

SECTION B

2. What are the limiting factors in farm mechanization in India?
3. With a neat diagram describe the fuel system of a diesel engine.
4. What is seed drill? Describe the process of calibration of seed drill.
5. Why a tractor needs a clutch? What is the principle of friction clutch?
6. What are the different types of sprayers? Describe the working of knapsack type sprayer with the help of a neat sketch.

SECTION C

7. Explain the working of four stroke cycle engine with neat sketches. Compare the advantages and disadvantages of four stroke cycle engine and two stroke engines.
8. A four bottom 40 cm M.B. plough has a working depth of 15 cm and draft of 1500 kg. It is working at a speed of 5 km /hr. with the field efficiency of 75 %. Find:
 - a) Unit draft
 - b) Drawbar power
 - c) Theoretical field capacity
 - d) Actual field capacity.
9. Describe the working principle of a combine. Name the important parts of a combine. Give grain flow diagram of a combine.