



# EXAMINATIONS COUNCIL OF ESWATINI

## Junior Certificate Examination

AGRICULTURE

Paper 1

516/01

October/November 2020

1 hour

### READ THESE INSTRUCTIONS FIRST

The answer sheet provided must have your Centre Number, Candidate Number and Name.

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. Which vegetable is classified as a leafy vegetable?

- A. beans
- B. beetroot
- C. lettuce
- D. onion

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	

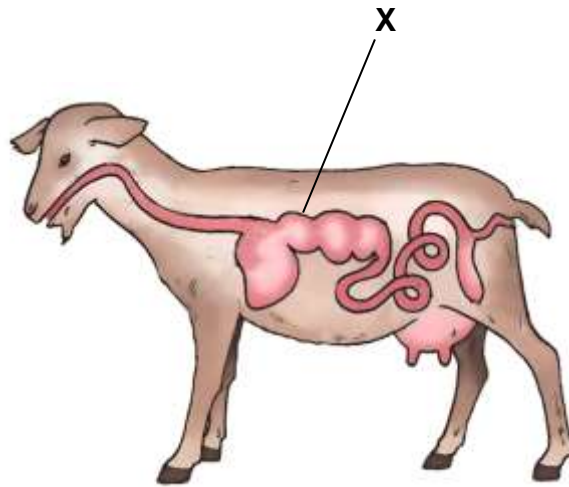
This document consists of **10** printed pages and **2** blank page.

1. Which digging tool turns the soil over?
  - A fork
  - B hoe
  - C rake
  - D spade
  
2. Which farming practice involves growing more than one crop in one field?
  - A crop rotation
  - B mixed cropping
  - C mixed farming
  - D mono-cropping
  
3. Which process involves the use of light energy?
  - A photosynthesis
  - B respiration
  - C translocation
  - D transpiration
  
4. Which plant part controls the entry of gases into the leaf?
  - A air spaces
  - B cuticle
  - C guard cells
  - D stomata
  
5. Which gases contribute to the greenhouse effect?
  - A carbon dioxide and methane
  - B carbon dioxide and nitrogen
  - C methane and sulfur oxides
  - D nitrous oxide and oxygen

6. Which term describes different kinds of a cabbage?
- A breeds
  - B hybrid
  - C species
  - D variety
7. Which of the following is a natural environmental disaster affect plants and animal development?
- A erosion
  - B deforestation
  - C drought
  - D pollution
8. What farming practice encourages the development of tall and weak seedlings?
- A delayed weeding
  - B excessive watering
  - C fertilizer application
  - D prolonged mulching
9. How do earthworms improve the soil structure?
- A blind the soil particles
  - B break up hard soil pans
  - C create pores for aeration
  - D preventing soil capping
10. How deep should a seed be planted in furrows?
- A 0 – 2 cm
  - B 1 – 3 cm
  - C 3 – 5 cm
  - D 6 – 8 cm

11. Which time of the day should transplanting be done?
- A at noonday
  - B in the afternoon
  - C in the evening
  - D in the morning
12. Which is the first process to take place in germination?
- A plumule develops into a shoot
  - B radicle develops into a root
  - C seeds take in water and swell
  - D shoot appears on soil surface
13. Which nutrient in a 2:3:4: (38) + 0.5% Zn fertilizer bag is represented by the ratio 4?
- A nitrogen
  - B phosphorus
  - C potassium
  - D zinc
14. What type of water is suitable when testing soil pH?
- A distilled water
  - B rain water
  - C soil water
  - D tap water
15. Which is a serious pest of maize?
- A bollworm
  - B grasshopper
  - C nematodes
  - D stalk borer

16. Which living organisms are controlled by using herbicides?
- A fungi
  - B insects
  - C pests
  - D weeds
17. **Figure 17.1** shows the digestive system of a ruminant.



**Fig. 17.1**

Name part **X** indicated in **Fig 17.1**.

