

Reg. No .....

Name .....

**17P121**

**MSc DEGREE END SEMESTER EXAMINATION- NOVEMBER 2017**

**SEMESTER 1 : ZOOLOGY**

**COURSE : 16P1ZOOT02 ; EVOLUTIONARY BIOLOGY AND ETHOLOGY**

*(Common for Regular - 2017 / Supplementary - 2016 Admissions)*

Time : Three Hours

Max. Marks: 75

**Section A**

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

1. Define variation
2. What is a progenote?
3. Recapitulation theory
4. Write notes on geographical isolation
5. Give the function of BMPs, Gremlin and FGF in bat wing development.
6. Write a short note on Eocene primates.
7. How behaviour can be quantified?
8. What are reflex actions? Comment on how they are important in behaviour?
9. Comment on psycho-hydraulic model.
10. What are tidal rhythms?
11. What is inclusive fitness?
12. Differentiate acclimation and acclimatization.

**(2 x 8 = 16)**

**Section B**

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

13. Comparative account on micro, macro and mega evolution
14. Briefly explain homeotic genes.
15. Discuss the significance of Fixed action Patterns.
16. Describe the organization of a reflex arc and properties exhibited by a reflex action.
17. Comment on internal causal factors of behaviour
18. Describe different types of memories.
19. Discuss the advantages of monogamy.

20. Write on polygamous mating behaviour studied in birds.
21. What are the various cues in migration?
22. Write a short essay on social life in primates.

**(5 x 7 = 35)**

**Section C**

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

23. Explain types of fossils ,methods of fossilization and its significance
24. Write an essay on isolation and speciation in animals
25. Give the cytogenetic basis of human evolution.
26. Write an essay on communication traits found in mammals.

**(12 x 2 = 24)**