



বিদ্যাসাগর বিশ্ববিদ্যালয়
VIDYASAGAR UNIVERSITY
Question Paper

B.Sc. Honours Examinations 2020

(Under CBCS Pattern)

Semester - I

Subject: BOTANY

Paper : C 1-T & C 1-P

Phycology and Microbiology

Full Marks : 60 [Theory-40 + Practical-20]

Time : 3 Hours

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

[Theory]

Answer any *two* questions :

20 × 2 = 40

1. a. Briefly describe about the growth pattern of microbes.
- b. Write the economic importance of bacteria with reference to their role in agriculture and industry.
- c. Describe the cell structure of *Chlamydomonas sp.* 6+8+6
2. a. Write the classification of Virus according to Baltimore.
- b. Write a short note on Archaeobacteria. What is endospore?
- c. Describe the male and female reproductive structure of *Chara sp.*

6+(4+4)+6

3. a. Describe the conjugation process of Bacterial recombination.
b. Write the pigments and reserve food material of different algal division with suitable example. 10+10
4. a. Write the evolutionary classification of algae according to Lee.
b. What do you mean by synzoospore? Briefly describe the isomorphic alternation of generation. 10+(4+6)

Paper - C 1-P
(Practical)

Answer any *one* question : 20 × 1 = 20

1. a. Write down the Gram staining procedure.
b. Draw and label the bacterial binary fission. 10+10
2. a. Mention the identifying characters of *TMV*
b. Draw and label the vegetative structure of *Chlamydomonas sp.* 10+10
3. a. Write the process of Endospore staining with malachite green?
b. Draw and describe the Study of bacteria from Curd sample. 10+10
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