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**PG CBCS**  
**M.Sc. Semester-I Examination, 2022**  
**BOTANY**  
**PAPER: BOT 102**

Full Marks: 40

Time: 2 Hours

**Write the answer for each unit in separate sheet**

The figures in the right-hand margin indicate full marks.  
 Candidates are required to give their answers in their own words as far as practicable.

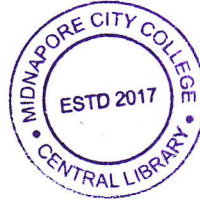
**BOT 102.1- PHYCOLOGY**

**GROUP-A**

1. Answer any **TWO** questions of the following: 2×2=4
- Write two characteristic features of Streptophytes.
  - What is Carrageenan? Give an example of its source.
  - Write the pigments and reserve food materials of Xanthophyceyan members.
  - What is meant by haplodiplobiontic life cycle. Cite an example.

**GROUP-B**

2. Answer any **TWO** questions of the following: 4×2=8
- What are phycocollids? Write the sources and uses of agar-agar. 2+2
  - Write the biochemistry of algal cell wall.
  - How algae help in soil reclamation?
  - Write the role of algae in pisciculture.



**GROUP-C**

3. Answer any **ONE** question of the following: 8×1=8
- What is SCP? Write the production process of SCP. Write its advantages and disadvantages. 3+5
  - Discuss endosymbiotic theory of origin of chloroplast. How many types of toxic substances are produced by cyanophyceyan member? Name them. 5+1+2

**P.T.O.**

(2)

**BOT 102.2 - BRYOPHYTES****GROUP-A****1. Answer any TWO questions of the following:****2×2=4**

- a) Mention the role Bryophyte as an ecological indicator.
- b) What is Sphaeroriccia?
- c) Name two aquatic members of Bryophytes.
- d) What are the basic differences between traditional and current system of classification with reference to Bryophytes.

**GROUP-B****2. Answer any TWO questions of the following:****4×2=8**

- a) Write four salient features of Marchantiophyta.
- b) Give an account on the sporophytic structures of Anthocerophyta.
- c) Write a short note on phytochemistry of Bryophytes.
- d) Write a short note on *Naiadita lanceolata*.

**GROUP-C****3. Answer any ONE question of the following:****8×1=8**

- a) Write the chromosomal diversity in Bryophytes and their application in taxonomy with example. **4+4**
- b) Write down the affinities and systematic position of Calobryales and Takakiales. **4+4**

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