**Name Adm No.**

**Date**

**MID TERM SERIES TERM 1-2023**

**FORM 4 AGRICULTURE**

**AGRICULTURE**

**PAPER 2**

**2 HOURS**

**INSTRUCTIONS TO CANDIDATES**

1. Write your name and index number in the spaces provided.

2. This paper consists of three sections. Section A, B and C.

3. Answer all questions in section A and B in the spaces provided.

4. Answer ANY TWO questions in section C in the spaces provided.

**SECTION A – 30 MARKS Answer all questions in this section in the spaces provided**

1. List down two reasons that make Agriculture ( 2 marks )
   1. An art

* 1. A science

1. State one use of each of the following farm tools. ( 2 marks )
   1. Mason’s trowel

* 1. A pair of tin snips

1. Give four reasons why indigenous cattle breeds are more suited to semi-arid areas of Kenya than exotic breeds. ( 2 marks )

1. Name two functions of calcium in dairy cows. ( 1 mark )

1. Prepare 100kg pig ration of DCP of 16% using a cereal balancer of 10% DCP and cotton seed cake of 28%DCP. ( 4 marks )
2. State two ways by which proper feeding contributes to disease control in poultry.

( 1 mark )

1. Outline four methods used to control Tse-tse flies. ( 2 marks )

1. (a) What is meant by the terms zero grazing in livestock production? ( 1 mark )

(b) What is the duration of oestrous cycle in a cow? ( 1 mark )

(c ) If a dairy cow is noticed to be showing first sign of heat at 9.00am. What time

should it be inseminated ? ( 1 mark )

1. Give two reasons why walls of dairy shed should be white washed instead of painting with water or oil paints. ( 1 mark )

1. A part from tractor and electricity, name four other sources of power that may be used

for doing work on the farm. ( 2 marks )

1. State two factors that contribute to depreciation of farm tools and equipment.

( 1 mark )

1. Name four chemical preservatives used to treat the wooden ( 2 marks )

1. Name two methods of identifying piglets in the farm. ( 1 mark )

1. Outline four management practices a farmer should undertake to ensure maximum number of fish is harvested from a fish pond. ( 2 marks )

