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

**IV SEMESTER EXAMINATION: APRIL – 2018**

**B.Sc. – ENVIRONMENTAL SCIENCE**

**ES 215: Ecology**

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

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

## Instruction: Draw diagrams wherever necessary.

# PART- A

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

1. Depict the biological sepctrum of organisation.
2. What is a detritus food chain?
3. Name any two phosphate solublizing bacteria.
4. Define Ecotone.
5. What is mortality?
6. What is a fundamental niche?
7. Mention any two significances of soil temperature.
8. What is Co- evolution?
9. What is phototaxis?
10. What is an epineuston?
11. What are limiting factors?.
12. What are Hekistotherms?

**PART- B**

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

1. Nitrogen Cycle
2. Niche partitioning
3. Biotic community of a pond
4. Mullarian mimicry
5. Growth form of population
6. Biomagnification

**PART- C**

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

1. Explain the energy flow in an ecosystem.

**OR**

Explainwith examples

a. Liebig’s law of minimum

 b. Shelford’s law of tolerance

1. Explain ecological sucession with reference to Hydrarch.

**OR**

 Discuss the effects of light on vegetation.

1. Discuss
2. Allen’s rule
3. Population dispersal

 **OR**

List Darvin’s postulates. Comment on progressive natural selection

.