

ZOO-ELH—101 (A) (Syllabus-2015)

2 0 1 5

(October)

ZOOLOGY

(Elective/Honours)

FIRST PAPER

(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 and any four from the rest

1. Write, in brief, on any three of the following :

4×3=12

- (a) Taxonomic hierarchy
- (b) Pathogenicity of *Plasmodium vivax*
- (c) Digestive system of leech
- (d) External morphology of *Balanoglossus*
- (e) Lamarckism

2. Write down the salient features of phylum Chordata. Classify phylum Chordata up to classes giving diagnostic features and suitable examples. 4+7=11
3. Give an account of the canal system in *sycon* with suitable diagram. 7+4=11
4. Describe the structure and function of water-vascular system of *Asterias* with suitable diagrams. 7+4=11
5. Describe the digestive system of rabbit. Provide a well-labelled diagram of the same. 7+4=11
6. (a) Discuss the theory of natural selection. 7
 (b) Write a note on anatomical evidences of evolution. 4
7. Describe the life cycle and pathogenicity of *Ascaris*. 7+4=11
8. Write short notes on any *two* of the following : 5½×2=11
 - (a) Respiratory organs in *Labeo*
 - (b) Salient features of *Amphioxus*
 - (c) Six kingdom classification
