

**EXAMINATIONS COUNCIL OF
ESWATINI**

JC

EXAMINATION REPORT

FOR

AGRICULTURE

YEAR

2021

Table of Contents

Subject Code:	Name of Subject:	Page No:
516	Agriculture P2	3-21
516	Agriculture P3	22-28

Questions that were accessible to candidates

Section A: Questions 1 (a), (c); 5 (a); 6 (a), (b), (c); 8 (a); 9 (a), (b)

Section B: Question 2

- Topic
- Introduction
- Factors considered when choosing a site for a chicken house
- Types of feed at different stages of growth
- Vaccination programme
- Practices to prevent diseases

Question 3

- Topic
- Preparation of a compost heap

Questions that were challenging to candidates

Section A: Questions 1 (b); 2 (a), (b); 3 (a), (b), (c); 4 (a), (b); 5 (b); 7 (a), (b), (c); 8 (c); 10 (a), (b); 11 (a), (b), 12 (a), (b).

Section B: Question 1

- Importance of fruit crops
- Propagation methods
- Planting the fruit tree

Question 2

- Description of features of the house

Question 3

- Introduction
- Importance of compost
- Management of a compost heap
- Signs and period of maturity of heap compost
- Advantages of heap compost over pit compost

JC Agriculture

Paper 516/02

JC Agriculture Paper 2 consists of two (2) sections, **SECTION A:** - Structured Questions and **SECTION B:** - Essay questions. This paper contributes 30% of the overall mark.

General Comments on Paper 2

The general performance of candidates for Agriculture P2 was below average even though there were exceptional cases where some candidates scored reasonably high marks (above 65%) and a few scored below 20%. However, most candidates ranged between 25 – 45% which was the average for most Centres. Candidates had challenges with section A of the paper. Section B was fairly done by the candidates especially essay 2.

The paper was appropriate and relevant to the grade level of the candidates. The paper covered all sections of the syllabus from General Agriculture to Farm Business. The candidates had serious challenges on certain questions, and it seemed like the content had not been covered in the teaching and learning. Such questions included questions 2 (b); 3 (a), (b), (c); 4 (a), (b); 7 (a), (b), (c); 10 (a); 11 (b), and 12 (a), (b). There were many candidates with poor spellings and grammar which made some of the answers provided to be difficult to be understood. This has a negative impact on their grades.

B. Comments on Specific Questions

Section A - Structured Questions – 50 Marks

Question 1 Fig. 1.1 shows farm tools



Fig 1.1

Question 1(a) Name tool

[1]

Expected response:

- Trowel/ hand trowel/ hand spade

Comments

This question was averagely done by most candidates. Most of the candidates confused the order of labelling and did not pay attention to the fact that the first tool was B not A. Many gave the opposite answer which affected their responses for part B. The most common response provided was the 'hand spade'.

Question 1(b) State the function of tool B

[1]

Expected responses:

- Weeding between rows in a seedbed; loosening the soil

Comments

Most candidates did not read question (b) with understanding as they responded as if it was a follow up from (a) hence they were stating the function of tool needed in (a)

Question 1(c) Outline any **two** safety precautions followed when using tools

[2]

Expected responses:

- Never use faulty tools.
- Use tools for their purpose.
- Carry tools correctly.
- Never play with tools.
- Never leave tools lying idle/ put away tools when they are not in use/ put away from children – to prevent injuries;

- Wear protective clothes/ gloves.
- Close tools with blades.

Comments:

Most candidates answered this question well except that some candidates thought that it was on how to make the tools last longer. Common wrong answers provided included: wash tools after use, oil and grease, oil parts where metals move over metal, and keep tools under shade. The learners gave maintenance points rather than safety precautions.

Question 2 (a) State the importance of including grass in a crop rotation [1]

Expected response

- Improve soil structure/ hold soil particles together.

Comments

This question was poorly done. Common incorrect responses included: correcting soil pH and control pests and diseases. The candidates stated the general function of grass/ vegetation in reference to controlling soil erosion rather than crop rotation.

