

B.Sc. CHEMISTRY
THIRD SEMESTER
DIVERSITY OF CRYPTOGAMS
BSB-731
[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 3 hrs.

Full Marks: 70

Time: 30 mins.

(Objective)

Marks: 20

Choose the correct answer from the following:

1×20=20

- Asexual reproduction in Lichen takes place by formation of:
 - Pycnidiospore
 - Aplanospore
 - Zygospore
 - Chlamyospore
- Heterocyst is found in:
 - Nostoc
 - Anabaena
 - Both A and B
 - Aspergillus
- The vegetative body of algae is a:
 - Thallus
 - Mycelium
 - Pseudoplasmodium
 - Highly organized
- What is the storage product of most algae?
 - Cellulose
 - Glycogen
 - Starch and oil
 - Fat
- Volvox belongs to the class:
 - Rhodophyceae
 - Xanthophyceae
 - Chlorophyceae
 - Myxophyceae
- Marchantia* belongs to which of the following division?
 - Gymnosperm
 - Algae
 - Bryophyta
 - Fungi
- Identify the "plant amphibian".
 - Pteridophytes
 - Bryophytes
 - Algae
 - Gymnosperm
- "Gemma cups" are found in:
 - Bryophytes
 - Both "a" and "c"
 - Pteridophytes
 - None
- Gametophyte is dependent sporophyte in:
 - Bryophyte
 - Algae
 - Gymnosperm
 - Pteridophyte
- An example of pteridophyte:
 - Gnetum*
 - Polytrichum*
 - Equisetum*
 - All of these

11. A virus is made up of:
a. Protein and nucleic acid
b. Protein coat and mitochondria
c. Nucleic acid and cell membrane
d. Nucleic acid, cell wall and cell membrane
12. Bacteria are morphologically how many types?
a. 1
b. 2
c. 3
d. 4
13. Mutated form of COVID 19 is:
a. Capricorn
b. Omicron
c. Babycorn
d. All
14. DNA containing viruses are called:
a. Retrovirus
b. Ribovirus
c. Deoxyvirus
d. None
15. Disease causing organisms are called:
a. Pathogen
b. Chemogen
c. Phagocyte
d. All
16. Fritsch (1935,44,45) in his book "Structure and Reproduction of algae" classified algae into:
a. Eleven classes
b. Seven classes
c. Three classes
d. Ten classes
17. Lichen is an association between:
a. Bacteria and virus
b. Algae and fungi
c. Algae and bacteria
d. Fungi and bacteria
18. "Gemma cups" are:
a. Asexual bodies
b. Both "a" and "c"
c. Sexual bodies
d. None
19. Bacteria cell wall is made up of:
a. Cellulose
b. Chitin
c. Peptidoglycan
d. Dextranb
20. The fungi which derive their food directly from dead organic matter are known as:
a. Predators
b. Decomposers
c. Mutualist
d. Parasitic fungi

(Descriptive)

Time : 2 hr. 30 mins.

Marks : 50

[Answer question no.1 & any four (4) from the rest]

- | | |
|--|--------|
| 1. Write down Fritsch's classification in detail. | 10 |
| 2. Describe the morphology and anatomy of <i>Selaginella</i> with suitable diagram. | 10 |
| 3. Write a note on general characters of algae and also state its economic importance. | 5+5=10 |
| 4. Write an account of life cycle of <i>Marchantia</i> . | 10 |
| 5. Describe general characters of Bacteria and mention its economic importance. | 5+5=10 |
| 6. Describe the morphology and anatomy of <i>Equisetum</i> with suitable diagram. | 10 |
| 7. Write differences between bacteria and viruses. | 10 |
| 8. Write briefly about classification of lichen. | 10 |

= = *** = =