

✓

EASTERN UNIVERSITY SRI LANKA
FIRST YEAR FIRST SEMESTER EXAMINATION IN AGRICULTURE - 2013/2014
(September 2015)

AE 1101 – FARM MECHANIZATION

Answer all questions
Time: One hour

01.

- (i) Give a brief note on any five types of different seed metering mechanisms present in planters.
- (ii) Explain the principle of threshing mechanism involved in a combine harvester.

02.

- (i) Briefly explain the operation of a tractor hydraulic system.
- (ii) Give a brief description about internal expanding brakes.
- (iii) A rear wheel rubber tyre tractor moving on a plane smooth surface has a total weight of 25 kN. The wheel base is 2000 mm. The centre of gravity is located 700 mm ahead of rear axle centre line. The pulling force provided by the tractor at a height of 450 mm is 12 kN at a forward speed of 1.45ms^{-1} . If the output power of the tractor is 35 kW, determine the soil reaction on the front wheel and the tractive efficiency.
