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

**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- I**

**Answer any ten questions. 10x2=20**

1. Define Ecology.

2. What is an ecosystem?

3. Differentiate habitat and niche.

4. Compare and contrast between immigration and emigration.

5. State Vant Hoff’s Q10 law.

6. What is an ectotherm? Give an example.

7. What is a sedimentary cycle? Give an example.

8. What is ecological succession?

9. What is organic evolution?

10. What is egg mimicry? Give an example.

11. What is coevolution? Give an example.

12. What is ammensalism? Give an example.

 **PART- II**

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

13. Topographic factors

14. Darwin’s postulates

15. Adaptive radiation

16. Population growth curves

17. Nitrogen cycle

18. Niche Hypervolume

## PART- III

**Answer all questions. 3x10=30**

 19. Discuss the impact of temperature on animals.

 **OR**

 Explain the spatial and trophic niche with suitable examples.

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

 **OR**

 With the help of an ecological model, explain the energy flow in an ecosystem.

21. Explain the progressive natural selection.

 **OR**

 Explain the Batesian and Mullerian mimicry.