

2017
AGRICULTURE - PAPER-I

Time Allowed : 3 Hours

Full Marks : 200

If the questions attempted are in excess of the prescribed number, only the questions attempted first up to the prescribed number shall be valued and the remaining ones ignored.

Answers may be given either in English or in Bengali but all answers must be in one and the same language.

5/170/34
15

GROUP-A

Answer any three Questions.

- | | | |
|-------|---|----------|
| 1. a) | What is soil ? Define. | 5 → 75 |
| b) | State the factors of soil formation. | 10 → 150 |
| c) | Describe in brief about soil structures. | 15 → 225 |
| d) | State the importance of soil structure in agriculture. | 10 → 150 |
| 2. a) | Describe different methods of soil and water conservation. | 20 |
| b) | Briefly describe about dry farming in India. | 20 |
| 3. a) | Explain the role of Climate and Weather on Crop production. | 10 |
| b) | What is green house effect ? | 10 |
| c) | What is your prediction about agricultural practices with climate change. | 10 |
| d) | State the applications of Remote sensing in agriculture. | 10 |
| 4. a) | Why weed management is necessary in plant protection. | 10 |
| b) | What are the different types of Chemical methods of Weed management. | 10 |
| c) | What is Weed Ecology ? How Weed are related to Crop and Climate. | 15 |
| 5. a) | What do you mean by agroforestry ? | 5 |
| b) | State the role of agro-forestation for the mitigation of Climate change. | 15 |
| c) | Describe in brief about soil erosion. | 10 |
| d) | Write the role of agro-forestry for the control of soil erosion. | 10 |

→ Yield
→ Resource wastage
→ Plant canopy
→ Aquatic
→ Further chance of spread
→ Broad leaved
→ Narrow leaved
→ Pre sowing
→ After sowing
→ Foliar spray
→ Selective
→ Non-selective
→ Toxic nutrient
→ Allelopathy or seed
→ Seed mixed, tillage

GROUP-B

Answer any two Questions.

- | | | |
|-------|--|----|
| 6. a) | What is rainfed agriculture ? | 6 |
| b) | What is the difference between rainfed agriculture and dry farming. | 12 |
| c) | Briefly describe about the different types of rain water harvesting and recharge of groundwater. | 12 |
| d) | What is your views about agricultural practice in rainfed areas of West Bengal. | 10 |

7. Write short notes on the following topics (any Five).
- a) Soil fertility and productivity.
 - b) Role of P in agriculture.
 - c) Biofertilizers.
 - d) Role of IT in Indian agriculture.
 - e) Precision farming.
 - f) G.I.S.
 - g) Global Warming.
 - h) Crop insurance. 8x5
8. a) Write in brief about role of KVK in technology transfer. 15
- b) State the role of mass media for the development of agriculture. 10
- c) State the function and importance of self-help groups in agriculture. 10
- d) State the importance of cold storage in agriculture. 5

