

MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END THEORY EXAMINATION

B.Sc.(Hons.) Agriculture

Semester	: VI (New)	Term	: Second	Academic Year	: 2023-24
Course No.	: AGRO 3612	Title	: Geo-informatics and Nano-technology and Precision Farming		
Credits	: 2 (1+1)				
Day & Date	: Monday, 15.04.2024	Time	: 14:00 to 16:00 hrs.	Total Marks	: 40

- Note :**
1. Solve ANY EIGHT questions from SECTION 'A'.
 2. All questions from SECTION 'B' are compulsory.
 3. All questions carry equal marks.
 4. Draw neat diagram wherever necessary.

SECTION 'A'

- Q.1 Describe Precision Farming with its components.
- Q.2 Discuss the practical difficulties of precision farming in Indian agriculture.
- Q.3 Define GIS and describe the major components of GIS.
- Q.4 Elaborate the importance of GIS in agriculture.
- Q.5 Elaborate the components and significance of GPS.
- Q.6 What do you mean by Image processing and interpretation of Remote Sensing images?
- Q.7 In which situations, simulations can be used?
- Q.8 Enlist any ten crop models as reported in recent literature.
- Q.9 Write in brief about role of Nano-technology in plant protection.
- Q.10 Write short notes on (Any Two):
- a) Yield monitoring b) Nano-fertilizers c) Nano-technology in weed management

SECTION 'B'

- Q.11 State True or False:
- 1) Geodesy studies the shape of the earth and the determination of the exact position of geographical points.
 - 2) Roger Frank Tomlinson is known as the 'Father of GIS'.
 - 3) In precision farming, high yield is obtained with high inputs.
 - 4) Carboxy Methyl Cellulose nanoparticles cannot degrade herbicide atrazine residue.
- Q.12 Give full forms of the following:
- 1) DSSAT 2) DGPS 3) LCC 4) NDVI

