

EXAMINATIONS COUNCIL OF ESWATINI

JC

EXAMINATION REPORT

FOR

AGRICULTURE

YEAR

2020

JC EXAMINATION REPORT

FOR 2020

Table of Contents

<u>Subject Code</u>	<u>Subject Name</u>	<u>Component</u>	<u>Page</u>
516	Agriculture	P1	3
516	Agriculture	P2	3-17
516	Agriculture	P3	18-24

JC AGRICULTURE

Paper 516/01

Questions that were easily accessible to candidates

Section A

Question 2 (a), 2(b), 3(a), 5(a), 5(b) and 11(a).

Section B

Question 1 – Topic

- Introduction
- methods of planting seeds
- Seedlings management on seedbeds
- Steps of transplanting

Question 2 – Topic

- Signs of readiness on dry maize
- Effects of harvesting too late
- Modern methods of storing maize grain
- Enemies of stored grain

Question 3 – Topic

- Introduction
- Signs of heat

Questions that were Challenging to candidates

Section A

Questions 4, 10(b), 11(b) and 12.

Section B

Questions 1 – Steps of preparing a seedbed

- Question 2 – Introduction
- Practices that limit grain damage in storage
- Steps followed when treating maize stored in bags

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 average. It showed a decline as compared to that of 2019. Candidates had a greater challenge with section A of the paper.

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 poor usage of agriculture technical terms remains the main setback to candidates. There is also an increase in number of candidates with poor spellings which change the content of their responses. This has a negative impact on their grades.

Comments on Specific Questions

Section A - Structured Questions – 50 Marks

Question 1

(a) State **four** guidelines for preparing a crop rotational programme? **[4]**

Expected responses

- A legume must be included.
- Heavy feeders must follow light feeders/start with heavy feeders in a new land.
- Crops of the same family/attached by same disease should not follow each other.
- Deep-rooted: carrots, must follow shallow rooted: onions.
- A grass must be included.
- Crops that require a lot of the same nutrient must not follow each other.

Comments

This question was poorly done by most candidates. The common responses which were not accepted were 'start with legume, start with grass or with cereals'. Some candidates listed the groups of vegetable, others steps of land reclamation and for some feature of a natural pasture.

Question 2

(a) Name **one** career in agriculture that involves controlling livestock diseases? **[1]**

Expected response

- veterinary Veterinarian/doctor/veterinary assistant.

Comments

This question was well attempted by most candidates however, some candidates gave wrong responses like 'dip tanker, dip manager, agriculture teacher, agronomist and *Madibhane*.

(b) State the purpose of a water policy? **[1]**

Expected responses

- Guide water usage; proper water usage; fair access to water; proper distribution; sustainable use of water.

Comments

This part of the question was fairly attempted by most Centres who gave the Correct responses. Common incorrect responses were provide water, watering and Environmental act. Some candidates gave the functions of water such as cooling the plants.

(c) Describe the maintenance of a sprayer. [2]

Expected responses

- Clean sprayer; oil all moving parts; tighten nuts, bolts and screws

Comments

Average performance by most candidates in all centres as almost all candidates mentioned clean the sprayer. Safety precautions responses such as ‘use with care and store correctly’ were common but not accepted.

Question 3 Figure 3.1 shows the burning of fossil fuels.



Fig. 3.1

(a) (i) What type of pollution is shown in Fig. 3.1? [1]

Expected responses

- Air pollution

Comments

This question was well done by candidates however most candidates gave ‘air and water pollution.’

(ii) Explain how the pollution of a river by fertilizers affect fish. [2]

Expected response

- Kill fish/life - due to lack of oxygen/ suffocation due to nitrogen contamination

Comments

An average was observed in this question. Some candidates described eutrophication leaving out the effects of the fertilisers to fish which was not accepted.