Question 2 (b) Explain any two benefits of intercropping in vegetable production [4]

Expected responses:

- Growing crops cover wide surface area - to reduce weed growth/ reduce soil erosion/ reduce evaporation.
- Provide insurance - if one crop fails the other may not.
- Increased yield - because two or more crops are grown/ yield as much as those grown on their own.
- Efficient/ optimal use of land – more crops on the same land.
- Improve fertility – if there are legumes.
- Control pests and diseases – vegetables grown with repellent vegetables e.g. cabbages and garlic.

Comments

This question was poorly answered by the candidates. They could not explain their stated the benefits. Some candidates stated that intercropping is for controlling pests and diseases and add nutrients without stating how and when.

Question 3 (a) State how lime improves clay soils.

[1]

Expected response:

- Makes clay soil less sticky/ forms bigger lumps.
- Flocculates/ bigger air spaces

Comments

The candidates had difficulty in answering this question. Most of them were stating the general use of lime which is to reduce soil acidity instead of relating it to the soil structure of clay soils which is to make clay soils less sticky. Common incorrect responses included: add nutrients and reduce soil acidity.

Question 3 (b) Describe a crumbly soil structure

[2]

Expected response:

- Soil condition in which the soil particles are small and not tightly held together/ small round aggregates.

Comments

This question was very poorly done. The learners lacked the adjectives to describe crumbs as round aggregates, spheres, or shape of the structure. They could not describe but stated the benefits of a crumbly structure such as good for cultivation. Common incorrect responses included: has small stones, and like bread crumbs.

Question 3 (c) Describe a loamy textured soil

[2]

Expected response:

- Good Mix of sand, clay, silt and humus - easy to cultivate; well aerated; well drained; good water holding capacity; do not easily erode; dark in colour.

Comments

The candidates performed poorly in this question. Many candidates could not describe but stated the characteristics e.g. well aerated, dark coloured, good for growing crops, and easy to cultivate.

Question 4 Fig 4.1 is a diagram showing measurements of slope.

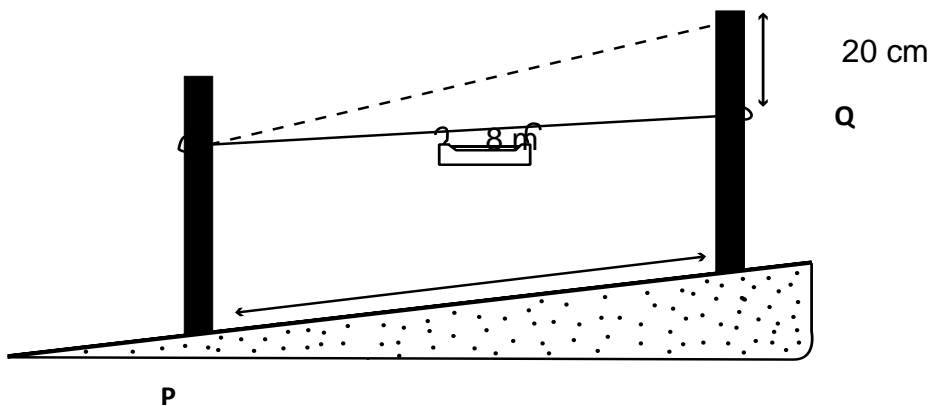


Fig. 4.1

Question 4 (a) Calculate the percentage slope of distance PQ

[2]

Expected response:

- Percentage Slope = $\frac{\text{Vertical Interval}}{\text{Horizontal Distance}} \times 100$
 $= \frac{20\text{cm}}{800\text{cm}} \times 100$
 $= 2.5\%$

Comments

Most candidates had difficulty with this question as most did not even know the formula for calculating the percentage slope. They could not convert metres to centimetres which then made them get incorrect answers. Some could not express their answers in percentages.

