

**KERALA AGRICULTURAL UNIVERSITY**  
**B.Tech (Agrl. Engg) 2013 Admission**  
**V<sup>th</sup> Semester Final - Examination- January-2016**

Cat. No: Fpme.3112

Marks: 50.00

Title: Farm Machinery and equipments II (2+1)

Time: 2 hours

**I Fill up the blanks**

(10 x 1=10)

1. Equipment used for cutting forage crop is known as \_\_\_\_\_
2. Threshers are classified as \_\_\_\_\_ and \_\_\_\_\_ based on their flow of feed material
3. The cutting mechanisms present in harvesters are \_\_\_\_\_ and \_\_\_\_\_
4. An equipment which cuts the crop and put the cut crop in a line is known as \_\_\_\_\_
5. A machine which does the operations of crop cutting and binding simultaneously is known as \_\_\_\_\_
6. Combine harvesters are generally classified as \_\_\_\_\_ type and \_\_\_\_\_ type depending on their locomotive system
7. The tools used for coconut harvesting is \_\_\_\_\_
8. The mechanism which converts the rotary motion in to reciprocating motion in a reaper is \_\_\_\_\_
9. \_\_\_\_\_ is the equipment used for gathering and packing of paddy straw
10. Shaker harvester is an equipment used for harvesting \_\_\_\_\_ crops

**II Write short notes on any FIVE questions**

(5 x 2=10)

1. Write short note on working principle of reaper binder
2. Write about various types of threshers and beaters
3. Brief the adjustments of shear type cutting mechanism
4. Write shortly on forage choppers
5. List the various tools and gadgets used for harvesting fruit crops
6. How a cotton picker functions
7. Describe the working of a potato digger

**III Write short essay on any FIVE questions**

(5 x 4=20)

1. Explain the principles of crop cutting mechanisms
2. Explain the adjustments of shear and impact type cutting mechanism

3. Explain the working principle of maize harvester
4. Explain the different types of threshing mechanisms used in grain threshers
5. Explain the functions carried out by grain combine with the help of a flow diagram
6. Explain the various machineries used for tea and rubber crop
7. Explain the principles of work place layout

**IV Write essay on any ONE**

**(1 x 10=10)**

1. Explain the various types of sugarcane harvesters along with their working principle
2. Explain the various root crop harvesting equipments