

1/EH-63 (i) (Syllabus-2015)

2022

(November)

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) Six-Kingdom Classification
- (b) Morphology of *Obelia* Colony
- (c) Urinogenital system of leech
- (d) Salient features of *Amphioxus*
- (e) *Homo sapiens*

(2)

2. (a) Write down the salient characteristics of phylum Porifera. 5
- (b) Classify phylum Porifera upto classes with examples. 6
3. Write few characteristics of Protozoans. With the help of suitable diagrams, describe the life cycle of *Plasmodium vivax*. Add a note on pathogenicity of *P. vivax*. 2+5+4=11
4. (a) Write down the salient features of phylum Echinodermata. 5
- (b) With the help of diagram, describe the morphology of *Asterias*. 6
5. With the help of suitable diagrams, describe the life cycle of *Ascaris lumbricoides*. Add a note on its pathogenicity. 2+7+2=11
6. Write a note on specific characteristics of mammals. With the help of diagram, describe the respiratory system in rabbit. 2+(3+6)=11
7. Discuss Darwin's theory of Natural Selection. Add a note on the main criticisms against this theory. 8+3=11

(3)

8. Write short notes on any two of the following : $5\frac{1}{2}\times 2=11$
- (a) Paleontological evidences of evolution
- (b) Taxonomic hierarchy
- (c) Digestive system of Cockroach
