

**2020/TDC(CBCS)/ODD/SEM/
BOTDSC/GE-101T/137**

**TDC (CBCS) Odd Semester Exam., 2020
held in March, 2021**

BOTANY

(1st Semester)

Course No. : BOTDSC/GE-101T

**[Biodiversity (Microbes, Algae, Fungi and
Archegoniates)]**

Full Marks : 50

Pass Marks : 20

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

SECTION—A

Answer any *fifteen* of the following questions :

1×15=15

1. Who discovered viruses?
2. What is virion?
3. Name an RNA virus.
4. Name the stain which is used as counterstain in gram staining of bacteria.

5. Give an example of peritrichous bacteria.
6. What is the full form of Hfr?
7. Give an example of Phaeophyceae alga.
8. Name an unicellular flagellate alga.
9. Who is called the Father of Modern Indian Algology?
10. Name an antibiotic-producing alga.
11. What is the name of the book written by F. E. Fritsch?
12. What are the reserve food materials found in Xanthophyceae?
13. Name the fungi which causes black rust of wheat.
14. Give an example of edible mushroom.
15. Name an antibiotic-producing lichen.
16. Name a parasitic alga.
17. What are mycorrhizae?
18. What do you mean by mycobiont?
19. *Anthoceros* belongs to which class of Bryophyta?
20. Give an example of leafy Bryophyta.
21. Name a fossil Pteridophyta.
22. Define stele.

23. Name a Bryophyta where elater mechanism of spore dispersal is found.
24. What are sporophylls?
25. What is the meaning of gymnosperm?
26. Name a member of gymnosperm, where you will get coralloid roots.
27. Give an example of gymnosperm, where winged pollen grains are found.
28. What is sulphur shower?
29. Name the type of pollination found in *Pinus*.
30. Give an example of the member of Cycadofilicales.

SECTION—B

Answer any five of the following questions : 2×5=10

31. What is capsid?
32. What do you mean by transduction?
33. Give examples of two filamentous algae.
34. Write the characteristic pigments found in Chlorophyceae.
35. Write the characteristics of Zygomycotina.
36. Name the spore stages found in *Puccinia*.
37. Write the unifying features of archegoniates.
38. What is heterospory?

39. What is chilgoza?

40. What is transfusion tissue?

SECTION—C

Answer any *five* of the following questions : 5×5=25

41. Describe the lytic cycle along with necessary diagrams.

42. Write the general characteristics of true bacteria.

43. Write the general characters of Phaeophyceae and Rhodophyceae.

44. Draw and describe the thallus structure of *Nostoc*.

45. Give an account of asexual reproduction of *Penicillium*.

46. Describe the spore stages of *Puccinia* found on barberry and wheat.

47. "Bryophytes are the amphibian in the plant kingdom." Discuss.

48. Draw and describe the capsule of *Funaria*.

49. Describe the microsporophyll and megasporophyll of *Cycas*.

50. Give an account of the economic importance of gymnosperms.

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