23124 3 Hours / 70 Marks Seat No. 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) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall. Marks 1. **10** Attempt any FIVE of the following: a) Explain the term GIS. b) What is drone? c) Define Electric conductivity. d) Name the crop which are mainly grown in polyhouse. (Any four) e) Write the applications of smartphone application used in agriculture. (Any two) Explain RFID. f) g) Explain Thinking Things. 2. Attempt any THREE of the following: 12 a) Explain remote sensing with neat labelled diagram. b) State application of GIS.

c) State the advantages of Remote Sensing.

d) Write the applications of drones in agriculture.

| | | Ma | rks |
|----|----|--|-----|
| 3. | | Attempt any THREE of the following: | 12 |
| | a) | Explain in details the basic components of drones. | |
| | b) | Write the benefits and limitations of drones. | |
| | c) | Explain vertical farming. Enlist which crops are mainly grown in vertical farming. | |
| | d) | Enlist the different techniques of vertical farming and explain any one with suitable diagram. | |
| 4. | | Attempt any THREE of the following: | 12 |
| | a) | Explain in details protected cultivation. | |
| | b) | Enlist different types of Greenhouse. Explain any one in detail. | |
| | c) | List the advantages and limitations of smartphones. | |
| | d) | State the advantages of smartphone applications used in farming. | |
| | e) | Explain Acting things. Enlist its applications. | |
| 5. | | Attempt any <u>TWO</u> of the following: | 12 |
| | a) | Explain applications of remote sensing in agriculture. | |
| | b) | Enumerate different types of drones. Explain any one in details. | |
| | c) | Explain Hydroponic farming with neat sketch. | |
| 6. | | Attempt any <u>TWO</u> of the following: | 12 |
| | a) | State the importance of protected cultivation. | |
| | b) | Explain the applications of information system and extension service. | |
| | c) | Differentiate between thinking things and tag things. | |