4/EH–63 (iv) (Syllabus–2015)

2019

(April)

ZOOLOGY

(Elective/Honours)

(Developmental Biology, Ecology and Economic Zoology)

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 short notes on any three of the following: 4×3=12
 - (a) Fate map of frog embryo
 - (b) Parthenogenesis
 - (c) Air pollution
 - (d) Levels of organization in the biosphere
- 2. What is metamorphosis? Describe the process of metamorphosis in insects. 2+9=11

- 3. Describe the different steps involved in induced breeding technique of carps. 11
- 4. Name the common species of bees used in apiculture in India. Describe the modern or scientific method of apiculture with the help of a labelled diagram.
 4+7=11
- 5. What are the ecological pyramids?

 Differentiate between the three types of ecological pyramids.

 4+7=11
- **6.** What are renewable and non-renewable resources? Write a note on the management of renewable and non-renewable resources.

3+8=11

- 7. What is blastulation? Describe the process of blastulation in frog with the help of suitable diagrams.
 2+9=11
- 8. Write short notes on any two of the following: $5\frac{1}{2} \times 2 = 11$
 - (a) Composite fish culture
 - (b) Culturable fish species of India
 - (c) Economic importance of sericulture
 - (d) Energy flow in an ecosystem
