

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2019
(First Semester)

Branch-BOTANY

PLANT DIVERSITY

Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(10 x 1 = 10)

- 1 Cell Wall in algae is made up of _____.
(i) Cellulose (ii) Chitin
(iii) Cutin (iv) Suberin
 - 2 Usually the cells of *Chlamydomonas* possess a chloroplast which is
(i) Reticulate (ii) H-shaped
(iii) Cup shaped (iv) Discoid
 - 3 One of the following algae has parenchymatous thallus
(i) *Ectocarpus* (ii) *Cladophora*
(iii) *Sargassum* (iv) *Spirogyra*
 - 4 Agar-agar is obtained from
(i) *Gelidium* (ii) *Nostoc*
(iii) *Spirogyra* (iv) *Volvox*
 - 5 Endophytic *Nostoc* is found in
(i) *Anthoceros* (ii) *Marchantia*
(iii) *Riccia* (iv) *Pellia*
 - 6 The thalli of *Riccia* are
(i) Wedge shaped (ii) Ribbon shaped
(iii) Reniform (iv) Girdle shaped
 - 7 The spore-bearing leaf is called
(i) Ramentum (ii) Indusium
(iii) Sorus (iv) Sporophyll
 - 8 Heteropsory has been reported in
(i) *Lycopodium* (ii) *Equisetum*
(iii) *Selaginella* (iv) *Ophioglossum*
 - 9 Male gametophyte in gymnosperms is represented by
(i) Microsporangium (ii) Nucellus
(iii) Microspore (iv) Spore dyad
- Internal structures are best preserved in which fossils?
(i) Compressions (ii) Petrifications
(iii) Incrustations (iv) Impressions

Cont...

SECTION - B (35 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 7 = 35)

- 11 a Bring out salient features of algae.
OR
b Describe the thallus structure of *Oscillatoria*.
- 12 a Narrate the sexual reproduction in *Sargassum*.
OR
b Analyze the general characters in *Diatoms*.
- 13 a Outline the classification of Bryophytes.
OR
b Summarise the ecology of Bryophytes.
- 14 a Explain the spore producing structure in *Psilotum*.
OR
b Highlight the sporophyte of *Equisetum*.
- 15 a Explain briefly the external morphology of *Cycas*.
OR
b Describe the life in different era.

SECTION - C (30 Marks)

Answer any THREE Questions

ALL Questions Carry EQUAL Marks (3 x 10 = 30)

- 16 Elucidate the methods of sexual reproduction in *Oedogonium*.
- 17 Enumerate the economic importance of algae.
- 18 Trace the structure of mature sporophyte in *Polytrichum*.
- 19 Discuss the life cycle of *Selaginella*.
- 20 Examine major fossil types that occur in nature.

Z-Z-Z

END