transport.

Comments:

This part of the question was fairly answered as most of the candidates provided answers that were acceptable. Common wrong responses included the marketing mix; place; price; product; promotion; clean the fruits; do not harvest on rainy days; do not harm the fruits; growing fruit trees; and do not harvest late.

(b) Describe a suitable soil condition for agroforestry production.

Expected responses:

- Soil type and texture; sandy loam to clay loam
- Soil moisture and drainage; moist soils but not excessively drained/well drained
- Soil aeration/well drained; no hard pan, deep soil
- Soil pH; ranges from 5.0 to 7.5
- Soil fertility; adequate organic matter 3 to 8 %, adequate phosphorus and potassium/fertile soil

Comments:

This part of the question was poorly answered by a majority of the candidates. Most wrong responses included: good pH; Highveld soils; acidic soil; vehicle access; and flat land.

(c) Discuss factors to consider when practicing agroforestry.

Expected responses:

- Reliable water supply; for irrigation purposes
- Good soil; provide required nutrients
- Accessibility; transportation of inputs and outputs
- Protection from wind and livestock; prevent breakage and damage of crops
- Slight slope/topography; for easy drainage and prevention of erosion
- Climate; provide suitable temperature
- Technical services; to provide inputs, knowledge and market
- Land tenure; to keep rules governing farmers land use preferences
- Government regulations; ensures conforming to forestry and agriculture policies
- User group profile; specific skills for farmer

Comments:

This part of the question was poorly answered, and the candidates seemed to lack knowledge on agroforestry. Some did not attempt to answer this section thus there were a lot of blank spaces. Some who attempted discussed factors considered when selecting a site for a vegetable garden. Common incorrect responses included: climate change; they need water if it is cold; growing fruit trees; and size of the land.

General Comments on Essay

The overall performance was very poor with most of the candidates having difficulty in processing concepts related to agroforestry. All sections of the essay were challenging to the candidates and thus performed poorly.

Comments on the question paper

A large number of the candidates fully answered the question paper, and the allocated time was sufficient for the candidates to answer all the sections. A majority of the candidates attempted all the questions as per the instructions. It was observed that some candidates did not attempt some questions at all, especially in section A, and only a few candidates answered only one essay question in section B. The question paper addressed the syllabus, but the candidates did not consider the command words in the questions e.g. outline; list; describe; and discuss.

Advice to Agriculture teachers

- Ensure that all topics of the syllabus are diligently taught to candidates.

- The teachers need to be trained in handling high order questions e.g. discussing, describing and explaining questions as the candidates take these to mean one thing and usually answer in the same way.
- Emphasis should be made on the usage of technical terms used in agriculture when teaching.
- Engage learners in practicals on all relevant topics to make it easy for them when answering practical questions.
- The teachers should teach their candidates on how to effectively answer the newly structured essays as it was observed that candidates still attempted the essays using the old model.
- Teachers are encouraged to use Examination Reports as they teach their candidates in order to note areas where they need to improve.
- Encourage candidates to study all contents of the syllabus when preparing for the examination.

Paper 120/03 Practicals

Introduction

Paper 3 is continuous assessment of the candidates practical work compiled by the teacher, the teacher who is responsible for allocating marks is required to submit the complete schedule of all marks for the purpose of moderation. The total marks available for the assessment of the practical project over the 3-year course are 100. There are two practical projects worth 60 marks and two written reports based on the practical undertaken worth 40 marks.

General comments

Teachers generally show good understanding of the practicals submitted, though this year there was a slight decline in the quality of work submitted. Most centers submitted 2 practicals as expected, i.e. one on vegetables or crops and the other on livestock. There was an exception of very few centres that submitted short-term practicals instead of long-term practicals. Teachers are advised to develop their own practicals.

Teachers file

A majority of centres were able to submit the teacher's files with all the expected contents.

Contents of the teacher's file:

- Blank practicals
- Mark guides for written work
- Diaries for each practical and pictures
- Lozenges/MS 1-mark sheets (**do not** staple or punch holes)
- Summary forms

Very few centres did not submit the teacher's file. Some teacher's files lacked certain items inside. Some had no diaries, no practical exercises. In some instances, the files were empty. Centres are advised to present teachers files containing only the required contents inside.