Question 4 (b) Describe how class VIII land should be used

[2]

Expected response:

- Should be left to natural vegetation - to bind the soil and protect the land further down the slope.
- Should be left for grazing, too rocky

Comments

This question proved to be challenging to most candidates. Most candidates had no clue of the Class VIII land but only knew that it was steep but could not state its use. Common incorrect responses included: building houses and ploughing across the slope. They could not comprehend that this land class cannot be cultivated.

Question 5 (a) Describe the signs which shows that groundnuts are ready for harvesting

[2]

Expected responses

- Lower leaves dry up/ leaves fall of the plant/ brown leaves.
- Brown speckles on the inside of the pods/ inside of the pods turn brown

Comments

This question was done fairly well as most learners were able to get one point out of the two. Common incorrect response included leaves turning yellow.

Question 5 (b) Discuss any **one** effect of excessive rainfall on plant growth and development. [2]

Expected responses

- Poor plant growth/ stunted growth/ yellowing – due to leaching of nutrients/ nutrient erosion increase/ disease prevalence/ water logging reducing root respiration/ weed growth

Comments

This question proved challenging for most of the candidates as they simply stated the general effects of excessive rainfall but could not related to plant growth and development. Common incorrect responses include rotten plants and affect photosynthesis. Most candidates stated that it causes soil erosion but could not relate that to plant growth and development.

Question 6 (a) State the function of perches in layer production [1]

Expected responses

- Roosting/ sleeping/ resting

Comments

This question was poorly done by most candidates. Most candidates did not know what perches are as they related them to laying equipment. Common incorrect response included: used for laying. They confused it with nest boxes.

Question 6 (b) Outline any two management practices that prevent egg eating [2]

Expected responses

- Provide enough food and water.
- Enough nest boxes.
- Collect eggs 2-3 times per day/ frequently.
- Avoid overcrowding/ enough space.
- Hang greens.
- Provide calcium through salt/ egg shells.

Comments

This question was well done as the majority of candidates got the maximum marks.

Question 6 (c) Explain why eggs should be stored away from onions [2]

Expected responses

- Egg shells are porous - absorb the strong smell of onions/ strong smell/ rotting/ getting spoiled.

Comments

This question was well done by the candidates but some could not write the porous part but only provided the effect.

Question 7 (a) Name the bee hive which produces less honey [1]

Expected response

- Swazi top-bar

Comments

This question was fairly done even though some candidates could not write the expected response in full. Common incorrect responses included: traditional hive, Nguni, bar hive, and Swazi bar.

Question 7 (b) State the reason why the queen bee lay drones [1]

Expected responses

- Unfertilized egg/ failure of queen to mate

Comments

The candidates performed very poorly in this question. Most candidates stated the reasons why drones are laid, the functions of drones. Common incorrect response includes drones die after mating. Some stated the role of drones, and some did not attempt this question.

Question 7 (c) Describe a method of catching a swam [2]

Expected responses

- Use a bee brush to move as much swarm cluster from a tree/ wall/ fence into a box with a sugar solution.
- Clipping one wing of the queen – swarm cluster around/ queen cannot fly.
- Remove a frame of capped brood with old queen – to stimulate formation of new colony.
- Remove some frames in the brooder chamber – to create more space.
- Checker brooder - rearrange frames.
- Catch queen and swam will follow

Comments

This question was poorly done as most candidates could not state the swarming methods. A few candidates stated that you remove the wings of the queen instead of clipping the wings.

Question 8 (a) State the cattle breed which produces creamy milk [1]

Expected response

- Jersey

Comments

Well done question. Most candidates were able to state the breed but some with wrong Jersey spellings e.g. jessey or jersey. Only a few of the candidates confused the required breed to that of the goat breeds for producing milk.

Question 8 (b) Outline any **one** importance of castration in cattle [1]

Expected response

- Fast muscle development.
- Prevents unwanted breeding.
- Promotes calm animals/ easy to handle.
- Improve meat quality

Comments

This question was poorly done as the candidates confused it with identification methods and dehorning. Some candidates could not attempt this question.

