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

Registration Number:

Date & session:

 **M.Sc. ENVIRONMENTAL SCIENCE AND SUSTAINABILITY – I SEMESTER**

**SEMESTER EXAMINATION: OCTOBER 2023**

**(Examination conducted in November/December 2023)**

**ES 7422 – ECOSYSTEM DYNAMICS, BIODIVERSITY AND WILDLIFE CONSERVATION**

**(For current batch students only)**

**Time: 2 Hours Max Marks: 50**

**This paper contains ONE printed page and THREE parts**

***Instruction: Draw diagrams wherever necessary***

**PART – A**

**Answer any FIVE of the following 5q X 2m = 10m**

1. List the approaches of studying ecology.
2. What is a trophic level?
3. Define material flux rate.
4. What is animal assisted therapy?
5. What is a biodiversity hotspot? Cite an example.
6. Define Keystone species. Cite an example.
7. Define Priority species. Cite an example.

**PART – B**

**Write explanatory notes on any FOUR of the following 4q X 5m = 20m**

1. Concept of ecotone and edge effect
2. Cultural services of ecosystems
3. Effects of invasive alien species
4. Role of traditional knowledge in conservation
5. IUCN Red listed species (Types)
6. Conservation of Black buck – a case study

**PART – C**

**Answer ALL the questions 2q X 10m = 20m**

1. Describe Hydrarch. Add a note on the concept of climax and their theories. (4+6)

**OR**

Comment on the provisional services of an ecosystem.

1. Discuss the factors that lead to the endangering of species.

**OR**

Discuss the methods of *ex situ* conservation with suitable examples.