

Roll No :-

3570

**M.Sc. (Zoology) (SEMESTER-II)
EXAMINATION, 2019
NINTH PAPER
DEVELOPMENT BIOLOGY**

Time Allowed - Three Hours
Maximum Marks - 50

*Note: The questions paper is divided into three parts,
Part-A, Part-B and Part-C.*

Part-A (Compulsory) {Marks:10}

Part A is compulsory and contains 10 questions (50 words each). Each question is of 1 mark.

Part-B (Compulsory) {Marks:10}

Part-B is compulsory and contains five questions at least one from each unit. Candidate is required to attempt all five questions. Each question is of 2 marks (100 words).

Part-C {Marks:30}

Part-C contains six questions two from each unit. Candidate is required to attempt three questions. one from each unit . Each question is of 10 marks (400 words).

Part-A (Compulsory)

1. Define Growth phase.
2. Explain Chemotaxis.
3. What is Fate map.
4. Explain Cell commitment.
5. What are Abnormal inducer.
6. Explain Morphagen gradient.
7. Explain chorio allantoic placenta.
8. Write two special features of differentiation of neuron.
9. Write two significance of insect metamorphosis.
10. Define Hypertrophy.

Part-B(Compulsory)

11. Describe role of membrane potential in prevention of polyspermy.
12. Write on Germ cell determinants.
13. Describe the nuclear transfer experiment giving example.
14. Write on Embryonic adptations
15. Write on Evolution of Viviparity.

(ZX) 3570_M.Sc._400 (01)

Contd.

(ZX) 3570_M.Sc._400 (02)

Contd.

Part-C

Unit-I

16. Write on Morphogenetic determination in egg cytoplasm.

OR

- 17- Write in detail on cell interaction and cell specification.

Unit-II

- 18- Describe establishment of body axis in chick.

OR

- 19- Describe nature and specific properties of inductor.

Unit-III

- 20- Describe Limb development and regeneration in vertebrates.

OR

- 21- Write in detail on Amphibian metamorphosis.