## M Sc DEGREE END SEMESTER EXAMINATION - APRIL 2018 SEMESTER 2 : ZOOLOGY

COURSE: 16P2ZOOT05; ECOLOGY: PRINCIPLES AND PRACTICES

(Common for Regular - 2017 & Supplementary - 2016 admission)

Time: Three Hours Max. Marks: 75

## Section A Answer any 8 (2 marks each)

- 1. What is resource partitioning?
- 2. Comment on environmental factors
- 3. What are biotic components of an ecosystem? Cite examples.
- 4. What is primary productivity?
- 5. Comment on trophic levels
- 6. Comment on aggregation
- 7. Differentiate between physiological natality and ecological natality
- 8. Differentiate between crude and specific population density with suitable examples
- 9. Differentiate between autogenic succession and allogenic succession
- 10. What is meant by afforestation?
- 11. Briefly explain Energy Audit
- 12. Write notes on soil formation

 $(2 \times 8 = 16)$ 

## Section B Answer any 7 (5 marks each)

- 13. Write notes on the concept of habitats.
- 14. Write notes on resistance and resilience stability.
- 15. Comment on the concept of homeostasis
- 16. Comment on primary productivity and its measurements.
- 17. Elucidate phosphorous cycle with a flow chart.
- 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 the physical and chemical properties of soil
- 22. Comment on the significance of soil fertility

 $(5 \times 7 = 35)$ 

## Section C Answer any 2 (12 marks each)

- 23. Write notes on the concept of homeostasis with special reference to the cybernetic nature of an ecosystem.
- 24. Explain the laws of thermodynamics and energy flow in ecosystems

- 25. Give an account of population interactions
- 26. Write an essay on Causes and consequences of deforestation and Conservation of Forests

 $(12 \times 2 = 24)$