

Total No. of Questions :8]

SEAT No. :

[Total No. of Pages :2

**P1869**

**[4859]-1056**

**B.E. (Electronics)**

**c-ELECTRONICS IN AGRICULTURE**

**(2012 Pattern) (End Sem.) (Semester - I) (404205) (Elective -II)**

*Time :2½ Hours]*

*[Max. Marks :70*

*Instructions to the candidates:*

- 1) Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6 and Q.7 or Q.8.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Assume suitable data, if necessary.

- Q1)** a) Define Data Logger and State its applications in Agriculture. [8]
- b) Draw and Explain block diagram of agricultural robot using virtual instrumentation. [8]
- c) State the factors influencing PH. [4]

OR

- Q2)** a) State types of soil moisture measuring techniques and explain any two in detail. [8]
- b) State the different techniques for measuring PH. Explain any one in detail. [8]
- c) List various types of Sensors used in the field of Agriculture. [4]
- Q3)** a) Explain uses of remote sensing in agricultural and water management sector. [6]
- b) What are the constraints for farmers to adopt precision Agriculture? [6]
- c) Write a note on Farm Management Information System. [6]

OR

- Q4)** a) How precision farming is applicable within fruits & vegetables sectors? [6]
- b) State & explain components of precision farming. [6]
- c) State the applications of GPS in Agriculture. [6]

**P.T.O.**

- Q5)** a) What do you mean by Yield Monitoring & Mapping? [6]  
b) List the types of Spraying Equipment and explain any one in detail. [6]  
c) State the various aspects of crop protection. [4]

OR

- Q6)** a) State various precision Agriculture technologies & its applications. [6]  
b) Discuss Climate control in the Greenhouse for Protected cultivation.[6]  
c) Explain the concept of Weed activated spraying. [4]
- Q7)** a) Write a note on Agricultural weather monitoring system. [6]  
b) Explain the Governance products & services in the field of Agriculture.[6]  
c) What are the benefits of Greenhouse Automation? [4]

OR

- Q8)** a) Describe the Roles of Electronic Governance in Agriculture sector. [6]  
b) Draw & explain Electronic Control System for grape drying process.[6]  
c) List various services provided on Agricultural Portal. [4]

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