**NAME ………………………………………………………INDEX NO……………………………**

**SCHOOL………………………………………………………SIGNATURE………………………**

**443/2**

**AGRICULTURE**

**PAPER 2**

**JULY/AUGUST -2016**

**TIME: 2 HOURS**

***KAKAMEGA SOUTH SUB-COUNTY JOINT EVALUATION -2016***

***Kenya Certificate of Secondary Education (K.C.S.E)***

**443/2**

**AGRICULTURE**

**PAPER 2**

**JULY/AUGUST -2016**

**TIME: 2 HOURS**

**INSTRUCTIONS TO CANDIDATES**

1. Write your name, school and index number in the spaces provided above
2. Sign and write the date of the examination in the spaces provided above
3. This paper consists of THREE sections A,B and C
4. Answer all the questions in section A,B and any TWO in the section C
5. All the questions should be answered in the spaces provided

**FOR EXAMINERS USE ONLY**

|  |  |  |  |
| --- | --- | --- | --- |
| **SECTION** | **QUESTION** | **MAXIMUM SCORE** | **CANDIDATES SCORE** |
| A | 1 -17 | 30 |  |
| B | 18 – 21 | 20 |  |
| C |  | 20 |  |
|  | 20 |  |
|  | **TOTAL** | **90** |  |

***This paper consists of 9 printed pages. Candidates should check the question paper to ensure that all pages are printed as indicated and no questions are missing.***

**SECTION A:30 MARKS**

***Answer ALL questions in this section in the spaces provided***

1. Name **two**  viral diseases that affect each of the following livestock

(a)Cattle (1mk)

………………………………………………………………………………………………………………………………………………………………………………………………………………

(b)Poultry (1mk)

……………………………………………………………………………………………………………………………………………………………………………………………………………….

1. Name **one** intermediate host for each of the following livestock parasite.

(a) Liverfluke (Fasciola spp) ( ½ mk)

……………………………………………………………………………………………………………………………………………………………………………………………………………….

(b)Tape worm (Taenia spp) ( ½ mk)

……………………………………………………………………………………………………………………………………………………………………………………………………………….

1. State **four** importance of colostrums to a newly born calf (2mks)

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….

1. State **four** harmful effects of ticks in livestock rearing (2mks)

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1. Give the difference between raddling and crutching in sheep management (1mk)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

1. State  **four** importance for castrating a male goat (2mks)

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….

1. State **four** limitations of using hydroelectric power on the farm (2mks)

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….

1. State **four** reasons for care and maintaining a wheelbarrow in good working condition(2mks) ………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….
2. Name **two** predisposing factors of foot rot diseases in livestock (1mk)

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………..

1. Name **two** hormones that affect milk let down in dairy cattle (1mk)

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….

1. State **four** conditions that may lead to a farmer using animal drawn ox-plough than tractor drawn mould board plough (2mks)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

1. State **four** uses of concrete in construction of farm building and structures (2mks)

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….

1. Give f**our** microbial activities in the rumen of cattle (2mks)

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………..

1. State **four** reasons for swarming of bees ` (2mks)

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….

1. List **four** problems associated with air cooled engines (2mks

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

1. State **fou**r effects of lack of proteins in livestock (2mks)

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….