- A abomasum
  - B omasum
  - C reticulum
  - D rumen
18. Which breed of goats is most resistant to diseases?
- A Angora
  - B Boer
  - C Nguni
  - D Saanen

19. Which sign shows that cotton is ready for harvesting?
- A bolls split open
  - B lint become stained
  - C plant turns brown
  - D seeds are formed
20. Why is a grain tank placed under shade?
- A to avoid moisture formation
  - B to avoid water entry to tank
  - C to control insects damage
  - D to keep the grain warm inside
21. Which of the following is a traditional method of storing crops?
- A maize crib
  - B metal drums
  - C metal tank
  - D mud tank
22. Which factor is considered when choosing a site for a poultry house?
- A availability of the market
  - B enough space for each bird
  - C future expansion plans
  - D protection from weather
23. Which cattle breed is the best beef producer?
- A Brahman
  - B Friesian
  - C Nguni
  - D Simmental

24. Which conditions are suitable for the storage of eggs?
- A cool and dry place
  - B cool and moist place
  - C warm and dry place
  - D warm and moist place
25. Which disease control measure is used on imported livestock?
- A blood smear
  - B cordon line
  - C dip tank
  - D quarantine
26. What is the condition of the natural pastures that grows in the Lowveld?
- A acidic
  - B neutral
  - C sour
  - D sweet
27. Which is the best management practice for invasive plants?
- A burning
  - B poisoning
  - C prevention
  - D spraying
28. Which soil texture has different soil particles?
- A clay textured soil
  - B loam textured soil
  - C sand textured soil
  - D silt textured soil

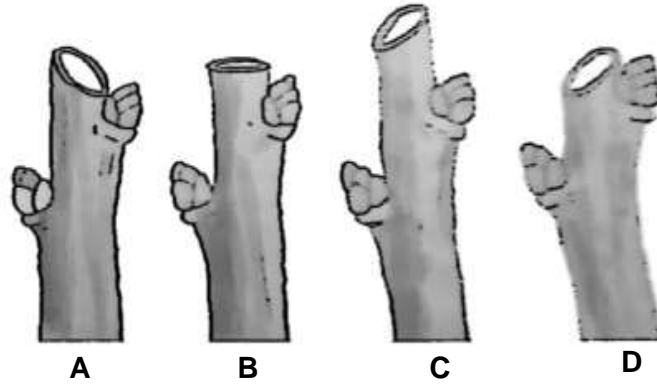
29. Which is the most dangerous enemy for agroforestry?
- A diseases
  - B fire
  - C pests
  - D weeds
30. Which marketing operation helps in the proper pricing of farm products?
- A grading
  - B packaging
  - C processing
  - D storage
31. How does a farmer estimate costs and returns in preparing a farm budget?
- A average cost and average returns
  - B maximize cost and maximize returns
  - C maximize cost and minimize returns
  - D minimize cost and minimize returns
32. Which land class is suitable for crop production?
- A Class I
  - B Class IV
  - C Class V
  - D Class VI
33. Which breed of rabbit is suitable for commercial purpose?
- A Chinchilla Giant
  - B Flemish Giant
  - C New Zealand Red
  - D New Zealand White



34. Which type of honeybee is common in Eswatini?
- A *Apis mellifera capensis*
  - B *Apis mellifera lamarckii*
  - C *Apis mellifera litorosa*
  - D *Apis mellifera scutellata*
35. What is the gestation period for rabbits?
- A 30 days
  - B 90 days
  - C 151 days
  - D 280 days
36. Which factor is important for brood rearing in an apiary?
- A drainage
  - B shelter
  - C roads
  - D water
37. Which breeding system could lead to deformity?
- A cross breeding
  - B inbreeding
  - C out crossing
  - D selective breeding
38. Which region of Eswatini can beans be grown successfully?
- A Dry Middleveld
  - B Highveld
  - C Lowveld
  - D Wet Middleveld

39. **Figure 39.1** shows diagrams of pruned fruit trees.

Which fruit tree shows the correct cut?



**Fig. 39.1**

40. How deep should be a planting hole for a fruit tree seedling?

- A 20 cm
- B 40 cm
- C 60 cm
- D 80 cm

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