

Exam. Code : 103205

Subject Code : 1414

B.A./B.Sc. 5th Semester
ZOO-V A : ZOOLOGY
(Developmental Biology)

Time Allowed—3 Hours]

[Maximum Marks—35

SECTION—A

Note :— All questions are compulsory.

Write a short answer on the following :

1. Egg membranes and their functional role
2. Spermiogenesis
3. Blastodisc
4. Ectodermal derivatives
5. Neurula
6. Inductors
7. Retrogressive metamorphosis.

1×7=7

SECTION—B

Note :— Attempt any FOUR questions, ONE from each unit. Each question carries 7 marks.

UNIT—I

1. Explain in detail the process of Spermatogenesis and draw diagrams of different stages.
2. Write a detailed note on Vitellogenesis.

UNIT—II.

1. What are different cleavage patterns and how does it affect the development of the embryo ?
2. Explain in detail the formation and fate of 3 germ layers in *Herdmania*.

UNIT—III

1. Explain in detail the early embryonic stages during the development of Frog.
2. What are fetal membranes and what is their functional significance ?

UNIT—IV

1. Give a detailed account of mammalian placenta.
2. Explain in detail the metamorphosis in *Herdmania*.

4×7=28