

SEAT No. _____

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SARDAR PATEL UNIVERSITY

No. of Printed Pages : 2

B.Sc. 5th SEMESTER, BOTANY US05CBOT01

(Algae, Bryophytes, Pteridophytes and Gymnosperms)

Date: 24/12/2020

Marks: 70

Thursday

Time: 2.00-4.00p.m.

Q-1 Multiple choice questions.

(10)

- (1) Algae are classified into major groups on the basis of _____.
- (a) vegetative characters (b) types of pigments
(c) nature of reserve food products (d) chemical composition of cell-wall
- (2) Which one of the following algae lacks sexual reproduction?
- (a) Ectocarpus (b) Chlamydomonas (c) Nostoc (d) Cladophora
- (3) A non-motile asexual cell is _____.
- (a) zoospore (b) aplanospores (c) antherozoid (d) none of these
- (4) Most economically important bryophyte among the following is _____.
- (a) Riccia (b) Funaria (c) Marchantia (d) Sphagnum
- (5) Elaters are found in the capsule of _____.
- (a) Pellia (b) Anthoceros (c) Marchantia (d) all of these
- (6) Father of Indian bryology is _____.
- (a) S.R.Kashyap (b) S.K.Pande (c) Ram Udar (d) R.S.Chopra
- (7) The elementary process of the telome concept is: _____.
- (a) curvation (b) reduction (c) overtopping (d) all of these
- (8) Heterospory is seen in _____.
- (a) Isotes (b) Lycopodium (c) Psilotum (d) Equisetum
- (9) In gymnosperms pollination is exclusively by _____.
- (a) Insects (b) wind (c) water (d) animals
- (10) Largest ovules, trees and male gametes are found in _____.
- (a) fungi (b) algae (c) bryophytes (d) pteridophytes

Q-2 Fill in the blanks and True or False.

(08)

- (1) Advance oogamous type of sexual reproduction is seen in _____.
- (2) A bryophyte differs from pteridophytes in _____.
- (3) Lanf induced apogamy in _____.

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- (4) Turpentine is obtained from_____.
- (5) Cladophora shows isomorphic life-cycle. (True/False)
- (6) Spore mother cell in bryophytes is diploid in nature. (True/False)
- (7) Ophioglossum is found in fresh water. (True/False)
- (8) In Cycas leaf-let monoxyllic condition is found. (True/False)

Q-3 Short answer questions. (Attempt any ten).

(20)

- (1) What are the various types of spores found in algae?
- (2) Write the characters of- Myxophyceae.
- (3) What are the common pigments present in algae?
- (4) Write similarities between bryophytes and algae.
- (5) Write the contributions of Prof. Ram Udar.
- (6) Explain- Bryophytes as food.
- (7) Draw a labelled diagram of Dryopteris sporangium.
- (8) Differentiate between homosporous and heterosporous.
- (9) Write notes on- telomes and mesomes.
- (10) Give economic importance of Gnetum.
- (11) Define: Monoxyllic wood.
- (12) Draw a labelled diagram of Gymnosperms ovule.

Q-4 Long answer questions (attempt any four).

(32)

- (1) Give a brief account on: Reproduction in algae.
- (2) Write an essay on: Economic importance of algae.
- (3) Write about: Ecology and distribution of bryophytes.
- (4) Explain: Vegetative reproduction in bryophytes.
- (5) Write about: Elementary processes in pteridophytes.
- (6) What is apogamy? Explain it.
- (7) Describe characteristic features of gymnosperms.
- (8) Write the similarities of gymnosperms with angiosperms.

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