



বিদ্যাসাগর বিশ্ববিদ্যালয় VIDYASAGAR UNIVERSITY

Question Paper

B.A./B.Sc./B.Com. Part-III (1+1+1) Examination 2020 3rd Year (Honours)

Subject: BOTANY

Paper: VI

Full Marks: 80 (Theory)
Time: 4 Hours (Theory)

Candiates are required to give their answer in their own words as far as practicable.

Questions are of equal value.

Answer **one question** [within 250 words] from the following:

- 1. Name the major classes of RNA. Discuss on their structure and functions.
- 2. Give a brief account of the mechanism of transcription in prokaryotes.
- 3. Give an account of the structure of cell membrane in the light of fluid mosaic model.
- 4. Briefly discuss the ultrastructure of Mitochondria
- 5. What is MPF? Briefly mention the role of Cdks in the regulation of the cell cycle.
- 6. Write about different chromosome banding and their applications.
- 7. What is genetic code? Discuss the properties of it.



- 8. Define hybridization. Discuss the hybridization method in self-pollinated crop.
- $9. \ \ Write briefly the structure of IS \ elements \ and \ mention \ significance \ of \ transposable \ elements.$
- 10. What is the difference between biofertilizer and organic fertilizer? Write a short note on VAM.
- 11. Discuss the importance of tissue culture.
- 12. Write the applications of recombinant DNA technology in agriculture.