Q. Code: P107

Reg. No…….. Name: ……..

M SC DEGREE END SEMESTER EXAMINATION 2014 -15

SEMESTER -1: ZOOLOGY

COURSE CODE –P1ZOOT01: TITLE– BIOSYSTEMATICS AND ANIMAL DIVERSITY

Time: 3 Hours Max. Marks: 75

Part A

(Answer ***any eight*** questions. Each carries 2 marks)

1. Distinguish between Synonymy & Homonymy
2. Explain Cladistics.
3. Write notes on Monophyly and Polyphyly
4. Polymorphism in Cnidaria
5. Enumerate the salient features of Cephalochordata
6. What are the merits of five Kingdom classification
7. Differentiate between Prokaryotes and Eukaryotes
8. Evolutionary significance of Hemichordata
9. Write short notes on threats of the survival of Amphibians.
10. Comment on the symmetry in organisms
11. Discuss the Arthropodan features of Phylum Onychophora.
12. Explain DNA barcoding.

8 x 2 = 16

Part B

(Answer ***any seven*** questions. Each carries 5 marks)

13. Write notes on Molecular phylogeny
14. What are the causes and consequences of Cambrian explosion?
15. Explain the three domain concept in Systematics.
16. Compare the features of Osteichthyes and Chondrichthyes
17. Explain the Colonial theory of Metazoan origin.
18. Discuss the Adaptive radiation of Annelids.
19. Explain the Morphological taxonomic characters.
20. Discuss the reasons for the successful survival of Arthropods.
21. Classify the Class Mammalia up to subclasses with salient features
22. Explain the adaptive modifications in Porifera

7 x 5 = 35 Marks

Part C

(Answer ***any two*** questions. Each carries 12 marks)

23. Write an essay on classical and modern methods in Biosystematics.
24. Explain the structural and functional modifications of Aves& Mammals for aerial life
25. Describe the classification of Echinodermata and their adaptive radiation
26. Write an essay on origin, adaptive radiation and Mesozoic extinction of Reptiles.

2 x 12 = 24 Marks