



KERALA AGRICULTURAL UNIVERSITY
B.Sc. (Hons.) Ag. 2016 Admission
III Semester Final Examination-February-2018

Engg.2102

Farm Machinery and Power (1+1)

Marks: 50
Time: 2 hours

I Fill in the blanks (10x1=10)

- 1 Thermal efficiency of diesel engine varies from-----
- 2 The diameter of an engine cylinder is called-----
- 3 The device designed to control the speed of an engine within the specified limits is a-----
- 4 A cutter bar of a tractor operated mower normally makes the cutting strokes per minute about-----strokes per minute.
- 5 The high volume sprayer may be in the range of -----litre / ha.

State True or False

- 6 Spark plug is present in diesel engine.
- 7 Splash system is one of the cooling system used in IC engines.
- 8 Solar energy is one of the renewable energy used in agriculture.
- 9 Mould board plough is one of the primary tillage implement.
- 10 Thresher is used to harvest the grains.

II Write Short notes on ANY FIVE of the following (5x2=10)

- 1 What are the main objectives of tillage ?
- 2 What do you mean by petrol engine and diesel engine?
- 3 What are the functions of carburetor?
- 4 What are the main functions of sprayer?
- 5 What are the functions of seed drill?
- 6 What are the purpose of cooling system of IC engines?
- 7 Draw a neat sketch of MB plough and show the parts.

III Answer ANY FIVE of the following (5x4=20)

- 1 Briefly explain the working of two stroke IC engine
- 2 Explain the working of manually operated Knapsack sprayer
- 3 What are the functions of cultivator?
- 4 Briefly explain the working of splash lubrication system.
- 5 Describe the process of calibration of seed drill.
- 6 Explain the working components of disc harrow.
- 7 Briefly explain the functions of differential unit in a tractor.

IV Write an essay on ANY ONE of the following (1x10=10)

- 1 Briefly explain the sources of farm power in India.
- 2 Illustrate the various components of combine harvester.
