

2018

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.

GROUP-A

Answer any three Questions :

1. i) Discuss on SRI. Mention the differences between SRI and conventional cultivation method of transplanted rice. 20
- ii) Describe in details about recommended management practices of jute crop. 20
2. i) Define "Weeds". 5
- ii) State the characteristics of Weeds. 5
- iii) Discuss in details about Weed management practices in Organic farming. 30
3. i) Define 'soil'. 5
- ii) Distinguish between soil fertility and soil productivity. 8
- iii) Discuss on modern concept of soil fertility. 7
- iv) Describe different methods of soil conservation. 20
4. i) What do you mean by 'essential plant nutrients' ? Classify and enlist essential plant nutrients. 10
- ii) Mention the important functions and commonly used sources of following plant nutrients :
N, P, S and Mo 20
- iii) Narrate the important features of INM. 10
5. Write in brief on any four : 10
 - a) Concentrated organic manure;
 - b) Biofertilizers;
 - c) Vermicompost;
 - d) Drip irrigation;
 - e) Strategies for improvement of fodder cultivation;
 - f) Green manure crops and green manuring.
6. i) Write in details on sugarcane cultivation in W.B. with special reference to — varieties, soil, tillage practices, sowing parameters, intercultural operations, nutrient management, plant protection measures, harvesting and yield. 10x4
- ii) Describe the crop management practices of rabi maize. 25

GROUP-B

Answer any two Questions :

7. Write short notes on any five :

- a) Crop insurance;
- b) Jute retting;
- c) Farm forestry;
- d) Soil solarisation;
- e) Methods of fertilizer application;
- f) Reduced tillage;
- g) SHG in agriculture;
- h) Reclamation of problem soils.

8. i) State the differences (with examples) between 'legumes' and 'pulses'.

ii) What do you mean by paira crop ? State the importance of paira cropping.

iii) Pulses are considered as "Climate smart crops" — Explain the statement.

9. i) What is agroforestry ? Describe the benefits of agroforestry.

ii) What do you mean by MPTs ? State the characteristics of MPTs suitable for agroforestry.

iii) Narrate the following land use systems :

- a) Alley cropping;
- b) Shifting cultivation;
- c) Wing-breaks;
- d) Taungya system.

10. Write in brief on any four :

- a) Cold storage and warehouse;
- b) Farm planning;
- c) Dryland farming;
- d) K V K;
- e) Afforestation;
- f) Water harvesting.

10x4