

TM171810E

Reg. No:

Name:

M. Sc. DEGREE (C.S.S.) EXAMINATION, NOVEMBER 2017
SEMESTER I – ZOOLOGY
(2017 Admission Regular, 2016 Admission Supplementary/Improvement &
2015 Admission Supplementary)
ZY1C02TM – EVOLUTIONARY BIOLOGY AND ETHOLOGY

Time: Three Hours

Maximum Marks: 75

PART A

I. Answer any five questions. Each question carries 3 marks.

1. Explain endosymbiotic theory.
2. Comment on RNA world.
3. Define genetic drift.
4. What is Prosimii?
5. Explain the scope of ethology.
6. Comment on motivation.
7. Explain aggregation in fishes.

(5x3=15)

PART B

II. Answer any six questions. Each question carries 5 marks.

8. Explain natural selection.
9. Comment on the Oparin Haldane experiment.
10. Explain fossilization and its significance.
11. Differentiate microevolution and macroevolution.
12. Briefly explain the different factors that change the rate of gene frequency.
13. Explain the different stages in primate evolution.
14. Explain Darwinian perspectives on animal behaviour.
15. Explain pheromonal communication in ants and mammals.
16. Comment on social organisation in insects.

(6x5=30)

PART C

III. Answer any two questions. Each question carries 15 marks.

17. Comment on the Pre-Darwinian, Darwinian and Post-Darwinian concepts of evolution.
18. Explain the origin of photosynthesis and aerobic metabolism.
19. Describe the different aspects of learning.
20. Explain the various reproductive strategies and parental care in animals.

(2x15=30)