



The Open University of Sri Lanka
Faculty of Engineering Technology
Bachelor of Technology

Final Examination- 2011/2012

AEX5230 Power and Machinery in Agriculture

Date : 02.03.2012
Time : 09.30 - 12.30hrs
Duration : Three (03) hours

SECTION 2: Answer any four (04) questions.

1. a). List out implements which are used by farmers for seed bed preparation.

b). Briefly discuss the importance of animal & human power in agriculture as present oil resources are depleting and its price is hiking.

2. a). Write down importance of rotary tillage in land preparation.

b). Briefly discuss losses in the process of harvesting a field crop.

3. Write down short notes in any three of the following.
 - a). Factors influence by the germination and emergence of seedlings.
 - b). Calibration of seed broadcaster.
 - c). Manual harvesting of mature plants or ear heads in crops.
 - d). Traditional threshing methods in developing countries.

4. a). List out performance parameters of grain threshers.
b). Briefly discuss limitations in portable threshers used by Sri Lankan farmers.

5. a). List out renewable energy sources in Sri Lanka.
b). Identify types of solar dryers available in food drying process.
c). Briefly discuss advantages and disadvantages of hydropower used for the electricity generation.

6. a). List out farm power sources for agricultural processing.
b). Write down the advantages and disadvantages of hiring of farm equipments to carry out crop production processes.
c). Briefly discuss mechanization needs of lowland rice and highland crops cultivation.