(b) Explain the importance of biodiversity. [2]

Expected responses

- Maintains balance of ecosystem – by protecting water resources/reduces pollution / forms and protects the soil / helps ecosystem recover from disaster.
- Provides biological resources – by providing food, clothing and shelter / medicines/industrial materials/breeding stock/diversity of species, ecosystems and genes.
- Provides social benefits – such as recreation, tourism, cultural value, and education and research.
- Improves productivity – forms and protect the soil/ protect water resources.
- Prevents extinction of species – by enabling organisms to adapt to changes in the environment, and provides wide range of materials and foods for survival. [2]

Comments

This question fairly done by all Centres. Most candidates were giving correct importance but then give an explanation for a different point where candidates were only awarded one mark for the correct importance. A common responses for such cases was 'balance ecosystem to provide food ,clothing and shelter

Question 4

- (a) **Explain the importance of transpiration in plants.** [2]

Expected responses

Water is lost through leaves - to regulate plant temperature - to allow absorption of nutrients in roots

Comments

This question proved to be challenging to most candidates. Most candidates stated the importance instead of explaining. Some candidates defined photosynthesis. Other responses were 'loss of water which reduce the process of photosynthesis and help plants to grow in their final place'.

- (b) **Discuss the effect of humidity on plant growth.** [2]

Expected responses

High humidity – spread of fungal diseases

Low humidity- increases evapotranspiration (any one)

Comments

This question also proved to be challenging for most candidates. Most candidates failed to give the magnitude of the humidity. They gave responses such as 'humidity decreases transpiration which was not accepted. Another common response that was not accepted was 'reduce drying of crops'.

Question 5

- (a) **State any two characteristics of a loamy soil which makes it suitable for vegetable production.** [2]

Expected responses

- Well aerated
- Well drained/good water holding capacity
- Fertile soil/ more nutrients/ more organic mater
- Easy to cultivate (any two)

Comments

Well done by most candidates in all Centres. Some few candidates described the soil particles that it is soft and fine which is incorrect.

- (b) **Explain why it is important for farmers to know the pH of the soil?** [2]

Expected response

To determine acidity/alkalinity - to allow soil treatment/to select suitable crop/to know which fertiliser to apply.

Comments

Most candidates responded well to this question. Most candidates gave the correct without describing pH which led them to miss 1 mark.

Question 6

- (a) **State three problems encountered during harvesting which can result in the loss of yield?** [3]

Expected responses

- Harvesting at the wrong time /harvesting too early /late
- Incorrect harvesting method.
- Eaten by animals

- Stolen by thieves

Comments

This question was poorly done by most candidates. Most candidates gave the enemies of stored produce. Common wrong answers included 'cobs fall down, shortage of storage area and climate.

- (b) **Name any one chemical used to treat stored grain** [1]

Expected responses

- Phostoxin; Actellic 2% Dust (Blue Cross Dust); Lihawu; Fumaphos

Comments

This question was poorly done. Very few candidates were able to name the chemical used to treat stored grain. Most incorrect responses were ' weevil tablet or pill'. Other wrong answers included 'blue death, dithane and malathion.

7. **Figure 7.1 shows a type of bee.**



Fig 7.1

Expected response

Queen.

Comments

This question was fairly done. Some candidates gave responses on drone. Few candidates gave responses on *Apis mellifera capensis* or *scutellata*.

- (b) **Explain the reproduction process in honey bees.** [3]

Expected responses

- Drone mate the virgin queen.
- Sperm fertilize virgin queen.
- Queen lay eggs.

Comments

The candidates performed relatively well in this question. Most candidates omitted either the mating or fertilizing stages of the process. Therefore most candidates missed a mark from this question. Most candidates described the mating flights without explaining the process.

Question 8

- (a) **What is supplementary feeding in cattle?** [1]

Expected response

- Giving livestock extra feed /concentrates/silage/ hay
- Provide for nutritional shortages in animal diet.

Comments

Poorly done. Very few candidates were able to describe supplementary feeding. Most candidates stated examples of extra feed which was not accepted.

(b) Which external parasite of cattle carry and spread diseases? [1]

Expected response

- Ticks

Comments

This question was well attempted. Common wrong answers were candidates stating 'tick-borne diseases', 'mites' and 'lice'.

(c) Discuss the effect of overstocking in cattle farming. [2]

Expected responses

To reduce production – because cattle has less to eat/overgrazing.

Comments

This question was poorly done. Most candidates discussed the effect of overstocking on the pasture by stating the cause of soil erosion.

Question 9

(a) What is sexual reproduction? [1]

Expected responses

- Production of plants from seed.
- Fusion of male and female sex gametes.

