

xv) What is the principle of threshing?

SECTION-C

Note: Long answer type questions. Attempt any three questions. 3x10=30

- Q.3 List various fertilizer application machines/equipment. And explain the functions and working of a fertiliser spreader with the procedure of adjusting the application rate of fertilisers?
- Q.4 Explain in detail the various components, working and functions of a hydraulic sprayer.
- Q.5 Explain the constructional details and working principle of mower. Also explain the alignment and registration of a mower.
- Q.6 What are different types of power threshers? Explain the operation and working of the commonly used thresher.
- Q.7 Explain the constructional details and working principle of a combine harvester. Also explain different adjustments of a combine harvester.

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5th Sem. / (Agricultural Technology)

Subject : Farm Machinery and Implements

Time : 3 Hrs.

M.M. : 100

- Note:** 1. Be brief and to the point.
2. Try to illustrate with examples and sketches.

SECTION-A

Note: Very Short Answer type questions. Attempt any 15 parts. (15x2=30)

- Q.1 a) Threshing Efficiency.
b) Concave Clearance.
c) Sieve loss.
d) Scraper & Leveller.
e) Subsoiler.
f) Hay conditioner.
g) Standardization of farm machines.
h) Hedge trimming.

- i) Puddler.
- j) Weeding.
- k) Fertilizer.
- l) Relief valve.
- m) Pressure Regulator.
- n) Sprayer.
- o) Fumigator.
- p) Mowing & Reaping.
- q) Ledger Plate.
- r) Harvesting.

SECTION-B

Note: Short answer type questions. Attempt any ten parts 10x4=40

- Q.2
- i) Explain the working principle of paddy thresher.
 - ii) What are the different troubles in the use of power thresher? How would you rectify them?
 - iii) What are the different horticultural tools.

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- iv) What are the functions of puddlers and cage wheel?
- v) What is the difference between hay rakes and hay bailers?
- vi) Explain the working principle of Laser Land Leveller.
- vii) How would you estimate cost of operation of using farm machinery?
- viii) List the different land levelling machines along with their specific functions.
- ix) List the different organization dealing in testing and standardization of farm machinery?
- x) What is the procedure for selecting farm machinery for a field?
- xi) How would you do the care and maintenance of dusters.
- xii) Explain the working of groundnut digger.
- xiii) Explain the working of horizontal conveyor reaper.
- xiv) What precautions should be taken for safe use of insecticides and pesticides?

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