

22599

24225

03 Hours / 70 Marks

Seat No.

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- Instructions* – (1) All Questions are *Compulsory*.  
(2) Answer each next main Question on a new page.  
(3) Illustrate your answers with neat sketches wherever necessary.  
(4) Figures to the right indicate full marks.  
(5) Assume suitable data, if necessary.  
(6) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

**Marks**

**1. Attempt any FIVE of the following:**

**10**

- Define the concept of remote sensing.
- Define Drone
- State features of vertical farming?
- Name four crops grown under green house cultivation.
- State two uses of smart phone sensors in agriculture.
- State the use of IOT in Agriculture.
- State components of typical IOT system.

P.T.O.

2. Attempt any THREE of the following: 12
- a) Explain applications of GIS.
  - b) Describe the regulations of drone use.
  - c) Explain process of data acquisition in remote sensing.
  - d) Describe the technique of planting of seeds from air.
3. Attempt any THREE of the following: 12
- a) Describe the different components of drone.
  - b) Explain Hydroponic technique of farming.
  - c) Write note on feeling things.
  - d) Explain the protected cultivation management.
4. Attempt any THREE of the following: 12
- a) Classify smartphone sensors.
  - b) Explain concept of Greenhouse cultivation.
  - c) Explain challenges in adopting vertical farming.
  - d) Explain benefits and constraints of drones in agriculture field.
  - e) Enlist any four types of benches on soil preparation and explain any one.
5. Attempt any TWO of the following: 12
- a) Describe the economics of protected cultivation.
  - b) Differentiate between thinking tags and tag things.
  - c) Describe the process of Remote sensing with neat diagram.
6. Attempt any TWO of the following: 12
- a) Enlist different types of Greenhouse. Explain any two in detail.
  - b) Describe Information system application and extension service application.
  - c) Explain potentials and challenges of IOT in agriculture.
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