Question 8 (c) Describe the process of artificial insemination in cattle [2]

Expected responses

- Inserting straw into the vagina by hand.
- Semen deposited into the cervix of a cow.

Comments

This question was poorly done. Most candidates discussed seemed to have no clue of artificial insemination. Some of the responses provided were very weird such as it is used to stimulate milk production.

Question 9 (a) State any **two** factors to consider when buying rabbits [2]

Expected responses

- Healthy and disease-free.
- 5 months old.
- Does with 8 teats.
- Buck with two developed testicles.
- Breeding records/ parental/ records

Comments

This question was generally well answered by most candidates. Most candidates had wrong spelling (tits) for teats. Common incorrect responses included correct age, alert and active.

Question 9 (b) Explain the process of mating in rabbits [2]

Expected response

- Take doe to the buck – for the doe to be submissive/ prevent fighting.

Comments

This part of the question had an average performance from candidates. Some candidates were able to write taking the doe to the buck but could not provide the reason for doing that.

Question 10 (a) Explain how meat production can be improved in Swazi goat [2]

Expected response

- Cross them with exotic breed (Boer/ Kalahari) - to get the desired traits from the exotic breeds.
- Provide them with nutritious feed/ concentrates – for muscle build up.

Comments

Poor performance by most candidates in most Centres. A few of them could state crossbreeding without the reason why. They also mentioned the provision of nutritious feed without any justification. Some candidates wrote about how meat can be sold instead of how it could be improved. Common incorrect responses were ‘give them food’ and ‘sell to butcheries.

Question 10 (b) Explain the purpose of increasing the feed for goats before kidding [2]

Expected responses

- To nourish the foetus – for its health and development.
- Build body reserves – in order to have more energy when giving birth.
- Increase milk production – to produce colostrum.

Comments

This question was fairly done by the candidates but could not explain instead stated purpose only. Some could only give the effect instead of the cause.

Question 11(a) State the benefit of reseeding a pasture [1]

Expected responses

- Result in a good pasture/ improve pasture production.
- No bare patches in the pasture

Comments

This question was poorly attempted by most candidates. They seemed not to be familiar with the term reseeding. Common incorrect responses were ‘prevent soil erosion and palatable grass’.

Question 11(b) Explain any one negative effect of understocking a pasture [2]

Expected responses

- Overgrowth of unpalatable grass species – because of selective grazing.

- Growth of bush plants – due to the accumulation of organic matter which suppress growth of grass.

Comments

Very poor performance by most candidates in most Centres. Instead of explaining the negative effect of understocking they explained the effect of overstocking. Common incorrect responses included: cause soil erosion. And animals have less to eat.

Question 12 (a) Outline the importance of market research in agricultural production [2]

Expected responses

- Gathers information about.
- What customers want.
- The price the customers are prepared to pay.
- When to produce.
- State/form of product customers want.
- Quantity to produce.
- To adopt new farming technologies to meet the changing demands

Comments

This question proved to be challenging for most candidates. Most candidates left the question unanswered. Most candidates wrote about marketing instead of market research. Some seemed not to have learnt this particular concept as they did not answer the question. Common incorrect responses included: to attract more customers and make profit.

Question 12 (b) Explain any one benefit of processing an agricultural product [2]

Expected response

- It changes the form of a product - it makes it to lasts longer; to add value to product/ more income; to meet the consumers preferences

Comments

This question was poorly done. Most candidates wrote about advantages of advertising instead of processing. They also confused processing with grading. Common incorrect response was to improve the economy of the country.

SECTION B: Essay Questions

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

Question 1

Describe the production of fruit crops using the guideline below: [25]

- Topic of the enterprise [1]
- Introduction (fruit crop production in Eswatini) [1]
- Importance of fruit crops [2]
- Propagation methods [4]
- Preparation of the planting hole [8]
- Planting of the fruit tree [9]

Topic of the enterprise

Expected response

- Fruit crop production [1]

Comments

A well attempted part of the essay. Most candidates wrote the correct topic with only a few writing vegetable production.

