

443/2 -

**AGRICULTURE**  
**(THEORY)**

- Paper 2

**Nov. 2018 - 2 hours**

Name ..... Index Number .....

Candidate's Signature ..... Date .....

**Instructions to candidates**

- (a) Write your name and index number in the spaces provided above.
- (b) Sign and write the date of examination in the spaces provided above.
- (c) This paper consists of **three** sections; **A, B** and **C**.
- (d) Answer **all** the questions in sections **A** and **B**.
- (e) Answer any **two** questions in section **C**.
- (f) **All** answers should be written in the spaces provided in the question paper.
- (g) **This paper consists of 16 printed pages.**
- (h) **Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.**
- (i) **Candidates should answer all the questions in English.**



**For Examiner's Use Only**

Section	Question	Maximum Score	Candidate's Score
A	1-16	30	
B	17-20	20	
C		20	
		20	
Total Score		90	



**SECTION A** (30 marks)

*Answer **all** the questions in this section in the spaces provided.*

1. State **six** characteristics of a good breeding stock. (3 marks)

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2. State **four** reasons for maintaining farm tools and equipment. (2 marks)

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3. State **four** reasons why a calf should be fed on colostrum. (2 marks)

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4. Give **two** reasons for growing grass around a fish pond. (1 mark)

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5. Name **four** systems of poultry rearing. (2 marks)

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6. State **three** advantages of contemporary comparison method of selecting breeding stock. (1½ marks)

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7. Give the meaning of the following terms as used in livestock breeding:

(a) close breeding (½ mark)

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(b) line breeding (½ mark)

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(c) out crossing (½ mark)

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(d) cross breeding (½ mark)

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8. State **four** livestock rearing practices undertaken in a crush to control parasites and diseases. (2 marks)

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9. Name the dairy cattle breed that

(a) produces the highest milk yield in kilograms (½ mark)

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(b) is fawn/brown coloured with white colour on the face, legs below knees and hocks, tail switch and flanks (½ mark)

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(c) is most suitable for marginal areas with poor pastures. (½ mark)

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10. Distinguish between each of the following breeding practices:

(a) crutching and ringing (1 mark)

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(b) tugging and serving (1 mark)

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11. What is a predisposing factor of a disease? (1 mark)

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12. State **four** candling qualities of good eggs for incubation. (2 marks)

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13. Apart from the roof, name **four** other parts of a building that can be constructed using wood. (2 marks)

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14. State **four** symptoms of internal parasite infestation in livestock. (2 marks)

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15. State the functional difference between the following:

(a) cross-cut saw and rip saw (1 mark)

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(b) wood chisel and cold chisel (1 mark)

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16. Give the meaning of the following terms as used in livestock health:

(a) predisposing factor (1 mark)

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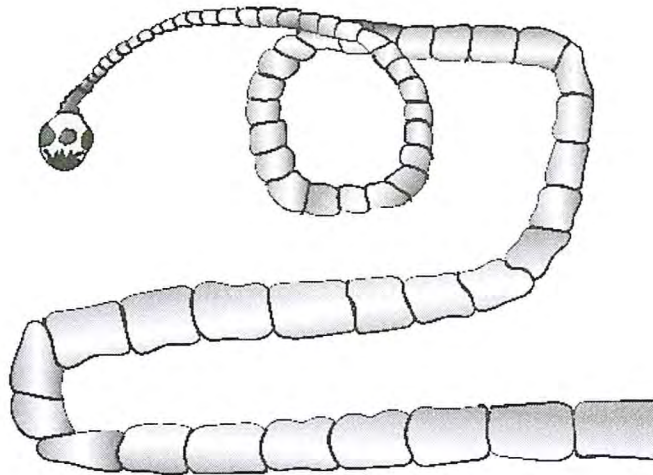
(b) incubation period (1 mark)

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**SECTION B (20 marks)**

*Answer **all** the questions in this section in the spaces provided.*

17. The diagram below shows a livestock parasite.



(a) Identify the parasite. (1 mark)

