



EXAMINATIONS COUNCIL OF ESWATINI
Junior Certificate Examination

AGRICULTURE

516/01

Paper 1

October/November 2022

1 hour

READ THESE INSTRUCTIONS FIRST

The answer sheet provided has your Candidate Name, Centre Number and Candidate Number and it must be signed after completion of the paper.

This paper consists of 40 multiple choice questions. **Four** possible answers are given for each question. Choose the **best** answer and shade your choice in the box provided under the correct letter in soft pencil **HB** on the separate Answer Sheet provided.

You may use a calculator

Read all questions carefully.

Answer **all** questions.

EXAMPLE: 41. Which crop is a staple food in Eswatini?

- A. beans
- B. groundnuts
- C. maize
- D. sorghum

41	A <input type="radio"/>	B <input type="radio"/>	C <input checked="" type="radio"/>	D <input type="radio"/>
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For Examiner's Use	
Marks	

- 1 Which farming system encourages pests and diseases?
- A crop rotation
 - B intercropping
 - C mixed farming
 - D mono cropping
- 2 Which crop rotation guideline ensures maximum use of soil nutrients?
- A crops attacked by the same pest should not follow each other
 - B deep rooted crops should follow shallow rooted crops
 - C grass should be included in the rotational programme
 - D legumes should be included in the rotational programme
- 3 Which career opportunity involves the growing of fruits and indoor growing?
- A agronomist
 - B botanist
 - C entomologist
 - D horticulturist
- 4 **Fig. 4.1** shows a farm implement.



Fig. 4.1

What is the name of the implement shown in **Fig. 4.1**?

- A coulter
- B harrow
- C planter
- D subsoiler

5 Which garden tool is used for turning over material in a compost heap?



A



B



C



D

6 Which safety measure ensures that tools are in good condition?

- A check tools regularly
- B follow safety measures
- C wash tool after use
- D wear gloves during use

7 Which environmental factors are most likely to spread pathogens between animals?

- A dry and warm
- B dry and windy
- C moist and warm
- D moist and windy

8 Which cause of desertification result in the loss of soil nutrients?

- A deforestation
- B forest fires
- C over cultivation
- D over grazing

9 Which farming activity has a potential of causing soil pollution?

- A burning maize stalk
- B excessive cultivation
- C excessive irrigation
- D fertilizer application

10 Which management practice uses herbicides?

- A fertilizing
- B mulching
- C watering
- D weeding

- 11 Which method of pest control involves the use of natural enemies?
- A biological control
 - B chemical control
 - C integrated control
 - D mechanical control
- 12 What does (38) represent in a 2:3:4 (38) +0.5%Zinc fertilizer?
- A percentage of the nitrogen nutrient
 - B percentage of the major nutrients
 - C percentage of the minor nutrients
 - D percentage of the zinc nutrient
- 13 **Fig. 13.1** shows a plant process taking place.



Fig. 13.1

Which process is shown in **Fig. 13.1**?

- A growing
 - B photosynthesis
 - C respiration
 - D transpiration
- 14 Which land class has a percentage slope of 8%-12%?
- A class I
 - B class II
 - C class IV
 - D class VI

- 15 Which is the deficiency symptom of phosphorus in plants?
- A pale leaf
 - B purple leaves
 - C wilted leaves
 - D yellow leaves
- 16 Which soil structure is best for crop production?
- A blocky
 - B crumbly
 - C platy
 - D prismatic
- 17 Which activity speed up decomposition when making a heap compost?
- A adding animal manure
 - B adding a layer of soil
 - C loosening the soil
 - D turning the heap often
- 18 Which are the characteristics of a matured compost?
- A dark brown, blocky, sweet smell
 - B dark brown, crumbly, sweet smell
 - C dark red, blocky, sweet smell
 - D dark red, crumbly, sour smell
- 19 Which regions of Eswatini are acidic?
- A Highveld and wet Middleveld
 - B Highveld and Lowveld
 - C Lubombo and wet Middleveld
 - D Lowveld and Lubombo
- 20 What is the plant spacing within rows when growing sweet potatoes?
- A 10cm
 - B 20cm
 - C 30cm
 - D 40cm
- 21 Which crop is harvested when the lower leaves dry up and fall off the plant?
- A beans
 - B groundnuts
 - C maize
 - D sorghum

- 22** Why should the supporting poles of a maize crib have rat baffles?
- A** to prevent insect
 - B** to prevent livestock
 - C** to prevent mould
 - D** to prevent rodents
- 23** In which season is feed consumption higher in chickens?
- A** Autumn
 - B** Spring
 - C** Summer
 - D** Winter
- 24** Which equipment is used for hatching eggs?
- A** brooder
 - B** heater
 - C** incubator
 - D** nest box
- 25** Which sign determine a fertile egg?
- A** a dark spot on the shell
 - B** a dark spot on the yolk
 - C** an air space in the egg
 - D** a yellow yolk in the egg
- 26** Which of the following is a characteristic of a round dance in bees?
- A** making a buzzing sound
 - B** running in a circle
 - C** running in a semi-circle
 - D** shaking the abdomen
- 27** Which is an advantage of the Swazi top-bar hive?
- A** easy to transport without damaging combs
 - B** harvesting is simple and convenient
 - C** hive is cheaper and easy to make
 - D** more honey of high quality is harvested
- 28** Which breed can be mated at an early age?
- A** Brahman
 - B** Friesian
 - C** Jersey
 - D** Nguni

- 29 Which feed is used in succulent form?
- A fodder
 - B foggage
 - C hay
 - D silage
- 30 Which method of livestock identification involves the pressing of a heated metal on the skin?
- A branding
 - B ear lettering
 - C ear notching
 - D ear tagging
- 31 Fig. 31.1 shows a rabbit breed.



Fig. 31.1

What is the name of the breed shown in figure 31.1?

- A Californian
 - B Chinchilla giant
 - C Flemish giant
 - D New Zealand white
- 32 Which rabbit disease is characterized by swollen teats?
- A coccidiosis
 - B ear canker
 - C mange
 - D mastitis
- 33 At what age are does ready for mating?
- A 5 months
 - B 6 months
 - C 7 months
 - D 8 months

- 34** In which part of the goats' digestive system does digestion occur?
- A** abomasum
 - B** omasum
 - C** reticulum
 - D** rumen
- 35** Which goat feed is an excellent source of protein?
- A** elephant grasses
 - B** leucaena plant
 - C** maize meal
 - D** salt lick
- 36** Which is the most effective method of controlling invasive weed?
- A** burning the plants
 - B** cutting the plants
 - C** feeding it to livestock
 - D** uprooting the plants
- 37** What term defines the growing of trees and crops on the same land?
- A** agroforestry
 - B** biodiversity
 - C** desertification
 - D** rotation
- 38** Which is the best soil pH range for agroforestry?
- A** 3.0-3.5
 - B** 4.0-4.5
 - C** 5.0-7.5
 - D** 8.0-9.5
- 39** What shape should be the planting hole of a fruit tree?
- A** a circle
 - B** a rectangle
 - C** a square
 - D** an oval
- 40** Which marketing operation ensures that agriculture produce is available throughout the year?
- A** advertising
 - B** grading
 - C** packaging
 - D** storage

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