

Odd Semester, 2020
(Held in March, 2021)

ZOOLOGY

(Elective/Honours)

(**Systematics, Animal Diversity and Evolution**)

Marks : 56

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

Answer Question No. **1** which is compulsory and
any **four** from the rest

1. Write in brief on any *three* of the following :
4×3=12

(a) Minor phyla

(b) Morphology of *Ascaris*

(c) Digestive system of *Pila*

(d) Salient features of *Balanoglossus*

(e) Geological time scale

2. (a) Write down the characteristics of kingdom Animalia. What are the diagnostic features of phylum Annelida? 4+3=7

(b) Classify phylum Mollusca up to classes. 4

3. Describe the canal system in *Sycon* with suitable diagrams. 8+3=11

4. With the help of a diagram, describe the urinogenital system of leech. 3+8=11

5. Describe the reproductive systems of male and female rabbit. Illustrate your answer with proper diagrams. 4+4+3=11

6. (a) Discuss the synthetic theory of evolution. 6

(b) Write a note on anatomical evidences of evolution. 5

7. (a) Describe the life cycle of *Entamoeba histolytica*. 5½

(b) Describe the respiratory organs of *Labeo*. 5½

(3)

8. Write short notes on any *two* of the following : $5\frac{1}{2} \times 2 = 11$

- (a) Taxonomic hierarchy
- (b) Morphology of *Asterias*
- (c) Lamarckism

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