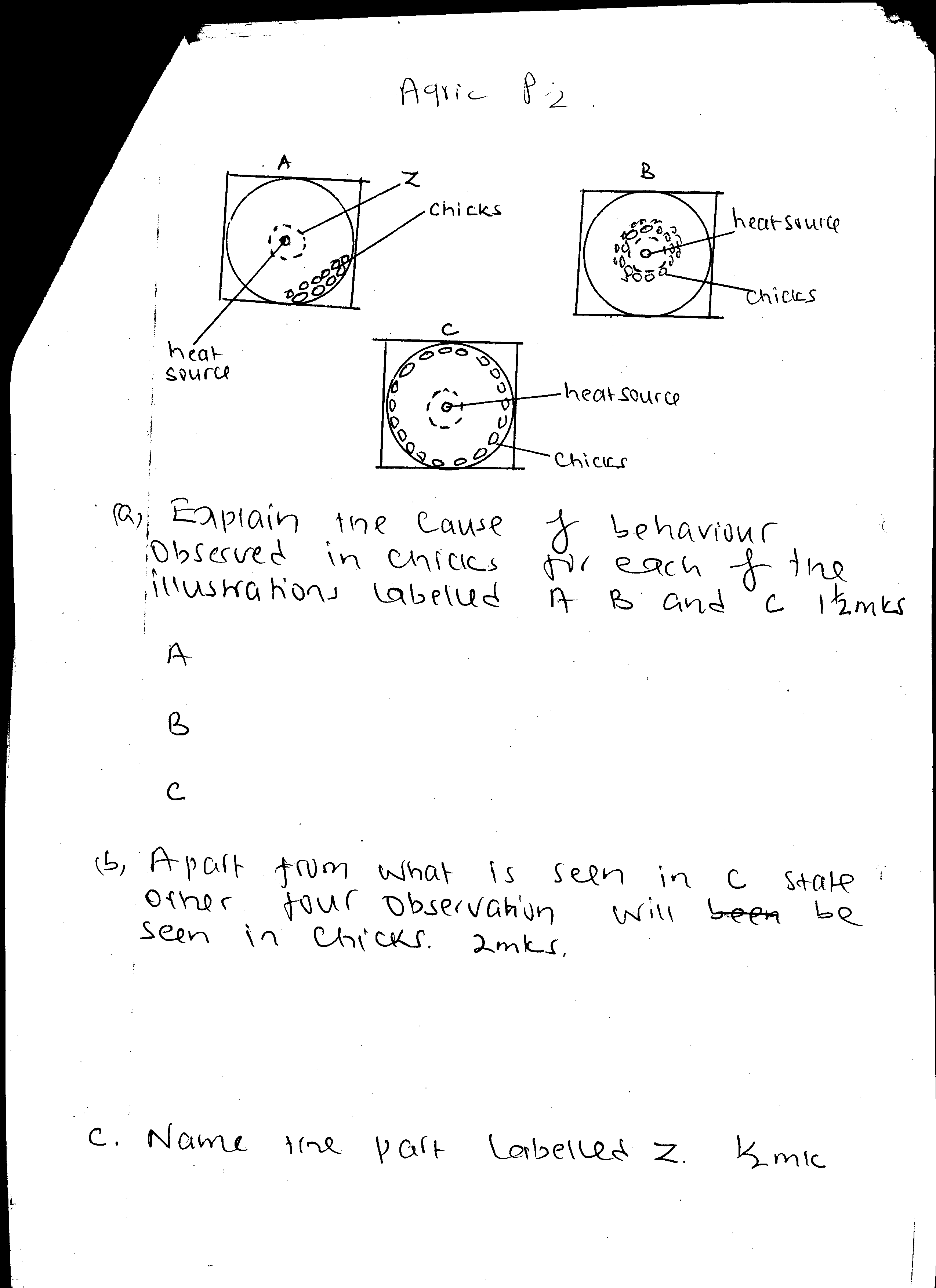
1. Name **four** light chicken breeds (2mks)

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….

**SECTION B(20 MARKS)**

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

1. The following illustration shows the behavior of chicks in a brooder. Study them carefully and answer the questions that follow.



1. Explain the cause of behavior observed in chicks for each of the illustrations labeled A ,B and C (1 ½ mks)

A……………………………………………………………………………………………….

………………………………………………………………………………………………..

B……………………………………………………………………………………………………………………………………………………………………………………………………

C……………………………………………………………………………………………………………………………………………………………………………………………………..

1. A part from what is seen in C state other four observations that will be seen in chicks (2mks)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………...

