

EASTERN UNIVERSITY, SRI LANKA

FIRST YEAR SECOND SEMESTER EXAMINATION IN AGRICULTURE-2016/2017

AE 1201 - FARM MECHANIZATION

Practical Examination

Part I - One hour

Answer all questions

01. A two cylinder four stroke engine has a cylinder diameter of 25cm and stroke bore ratio of 1:6. The clearance volume is 2500 cm^3 and the engine speed is 1200 rpm. If the mean effective pressure is 700 kPa and mechanical efficiency is 70%, calculate;
- (i) The indicated power
 - (ii) The brake power
 - (iii) Compression ratio
 - (iv) Swept volume
02. Briefly explain the structure of a radiator using a labelled diagram (IL).
03. Graphically illustrate the following types of gears.
- (a) Spur gear
 - (b) Helical gear
 - (c) Herringbone gear
 - (d) Bevel gear
 - (e) Worm gear
 - (f) Rack and pinion

Part II - One hour

Spot Examination – 1 hour