

Reg. No .....

Name .....

**M. Sc DEGREE END SEMESTER EXAMINATION - MARCH 2020**  
**SEMESTER 2 : ZOOLOGY**  
**COURSE : 16P2ZOOT05 : ECOLOGY: PRINCIPLES AND PRACTICES**  
*(For Regular - 2019 Admission & Supplementary 2018/2017/2016 Admissions)*

Time : Three Hours

Max. Marks: 75

**Section A**

**Answer any 8 (2 marks each)**

1. Comment on environmental factors
2. Comment on niche width and niche overlap.
3. What are abiotic components? How they interconnected with biotic components in an ecosystem?
4. How feedback mechanisms control the cybernetic nature of an ecosystem?
5. What are inverted ecological pyramids?
6. What is carrying capacity?
7. Comment on the factors responsible for annual population fluctuations
8. Comment on Gause's principle
9. Differentiate between autogenic succession and allogenic succession
10. What is a natural resource?
11. What is meant by afforestation?
12. Briefly explain Energy Audit

(2 x 8 = 16)

**Section B**

**Answer any 7 (5 marks each)**

13. Describe the Gaia hypothesis.
14. Comment on Host as Habitat concept
15. Bring out the significance of character displacement considering various animal groups.
16. Comment on primary productivity and its measurements.
17. Differentiate between GPP, NPP and NCP.
18. Differentiate between r and k selection
19. Comment on the ecological and evolutionary effects of competition
20. Write a note on the trends expected during the course of autogenic succession of ecosystems
21. Write notes on sand mining and its impacts
22. Write notes on the Forest Products

(5 x 7 = 35)

**Section C**

**Answer any 2 (12 marks each)**

23. Explain resource partitioning quoting suitable examples.
24. Write notes on biogeochemical cycles.
25. Write an essay on the characteristics of a population.
26. Write an essay on the importance, threats and initiatives for the conservation of Wetlands

(12 x 2 = 24)