

**4/EH-63 (iv) (Syllabus-2015)**

**2 0 2 3**

( May/June )

**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. Answer any *three* of the following questions :

4×3=12

- (a) Briefly describe metamorphosis in frog.
- (b) Differentiate between food chain and food web. Give examples.
- (c) Name the different species of silk moths that are commonly reared in sericulture industry.

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- (d) Describe one method to control pests.
- (e) Write on ecological niche.
2. What is fertilization? Describe the different steps involved during fertilization with suitable diagrams. What is the significance of this process?  $1+6+2+2=11$
3. What are ecological pyramids? Describe the various types of ecological pyramids. Add a note on the trophic dynamic in an ecosystem.  $2+7+2=11$
4. Define pollution. What are the major sources and effects of air pollution? Suggest some measures to control air pollution.  $1+4+4+2=11$
5. What is induced breeding? Describe the steps involved in induced breeding by hypophysation technique. What are its advantages?  $1+8+2=11$
6. Name the different species of honeybees commonly reared in India. Briefly describe the scientific method of beekeeping with the help of a suitable diagram.  $2+7+2=11$

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7. (a) Distinguish between interspecific and intraspecific interactions. Give a brief account of the interspecific interactions found in living organisms.  $2+5=7$
- (b) Describe briefly the energy flow in an ecosystem with the help of a diagram. 4
8. Write short notes on any *two* of the following :  $5\frac{1}{2}\times 2=11$
- (a) Parthenogenesis
- (b) Non-renewable resources
- (c) Composite fish culture
- (d) Population regulation

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