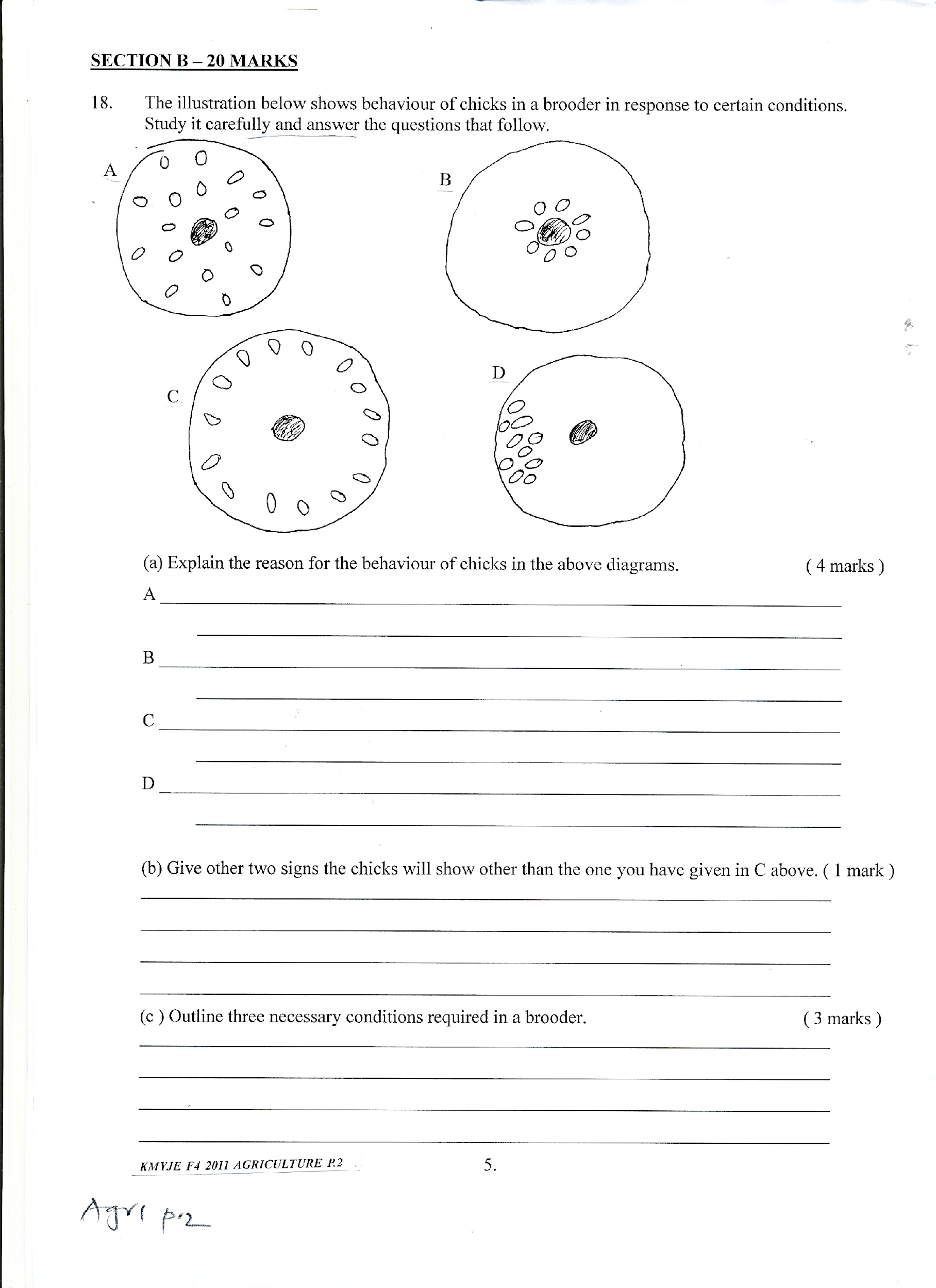
1. Name two methods of extracting honey from the combs. ( 1 mark )

1. Name four benefits of a good farm layout. ( 2 marks )

1. State four symptoms shown by poultry when suffering from new castle disease. ( 2 marks )

**SECTION B – 20 MARKS**

18. The illustration below shows behaviour of chicks in a brooder in response to certain conditions. Study it carefully and answer the questions that follow.