Comments

This question was poorly done by all centres. Most candidates described sexual intercourse as it happens in human beings.

(b) What are the benefits of planting seeds in trays? [3]

Expected response

- Reduce transplanting shock/roots are not disturbed/seedling has a ball of compost.
- Each seedling grow in its own space/no competition amongst plants.
- Make transplanting easy.

Comments

This part of the question had an average performance from candidates. Common incorrect responses were 'grow well,' reduce weeds' and 'no need for thinning'.

Question10:

Table 10.1 shows characteristics of a layer.

(a) Fill in the missing characteristics.

Table 10. 1

Characteristics	Good Layer	Poor layer
Body	(i).....	narrow and shallow
Eyes	bright and prominent	(ii).....

[2]

Expected response

- (i) full/broad

- (ii) dull/sunken

Comments

Average performance by all candidates and all centres. Responses such as sleepy, active or dim eyes, shiny feathers and shrunken body were common but not accepted.

- (b) **Explain why chickens must be provided with grit** [2]
Expected responses

Small stones - for grinding the food -for easy digestion

Comments

This question proved to be challenging for most candidates. Very few students gave the correct answer. Most common incorrect responses were prevent parasites and diseases, improve production and prevent pecking. Some candidates stated the importance of grit without explaining it.

Question 11

- (a) **Give any two characteristics of a nursery site.** [2]
Expected responses

- Reliable water supply
- Accessibility
- Good soil (*reject fertile soil*)
- Protection from strong wind and livestock

Comments

This question was fairly attempted by most candidates. The most common correct response by candidates was near a water source. Common incorrect responses were 'away from busy areas' and 'away from trees'.

- (b) **Explain how watering should be done on fruit trees.** [2]
Expected responses

- From tree trunk to drip line – that is how far roots spread
- Water every day for the first two weeks – tree is still young and needs to establish itself

Comments

Average performance by most candidates in all Centres. Responses such as 'water around the plant, water in a circle and use a sprinkler were common but not accepted.

Question 12

- (a) **Give five questions which guides a farmer when taking a decision in farm planning?** [5]
Expected responses

- What are you going to produce- variety; breed?
- How much land-labour and capital you need?
- Why do you want to produce it?
- How much should you produce?
- When should you produce it?
- Where will you produce it?
- How will you produce?

(any five)

Comments

This question proved to be challenging for most candidates. Most candidates left the question unanswered. Most candidates also gave prefixes only such as 'what,where, why, when and how. Some responses were statements instead of questions. Other responses were factors ~'

production. Other candidates gave factors influencing decision- making. Some candidates gave questions specifically on planning such as 'why are you planning'?

SECTION B: Essay Questions

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

Question 1

Write an essay on vegetable production using the guidelines below.

Topic of the enterprise [1]

Expected response

Vegetable production. [1]

Comments

A well attempted bullet of the question. Some candidates gave a topic for a specific vegetable.

Introduction (importance of growing vegetables) [1]

Expected responses

Nutritional importance (provides minerals and vitamins); economic importance(source of money).

Comments

This bullet of the question was well answered. Most candidates gave a general importance that vegetables provide food. Some candidates stated that they provide proteins.

Steps of preparing a seedbed [7]

Expected responses

- Choose a sunny site/good soil/near water source
- Mark out the size not more than 1m wide
- Add 1 bucket of compost/manure per square metre and dig it in
- Add 70g of 2:3:2 (22) per square metre and rake it in
- Mark out rows 15 to 20cm apart
- Sow the seeds thinly and cover with soil
- Cover with mulch and water seedbed.

Comments

The candidates performed fairly in this bullet of the question. Most candidates began their discussion from land reclamation with more emphasis on soil preparation. This led them to miss the expected steps. Most candidates gave responses that lack specific details such as types of fertilisers, width of seedbed and spacing between rows. It was also a common response for candidates to 'dig holes' instead of marking rows.

Methods of planting [2]

Expected responses

- Indirect - seedbed/seed trays
- Direct – on the plot

Comments

Well answered bullet of the question. Some candidates stated transplanting as a method of planting.

