

TM171800E

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)
ZY1C01TM – BIOSYSTEMATICS AND ANIMAL DIVERSITY

Time: Three Hours

Maximum Marks: 75

PART A

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

1. Comment on taxonomic characters and their significance.
2. Give a brief account on the similarities and dissimilarities between Archaea and bacteria.
3. What is cropping principle?
4. Give a brief account on the significance of Trochophore larva.
5. Distinguish between Chondrichthyes and Osteichthyes.
6. Give an account of threats to modern amphibian.
7. Distinguish between metatheria and eutheria.

(5x3= 15)

PART B

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

8. What are zoological types and mention their significance in biological classification?
9. What is molecular phylogeny? Give an account on phylogenetic trees.
10. Give an account of different types of keys, their merits and demerits.
11. Mention the significance of Edicaran and Burgess Shale Fauna in the evolution of multi cellularity.
12. Give reasons for the success of arthropods.
13. Give an account on the water vascular system in echinoderms.
14. Give an account on adaptive radiation in mammals.
15. Explain the importance of reptilian skull in biosystematics.
16. Comment on evolution of jaws and their significance.

(6x5= 30)

PART C

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

17. Describe the various methods of biosystematics.
18. Comment on the phylogenetic position of arthropod. Give details on the reasons for their success.
19. Give details on modern amphibians. Briefly describe their diversity, distribution, status and major threats faced by this group of animals.
20. "Huxely called birds as glorified reptiles." Substantiate this statement and comment on origin of birds.

(2x15=30)