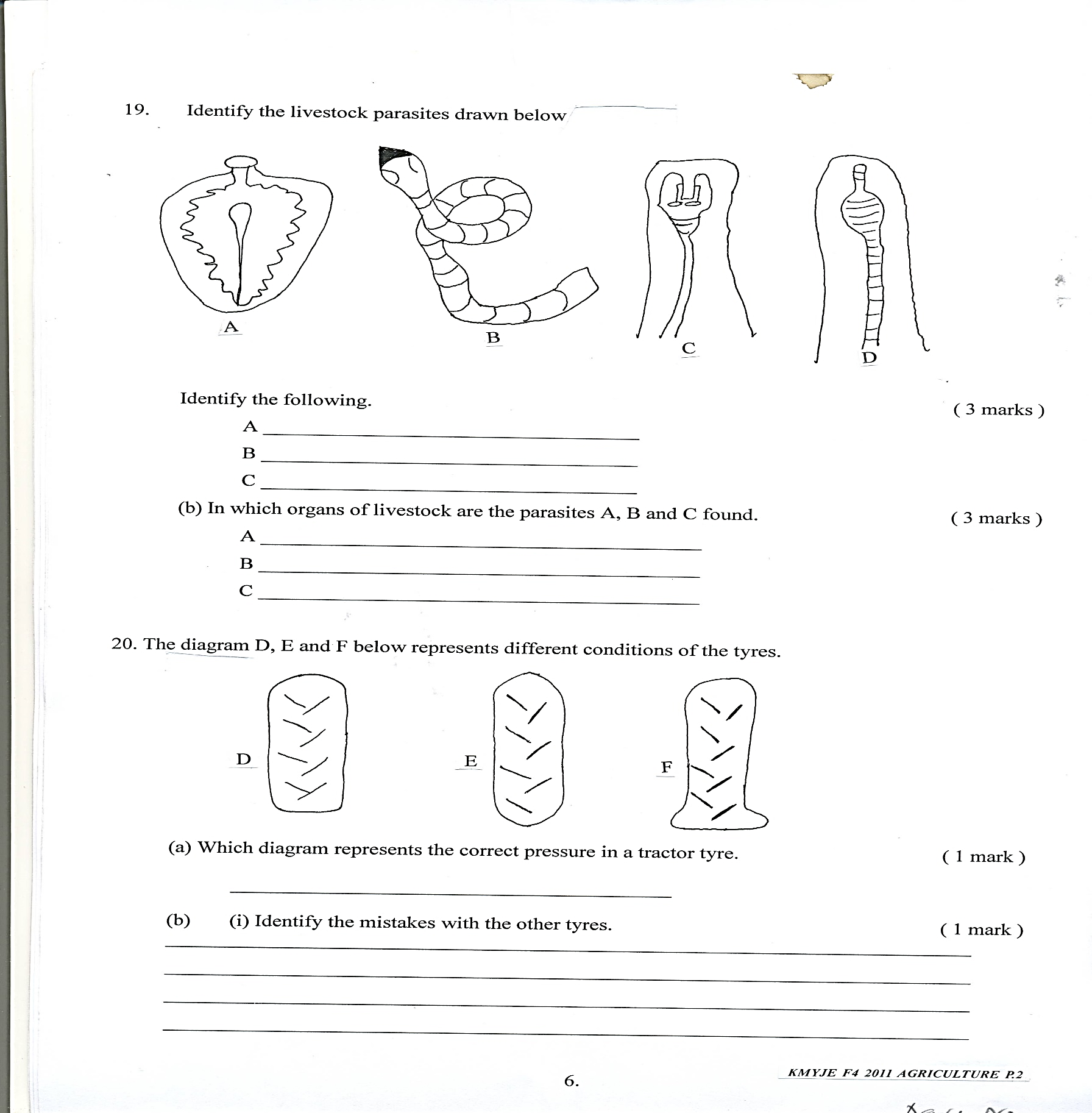
(a) Explain the reason for the behaviour of chicks in the above diagrams. (4 marks )

A B C D

(b) Give other two signs the chicks will show other than the one you have given in C above. (1 mark)

(c ) Outline three necessary conditions required in a brooder. ( 3 marks )

19. Identify the livestock parasites drawn below.



Identify the following livestock parasites. ( 3 marks )