Introduction (fruit crop production in Eswatini) [1]

Expected responses

- Growing fruit trees is very expensive, and the farmer need to wait for a long time before getting income, The large fruit growing areas are in the title deed land. [1]

Comments

This part of the essay was poorly answered as most candidates gave the nutritional value of fruits and their economic importance.

Importance of fruit crops [2]

Expected responses

- Fruits are rich in energy, vitamins and minerals. This is essential for to a healthy diet; bring extra income/ foreign exchange/ employment; job opportunities

Comments

The candidates performed poorly in this part of the essay. The only importance highlighted by Centres was providing nutrients.

Propagation methods [4]

Expected responses

- Sexual - where a seed is used to produce a fruit tree.
- Asexual reproduction - where an existing plant or part of a plant is used.

Comments

This part of the essay was poorly answered by the candidates and some of the candidates did not attempt the question. A large number of the candidates stated methods of artificial propagation (budding, grafting, and layering). Some candidates wrote about direct and indirect planting.

Preparation of the planting hole

[8]

Expected responses

- Measure area (60cm x 60cm)
- Dig the soil
- Pile the topsoil on the side of the hole.
- Mix soil with 10kg of compost and 0.5kg of super phosphate.
- Put subsoil on the other side of the hole.
- Loosen the soil at the bottom of the hole.
- Half fill the hole with topsoil, compost and fertilizer mixture.
- Water the hole.

Comments

This part of the essay was fairly answered by the candidates. Some of the candidates jumbled the steps for digging the planting hole.

Planting of the fruit tree

[9]

Expected responses

- Cut bottom of the bag.
- Gently put tree seedling at the center of the planting hole.
- Remove the plastic bag.
- Stake the fruit tree.
- Fill the hole with topsoil.
- Put the topsoil down firmly.
- Make a shallow basin around the tree seedling.
- Water the tree seedling.
- Place compost around the tree and then mulch.
- Protect the plant from animals.

Comments

The candidates performed poorly in this part of the essay. Most candidates jumbled up the steps for planting and some did not have the idea on how planting is supposed to be done. This significantly affected the total scores attained in the essay because most of the candidates got few marks.

General Comments on Essay

This was the second most selected essay. candidates performed poorly on this essay. Most responses from candidates indicated that candidates did not do the practical in their Centre. The challenge was in outlining the importance of fruit crops, propagation methods, and the planting of fruit crops.

Question 2: Describe broiler production using the guidelines below [25]

- Topic of the enterprise [1]
- Introduction (description of broilers) [1]
- Factors considered when choosing a site for a chicken house [6]
- Description of features of the house [4]
- State the types of feed at different stages of growth [3]
- Describe the vaccination programme [3]
- Practices that prevent diseases [7]

Topic of the enterprise [1]

Expected responses

- Broiler production; broiler management; raising broilers

Comments

This part of the essay was well attempted. Most candidates were able to draw the correct topic for the essay however, one common topic written was ‘chicken production’.

Introduction (description of broilers) [1]

Expected responses

- Broilers are chickens kept for their meat.

Comments

This part of the essay was well answered by the candidates. Only a few candidates stated that it was chicken kept for egg production.

Factors considered when choosing a site for house [6]

Expected responses:

- Location of neighbours
- Topography
- Condition / distance from roads/ accessibility
- Distance from water and power/electricity sources/ utilities
- Prevailing wind direction/ wind shed
- Distance from other buildings
- Future expansion
- Litter utilization

- Setbacks – public places

Comment

This part of the essay was well attempted by most candidates. However, some candidates gave setbacks and away from public places at the same time, thus were only awarded one point.

