

4/BOT-253(Th) Syllabus-2023

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(May-June)

FYUP : 4th Semester Examination

BOTANY

(Biodiversity and Conservation Biology)

(BOT-253)

(Theory)

Marks : 56

Time : 3 hours

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

Answer Question No. **1** which is compulsory and **four**
from the rest, selecting **one** from each Section

1. Write short notes on the following : $4 \times 4 = 16$

- (a) India as a mega-diversity nation
- (b) IUCN Red List
- (c) Botanical names of four endemic plant species of North-East India
- (d) UNEP

(2)

SECTION—I

2. Describe the concept of biodiversity. Discuss the role of genetic diversity in conservation. Give examples. $4+6=10$
3. What are the values of biodiversity? Write, in brief, the key aspects of consumptive and productive use value of biodiversity. $2+(4+4)=10$

SECTION—II

4. Define biodiversity hotspots. What criteria are used to identify these regions? Describe the unique characteristics of the Himalaya biodiversity hotspot. $2+2+6=10$
5. Differentiate between *In situ* and *Ex situ* conservation practices. Write a brief account of one biosphere reserve in India. $4+6=10$

SECTION—III

6. Define biodiversity policy. Give an account of Indian Biodiversity Act, 2002. $2+8=10$
7. (a) Write a brief note on access to biodiversity resource and benefit sharing.

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(3)

- (b) Give the full form of the following abbreviations : $1 \times 5 = 5$
- (i) UNESCO
- (ii) BSI
- (iii) IPGRI
- (iv) WWF
- (v) FAO

SECTION—IV

8. Differentiate between endangered and endemic plant species. Give a brief account on the challenges faced by two endangered plant species found in India. $(4+3)+3=10$
9. Write notes on the following : $5+5=10$
- (a) Cryopreservation
- (b) Seed bank
