

OCTOBER 2011

P/ID 40313/PZLJ

Time : Three hours

Maximum : 100 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

All questions carry equal marks.

Each answer should not exceed 50 words.

Explain/Define the following.

1. Epigenesis.
2. External fertilization.
3. Chemotaxis.
4. Epiblast.
5. Organogenesis.
6. Cell lineage.
7. Metamorphosis.
8. Germ ring.
9. Neuro Secretary cell.
10. Ontogeny.

PART B — (5 × 6 = 30 marks)]

Answer ALL questions.

All questions carry equal marks.

Each answer should not exceed 250 words.

11. (a) Discuss the growth of Oocytes.
Or
(b) Describe the physiological changes during fertilization.
12. (a) Explain the processes of chemo differentiation.
Or
(b) Write an account on development of sponges.
13. (a) Explain the differentiation and development of heart in a mammal.
Or
(b) Describe the developmental genetic defect.
14. (a) Define the term “cell death”. What are the roles of cell death in development.
Or
(b) Explain the term Teratogenesis with suitable example.

15. (a) Give an account of the events in gastrulation of frog.

Or

- (b) Discuss the development of molluscs.

PART C — (5 × 10 = 50 marks)

Answer ALL questions.

All questions carry equal marks.

Each answer should not exceed 500 words.

16. (a) Write an essay on Oogenesis.

Or

- (b) Write on hormonal control of ovulation?

17. (a) Write an account on nuclear transplantation process.

Or

- (b) Describe the development of kidney in mammals.

18. (a) Write an essay on neuroendocrine control of insect metamorphosis.

Or

- (b) Describe in detail about the early development of crustaceans.

19. (a) Explain the development of endolecithal egg of platyhelminthes.

Or

- (b) Write an essay about Neoplasia.

20. (a) Explain the following terms-Teratogenesis and Transgenic organisms.

Or

- (b) Describe the tissue reactivity in amphibian metamorphosis.
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