Features of the house

[4]

Expected responses

- Well ventilated
- Protection from harsh weather conditions
- Protection from predators
- Allow enough light
- Easy to clean
- Footbath
- Provide enough space

Comments

This part of the essay was poorly answered by the candidates. Most of the candidates stated the things considered when selecting a site where a poultry house is to be placed.

Types of feed

[3]

Expected responses

- Starter: Day1 – 21 days (3 weeks)
- Grower: 21 days – 35 days (4 weeks)
- Finisher: 35 days to sale (Slaughter)

Comments

Most candidates responded well to this part of the essay. However, some candidates could not state the number of days for the stated animal feed but were rewarded.

Vaccination programme

[3]

Expected responses

- Stress pack/ Vitamins – Day 1/ immune stress/ camilla
- Newcastle- day 10 and 28 / Clone 10/ La- sota
- Gumbora- day 14 and 21

Comments

This part of the essay was fairly done. Most candidates gave responses such as stress pack and La-sota. Some candidates gave stress pack and Immune stress, and they were awarded only one point.

Practices to control disease

[7]

Expected responses

- Clean and disinfect the house and equipment
- Never mix chickens of different ages
- Never mix chickens from different flocks
- Isolate sick chickens
- Manage litter well
- Always buy disease free birds
- Provide a footbath
- Limit the number of people coming into the poultry house
- Prevent birds and animals into the house.
- Provide good housing
- Provide fresh feed
- Do not overcrowd
- Change water
- Vaccination

Comments

This part of the essay was well answered by the candidates and the majority who attempted it got all the marks.

General Comment on Essay

This was the most attempted essay, and the overall performance was fairly good. Candidates showed that they were exposed to broiler production in their respective schools. The major challenge was only in the description of the features of the house.

Question 3: Describe the preparation of a heap compost using the guidelines below	[25]
Topic of the essay	[1]
Introduction (description of compost)	[1]
Importance of compost	[3]
Preparation of compost heap	[10]
Management of compost	[4]
Signs and period of maturity of compost heap	[4]
Advantages of heap compost over pit compost	[2]

Topic of the essay [1]

Expected responses

- Preparation of a compost heap

Comment

This part of the essay was accessible and almost all candidates who attempted this question were able to highlight the correct topic.

Introduction (description of compost) [1]

Expected responses

- Plant and animal waste or remains, gathered and allowed to rot/ organic matter like grass, leaves and manure, which have broken down into a dark, crumbly material called humus.

Comments

This part of the essay was poorly answered by the candidates. Most candidates gave an incorrect introduction. They had a challenge in consolidating the different sub-topics to come up with the correct topic.

Importance [3]

Expected responses

- Provide plant nutrients
- Improves the structure/ water holding capacity/ aeration
- Makes use of plant residues
- Improves soil fertility/ makes plants grow better
- Improves microbial activity
- Regulate soil temperatures

Comments

This part of the essay was poorly answered. Some of the wrong answers referred to animal/ cattle management and some to a type of food.

Preparation of a heap compost [10]

Expected responses

- Mark size of the compost heap to be 2m x 1.5m.
- Put poles at the corners to build a framework of poles and a wire netting to keep the material together.
- Loosen the soil on the marked area.
- Start with a layer of maize stalk and branches to allow air into the compost.
- Add a 10cm to 30cm layer of organic matter e.g. weeds and vegetables waste;
- Add 5cm animal manure.
- Add a thin layer of soil to provide microorganisms to break the organic matter.
- Build the layer again up to 1,5m high leaving out the layer of maize stalk.

- Water each layer as you make it;
- Cover the layers with grass or a fertilizer bag to prevent drying out.

Comments

This part of the essay was poorly answered by most candidates. Most responses were on putting the plant materials together without specifying the order of placement of the different layers in order to come up with a compost heap.

Management of the compost

[4]

Expected responses

- Water the compost heap
- Add more manure/ little nitrogen fertilizer for extra nitrogen
- Turn the heap compost more often so that the outside is in the middle and for adding more air
- Leave compost for 6 weeks
- Keep compost covered
- Add microorganisms/ soil

Comments

This part of the essay was poorly answered by candidates. Only a few candidates mentioned the turning of layers to allow air into the heap.

