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SARDAR PATEL UNIVERSITY
B.Sc. Examination 5th SEMESTER
BOTANY-US05CBOT01

(Algae, Bryophyta, Pteridophyta and Gymnosperms)

Date: 11/11/2019, Monday Time: 10.00a.m.-1.00 p.m. Marks-70

Q-1 Multiple Choice Questions.

(10)

- (1) A non-motile asexual cell is _____.
(a) aplanospore (b) zoospore (c) antherozoid (d) none of these
- (2) Fusion of mature individuals which directly act as gametes is called _____.
(a) isogamy (b) hologamy (c) autogamy (d) conjugation
- (3) Advanced oogamous type of sexual reproduction is seen in: _____.
(a) Ectocarpus (b) Codium (c) Oedogonium (d) Cladophora
- (4) Spore mother cell in bryophytes is: _____.
(a) haploid (b) tetraploid (c) triploid (d) diploid
- (5) Elaters are found in the capsule of: _____.
(a) Marchantia (b) Pellia (c) Anthoceros (d) all of these
- (6) A bryophyte differs from pteridophytes in: _____.
(a) lack of vascular tissues (b) presence of archegonia
(c) flagellated antherozoids (d) independent gametophyte
- (7) Homospory is seen in: _____.
(a) Lycopodium (b) Equisetum (c) both (d) none
- (8) Which of the following structure is not a part of the sporangium in Dryopteris?
(a) annulus (b) stomium (c) stalk (d) ramenta
- (9) In Cycas leaflet, which condition is found?
(a) diploxylic (b) monoxylic (c) both (d) none
- (10) A gymnosperm is a plant which _____.
(a) bears flowers (b) does not produce seeds enclosed in ovary
(c) produces seeds in ovary (d) has no vascular tissues

①

(PTO)

Q-2 Attempt any ten short answers questions. (20)

- (i) What are the various types of spores found in algae?
- (ii) What are the common pigments present in algae?
- (iii) What are the characteristics of oogamous type of sexual reproduction?
- (iv) Write similarities between bryophytes and algae. Name any two bryophytes.
- (v) Explain: Elaters and elaterophore.
- (vi) Write the structure and function of gemma-cup.
- (vii) Differentiate between homosporous and heterosporous.
- (viii) Write about: telomes and mesomes.
- (ix) Draw a labelled diagram of Dryopteris sporangium.
- (x) Write economic importance of Gnetum.
- (xi) Draw a labelled diagram of gymnosperm ovule.
- (xii) Write external characters of Welwitschia.

Q-3 Give a brief account on: Reproduction in algae. (10)

OR

Q-3 Write notes on: (a) Haplontic type of lifecycle of algae. (05)

(b) Algae as food and fodder. (05)

Q-4 Give a brief account on: Economic importance of bryophytes. (10)

OR

Q-4 Write about: Ecology and distribution of bryophyte. (10)

Q-5 Write any three elementary processes of telome theory. (10)

OR

Q-5 Describe: Prothallus of Dryopteris with sex-organs. (10)

OR

Q-6 Give the resemblances of gymnosperms with pteridophytes. (10)

OR

Q-6 Write characteristics feature of gymnosperms. (10)