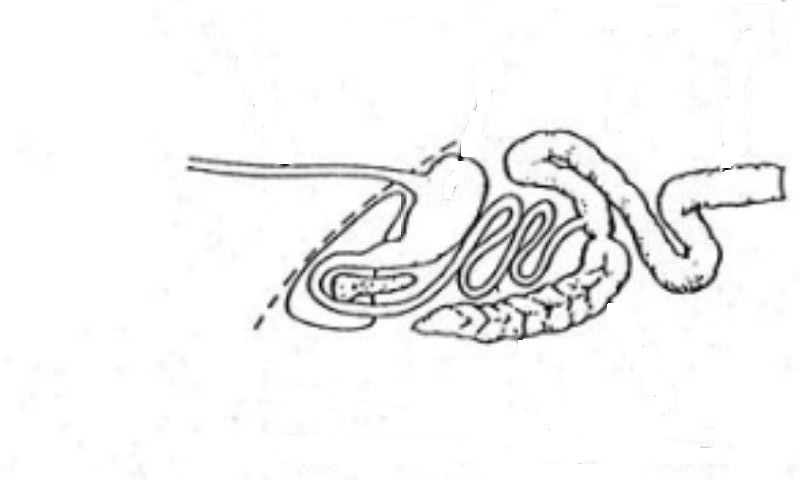
1. Name the part labeled Z ( ½ mk)

…………………………………………………………………………………………

1. Give **one** reason for making the brooder wall round in shape (1mk)

……………………………………………………………………………………………………………………………………………………………………………………………………

1. The diagrams below show the digestive system of cattle .Study it and answer the questions that follow.



**A**

**F**

**G**

**B**

**C**

**D**

**E**

1. Name the parts labeled B,C and G

B……………………………………………………………………………………….( ½ mk)

C……………………………………………………………………………. ………..( ½ mk)

G……………………………………………………………………………………..( ½ mk)

1. State one function of the part labeled D and G

D (½ mk)

………………………………………………………………………………………………………………………………………………………………………………………………………….

B (½ mk)

…………………………………………………………………………………………………

…………………………………………………………………………………………………..

(c) Give one enzyme that is produced by the part labeled E and F

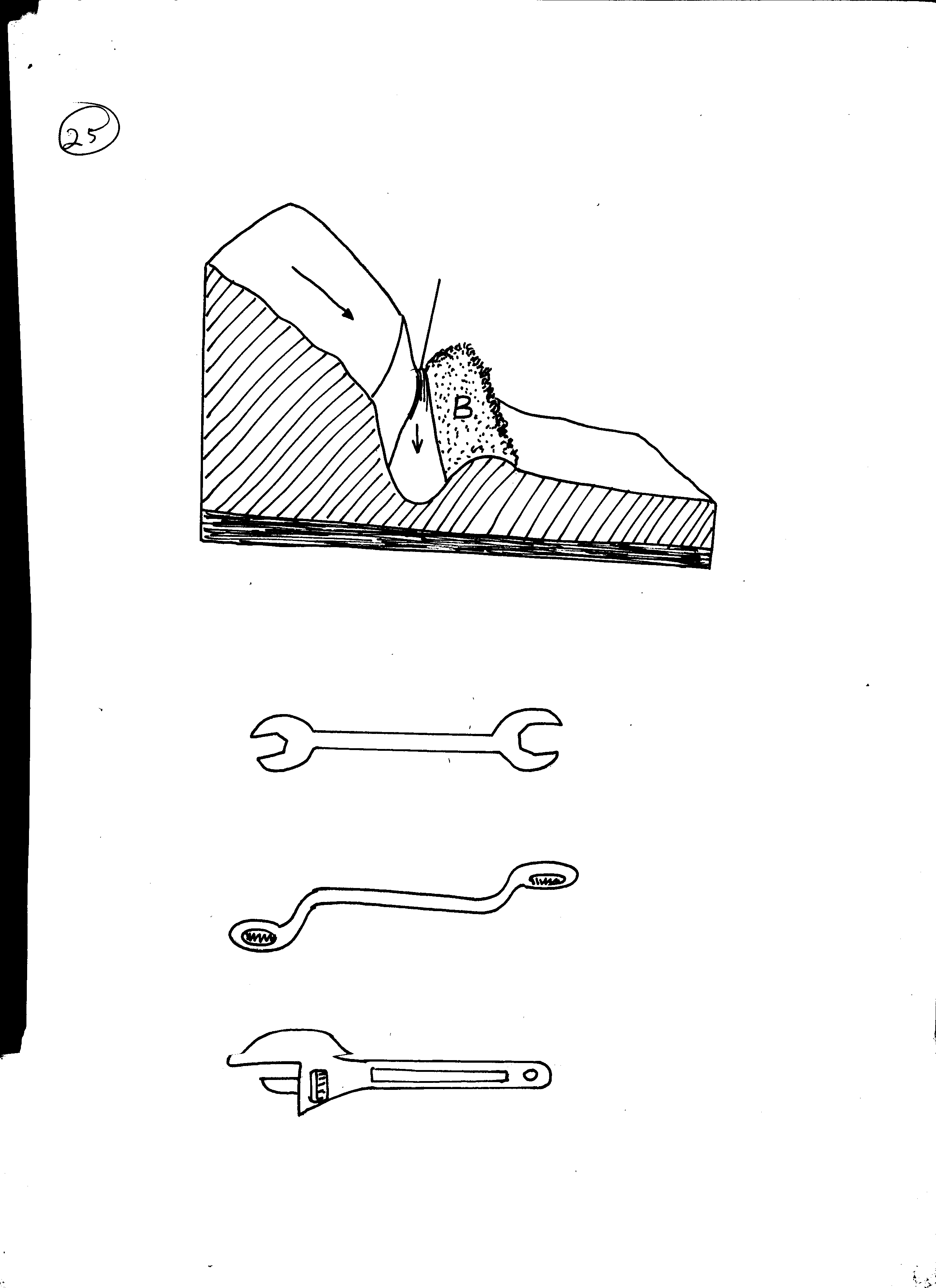
E……………………………………………………………………………………………(½ mk)

