

Exam. Code : 103205

Subject Code : 1364

B.A./B.Sc. 5<sup>th</sup> Semester

ZOOLOGY

(Developmental Biology)

Paper—ZOO—VA

Time Allowed—3 Hours]

[Maximum Marks—35

**Note** :— (1) Section A is compulsory – write short answers.

(2) Section B : Attempt any **FOUR** questions, selecting at least **ONE** from each unit.

**SECTION—A**

Write short answers for the following :

1. Polarity of Egg
2. Corpus luteum
3. Reciprocal induction
4. Gastrocoel
5. Tissue interactions
6. Retrogressive development
7. Cortical Granules. 1×7=7

**SECTION—B**

**UNIT—I**

1. Describe Spermatogenesis and highlight role of subtesticular cells. 7
2. Highlight the steps of fertilization and the post fertilization changes in the egg. 7

## UNIT—II

3. Describe embryonic development of Herdmania. 7
4. Write notes on the following :
- (a) Patterns of cleavage
- (b) Determination and differentiation.  $3.5 \times 2 = 7$

## UNIT—III

5. Describe metamorphosis in Frog. 7
6. Describe fate maps in chick. 7

## UNIT—IV

7. How are foetal membranes formed ? What is their role in development ? 7
8. Write notes on :
- (a) Regeneration
- (b) Parthenogenesis.  $3.5 \times 2 = 7$