



EXAMINATIONS COUNCIL OF ESWATINI  
Junior Certificate Examination

**AGRICULTURE**

**516/01**

Paper 1

**October/November 2023**

**1 hour**

Additional material: calculator

**READ THESE INSTRUCTIONS FIRST**

The answer sheet has your 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.

Read all questions carefully.

Answer **all** questions.

**EXAMPLE:** 41. How long is the gestation period in rabbits?

- A. 18 days
- B. 25 days
- C. 30 days
- D. 60 days

|    |                            |                            |                                       |                            |
|----|----------------------------|----------------------------|---------------------------------------|----------------------------|
| 41 | A<br><input type="radio"/> | B<br><input type="radio"/> | C<br><input checked="" type="radio"/> | D<br><input type="radio"/> |
|----|----------------------------|----------------------------|---------------------------------------|----------------------------|

**For Examiner's Use**

**Marks**

- 1 Which farming practice may lead to a decline in market prices?
- A crop rotation
  - B intercropping
  - C mixed farming
  - D monocropping
- 2 Which of the following is an advantage of commercial farming?
- A increase food production
  - B provides food for poor household
  - C reduces dependence on buying food
  - D surplus food is sold for cash
- 3 Which tool is used for cutting small branches and twigs?
- A axe
  - B pickaxe
  - C pruning shear
  - D slasher
- 4 Which management practice prevents rusting in tools?
- A keep tools in an orderly way
  - B keep tools under good condition
  - C paint tools during off season
  - D regular check for cracks and breaks
- 5 Which term describe the gradual increase in the overall temperature of the earth's atmosphere?
- A climate change
  - B global warming
  - C greenhouse effect
  - D high temperature
- 6 Which environmental factor increases the rate of transpiration?
- A high frost
  - B high humidity
  - C high rainfall
  - D high wind
- 7 What is the first step in land reclamation?
- A burn plant residue
  - B cut down trees
  - C drain waterlogged soils
  - D remove the stump

- 8 Which of the following activities makes seedlings stronger and can withstand heat?
- A fertilization
  - B hardening off
  - C shading
  - D transplanting shock
- 9 How often should seedlings be sprayed to protect them from diseases?
- A daily
  - B hourly
  - C monthly
  - D weekly
- 10 Which watering practice encourages shallow root system?
- A early watering
  - B even watering
  - C late watering
  - D light watering
- 11 Which pest control method is practiced when making snail traps?
- A biological control
  - B chemical control
  - C cultural control
  - D integrated control
- 12 Which is the main product of photosynthesis?
- A carbohydrates
  - B carbon dioxide
  - C chlorophyll
  - D water

13 Fig 13.1 shows a type of soil structure.



Fig 13.1

Which soil structure is indicated in Fig 13.1?

- A blocky structure
- B crumby structure
- C prismatic structure
- D single grain structure

14 Which material prevents soil capping?

- A fertilizer
- B lime
- C mulch
- D weeds

15 Which plant nutrient is in short supply in most Eswatini soils?

- A calcium
- B phosphorus
- C sulfur
- D zinc

16 Which chemical substance directly increase plant growth?

- A fertilizer
- B herbicide
- C lime
- D pesticide

17 Which is the first step when making a heap compost?

- A add manure
- B add water
- C fork the soil
- D place the material

- 18 Which soil condition increases the chances of erosion?
- A coarse soil
  - B crumbled soil
  - C heavy soil
  - D sticky soil
- 19 What is the vertical distance of land with 20% slope and a horizontal distance of 200m?
- A 10m
  - B 20m
  - C 40m
  - D 200m
- 20 Which method involves planting in drills?
- A broadcasting
  - B furrows
  - C intercropping
  - D intervals
- 21 **Fig. 21.1** shows a method of planting a crop.



**Fig. 21.1**

Which of the following crops is planted using the method indicated in **Fig. 21.1**?

- A beans
- B maize
- C potato
- D sorghum

- 22 Why are potatoes stored in brown paper bags?
- A to avoid tubers turning green
  - B to keep them moist and warm
  - C to prevent sprouting of tubers
  - D to protect them from moisture
- 23 Which crop storage method is used to dry maize cobs?
- A grain tanks
  - B maize crib
  - C metal drums
  - D mud tanks
- 24 What is the recommended period for feeding starter mash to broilers?
- A 21 days
  - B 28 days
  - C 35 days
  - D 56 days
- 25 Which honeybee lays eggs?
- A drone
  - B king
  - C queen
  - D worker
- 26 Which term describes a family of bees in one hive?
- A apiary
  - B colony
  - C hive
  - D swarm
- 27 Which cattle breed is characterised by a large body, a dark red coat and a broad head?
- A Afrikander
  - B Brahman
  - C Jersey
  - D Nguni
- 28 Which breeding method results in an improvement in young livestock?
- A cross breeding
  - B inbreeding
  - C outbreeding
  - D outcrossing

- 29 What is the function of a burdizzo?
- A castration
  - B dehorning
  - C deworming
  - D disbudding
- 30 Which part of the digestive system of a rabbit secretes bile?
- A caecum
  - B colon
  - C liver
  - D pancreas
- 31 What is the name of a young rabbit weighing between 2.0 kg and 2.3 kg?
- A buck
  - B doe
  - C fryer
  - D kitten
- 32 When is a pregnant rabbit provided with a nest box?
- A a week after mating
  - B a week after weaning
  - C a week before kindling
  - D a week before mating
- 33 How long is the daily heat period in goats?
- A 10-11 hours
  - B 12-18 hours
  - C 21-26 hours
  - D 24-30 hours
- 34 Which type of grass is best for feeding goats?
- A couch grass
  - B elephant grass
  - C thatching grass
  - D weeping love grass
- 35 What causes pastures in the Highveld to be sour?
- A high rainfall
  - B low rainfall
  - C no rainfall
  - D moderate rainfall

36 Fig. 36.1 shows a fruit tree.

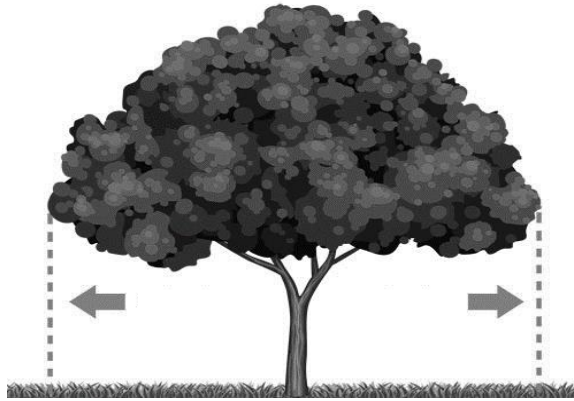


Fig. 36.1

What do the vertical lines represent?

- A base line
- B border line
- C drip line
- D straight line

37 How much 2:3:2 (22) + 0.5% Zn fertilizer is applied to a fruit tree every after three months?

- A 100g
- B 200g
- C 300g
- D 400g

38 What term describes expected costs and returns?

- A budget
- B capital
- C profit
- D record

39 Which type of influence in decision making involves price?

- A economic influence
- B political influence
- C social influence
- D technological influence

40 Which marketing operation makes a product easy to handle?

- A advertising
- B assembling
- C packaging
- D processing