Registers

Most centres submitted their registers which were marked correctly, with both columns ticked. Few centres, however, still have a challenge in completing the register correctly. Some centres marked sampled students on the present column of register. Other centres did not have the page totals written. Some crossed the students. Some centres had students appearing on the register and not in the summary sheets. All details in the register must be filled, signed and the date indicated. Centres are reminded that they should keep the copy of the register and send the original.

NB. All registered candidates on the register must appear on the summary sheet, and if not, a covering letter must be provided to explain why the student does not appear on the summary sheet.

Sampling

Some centres sampled correctly according to expectations. Teachers were able to submit all three categories or a whole mark range: top students, moderate and low-ranking students. The highest and lowest students should be part of the sample. Some centres sampled incorrectly, some only sampled top bracket only. It was also noted that some centres submitted work that is not sampled. Some centres submitted more files than what is required. Some centres did not show sampled students by asterisk on the summary sheet.

The sampling procedure should be as follows

1 - 10 candidates (all files)

11 – 50 candidates (10 files)

51 – 100 candidates (15 files)

101 and above (20 files)

Lozenges/MS 1 Form

Most centres submitted the lozenges/MS 1 forms which were correctly filled. Some centres did not submit the lozenges/MS 1 forms stating that they were not delivered to their centre. Some centres had the forms filled but had some information missing, such as shading without g marks. Very few centres would shade M but at the same time have a mark shaded. A number of challenges were again repeated this this year, which included lozenges/MS1 forms being shaded with no marks entered. Some lozenges/MS1 forms were punched, some fastened with staplers and some written in ink. Teachers are advised to avoid doing the above. Some centres shaded the form but the corresponding mark being different, e.g. shading 60 then write 50 as a mark. Some centres had missing candidates entered by hand on the lozenges/MS1. Centres are encouraged to use supplementary forms to enter students that are missing in the form. Absent students must be marked on the lozenges/MS 1 form. The lozenges/MS1 marks should be similar to those in the summary sheet. Teachers are advised to submit their lozenges/MS1 forms together with the candidates work.

Summary Sheets

A majority of the centres submitted well written summary sheets. Some centres had submitted their summary sheet but were incomplete with blank spaces on both practicals and guided reports. Some centres had decimals on their marks. We still had some centres having marks higher than the total e.g. 61 over 60. There has been a significant increase in wrong calculation of marks. Centres are advised to provide a covering letters for the absent candidates as per the expectations. These letters should bear a school stamp. Centres are advised to staple summary sheets together especially those with a large number of candidates. All necessary information should be filled in the summary sheet e.g. Centre name and centre number, teachers name and contacts. The summary sheets should bear the head of centre

signature and have a school stamp. Summary sheets should be filled using a pen and candidates' names should appear as in the register.

Note: Centres that have candidates that have dropped out for whatsoever reason should provide all the marks up to the last day the candidate was at the centre and accompanied by a covering letter.

Student Cards

Most centres had student cards correctly filled. Practical activities arranged according to the arrangement of the practicals in the student cards. However, some centres submitted cards with no titles for the enterprises, some did not arrange their practical activities in the correct order. The correct order being Vegetable Production or Field Crops and Livestock Production. Some centres submitted all the student cards in a separate file instead of submitting sampled candidates. The title of practicals in the student card should be similar to that on the practical. Some centres still enter marks with decimals which is not allowed.

PRACTICAL SKILLS

There in an increase in centres submitting SGCSE practicals in JC, this was treated as plagiarism. Centres are advised to develop and improve their own practicals. There was an increase in the submission of very old practicals which were not up to standard. There was an improvement on the upper level of descriptors. The biggest challenge was reducing the levels of each descriptor. Teachers are requested to consult if they are facing challenges in developing practicals. Some centres still continue to have their practicals as short term e.g. killing and dressing a rabbit, instead of long term as per the requirements of the syllabus.

TOPIC

It is expected that all practical activities should have a topic that is relevant to the practical skill evaluated. The topic should be short and clear within the enterprises in the syllabus. The topic that appears on the assessment instrument must be the same as the one on the student card. Most centres gave topics that were specific. Some centres still had topics that were not specific to the enterprise e.g. Vegetable Production which could fit every vegetable. Some topics were not corresponding with what is written in the practical inside. Centres are advised to edit their practicals to make their topics specific to the enterprise.

