

Reg. No .....

Name .....

**M. Sc DEGREE END SEMESTER EXAMINATION - OCTOBER 2019****SEMESTER 1 : ZOOLOGY****COURSE : 16P1ZOOT02 : EVOLUTIONARY BIOLOGY AND ETHOLOGY***(For Regular - 2019 Admission and Supplementary - 2016/2017/2018 Admissions)*

Time : Three Hours

Max. Marks: 75

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

1. What is the Darwin-Wallace concept of Natural Selection?
2. Define 'RNA world'.
3. What does Geological time scale refer to?
4. Define the term 'Co-option'.
5. Name the three earliest forms of hominid fossil species.
6. What do you mean by displacement behaviour?
7. What are 'Fixed Action Patterns' (FAP)?
8. Outline the hormonal effects on behaviour?
9. Mention the contributions of Konrad Lawrence in the field of imprinting.
10. Comment on Lee-Boot effect.
11. What are epigamous structures?
12. Define 'Animals migration'.

(2 x 8 = 16)

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

13. Write a note on the evidences of evolution from embryology.
14. Briefly describe 'genetic drift'.
15. Give a short account on 'Molecular parsimony'.
16. Write a note on 'Speech and language evolution' in man.
17. Describe the organization of a reflex arc and the properties of a reflex action.
18. Discuss the hormonal control of reproductive behaviour in vertebrates.
19. Describe the neural basis of learning and memory.
20. How do honey-bees communicate with one another?
21. Write a note on 'Parental care in mammals'.
22. Briefly explain the types of migration in birds.

(5 x 7 = 35)

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

23. Explain the evidences of evolution from morphology and anatomy
24. Describe the cytogenetic basis of human evolution.
25. Write an essay on learning in animals.
26. Write an essay on animal communication through auditory signals.

(12 x 2 = 24)