

MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END THEORY EXAMINATION

B.Sc.(Hons.) Agriculture

Semester	: VI (New)	Term	: Second	Academic Year	: 2022-23
Course No.	: AGRO 3612	Title	: Geo-informatics and Nano-technology and Precision Farming		
Credits	: 2 (1+1)				
Day & Date	: Tuesday, 04.07.2023	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 Define Geo-informatics and explain in short principles of Geo-informatics.
- Q.2 What is Remote sensing? Give its application in agriculture.
- Q.3 Define Nano-fertilizers and explain how nano-fertilizers are more beneficial as compared to chemical fertilizers.
- Q.4 Define Precision farming. Enlist the components of precision farming and explain any one in detail.
- Q.5 What is Global Positioning System (GPS)? Explain in short its components and functions.
- Q.6 Define Nano-technology. Give its application in agriculture.
- Q.7 What is STRC approach? Give its importance in precision farming.
- Q.8 Define Crop model. Enlist the various types of model and explain simulation model.
- Q.9 What are Nano-pesticides? State the formulations of nano-pesticides and its advantages.
- Q.10 Write short notes on (Any Two):
- a) Soil mapping
 - b) Constraints of precision farming in India
 - c) Soil-cum-plant analysis based SSNM approach

SECTION 'B'

- Q.11 Expand the following abbreviations:

- 1) GIS 2) VRT 3) HVI 4) IRS

- Q.12 Fill in the blanks:

- 1) _____ is an act of examining image for the purpose of identifying objects and judging their significance.
- 2) _____ is a powerful set of tools for collecting, storing and retrieving the data.
- 3) Size of nanoparticle is _____.
- 4) _____ are crop yield measuring devices installed in harvesting equipment.

