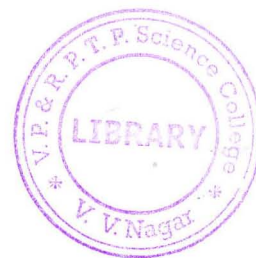


V.P. &R.P.T.P.SCIENC COLLEGE
T.Y.B.Sc. BOTANY
US05CBOT01



(Algae, Bryophyta, Pteridophyta and Gymnosperms)

Date-29/09/2018
Saturday

Time-10.00a.m.-12.00 noon
Marks-50

Q-1 Multiple Choice Questions.

(08)

- (1) Filaments are unbranched _____.
(a) *Oedogonium* (b) *Zygnema* (c) *Spirogyra* (d) all the above
- (2) Red rust of tea is caused by:
(a) a green alga (b) a fungus (c) a bacterium (d) all the above
- (3) A bryophyte differs from pteridophytes in:
(a) archegonia (b) lack of vascular tissues
(c) flagellated antherozoids (d) independent gametophyte
- (4) Gametophyte generation in bryophyte starts with spore and ends in the _____.
(a) gametes (b) thallus (c) zygote (d) spore mother cell
- (5) If all the spores are of same size and shape, the plant is said to be:
(a) aposporus (b) homosporous (c) heterosporus (d) none of the above
- (6) The elementary process of the telome concept is:
(a) curvation (b) reduction (c) overtopping (d) all the above
- (7) Largest ovules, trees and male gametes are found in _____.
(a) angiosperms (b) monocots (c) gymnosperms (d) dicots
- (8) Which of the following is the smallest gymnosperm?
(a) *Zamia* (b) *Ephedra* (c) *Pinus* (d) *Cycas*

Q-2 Attempt following questions (any five).

(10)

- (i) What are the various types of spores found in algae?
- (ii) List the main classes of algae according to Fritsch.
- (iii) Name the types of vegetative reproductions are found in bryophytes.
- (iv) Briefly mention the contributions of Prof. Ram Udar.
- (v) Describe briefly the demerits of the telome theory.
- (vi) How can you differentiate obligate apogamy from that of facultative apogamy?
- (vii) Write the economic importance of Gnetum.
- (viii) List the similarities of gymnosperms with angiosperms.



Q-3 Write a detailed account of the evolution of sex in algae. (08)

OR

Q-3 Give an illustrated account of alternation of generation in algae which studied by you. (08)

Q-4 Write note on: Ecology of bryophytes. (08)

OR

Q-4 Write about: Economic importance of bryophytes. (08)

Q-5(a) Write in detail the origin of sporophylls in Lycopsida and Pteropsida in terms of telome theory. (04)

(b) Describe asexual reproduction in *Dryopteris*. (04)

OR

Q-5 Describe apomixis. (08)

Q-6 Describe morphology of vegetative organs in Gymnosperms. (08)

OR

Q-6 Write notes on: (a) Fertilization in Gymnosperms. (05)

(b) Economic importance of *Pinus*. (03)
