

Date:

Registration number:

ST. JOSEPH’S COLLEGE (AUTONOMOUS), BENGALURU-27

B.Sc. ENVIRONMENTAL SCIENCE - II SEMESTER

SEMESTER EXAMINATION: APRIL 2022

(Examination conducted in July 2022)

**ES 221 - Ecology – Theory and Practice**

Time 2 Hrs Max Marks 60

This question paper contains one printed page and three parts

**Part A**

**Answer any six questions 6×2 = 12**

1. What is an ecosystem?
2. What is biomagnification? Give an example.
3. Differentiate community periodicity and aspection.
4. Define ecological succession.
5. Differentiate fundamental and realized niche.
6. Define population density.
7. What is a limiting factor? Give an example.
8. What is co-evolution? Give an example.

**Part B**

**Write explanatory notes on any four 4 ×7 = 28**

1. Ecological pyramids
2. Ecotone
3. Ecological indicators
4. Trophic niche
5. Tundra biome
6. Darwin’s postulates

**Part C**

**Answer all questions 2× 10 = 20**

1. Explain the energy flow in an ecosystem with a pipe and box model.

**OR**

With the help of a sketch, explain the pond ecosystem.

1. With a neat labelled sketch, explain the ecological succession of Xerarch.

**OR**

Explain the progressive natural selection with special reference to industrial melanism.