Management of seedlings on seedbed [6]

Expected responses

Thinning

- Remove weak seedling/ leave strong seedlings
- To avoid overcrowding
- Thin to at least 1cm apart) **(any two)**

Watering

- Water daily and twice on very hot days
- Avoid watering in the late afternoon to prevent damping off
- Amount of water is dependent on weather conditions, soil type, vegetable type and growth stage
(any two)

Pest and disease control

- Spray seedling weekly
- Use mixture of Dithane and Malathion

Comments

The candidates performed fairly well in this bullet of the question. Most candidates had difficulty to describe the control of pests and diseases. Most responses stated 'use pesticides' without the mention of the specific pesticides. Some candidates gave responses on controlling pests and diseases when seen which does not consider 'protective spraying'. Few candidates gave responses on methods of pest control which are biological, cultural and chemical.

Steps followed when transplanting

[8]

Expected responses

- Water seedbed well
- Mark out the rows and make planting stations
- Apply basal dressing fertilizer and mix well with the soil
- Fill planting holes with water
- Use trowel to lift seedlings from seedbed/lift a few seedlings using a trowel
- Plant seedlings to the depth of first set of leaves
- Firm the soil around the seedling and water
- Shade the seedlings

Comments

This part of the question was also done well. Some candidates from some Centres gave steps for transplanting fruit trees. Some candidates would state application of mulch after transplanting instead of shading. A few candidates failed to present the steps in chronological order hence they missed some marks.

General Comments on Essay

This was the most selected essay. Candidates performed fairly on this essay. Most responses from candidates indicated that candidates did the practical in their respective Centres. The challenge was in outlining the steps as required by the question especially 'The steps of preparing a seedbed'.

Question 2:

Write an essay on harvesting and storing maize using the guidelines below.

[1]

Topic of the enterprise

Expected responses

Harvesting and (Safe) Storage of Maize

Comments

This bullet of the question was well attempted. Most candidates were able to draw the correct topic for the question however, some responses were 'Maize Production' and 'Storing Maize' which were not accepted.

Introduction (importance of harvesting) [1]

Expected responses

Reward for hard work/ensure good crop quality; to reduce crop losses/avoid produce getting spoilt.

Comments

This bullet of the question was poorly answered. The common incorrect responses were 'for storing maize and 'to get high yield'. Some responses included to get food, carbohydrates and nutrients.

Signs of readiness of dry maize [2]

Expected responses

- Plant dry up/turn brown
- Cobs/ears hang down

Comment

This bullet of the question was well attempted by most candidates however, some candidates gave responses on signs of readiness on green mealies. Some candidates gave wrong spellings for cob and missed a mark. They misspelled it for cop or comb.

Effects of harvesting too late [2]

Expected responses

- Pest infestation/damage
- Get mouldy/germinate

Comments

This bullet of the question was also well answered although a few candidates stated thieves.

Modern methods of storing maize grains [4]

Expected responses

- Metal drums / tins
- Sacks
- Grain tanks
- Silos

Comments

Most candidates responded well to this bullet, however some candidates were not specific on 'Tank' which was not accepted because there is a mud tank which is a traditional method of storage. Some candidates stated traditional methods of storage commonly mud tank.

Practices that limit grain damage in storage [6]

Expected responses

- Store properly dried crops
- Use clean storage areas
- Maintain storage areas
- Store old and new crops separately
- Stack harvested crops correctly
- Use tanks or drums that are in good condition placed under shade
- Keep stored crops free from moisture
- Check stored crops regularly
- Use chemicals with care

Comments

This bullet of the question was poorly done. Most candidates gave responses such as ‘ avoid rain from getting into grain and use a pill to control rats’. Some candidates gave factors that promote grain damage.

Main enemies of stored crops

[3]

Expected responses

- Insects
- Rodents (rats and mice)
- Moulds

Comments

This bullet of the question was challenging. Most candidate misinterpreted it for enemies of the farmer. Common responses included jealous people, thieves and neighbours. It was observed that some candidates were poor in crucial spellings such as ‘rates’ for rats.

Steps followed when treating maize stored in bags

[6]

Expected responses

- Empty the bag onto the floor
- Sprinkle the correct amount of Actellic 2% Dust
- Shovel heap to other part of floor
- Shovel it back again
- Shovel until you do not see particles of Actellic powder
- Fill clean storage containers with grain.