Instructions

The expectation is that the instructions must be brief and precise. They should cover the entire duration of the practical. Some centres had their instructions for short term practicals. Most centres were able to select practical tasks across the enterprise they had selected. Example in vegetable production, tasks were selected from preparation, planting, management and harvesting. Some centres had tasks taken from one part of the enterprise. Some centres still had too many instructions and very few had no

instructions at all. Centres are advised to stick to instructions of long-term practicals. The instructions must be specific. Avoid an instruction like manage your crop.

Materials

It is expected that tools, equipment and inputs be relevant to the practical activity. Most centres had materials properly written in their practicals. Teachers may tabulate the materials. Some centres still had the main input, missing, especially in the livestock enterprises.

Criteria

Most centres had followed the well-written format of the criteria, i.e. Responsibility, Initiative, Technique, Perseverance and Quality. Few centres had criteria jumbled, for example starting with Initiative or ending with Perseverance. This resulted in some criteria being omitted in the process. Each criterion should start on a new page. It is preferred that the criteria are not typed back-to-back. The tasks should be specific to the enterprise. Centres are advised to use Times Roman when projects have been typed.

Descriptors

Descriptors must be distributed across the enterprise under each criterion, the descriptors should be specific to the enterprise. Centres are advised to have 5 descriptors within and across the criterion. There was a significant decline in the standard instruments submitted for moderation this year. Challenges noted were in the construction of initiative, technique and quality, also how to reduce the level of descriptors. Centres are advised to use the same reducing word for middle level and lower level but must avoid using failed, never and does not. The level of assistance must be qualified to differentiate between the middle and lower levels of descriptors. Some centres had their descriptors too general and not clear. Teachers should edit their descriptors to avoid some being irrelevant to the enterprise e.g. having a good descriptor for onion production in a spinach production practical exercise.

NB. Centres are encouraged to develop their own descriptors to avoid malpractice.

Scaling

The expected scaling should be 5/4; 3/2; and 1/0 differentiating the three levels under each criterion in their own column. The columns of the instrument should be as follows. Descriptors, Scale, Mark allocated and Teacher's comment.

Descriptors	Scale	Mark allocated	Teacher's comment
	5/4		
	3/2		
	1/0		

Most centres had the correct scaling. There were only a few centres that had a scaling of 4/5, 3/2 and 0/1 which was opposite to the above scale. Very few centres had no column for marks and also had the first column as the scale.

Teacher's comments

There was a great improvement in the comments made by teachers, doing away with the general comments of good, fair and bad.

Packaging

(a) Student files

These should have the following materials arranged in this order:

- Student cards for practical
- Student cards for guided write up
- Practical exercises in this order vegetables or crops and livestock
- Guided write up also arranged in the same order
- Evidence i.e. diaries, pictures and written work.
- Teachers are urged to use paper files with Indian treasure tags not metal paper fasteners
  It is recommended that all work for a candidate is placed in one file i.e. practical and write-up.
  Some Centres did not have anything to fasten papers in the student files. Very few centres used pocket files which is discouraged.
  NB. Centres are urged to improve on the packaging of their students files.

(b) Examination Packaging

Centres are expected to write the following items under CONTENTS ENCLOSED.

1. Attendance register
2. Summary sheet
3. Quantity of sampled students' files
4. Teacher's file
5. Lozenges/ MS1 form

There should be one teachers file even in centres where there is more than one teacher for that level.

Evidence

Evidence in the form of diaries, production records, written work and photos are ideal for a practical exercise. Most centres submitted diaries and written work as evidence, this written work must be marked and graded. Very few centres did not submit any evidence at all. Teachers are encouraged to maintain original diaries as opposed to transferring from original diary to new diaries for the purpose of submission to ECESWA.

Guided write-up report

Title

The report should bear a clear title. This should appear on the first page, together with the name of the candidate and name of centre. Most centres had specific topics which were relevant to the enterprise, but some still have general topics and are encouraged to have specific titles to the enterprise stating the vegetable or crop and livestock. A few centres still had titles that are not in line with the practical undertaken.

Introduction

The introduction is expected to be brief, and should include the importance of the enterprise, the nutritional value, economic importance. Sometimes it may be a brief description of the enterprise. Most centres had the introduction relevant to the topic and its depth was relevant to the level of the candidates. We still had a few centres that had very long Introductions which were of higher level than the candidates. The structure of the introductions should be that for form three not form five or higher, for instance some included limitations.

