



EASTERN UNIVERSITY, SRILANKA

FIRST YEAR SECOND SEMESTER EXAMINATION IN AGRICULTURE - 2011/2012
(November/December – 2013)

AEN 1201 FARM POWER AND MACHINERY (3:30/30)

Answer all questions

Time: 2 hours

- 1 a. Briefly explain the operational characteristics of four stroke diesel engine.
- b. Briefly explain the structure and function of a carburetor in the fuel system.
- 2 a. Planter is normally used for seeds which are larger in size for the planting. Briefly discuss the role of seed metering device in a planter.
- b. Briefly discuss the operational mechanisms of the Combine harvester.
- 3 a. Indicate the preferable conditions for the following tillage implements:
 - (i) Bar share
 - (ii) Slatted mould board
 - (iii) Chain harrow
 - (iv) Chisel plough
 - (v) Sub soiler
- b. Disc plough works well in sticky soil for deep ploughing compare to the Mould board plough. Justify the above statement with the structural and operational features of a disc plough.
4. Write short notes on the following:
 - a. Centrifugal pump
 - b. Battery ignition system
 - c. Clutch as a power transmission component in a farm tractor