

NATIONAL OPEN UNIVERSITY OF NIGERIA FACULTY OF AGRICULTURAL SCIENCES DEPARMENT OF CROP AND SOIL SCIENCES 2024_2 EXAMINATION_

COURSE TITLE: FARM POWER AND AGRIC. MECHANIZATION (2 CU) COURSE CODE: CPR 312 TOTAL SCORE: 70 MARKS TIME ALLOWED: 2 hours INSTRUCTION: Answer THREE (3) Questions. Question 1 is Compulsory (30 marks) and any other TWO (2) Questions (20 marks each)

QUESTION 1

- a. Differentiate between primary and secondary tillage (6 marks)
- b. Describe the operation of a hydraulic system in a tractor (8 marks)
- c. Explain four (4) components of duster (8 marks)
- d. Give six (8) major components of an internal combustion engine (8 marks)

QUESTION 2

a. State four (4) types of automatic drinkers and briefly explain two (10 marks)

b. Explain three (3) reasons why draft power requirement data is important in selecting suitable tillage implements (6 marks)

c. Distinguish between a grain drill and a planter (4 marks)

QUESTION 3

- a. Explain five (5) types of harvesting equipment (10 marks)
- b. Discuss five (5) ways of maintaining planters and grain drills (10 marks)

QUESTION 4

- a. Discuss five (5) problems associated with Non-mechanized agriculture (10 marks)
- b. Briefly explain the five (5) sources of farm power (10 marks)