

CS/2111

11480/NH

Developmental Biology - Zoo-301  
SEM-V

Max Marks -40

Time-3 Hours

Note- Candidate are required to attempt two questions from section-A and section-B.  
Entire section-C is compulsory.

### Section-A

1. What do you mean by gametogenesis. Differentiate between spermatogenesis and oogenesis
  2. Discuss about the various types of fertilizations occur in animals.
  3. Discuss about the concept and role of organizers and inducers during development.
  4. Discuss briefly about the maturation of egg before fertilization. 6x2=12
- Marks

### Section B

5. Discuss briefly about development of chick up to three germ layers.
  6. Give an account of terms determination and differentiation during animal development.
  7. Write a Short note on mammalian placenta, its formation, and types.
  8. Discuss about the phenomenon of metamorphosis in Frog. 6x2=12
- Marks

### Section-C

1. Follicular cell.
2. Cleavage patterns.
3. Polarity of egg.
4. Parthenogenesis.
5. Fetal membranes.
6. Types of cleavage.
7. Fate of germ layers in rabbit.
8. Metamorphosis in *Herdmania*.

2x8= 16Marks