

(4)
Group—C

Answer *any one* question from the following :
8×1=8

9. What is bioremediation? Write the advantages and disadvantages of bioremediation. Discuss different types of bioremediation techniques.

2+2+4=8

10. Write the differences between alpha, beta and gamma diversity. Write a short note on Chipko Movement in India.

3+5=8

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Total Pages—04

PG/4th Sem/BOT-203/24

2024

M.Sc. 4th Semester Examination

BOTANY

PAPER : BOT-203

Full Marks : 40

Time : 2 hours

The figures in the right-hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Answer from both the Sections.

Section—I

(203.1 : Ecology)

(Marks : 20)

Group—A

Answer *any two* questions from the following :

2×2=4

1. What are sere and seral community?

2. Differentiate between grazing and detritus food chain.

(2)

3. What is carrying capacity?
4. Write the differences between fundamental niche and realized niche.

Group—B

Write short notes on *any two* of the following :

4×2=8

5. Survivorship curve
6. Morphological adaptation of hydrophytes
7. Aspects of ecological niche
8. Mangrove ecosystem

Group—C

Answer *any one* question from the following :

8×1=8

9. What is climax community? Describe different succession models with diagram. Discuss the stages of succession in hydrosere. 1+3+4=8
10. Discuss niche differentiation with example. What is Gause's competitive exclusive principle? Differentiate between *r* and *k* selection.

4+2+2=8

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(Continued)

(3)

Section—II

**(203.2 : Environmental Biology and
Phytogeography)**

(Marks : 20)

Group—A

Answer *any two* questions from the following :

2×2=4

1. What is seed bank?
2. Name four biodiversity hotspots of India.
3. What is the prime role of polar stratospheric clouds in ozone depletion?
4. Write the differences between classical smog and photochemical smog.

Group—B

Write short notes on *any two* of the following :

4×2=8

5. Red Data Book
6. Soil horizon
7. CBD
8. Bioindicators

/1114

(Turn Over)