

**End Semester/Reappear (Semester III) Examination December 2022**

**Programme: B. Sc. (Hons.) Agriculture**  
**Subject: Farm Machinery and Power**  
**Subject Code: 13A.212**  
**Enrollment No: \_\_\_\_\_**

**Full Marks: 50**  
**Time: 2 Hrs.**

**Section I**

- 1. Short Answer type questions. Answer any four. 4 x 5 = 20**
- Compare Diesel engine with Spark ignition engine with examples.
  - Mentioned the single plate friction clutch with net sketch.
  - Differentiate between Primary tillage & secondary tillage.
  - Illustrate the factors affecting performance of thresher.
  - Sketch the transmission system of a tractor. Mention its functions of the transmission system.
  - Differentiate between conventional energy and Non-Conventional energy.

**Section II**

- Long answer type questions. Answer any two. 2 x 15 = 30**
- Sketch the schematic view of four stroke cycles and elaborate working details of all strokes.
  - Suppose you are going to purchase a tractor. List the basic pre-requisite that you should look into it. Justify your points.
  - List the functions of lubrication in IC Engine. Also, explain the splash lubrication system.
    - Differentiate between Dry air cleaner and oil bath air cleaner.
  - Define Disc Plough and tabulate the advantages and disadvantages of disc plough.
    - Distinguish between hand compression sprayer and rocker sprayer.

\*\*\*\*\*