

18.1- Gpy
1/EH—63 (i) (Syllabus—2015)

2 0 1 6

(October)

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 and *any four* from the rest

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

4×3=12

- (a) Minor phyla
- (b) Reproduction in *Obelia*
- (c) Oparin-Haldane theory
- (d) External morphology of *Petromyzon*
- (e) Feeding and digestion in leech

2. (a) Classify phylum Arthropoda up to classes giving examples.

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(b) Give the distinctive features of class Mammalia.

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3. Describe the life cycle of *Plasmodium vivax*. Suggest measures to control the spread of malaria. $9+2=11$

4. With the help of a suitable diagram, describe the digestive system of *Pila*. Add a note on its feeding mechanism. $(2+6)+3=11$

5. Describe the organs and mechanism of respiration in fish *Labeo*. Draw a diagram to illustrate your answer. $(3+6)+2=11$

6. What is evolution? Discuss the anatomical and embryological evidences of evolution. $1+(5+5)=11$

7. Describe the male and female reproductive systems of rabbit with the help of suitable diagrams. $4+4+3=11$

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

(a) Conjugation in *Paramecium*

(b) Tracheal respiration in cockroach

(c) Skeletal system of *Sycon*

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