| (i) | Printed Pages: 2 | Roll No |
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(ii) Questions :9 Sub. Code: 1 7 4 5 6 Exam. Code: 0 0 0 5

B.A./B.Sc. (General) 5th Semester (2124)

ZOOLOGY

Paper-I: Developmental Biology (ZOO-501)

Time Allowed: Three Hours] [Maximum Marks: 36

Note: — Question No. 1 is compulsory. ONE question is to be attempted from each unit. In all, FIVE questions are to be attempted including compulsory one.

- 1. Write briefly:
 - (a) Chromosome Puffing
 - (b) Fertilizin
 - (c) Paedogenesis
 - (d) Intercalation
 - (e) Inducers
 - (f) Anisogamy
 - (g) Sub Testicular Cells
 - (h) Mosaic Egg.

 $8 \times 1 = 8$

UNIT-I

- Describe the process of spermatogenesis and explain the role of subtesticular cells in spermatogenesis.
- 3. Write short notes on:
 - (a) Vitellogenesis.
 - (b) Polarity of Egg.

4+3=7

UNIT-II

- 4. How is Parthenogenesis different from fertilization and what are the significance of both?
- 5. Write notes on:
 - (a) Coeloblastula.
 - (b) Indeterminate cleavage.
 - (c) Fate maps of chick embryo.

2+1+4

UNIT—III

- 6. What are the cell interactions? Write about paracrine and juxtacrine cell to cell interactions.
- Write an account on the development of Rabbit upto 3 germ layers.

UNIT—IV

- 8. Describe the retrogressive Metamorphosis in Herdmania. Explain the various changes in Larval life to adult life. 7
- 9. Explain different types of placenta with regard to the intimacy between foetal & maternal parts of placenta. 7