A

B

C

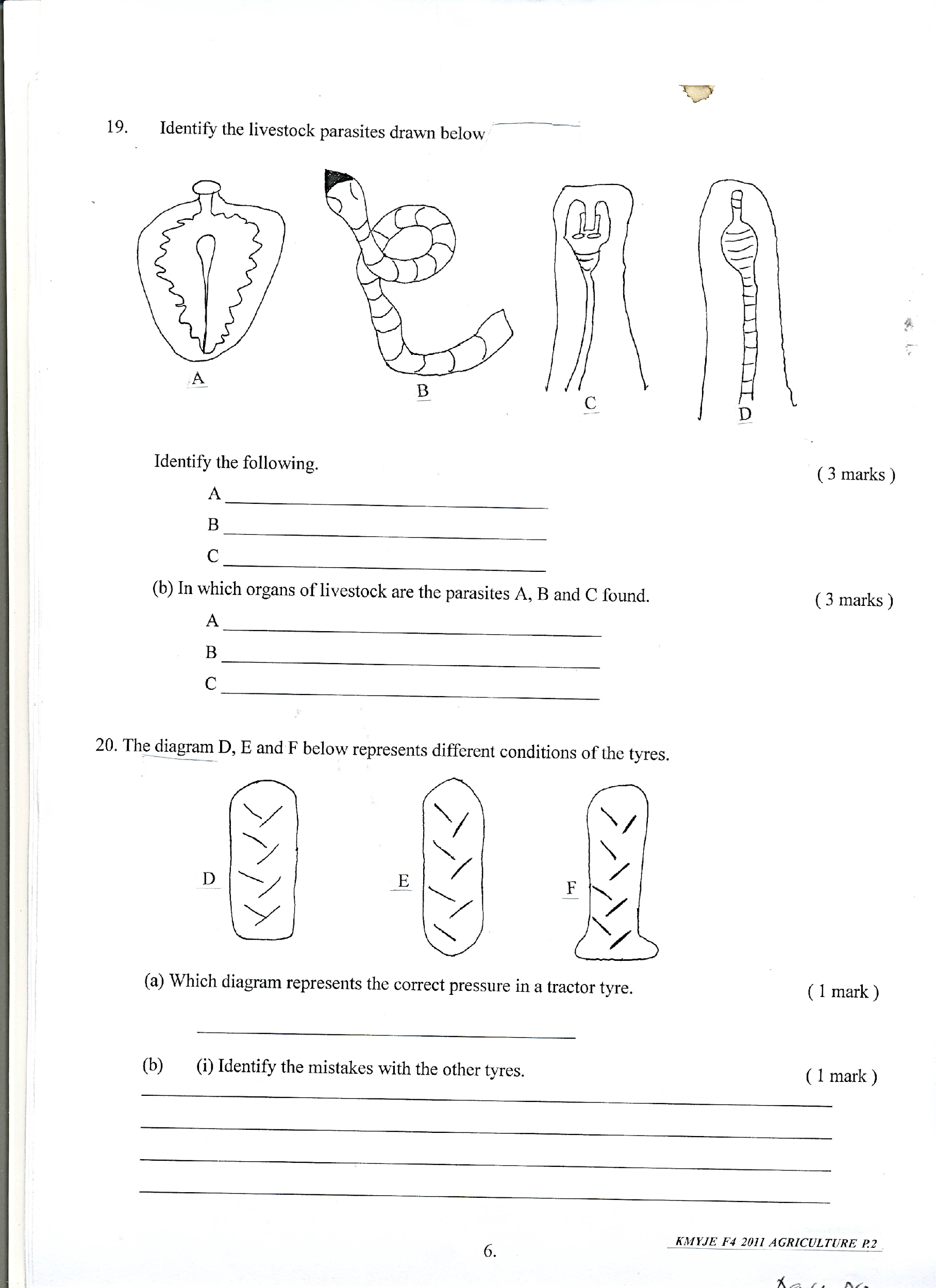
(b) In which organs of livestock are the parasites A, B and C found. ( 3 marks )

A

B

C

20. The diagram D, E and F below represents different conditions of the tyres.



(a) Which diagram represents the correct pressure in a tractor tyre? (1 mark

(b) (i) Identify the mistakes with the other tyres. (1 mark)

(ii) Give the correction measure for each tyre mentioned in b(i) above. (1 mark)

21. Give three maintenance practices that should be carried out on a grain storage structure. (3 marks)

**SECTION C – 40 MARKS**

**Answer any two questions in the spaces provided after the questions**

22. (a) Describe construction of a movable calf pen under the following sub-headings.

(i) Selection and construction materials

(i) Requirements of a calf pen (12 marks)

(b) Describe the management of a dairy calf for the first week after calving. (8 marks)

23. (a) Outline any seven factors that would determine the use of jembe instead of use of

a disc plough in primary cultivation. (6 marks)

(b) State seven structural difference between petrol and diesel engines. (14 marks)

24. Explain **ten** management practices that a farmer could carry out to improve milk

production in a low yielding dairy cow. (20 marks)