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University Examinations 2024/2025

SECOND YEAR FIRST SEMESTER EXAMINATION FOR THE CERTIFICATE IN AGRICULTURE

AAC 1401: FARM MACHINERY

DATE: DECEMBER 2024

TIME: 1½ HOURS

INSTRUCTIONS: Answer question *one* and any other *two* questions

QUESTION ONE (30 MARKS)

- a) Define farm machinery (1 mark)
- b) Highlight three functions of a sprayer (3 marks)
- c) Define farm implements (1 mark)
- d) Why is farm power an essential input in agriculture (2 marks)
- e) State four sources of farm power (4 marks)
- f) State four benefits of farm mechanization (4 marks)
- g) Highlight four constraints in farm mechanization (4 marks)
- h) State the function of the following parts of an engine
 - i. Cylinder (1 mark)
 - ii. Sleeve/liner (1 mark)
 - iii. Water jackets (1 mark)
- i) State the implement that are used for primary cultivation (2 marks)
- j) Highlight the cause of hardpan (2 marks)
- k) ii) State the implements used for breaking hardpan (2 marks)

iii) State the problems of having hardpan in the farm

(2marks)

QUESTION TWO (15 MARKS)

a) Highlight five advantages of primary cultivation

(5 marks)

b) Discuss the parts and functions of a disc plough

(5 marks)

c) Discuss the parts and functions of a mouldboard plough

(5 marks)

QUESTION THREE (15 MARKS)

a) State five systems of a tractor

(5marks)

b) Discuss the water cooling system of a tractor

(10marks)

QUESTION FOUR (15 MARKS)

a) Highlight five advantages of secondary cultivation

(5marks)

b) Discuss the two stroke engine cycle

(10 marks)