

6/H-63 (viii) (Syllabus-2015)

2018

( April )

ZOOLOGY

( Honours )

EIGHTH PAPER

( Developmental Biology, Environmental Biology  
and Biotechnology )

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 any *three* of the following :  $4 \times 3 = 12$

(a) Patterns of cleavage

(b) Concept of ageing

(c) Biomagnification

(d) Acid rains

(e) Types of restriction enzyme

( Turn Over )

8D/1886

( 2 )

2. What are morphogenetic movements? Discuss various morphogenetic movements during the process of gastrulation with suitable diagrams.  $1+8+2=11$
3. Give an account of regeneration in invertebrates. 11
4. (a) Describe Shelford's law of tolerance.  
(b) Briefly describe the major terrestrial biomes of the world.  $5\frac{1}{2}+5\frac{1}{2}=11$
5. (a) State the causes and consequences of radioactive pollution.  
(b) Briefly describe the gasses responsible for ozone depletion and suggest some control measures.  $5+6=11$
6. Discuss different processes involved in nitrogen cycle. 11
7. Write short notes on any two of the following :  $5\frac{1}{2}\times 2=11$
- (a) Teratogenesis  
(b) Biological indicators  
(c) PCR

( 3 )

8. (a) Describe the application of cosmid vector in genetic engineering with suitable illustrations.  
(b) List various steps involved in Southern blotting with diagrams.  $5\frac{1}{2}+5\frac{1}{2}=11$

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