

MFS

2007

AGRICULTURE (Optional)

001979

कृषि ( वैकल्पिक )

Time : 3 hours

Maximum Marks : 200

- Note :
- In all attempt five questions.
  - Question No. 1 is compulsory.
  - Of the remaining Questions, Attempt **any four** by selecting **one question** from each section.
  - Numbers of optional questions upto the prescribed number in the order in which questions have been solved, will only be assessed and excess answers of the question/s will not be assessed.
  - Candidate should not write roll number, any names (including their own), signature, address or any indication of their identity anywhere inside the answer book otherwise he will be penalised.

1. Answer **any four** of the following questions : 40
- Discuss the agroclimatic zones of Maharashtra.
  - Mention the different breeds of cows found in Maharashtra. Briefly mention the characteristics of each one of them.
  - Write in detail the factors affecting the seed quality in storage.
  - Discuss about integrated pest and disease management.
  - What are important fruit, vegetable and flower crops in Maharashtra ?

## SECTION - A

2. Answer the following questions :
- What are the emerging environmental problems ? Discuss in brief. 20
  - What do you understand by the term "Integrated Weed Management" (I.W.M.) ? Explain in detail its importance in relation to crop production. 20
3. Answer the following questions :
- Write in detail about the role of various climatic parameters in crop production. 20
  - Discuss in brief the definition and concept of organic farming. Explain its relevance in Indian conditions. 20

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## SECTION - B

4. Answer the following questions :

- (a) What do you mean by "Integrated Nutrient Management" ? Explain the role of Sulphur and Zinc in crop production. 20
- (b) What are the different types of soil erosion ? Suggest suitable agronomic practices of soil conservation to control different types of soil erosion. 20

5. Answer the following questions :

- (a) Differentiate between 'Soil Fertility' and 'Soil Productivity'. Discuss in brief the factors affecting soil fertility. 20
- (b) Keeping in mind the water scarcity problem in India by 2025 A.D., describe in detail the importance of micro-irrigation for sustainable development of agriculture. 20

## SECTION - C

6. Answer the following questions :

- (a) Define mutation. Briefly describe the characteristics of mutations and their effects on survival of organism. 10
- (b) What do you mean by Photosynthesis ? Briefly describe the factors affecting photosynthesis. 10
- (c) What do you understand by Farm Profit ? Discuss the factors affecting Farm Profit. 20

7. Answer the following questions :

- (a) Write in detail about the scope of plant biotechnology. 10
- (b) Define growth. Discuss the factors affecting growth. 10
- (c) Differentiate between "Partial Budgeting and Complete Budgeting". 20

SECTION - D

8. Answer the following questions :

- (a) Differentiate between IRDP and SGS. 20
- (b) Describe in detail about classification of Bio-fertilizers. 20

9. Answer the following questions :

- (a) Define 'Extension Education'. Discuss the principles of 'Extension Education'. 20
- (b) Write the important diseases and their Control of Cereals Crop in Maharashtra. 20

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