F……………………………………………………………………………………………(½ mk)

d) Name three microbial products at part labeled A (1 ½ mk)

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………....

1. The illustration below shows tools used in farm workshop



**A**

**B**

**C**

1. Identify tools A,B and C

A………………………………………………………………………………………..(½ mk)

B………………………………………………………………………………………..(½ mk)

C……………………………………………………………………………………….( ½ mk)

1. State the main function of the tools above (1mk)

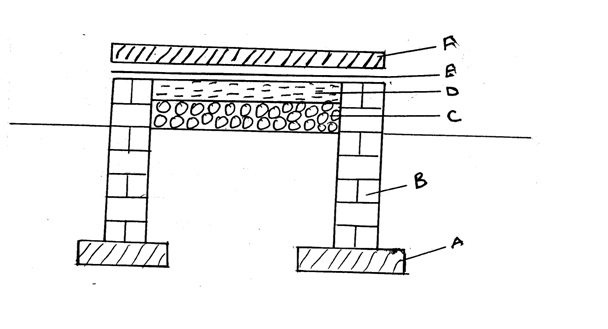
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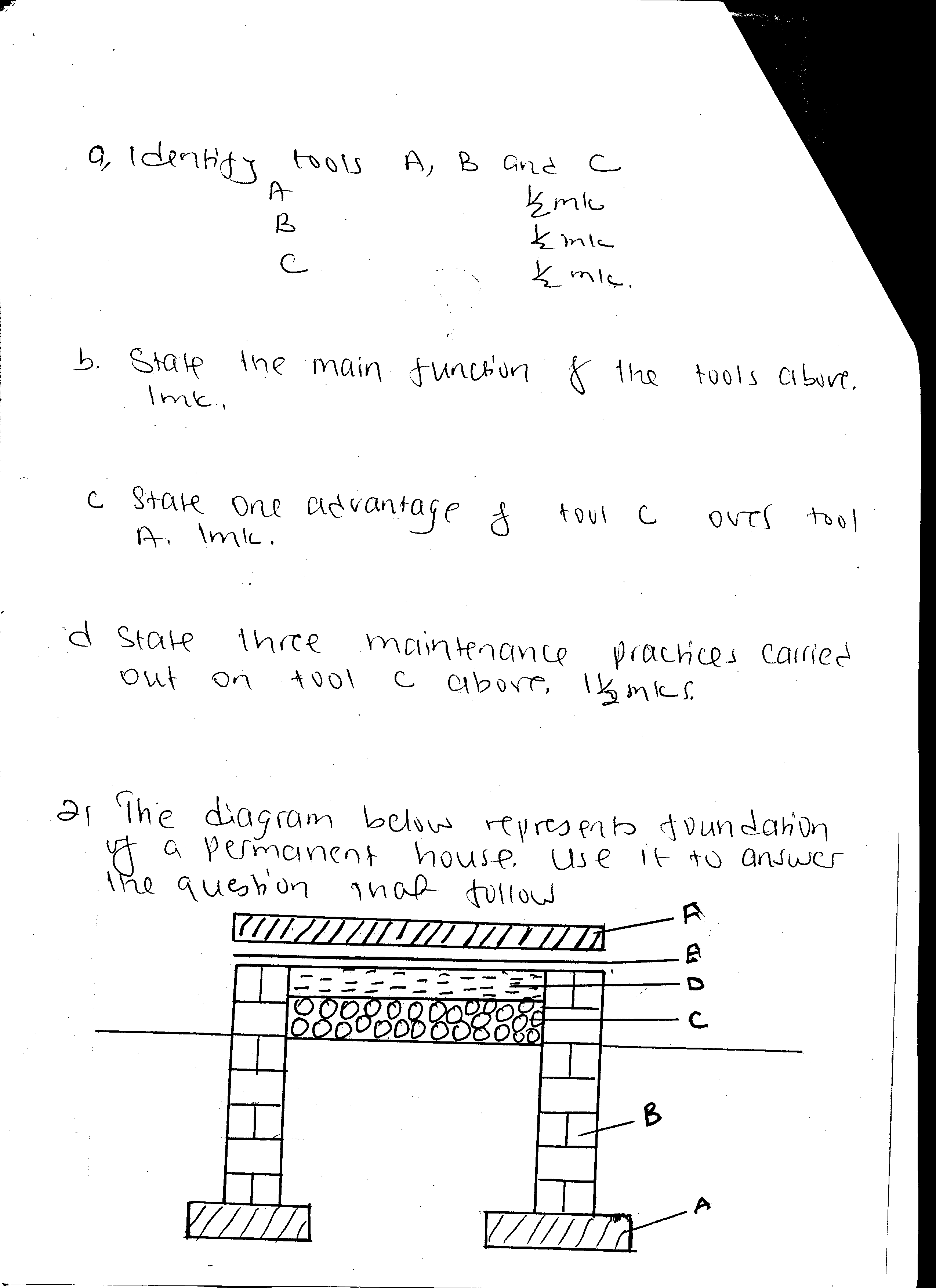
1. State **one** advantage of tool C over tool A (1mk)

……………………………………………………………………………………………………………………………………………………………………………………………………

1. State **three** maintenance practices carried out on tool C above (1 ½ mk)

…………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

1. The diagram below represents foundation of a permanent house. Use it to answers the question that follow.

(i)Name the parts

B…………………………………………………………………………………( ½ mk)

C…………………………………………………………………………………( ½ mk)

D………………………………………………………………………………….( ½ mk)

F…………………………………………………………………………………..( ½ mk)

(ii) State twofactors that determine the thickness of the part labeled A (1mk)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

(ii) State two functional of part E (2mks)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

**SECTION C (40 MARKS)**

1. (a)Describe two feeding practices in artificial rearing of a dairy calf (10mks)

(b)Describe mastitis disease under the following sub- headings

(i)Causal organism (1mk)

(ii)Three signs infection (3mk)

(iii)Six control measures (6mks)

1. (a) Describe **five** signs of internal parasite infestation in livestock (5mks)

(b)Explain **five** factors that should be considered when sitting homestead on the farms (5mks)

(c )State **five** difference between petrol and diesel engine (5mks)

(d)Describe **five** uses of dead fences on the farm (5mks)

1. (a) Giving a relevant example in each case, describe the role of the various component of a balanced diet in livestock nutrition (10 mks)

(b)Explain the importance of each of the function difference between a disc plough and a moldboard plough in land preparation (10 mks)

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….