

EXAMINATIONS COUNCIL OF SWAZILAND

Junior Certificate Examination

CANDIDATE
NAME

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CENTRE
NUMBER

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CANDIDATE
NUMBER

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AGRICULTURE

516/01

Paper 1

October/November 2018

1 hour

READ THESE INSTRUCTIONS FIRST

Write your Centre number, candidate number and name on the answer sheet provided.

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 class of land has a percentage slope of 5% - 8%.

- A. Class II
- B. Class III
- C. Class IV
- D. Class V

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

This document consists of **9** printed pages and **3** blank pages.

SECTION: A

1. What is commercial farming?
 - A. producing animals in small scale to sell and get cash
 - B. producing crops and animals in large scale for sale
 - C. producing crops on small scale to sell and get cash
 - D. producing food for oneself and may sell the surplus

2. Which garden tool can be used for making ridges?
 - A. fork
 - B. hand fork
 - C. hoe
 - D. trowel

3. Which soil type when rolled into a stick can be bent into a ring?
 - A. clay
 - B. loam
 - C. sandy
 - D. silt

4. At what depth should the soil be cultivated for vegetable production?
 - A. about 10 cm deep
 - B. about 20 cm deep
 - C. about 30 cm deep
 - D. about 40 cm deep

5. Which planting method is suitable for planting grass?
 - A. broadcasting
 - B. furrow
 - C. intercropping
 - D. interval

6. When should top dressing fertilizer be applied?
 - A. 2 to 4 weeks after planting
 - B. 3 to 5 weeks after planting
 - C. 4 to 6 weeks after planting
 - D. 5 to 7 weeks after planting

7. What is the importance of nitrogen in crops?
- A. it is needed for leaves and stems growth
 - B. it makes vegetables healthy and strong
 - C. it promotes growth of roots and flowers
 - D. it promotes resistance and crop quality
8. Which method of pest control is described by spraying vegetables before seeing the insects?
- A. contact spraying
 - B. interval spraying
 - C. mist spraying
 - D. protective spraying
9. Which of the following is a minor plant nutrient?
- A. calcium
 - B. magnesium
 - C. molybdenum
 - D. phosphorus
10. Which of the following formulas represents the process of photosynthesis?
- A. $\text{CO}_2 + \text{H}_2\text{O} \xrightarrow[\text{Chlorophyll}]{\text{Light}} \text{C}_6\text{H}_{12}\text{O}_6 + \text{CO}_2$
 - B. $\text{CO}_2 + \text{H}_2 \xrightarrow[\text{Chlorophyll}]{\text{Light}} \text{C}_6\text{H}_{12}\text{O}_6 + \text{O}_2$
 - C. $\text{CO}_2 + \text{H}_2\text{O} \xrightarrow[\text{Chlorophyll}]{\text{Light}} \text{C}_6\text{H}_{12}\text{O}_6 + \text{CO}$
 - D. $\text{CO}_2 + \text{H}_2\text{O} \xrightarrow[\text{Chlorophyll}]{\text{Light}} \text{C}_6\text{H}_{12}\text{O}_6 + \text{O}_2$
11. In which part of the flower are female cells formed?
- A. anther
 - B. filament
 - C. ovary
 - D. stigma
12. What is the main cause of soil erosion?
- A. air
 - B. humidity
 - C. temperature
 - D. water

13. Figure 13.1 shows a crop production area.

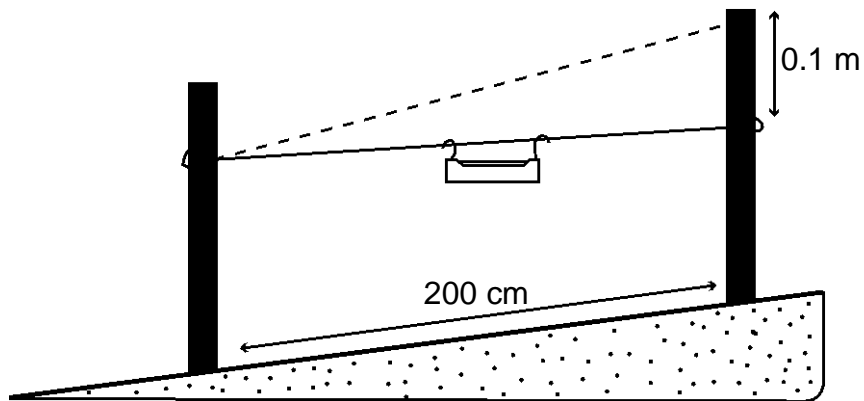


Fig. 13.1

What is the percentage slope of the area?

