**ST JOSEPH’S UNIVERSITY, BENGALURU-27**

Registration Number:

Date & Session

**B.Sc. (BOTANY)– 4th SEMESTER**

**SEMESTER EXAMINATION: APRIL 2024**

**(Examination conducted in May/June 2024)**

**BO 423 – ECOLOGY AND CONSERVATION BIOLOGY**

(For current batch students only)

**Time: 2 Hours Max Marks: 60**

This paper contains ONE printed page and THREE parts

Draw diagrams and write examples wherever necessary

**A. Define/explain any TEN of the following 10x2=20**

1. Allen’s rule
2. BIDE Model
3. Capillary water
4. Carbon footprint
5. Ecological density
6. Importance Value Index
7. Invasive Alien Species
8. Keystone species
9. List out any two conservation laws in India
10. Ozone Layer Depletion
11. Passive dispersal
12. Traditional Ecological Knowledge

**B. Attempt any FIVE of the following: 5x6=30**

1. Describe the soil profile with a neat labelled diagram.
2. Briefly describe the steps involved in Ecological Niche Modelling.
3. Discuss anythree ecological interactions with suitable examples.
4. Discuss the IUCN Red list categories with suitable examples.
5. Briefly describe methods of vegetation enumeration.
6. Write a brief note on Nitrogen cycle with neat labelled flow chart.
7. Write a brief note on tundra biome.

**C. Attempt any ONE of the following: 1x10=10**

1. Elucidate the importance of age pyramids in population ecology with neat labelled diagrams.
2. Give a comprehensive account on *in-situ* conservation strategies in India.