



EASTERN UNIVERSITY, SRILANKA
FIRST YEAR SECOND SEMESTER EXAMINATION IN AGRICULTURE 2008/2009
(September/October 2009)
AEN 1201 FARM POWER AND MACHINERY (3:30/30)

Answer all questions

Time: 2 hours

01. (a) Briefly discuss the major components of a petrol fuel system.
(b) Describe the working principle of a carburetor in a four wheel tractor.
02. (a) List the primary and secondary tillage implements used in agricultural practices.
(b) Briefly describe four (04) primary tillage implements.
03. (a) Give a brief note on the types of pumps used to pump water for agricultural practices.
(b) State the operation mechanism of a knapsack sprayer.
(c) Describe the operating principle of a centrifugal pump.
04. (a) List out the simplifying assumptions used in analyzing the stability of a four wheel tractor moving on a plane, level surface.
(b) Briefly describe any two Traction Aids used to improve tractive performance of a tractor
(c) A tractor is moving on a plane level surface. Weight of the tractor is 3000 kg acting 2m from the front wheel. Length between front and rear wheel is 2.5m. Determine the weight transfer in front and rear wheels while the 1000kg pull is given to the tractor on the point of 0.25m from the rear wheel surface contacting point.