Objectives

These should be specific based on the purpose of doing the enterprise or practical. Centres should have only four objectives that are specific to the enterprise. The objectives should be SMART (specific, measurable, attainable, realistic and time bound). Only a few candidates were able to write specific and measurable objectives. We still have centres that write objectives that compare two variables which are not in JC level. Some centres had similar objectives for all the candidates. Other centres had less than four objectives. It is advisable to have an opening statement for objectives, e.g. The objectives of the practical were to. Centres are advised to avoid command words such as" to describe/identify laying percentage".

Materials Used

It is expected that candidates list inputs, tools and equipment used during the practical. Some centres listed only tools and implements as they appear in the textbooks. Some centres just gave the list of tools without uses. Some centres still do not write the main input of the enterprise, especially with the livestock enterprises. It is recommended that candidates explain the functions or uses of the tools, equipment, and inputs. These should be explaining how they were used in the practical. Some centres had general inputs such as fertilizer instead of LAN. All materials used for the enterprise must be indicated.

Preparations

These are activities done prior to management e.g. activities done until planting/transplanting or receiving livestock. These activities must appear in sequence, i.e. in the order of occurrence. Candidates should give a report on how they have done the activities. Most centres had their preparations in order and correctly done. Some centres still had a plan for the whole practical activity instead of preparations, which

should be avoided, while some gave instructions as preparations. Candidates should report on activities done not as the activities appear in the book. Very few centres still did not understand how far they have to write on preparations. Centres are advised to in line with the syllabus to be able to stick to the dictates of the syllabus. The preparations must be written in subtopics, e.g. land clearing, land preparation etc. Centres are advised to write in reported speech.

Management

These are things done while the enterprise is in progress. Some centres listed preparations under management. These must be written in clear sub-headed points. Some centres still allow students to copy activities as they appear in the book instead of reporting on that they did in the practical. Most centres wrote the management in the report well. The report should include the timing on which the management activities were done. It is recommended that teachers should guide the learners on answering these questions what, when, how and why. Teachers are advised to help students discuss the management activities under the different subheadings.

Presentation

The presentation should be done as per objective, data must have a brief explanation below. Some centres had good presentations with tables and explanations. There are some centres that presented tables with no explanations, some had tables, linear graphs and bar graphs for the same objective. Some centres presented data that did not match any objective. Others presented data without explanations. Several centres had their presentations in statement form. Selected centres failed to have presentation because their objectives were statements. Others jumbled the presentation not following the order of objections. Centres are encouraged to present tables and graphs as per the objectives.

Conclusion

The conclusion should show the outcome of the practical exercise per objective, summary of the results, problems and solutions. Most centres had their conclusions based on the objectives and results. Some concluded by giving a general comment on the enterprise without addressing the objectives. There were a few centres that only concluded by writing down problems and solutions encountered in the enterprise. Others had conclusion without data to draw the conclusion from. Several centres confused problems and conclusions. Others used recommendations as conclusions. Very few centres did not have conclusions.

Recommendations

These should include the way forward or solutions to the problems encountered in the practical work. Most centres identified the problems and also had solutions to them. Few centres still misplaced the problems and solutions just after the introduction.

General Comments

- Some teachers are new in the programme thus must seek guidance.

- Candidates should be guided through all the stages of the report (guided). All the sections of the report should be covered.
- Several centres had their practicals and reports awarded very high marks, teachers are advised to improve their practical and reports to align with the marks allocated
- Marks awarded to students should follow a normal distribution curve
- During filing some papers were misplaced
- Teachers are advised to keep the guided report at the level of form three. Centres must not make candidates write an investigatory project.
- Certain centres type their work, which is good, but in the process removes the originality of the candidates work. This results in reports being similar for some candidates. Teachers must monitor the typing closely.
- Grading of reports must be consistent through all the candidates
- The student's work must be marked, and the marked scripts should be submitted
- Reports should be in line with the specification of the JC syllabus
- Teachers are advised to use summary sheets from ECESWA, no need for typing as some candidates end up being missed out.
- Centres are advised to start writing their reports in form one, so to avoid candidates getting zeros and to meet the deadlines