

(Following Paper ID and Roll No. to be filled in your Answer Books)

Paper ID : 2290070

Roll No.

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B.TECH

Regular Theory Examination (Odd Sem - VII) 2016-17

PRECISION AGRICULTURE AND SYSTEM MANAGEMENT

Time : 3 Hours

Max. Marks : 100

Note : Attempt **all** Sections. If require any missing data; then choose suitably.

SECTION - A

1. Attempt all questions in brief. (10×2=20)
- What do you understand by precision drilling?
 - What do you understand by familiarization?
 - Define ultra low volume spray.
 - Write about 'remote sensing'.
 - Write about use of air chamber in power sprayer.
 - Write the basic components of sprayer.
 - Define transplanting.
 - Write the components of seed drill.
 - Write the problems in selection of machinery.
 - Define GIS.

SECTION - B

2. **Attempt any three of the following : (3×10=30)**
- What are the needs and functional requirement of precision agriculture?
 - Define sprayer and describe quality of sprayers. Also discuss the basic components of sprayers.
 - Define sensors and give their brief classification.
 - Discuss the maintenance of machinery in brief.
 - Write about the PERT and CPM for machinery system management.

SECTION - C

3. **Attempt any one part of the following : (1×10=10)**
- Discuss about familiarization and relate to it with natural resources.
 - What is seed drill? Describe its various components and functions.
4. **Attempt any one part of the following : (1×10=10)**
- What is straw chopper? Write about its components in detail.
 - Explain GIS and its applications in precision agriculture.
5. **Attempt any one part of the following : (1×10=10)**
- What are the functions of system approach in farm machinery management?

- What are the problems in the selection of machinery?
6. **Attempt any one part of the following : (1×10=10)**
- What is a laser guided land leveller? Discuss in brief.
 - What is planter? Write about different type of seed metering devices used in planters
7. **Attempt any one part of the following : (1×10=10)**
- Explain the working of rice transplanter.
 - What are the different methods of sowing crops? Explain 'broadcasting' and 'dibbling'.

