

2018

CBCS

1st Semester

BOTANY

PAPER—CIT

(Honours)

Full Marks : 40

Time : 2 Hours

The figures in the right-hand margin indicate full marks.

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

Illustrate the answers wherever necessary.

Phycology and Microbiology

Answer all question

1. Answer any *five* questions :

5×2

(a) What is Palmella stage ?

(b) What is meant by spheroplast ?

(Turn Over)

- (c) Differentiate between trichome and filament.
- (d) What is Gaiducov Phenomenon ?
- (e) Distinguish between macrandrous and nannandrous species of *Oedogonium* with example.
- (f) What is meant by gongrosira stage ?
- (g) Define Mesosome and Carboxysome.
- (h) Differentiate pili from flagella.

2. Answer any four questions : 4×5

- (a) Draw and describe the detailed structure of TMV. 5
- (b) Write an essay on the conjugation of bacteria. 5
- (c) Mention the photosynthetic pigments of Cyanophycean algae. What is suffultory cell? 5
- (d) Describe with sketches the male and female reproductive structures of *Chara* sp. 2½+2½

- (e) Distinguish between carpogonium, carpo-sporangium and tetrasporangium of *Polysiphonia*. 5
- (f) Describe the development of male and female reproductive structure of *Vaucheria*. 5
3. Answer any one question : 1×10
- (a) Differentiate the cell wall between a gm⁺ and gm⁻ bacteria. Write a short note on economic importance of bacteria. Compare archaebacteria with eubacteria. 4 + 3 + 3
- (b) What do you mean by isomorphic alternation of generation? Describe the asexual reproduction of *Ectocarpus*. Name one epiphytic, endophytic and epizoic species of *Ectocarpus*. 2 + 5 + 3
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