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

Register Number:

DATE: 12-4-19

**II SEMESTER EXAMINATION: APRIL – 2019**

**B.Sc. – ENVIRONMENTAL SCIENCE**

**ES 218: ECOLOGY**

**Time: 2 ½ hours                                                       Maximum marks: 70**

## This paper contains one printed sides and three parts.

## Instruction: Draw diagrams wherever necessary.

# PART- A

## Answer any ten of the following. 10x2=20

1. List any three approaches of studying ecology.
2. What is an ecosystem?
3. What is bio-magnification?
4. What is residence time in a biogeochemical cycle?
5. Define a community.
6. What is an ecotone?
7. What are ecological indicators?
8. What is natality?
9. Define an ecological niche.
10. Define phototropism.
11. What is Allan’s rule?
12. State the Liebig’s law of minimum.

**PART- B**

**Write explanatory notes on any four of the following. 4x5=20**

1. Structure of an ecosystem
2. Carbon cycle
3. Types of dispersal
4. Age pyramids in a community
5. Niche partitioning
6. Darwin’s postulates

**PART- C**

#### Answer the following. 3x10= 30

1. Provide a detailed account of energy transfer in ecosystems.

**OR**

Discuss any four characteristics of a community.

1. Comment on r and K strategists.

**OR**

 Describe the effect of biotic factors on plants.

1. Write an elaborate note industrial melanism.

 **OR**

Explain Batesian and Mullerian mimicry with suitable examples.

ES -218-B-19