

Reg. No. :

Code No. : 30786 E

Sub. Code : EEBO 11

B.Sc. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2023.

First Semester

Botany — Elective

ALLIED BOTANY — I

(For those who joined in July 2023 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. Sargassum is a _____ algae.
(a) Blue green (b) Red
(c) Brown (d) Green
2. The algae used in space travel is
(a) Nostoc (b) Chara
(c) Volvox (d) Chlorella

3. The study of fungi is
(a) Bryology (b) Mycology
(c) Phycology (d) Algology
4. Gibberellin is obtained from
(a) Algae (b) Fungi
(c) Bryophytes (d) Pteridophytes
5. Coralloid roots are seen in
(a) Pinus (b) Gnetum
(c) Cycas (d) Psilotum
6. Funaria belongs to the class
(a) Bryopsida (b) Hepaticopsida
(c) Anthocerotopsida (d) Lycopsida
7. In which cells mitotic cell division takes place
(a) Somatic (b) Reproductive
(c) (a) and (b) (d) None of the above
8. The pairing of homologous chromosomes takes place in
(a) Leptotene (b) Zygotene
(c) Pachytene (d) Diplotene
9. The phenotypic ratio of incomplete dominance is
(a) 3 : 1 (b) 1 : 2 : 1
(c) 2 : 2 (d) 1 : 3

10. Who is the father of tissue culture?
(a) Linnaeus (b) Mendel
(c) Haberlandt (d) Bentham

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Explain the structure of anabaena.
Or
(b) Mention the role of algae in medicine.
12. (a) Describe the structure of bacterio phage.
Or
(b) Enumerate the general characteristics of viruses.
13. (a) Bring out the general characters of pteridophytes.
Or
(b) Explain the structure of Lycopodium cone.
14. (a) Write notes on structure of mitochondria.
Or
(b) List out the significance of mitosis.
15. (a) What is test cross? Explain it.
Or
(b) Tabulate the applications of plant tissue culture.

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Give a detailed account on reproduction of Sargassum.

Or

- (b) Explain the role of algae in industry.

17. (a) Describe the structure and reproduction of penicillium.

Or

- (b) Describe the ultrastructure of bacterial cell.

18. (a) Describe the structure of Cycas ovule.

Or

- (b) Describe the life cycle of lycopodium.

19. (a) Describe the ultrastructure of eukaryotic cell with suitable diagram.

Or

- (b) Explain the structure and functions of nucleus.

20. (a) Describe the laws of Mendal.

Or

- (b) Give a detailed account on plant tissue culture.