- A. 5%
- B. 10%
- C. 15%
- D. 20%

14. Which of the following crops cannot be grown successfully in the Lowveld?

- A. Beans
- B. Cotton
- C. Sorghum
- D. Tobacco

15. Which of the following food substances are for body building?

- A. bread
- B. fruits
- C. maize
- D. meat

16. Which disease is caused by not getting enough of any food?

- A. anaemia
- B. goitre
- C. kwashiorkor
- D. marasmus

17. Which environmental factor lead to the increase of fungal diseases?

- A. high humidity
- B. high wind speed
- C. low light intensity
- D. low temperature

18. Which of the following is a cause of desertification?

- A. cultivation
- B. drought
- C. pollution
- D. rainfall

19. Which gas affects the amount of heat reflected back into space?

- A. carbon dioxide
- B. carbon monoxide
- C. nitrogen
- D. oxygen

20. Figure 20.1 shows a diagram of a maize crib.

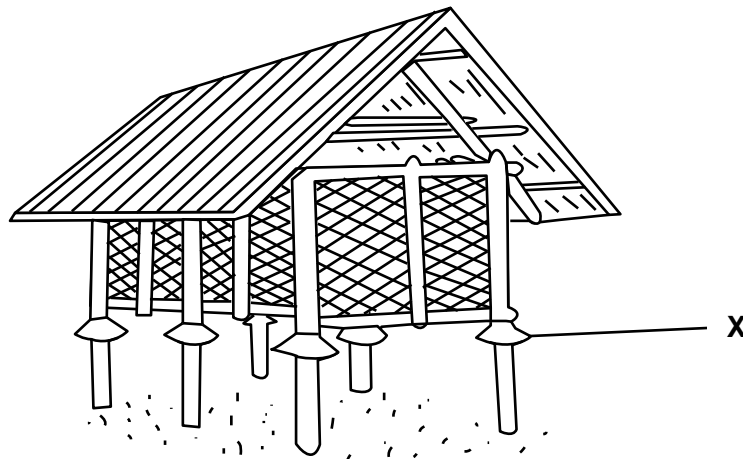


Fig. 20.1

Name the part labelled X

- A. overhang
- B. rat baffle
- C. sloping roof
- D. wire netting

21. What is the poisonous substance produced by mould in groundnuts?

- A. aflatoxin
- B. cancer
- C. phostoxin
- D. toxins

22. How far from the ground should perches be placed in a poultry house?

- A. 30 cm
- B. 60 cm
- C. 90 cm
- D. 120 cm

23. Why is candling done in egg production?

- A. to check the size of the chick
- B. to check if eggs are fertile or not
- C. to increase the lifespan of the egg
- D. to warm eggs so they last longer

24. Which chicken parasite causes droppings to be watery and have blood stains?

- A. coccidiosis
- B. lice
- C. mites
- D. roundworm

25. What is the process of removing old branches on a fruit tree to encourage the growth of new ones?

- A. budding
- B. grafting
- C. layering
- D. pruning

26. Which is the best region for agro-forestry?

- A. highveld
- B. lowveld
- C. lubombo
- D. middleveld

27. What is the main purpose of growing pine?
- A. mining timber
 - B. fencing poles
 - C. pallet wood
 - D. pulp wood
28. Which members of a bee colony has the function of mating with the virgin queen?
- A. drones
 - B. king
 - C. queen
 - D. workers
29. Which term describe the variety of life found on earth within a given ecosystem?
- A. biodiversity
 - B. biosafety
 - C. ecosystem
 - D. food chain
30. Which of the following is the best feed for goats?
- A. grass
 - B. leucaena
 - C. maize stalk
 - D. vegetables
31. Which part of the digestive system is classified as the true stomach?
- A. abomasum
 - B. omasum
 - C. reticulum
 - D. rumen
32. What do we call the mating of unrelated rabbits of the same breed?
- A. cross breeding
 - B. double-crossing
 - C. in-breeding
 - D. out-crossing

33. What is the process of feeling if there are any young ones in the uterus of a rabbit?

- A. fostering
- B. gestating
- C. palpating
- D. test mating

34. Which part of a livestock is affected by mastitis?

- A. heart
- B. liver
- C. lungs
- D. udder

35. Which plant material should not be fed to rabbits?

- A. cabbage leaves
- B. lettuce leaves
- C. potato leaves
- D. spinach leaves

36. Which of the following breeds of cattle is indigenous in Swaziland?

- A. afrikander
- B. brahman
- C. friesland
- D. nguni

37. Figure 37.1 shows identification in livestock.



Fig. 37.1

Which type of identification is indicated in fig.37.1?

- A. branding
- B. lettering
- C. notching
- D. tagging

38. What name is given to cut dry grass given to livestock as feed?

- A. foggage
- B. forage
- C. hay
- D. silage

39. Which of the following is a fixed cost?

- A. buying seed for planting
- B. hiring of a tractor
- C. hiring of temporal labour
- D. hiring permanent labour

40. What is a budget?

- A. a financial record of an enterprise
- B. a record of every day activity
- C. an estimate of expected costs and returns
- D. the difference between costs and returns

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