Comments

This bullet of the question proved to be challenging for most of the candidates. Most responses were on threshing/shelling, winnowing and storing grain. Some would give the practices that limit grain damage in storage.

General Comment On Essay

An average number of candidates attempted this essay. The overall performance was poorly. Candidates showed lack of knowledge on ‘Practices that limit grain damage in storage and ‘Steps followed when treating maize stored in bags’.

Question 3:

Write an essay on goats’ production using the guidelines below.

[1]

Topic of the essay

Expected responses

Goat production/goat management

Comment

This bullet of the question was accessible and almost all candidates were able to draw the correct topic. Few candidates gave Goats.

Introduction (importance of goats)

[1]

Expected responses

Goats provide milk/meat/wool/income/rituals/traditional ceremonies/attire

Comments

Well done by all candidates in all Centres. Most candidates gave the correct introduction.

Breeds to keep [2]
Expected responses
 Saanen;Toggenburg; Angora; Boer; Kalahari; Nguni (any two)

Comments

This bullet of the question was attempted fairly. Most responses on candidates were on the types of breeds such as ‘meat breeds’, ‘dairy breeds’ and ‘dual purpose breeds. Few candidates stated cattle breeds such as Fresian and Jersey.

Things to consider when buying breeding stock [5]
Expected responses

- Buying healthy goats/strong well build legs and feet
- Bright and alert eyes
- Shiny clean coat
- Firm udder/ undamaged teats
- Avoid buying horned goats
- Ask to see production records/resistance to diseases
- Do not buy milking goats if you will not use the milk (any five)

Comments

This bullet of the question had an average performance from candidates. Most candidates mentioned the factors without description of how they should be. They gave responses like consider the ‘udder, testicles, age and health. Some gave incorrect responses which included age, climate and environment.

Features of the goat house [3]
Expected responses

- Provide shelter
- Concrete floor
- Provide ventilation
- Kidding pens
- Communal pen
- Feeding trough
- Watering trough

Comments

This bullet of the question was well attempted by most candidates however, some candidates gave wrong responses like ‘accessibility, far from living quarters and a footbath’.

Signs of heat [5]
Expected responses

- Makes a lot of noise
- Shakes her tail
- Restless
- Allow other goats to mount her/mounts other goats
- Clear sticky liquid from vulva

Comments

Most candidates responded well to this bullet of the question. Some candidates related the signs of heat to signs of labour by including ‘isolate itself’ among the responses. Some candidates would state that nanny goats allow to be ‘mated’ instead of ‘mounted’

Management during pregnancy

[2]

Expected responses

- Dry-off two months before kidding.
- Steaming-up: Give 500g concentrates/supplements in the last two months before kidding.

Comments

This bullet of the question was poorly done by most candidates across the Centres. Common incorrect answers included 'isolate nanny', 'prepare bedding', 'do not let it walk long distances. Very few candidates gave the correct responses.

Feeding goats

[4]

Expected responses

- Variety of feeds: (grasses, vegetables, leaves, maize stalks, ground nuts, tops, yellow maize meal, bread, and kitchen leftovers).
- Elephant grass; leucaena (leguminous pasture plants).
- Salt licks
- Concentrates
- Water

(any four)

Comments

An average performance of candidates on this bullet of the question was observed. Most candidates repeatedly gave the same response in different forms of feed like 'grass', 'vegetables and kitchen left overs.

Caring for young immediately after birth

[2]

Expected responses

- Ensure it gets colostrum
- Remove mucous from mouth for proper breathing
- Treat the navel.

Comments

The bullet of the question was fairly well answered. Most candidates were not specific about ensuring that Kid gets colostrum instead they would state breastfeeding or providing milk. Very few candidates stated treatment of the navel. Others referred to the navel as the umbilical cord. Some candidates gave an incorrect response of bathing the kid after giving birth.

General Comments on Essay

Few candidates attempted this essay. The overall performance was good.

Comments on the question paper

The allocated time of 1hour 45 minutes was adequate for writing this paper. Very few candidates had challenges of time management.

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. There was no common misinterpretation of the rubric.