Signs and period of maturity of heap compost

[4]

Expected responses

- Dark brown.
- Crumbly.
- Smells sweet.
- Matured/ready at 12 weeks

Comments

This part of the essay was poorly answered by most candidates with a very few mentioning its sweet smell. In terms of colour a very small number stated that. A very few candidates could state the period taken by heap compost to be matured. Most candidates left this component of the essay unanswered.

Advantages of heap compost over pit compost

[2]

Expected responses

- Easier to build.
- Do not get waterlogged in wet weather/ drainage
- Cheap to make
- Allows aeration

Comments

Most candidates responded poorly to this part of the essay. They could not differentiate between heap and pit compost thus could not outline the differences.

General Comments on Essay

Few candidates attempted this essay. The overall performance was very poor with the candidates having difficulty with the introduction, importance of compost, signs and period of maturity of heap compost, and advantages of heap over pit compost.

Comments on the question paper

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.

Advice to Agriculture teachers

- Ensure that all topics of the syllabus are taught.
- Candidates need to be guided on how to answer high order questions e.g. describing and explaining questions.
- Emphasis should be made on the usage of technical terms used in agriculture.
- Engage students with practicals on all topics that are required to be practicalized e.g. compost making and management.
- Candidates need to be encouraged to write correct spellings as some answers are usually not credited because they cannot be understood due to wrong spelling.
- The examination reports can assist can be of assistance to Centres during teaching and learning.

Paper 516/03**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 is 100. There are two practical projects worth 60 marks and two written reports based on the practical worth 40 marks.

General comments

Teachers did a good job on the practicals, there was great improvement on the type of work submitted. Where most Centres submitted 2 practicals as expected ie one on vegetables or crops and the other on livestock. There were exceptions though where Centres submitted one practical on vegetables and the other on crops. One Centre submitted only one practical of vegetables and stated that they could not keep livestock because chicks were in short supply. Some Centres submitted only one practical with no justifying letter. Very few cases submitted short term practicals. Some Centres submitted guided reports that were different to the practicals.

Teacher's 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
- Mark schemes
- MS 1-mark sheets
- Summary forms
- Sometimes registers found

Very few Centres had no teacher's file

Registers

Most Centres which had their registers submitted were marked correctly, with both columns ticked. Few Centres only marked students present and did not mark the column on submitted ticked. Other Centres did not have the page totals written. Some Centres had students appearing on the register and not in the summary sheets without any covering letter. Registers and summary sheets should have the same number of candidates. All details on the register must be filled, signed and should have the date.

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. There has been an increase in Centres that sampled incorrectly.

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)

Sampled candidates should be shown on the summary sheet with an asterisk.

Mark Sheets Form (MS 1)

Most Centres submitted the MS 1 Form and were correctly filled. Some Centres though did not submit the MS 1 Form. Some Centres had the Forms filled with some information missing. Very few Centres shaded A for absent but at the same time have a mark shaded.

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. There was an increase in Centres that had decimals on their marks. Some Centres had marks higher than the total e.g. 61 over 60. Centres are advised to have a covering letter for the absent candidates as per the expectations. Centres are advised to staple the 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 code, teachers name and contacts, the summary sheets should have the school stamp. Centres are also advised to use summary sheets provided by ECESWA. Summary sheets should be filled using a pen and candidates' names should appear as in the register.

Student Cards

Most Centres filled and provided students cards that were correctly filled. Most Centres had the practical activities arranged according to the arrangement of the practicals in the student's cards. However, some Centres 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 instead of the sampled ones. The title of practicals in the student card should be similar to that on the practical. Some student cards had figures with decimals which is not allowed. Very few Centres designed their own student cards.