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(b) Explain how the parasite is passed from

(i) livestock to human beings (1 mark)

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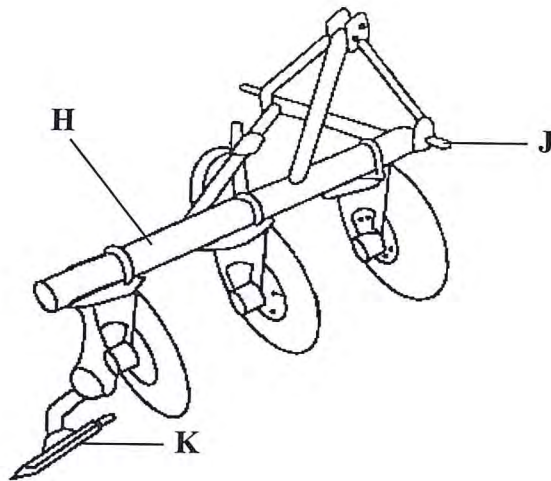
(ii) human beings to livestock (1 mark)

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(c) Explain **two** control measures for the parasite in a zero grazing unit. (2 marks)

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18. The diagram below illustrates a tractor drawn implement.



(a) Identify the implement (1 mark)

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(b) Name the part labelled

**H** ..... (1 mark)

**J** ..... (1 mark)

(c) State **one** function of the part labelled **K** (1 mark)

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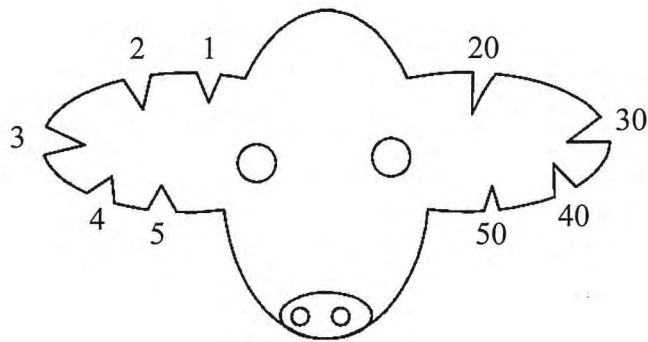
(d) Explain why the implement is suitable for ploughing areas with hidden stones. (1 mark)

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19. A farmer is required to prepare 200 kg of dairy meal containing 18% digestible crude protein (DCP). Using the Pearson's Square Method, calculate the quantity of sunflower seed cake (34% DCP) and maize germ (7% DCP) the farmer requires for the dairy meal. (5 marks)

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20. The diagram below represents a practice of identifying livestock on a farm.



(a) Identify the practice (1 mark)

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(b) Determine the number that identifies the animal represented by the illustration (1 mark)

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(c) Draw a diagram of the animal identified by the number 148 on the farm. (1 mark)

(d) Give **two** reasons why this method of identification is discouraged in livestock rearing. (2 marks)

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**SECTION C (40 marks)**

*Answer any two questions from this section in the spaces provided after question 23.*

- 21. (a) Describe how natural incubation is set up and managed. (8 marks)
- (b) Describe the management of growers in poultry rearing. (5 marks)
- (c) Describe **seven** possible sources of power on a farm. (7 marks)
  
- 22. (a) Describe pneumonia disease under the following sub-headings:
  - (i) causal organism (1 mark)
  - (ii) animals affected (2 marks)
  - (iii) predisposing factors (2 marks)
  - (iv) symptoms (5 marks)
  - (v) control measures. (3 marks)
- (b) Explain **seven** housing requirements for a calf. (7 marks)
  
- 23. (a) State **five** signs of heat in cattle. (5 marks)
- (b) State **five** advantages a spray race has over a plunge dip. (5 marks)
- (c) Give **five** reasons for maintaining livestock healthy. (5 marks)
- (d) Explain **five** factors that determine the amount of food eaten by a livestock animal. (5 marks)

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