Advice to Agriculture Teachers

- Ensure that all topics of the syllabus are taught.
- Emphasis on teaching and testing on all levels. Candidates still have challenges to answer higher level questions.
- Emphasis should be made on the usage of technical terms used in agriculture when teaching.
- Engage students with practicals on grain storage.
- Train candidates to relate skills gained from practical activities in theory assessment.
- Encourage students to write correct spellings and proper English grammar.
- Teachers are encouraged to use Examination Reports as they teach their candidates.

JC AGRICULTURE

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 three practical projects worth 60 marks and three 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 3 practicals as expected ie one on vegetables one on crops and the other on livestock. There were exceptions though where LESS THAN 1% OF CENTRES submitted one or two practicals. Some submitted two livestock practicals and one vegetable practical. Others would submit two practicals on crops and one on livestock without any covering letter to justify that. Some centres had no variation on practicals ie there would have the same practical for all students in vegetable production, same practical on crop production and on livestock production.

Teachers file

A majority of centres were able to submit the teacher's files with all the expected contents. Teachers are advised to have one teachers file per school even in schools where there are two teachers for JC.

Contents of the teachers file:

- Blank practicals
- Mark guides for written work
- Diaries for each practical

Registers

Most centres which had their registers submitted were marked correctly, with both columns ticked. Few centres however did not have the column on submitted ticked. Other centres did not have the page totals written. Registers and summary sheets should have same number of candidates. All details on the register have to be filled then signed and 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. A few centres sampled incorrectly, they sampled on the students in class whereas they are to sample according to the students appearing on the register.

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.

Summary Sheets

A majority of the centres submitted well written summary sheets. Some centres had marks higher than the total e.g. 61 over 60. Some centres continue to have either the practical skills mark missing or that of the guided write up reports. Centres are advised to have covering letters for the absent candidates as per the expectations. 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 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, Field Crop Production 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. Other centres submitted all the students cards instead of the sampled ones. Some student cards were found in the teacher file instead of the student file.

PRACTICAL SKILLS

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 in the practical inside. Some centres still continue to have their practicals as short term instead of long term as per the requirements of the syllabus. Some had topics that are irrelevant to the practical exercise.

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, ie is Responsibility, Initiative, Technique, Perseverance and Quality. Few centres had criteria fumbled 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. It is preferred that the criteria are not typed back to back.

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 slight improvement from last year. Some centres had a problem constructing the responsibility descriptors. Some centres just used the example in the syllabus. A considerable number of centres had a problem with constructing descriptors technique and Initiative descriptors. 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 criteria in their own column. The columns of the instrument should be as follows. Descriptors, Scale, Mark allocated and Teachers comment.

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

Few centres had incorrect scaling, for example

Descriptors	Scale	Mark allocated	Teacher's comment
	4/5		
	3/5		
	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. Comments are used to justify the mark allocated by teachers.

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> Crops> Livestock
 - Guided write up also arranged in the same order
 - Evidence ie Diaries, pictures and writtern 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 ie is 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. Teachers file. There should be one teacher's file even in schools where there are 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, crop or livestock.

Introduction

The introduction is expected to be about 5 lines, which should include the importance of the enterprise, the nutritional value, economic importance and the origin. Sometimes 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, some were even of higher level for JC candidates.

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 which is not in JC level. 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 text books. We still have centres that miss out the main input of the 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. It is recommended that centres stick to all activities done up to planting, transplanting or receiving the livestock Learners 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 that they did in 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.

Presentation

The presentation should be done as per objective, data may either be qualitative or quantitative or have a brief explanation below. Some centres 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 with explanations below.

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. There were a few centres that only concluded by writing down problems encountered in the enterprise. It is recommended to conclude per objective.

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.
- Some teachers are new in the programme thus must seek help of the inspectorate and colleagues.
- 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 misplaced, teachers are urged to be very careful
- When filing put student cards first (practicals first then reports), followed by three practicals and three reports.
- Comparison of when doing the report is above the level of the students in JC.
- Some centres type their work which is good, some remove the originality of the students work thus reports are similar for the whole class
- The student's work must be marked and the marked scripts should be submitted
- The report should follow the order of vegetables, field crop and livestock and should be arranged as per the student card
- Teachers are advised to use summary sheets from ECESWA, no need for typing as some students end up being missed out.