

2019

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.

The figures in the margin indicate marks for each question.

Group A

Answer any three questions.

1. (a) What is greenhouse effects?
 (b) Describe in brief about global warming and its effects on crop production.
 (c) State the use of Remote Sensing technology in agriculture. 10+20+10=40
2. (a) What is the difference between soil fertility and productivity?
 (b) What are the major soil nutrient as essential elements in plant growth?
 (c) What to you know about micronutrients and its necessity in plant growth?
 (d) What do you know about the Law of Minimum?
 (e) Describe the amelioration of acid soils in different parts of this state. 8+10+10+4+8=40
3. (a) What are the different soil forming factors? Describe in brief.
 (b) Discuss in details on the methods on soil and water conservation.
 (c) Describe the role of Agro Forestry in such conservation methods. 8+20+12=40
4. Write in brief on **any five**: 8×5=40
 - (a) Precision agriculture
 - (b) Rainwater harvesting
 - (c) Jute rating
 - (d) Vermi compost

MSC(O)-AG-I/19

(2)

- (e) Farm planning and budgetting
 (f) Bio-fertilizers
 (g) Organic farming
5. (a) Describe in details package and practices of rice cultivation during kharif season.
 (b) Write down scope of growing rabi maize under West Bengal situation. 20+20=40

Group B*Answer any two questions.*

6. (a) What are the different types of problem soils in this State? State the methods of reclamation of this types of problem soils.
 (b) Describe the major physiological role of N, P, K for plant nutrition and their deficiency symptoms. 20+20=40
7. (a) Describe in detail on the role of KVK in technology transfer system.
 (b) Discuss in details about weed management practices in organic farming.
 (c) What do you know about sustainable agriculture? 10+20+10=40
8. Write short notes on *any five*: 8×5=40
- (a) Crop insurance
 (b) Dry land farming
 (c) Soil erosion and its control
 (d) Green manure crops
 (e) Reinforcing manures
 (f) Field capacity and permanent wilting point
 (g) Sheet Erosion
 (h) Effective rainfall and its measurement
9. (a) What do you know about rainfed agriculture? What is the differences between rainfed agriculture and dry land farming?
 (b) Write down about the rainwater harvesting and recharge of groundwater.
 (c) What do you know about shifting cultivation? 20+10+10=40