

Code No: RT41352

R13**Set No. 1**

IV B.Tech I Semester Supplementary Examinations, February - 2019
FARM MACHINERY AND EQUIPMENTS - II
(Agriculture Engineering)

Time: 3 hours

Max. Marks: 70

Question paper consists of Part-A and Part-B
Answer ALL sub questions from Part-A
Answer any THREE questions from Part-B

PART-A (22 Marks)

1. a) What is harvesting? Explain principles of harvesting. [3]
- b) What is a reaper binder? [3]
- c) Explain principles of threshing? Name the parameters effecting efficiency of a thresher. [4]
- d) What are the advantages and disadvantages of combine? [4]
- e) What is cotton picker and cotton stripper? What is the difference between them? [4]
- f) Write about the types of testing methods. [4]

PART-B (3x16 = 48 Marks)

2. a) Name cutter bar parts and explain them. [8]
- b) Discuss the safety precautions in operation and adjustments of mowers. [8]
3. a) Explain row type forage harvesting equipments. [8]
- b) Explain about tractor mounted vertical Conveyor reaper with a neat sketch. [8]
4. a) Explain different types of threshing cylinders with neat sketch. [8]
- b) What are the factors that affect threshing performance? Explain the development of the combine. [8]
5. a) Draw the schematic diagram of a grain combine? Explain about cutting and threshing mechanism. [8]
- b) What is the difference between snapper and picker-sheller? Explain the gathering and snapping mechanism of a corn harvester. [8]
6. a) Explain about self-propelled sugar-cane harvesters. [8]
- b) What are the types of cotton pickers? Explain cotton pickers with drum type spindle arrangement. [8]
7. a) What are the regular national tests conducted on agricultural machinery? [8]
- b) What are the traditional methods of fruit harvesting? Explain about manual fruit harvesters and manually operated sapota harvesters. [8]