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Total No. of Pages : 02

Total No. of Questions : 09

# B.Sc. (Agriculture) (Sem.–5) GEO-INFORMATICS, NANO-TECHNOLOGY AND PRECISION FARMING Subject Code : BVAG-507-19 M.Code : 90946 Date of Examination : 16-07-22

Time: 3 Hrs.

Max. Marks : 60

#### **INSTRUCTIONS TO CANDIDATES :**

- 1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- 2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
- 3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

## **SECTION-A**

#### 1. Write briefly :

- a) Precision agriculture
- b) Geo-informatics
- c) Global positioning system
- d) Remote sensing
- e) STCR approach
- f) Nano-technology
- g) Nano-particles
- h) Nano-pesticides
- i) Nano-sensors
- j) Geospatial technologies

## **SECTION-B**

- 2. Discuss in details the concepts and techniques of precision agriculture.
- 3. Elaborate the role of geo-informatics for their use in Precision Agriculture.
- 4. Discuss the role of geo-informatics in soil mapping and fertilizer recommendation.
- 5. Describe nano-technology with respect to its concepts and techniques used in agriculture.
- 6. Discuss the STCR approach for precision agriculture.

# **SECTION-C**

- 7. Discuss Global Positioning System (GPS) with respect to crop simulation models and optimization of agricultural inputs.
- 8. Discuss the role of remote sensing during image processing and interpretation in agriculture.
- 9. Elucidate the use of nanotechnology in seed, water, fertilizer and plant protection for scaling-up farm productivity.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.