PRACTICAL SKILLS

Some Centres used instruments designed for SGCSE in JC, this was treated as plagiarism. Centres are advised to design and improve their own instruments. 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. Some Centres 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 inside the practical.

Instructions

The expectation is that the instructions must be brief and precise. They should cover the entire duration of the practical. Observations are to the effect that some Centres had their instructions for short term practicals. Some had too many instructions and very few had no instructions at all.

Materials

It is expected that tools, equipment and inputs be relevant to the practical activity. Some Centres had no materials.

Tasks

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 though had tasks taken from one part of the enterprise. The tasks should be specific to the enterprise.

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 be stated on a new page.

Descriptors

Descriptors must be distributed across the enterprise under each criterion, the descriptors should be specific to the enterprise. The number of descriptors must also be the same within and across the criteria. There was a slight improvement from last year. There was some improvement in the construction of the responsibility descriptors and perseverance. Challenges were noted in the construction of initiative, technique and quality. Very few Centres used the example in the syllabus. Some Centres had their descriptors too general and not clear.

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		

Teacher’s comments

Teachers are expected to comment on marks obtained by candidates per criterion to justify the marks awarded. Still very few Centres give appropriate comments. Most teachers made general comment on the marks awarded such as good, excellent, and poor.

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 ie Diaries, pictures and written work.
- Teachers are urged to use Indian treasure tags not metal paper fasteners

It is recommended that all work for a pupil is placed in one file i.e. practicals and write-ups.

(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. There should be one teacher’s file even if there were more than one teacher for that level.

Evidence

Evidence in the form of diaries, production records written work and photos are ideal to a practical exercise. Most Centres submitted diaries and written work as evidence. Very few Centres did not submit any evidence at all. Centres are encouraged to submit evidence in the form of diaries and or pictures. Teachers are encouraged to maintain original diaries as opposed to transferring of notes from original 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, but some still have general topics thus are encouraged to have specific titles to the enterprise stating the vegetable or crop and livestock. A few Centres had titles that are not in line with the practical undertaken.

Introduction

The introduction should include the importance of the enterprise, the nutritional value, economic importance and the origin. 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. Few Centres though had very long Introductions with too much information. Introductions should just give an outline.

Objectives

These should be specific based on the purpose of doing the enterprise or practical. Centres should have a minimum of four objectives that are specific to the enterprise. The objectives should be SMART (specific, measurable, attainable, realistic and time bound). Only a few students were able to write specific and measurable objectives. We still have Centres that write objectives that compare two variables. Some Centres had similar objectives for all the students. Some other Centres had less than four objectives and very few had no objectives at all.

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. We still have Centres that miss out the main input of the enterprise e.g on livestock enterprise. 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 had done the activities. Most Centres had their preparations in order. Some Centres had a plan for the whole practical activity while some gave instructions as preparations. Candidates should report on activities done not as the activities appear in the book.

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 copy activities as they are from the book instead of reporting on what was done during the practical. Most Centres had a challenge on livestock. 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. Some Centres still 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. Some had their presentation in statement form. Some few Centres still presented diaries as their presentation, tables and graphs without headings, no explanations after tables and graphs. Centres are encouraged to present tables and graphs as per the objectives.

Conclusion

The conclusion should inform on 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. A few Centres did not have conclusions.

Recommendations

These should be problems encountered as the practical was being done. Most Centres identified the problems and also had solutions to them. Few Centres though misplaced the problems and solutions just after the introduction.

General Comments

- Some Centres were bringing same practicals as the previous year, teachers are encouraged to revisit their practical in order to improve on them.
- New teachers should seek assistance on assessment matters from ECESWA.
- Some 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 not included
- When filing, candidates cards must be placed on top of the practicals and the reports.
- Centres that type their work should ensure that the originality of the work remains.

- The candidates work must be marked, and the marked scripts should be submitted
- The report should follow the order indicated in the syllabus.
- Teachers are advised to use Summary Sheets Forms from ECESWA instead of generating their own Summary Sheets.