D 72975 (Pages : 2) Name..... 28

Reg. No.....

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, DECEMBER 2014

(CUCSS)

Botany

BO 01 CT01—PHYCOLOGY, BRYOLOGY, PTERIDOLOGY AND GYMNOSPERMS

Time : Three Hours Maximum : 36 Weightage

I. Answer the questions briefly :

1 What are synzoospores ?

2 What are 'globule' and 'nucule' ?

3 What do you mean by cryptoblasts ?

4 What is a cystocarp ?

5 Briefly describe the pigmentation in algae.

6 What is the function of psuedo elator ?

7 Briefly describe the structure of synangium.

8 What is heterospory ?

9 Write short notes on : (a) Protonema ; (b) Trabeculae.

10 Comment on the 'fern' characters of the gymnosperm leaves

11 What is Polyembryony ? Give *one* example.

12 Describe the seed habit in Selaginella.

13 What are corolloid roots ? What is its function ?

14 What are the major economic importance of Pteridophytes ?

(14 × 1 = 14 weightage)

II. Answer any *seven* questions in not more than 100 words each :

15 Differentiate between meiotic apogamy and mitotic apogamy.

16 Briefly explain triphasic haplobiontic life cycle.

17 Comment on the economic importance of Phaeophyceae.

18 Write short notes on : (a) Algal bloom ; (b) Pyrenoids ; (c) Endospore ; and (d) Heterocyst.

Turn over

19 Describe the role of Bryophytes as pollution indicators.

20 Write down ambhibious characters of bryophytes.

21 Describe the structure and function of a ligule.

22 Rhizophore of Selaginella is called as an 'Organ-sui-generis'. Why ?

23 Describe the xerophytic characters of Gymnosperms.

24 Enumerate the important diagnostic features of Cycadales and Gnetales.

(7 × 2 = 14 weight

III. Answer any *two* questions in 300 words each :

25 With the help of suitable diagrams compare the post fertilization changes in Nemalion and Ceramiales.

26 Give an account of the thallus organisation of Bryophytes in an evolutionary perspectiv

27 Describe the stelar evolution in Pteridophyte stems.

28 "Gymnosperms are a connecting link between Angiosperms and Pteridophytes". Explain

(2 × 4 = 8 weight