

Total No. of Pages: 2

Register Number:

5306

Name of the Candidate:

B.Sc. DEGREE EXAMINATION, 2013

(ZOOLOGY)

(THIRD YEAR)

PART-III

740: DEVELOPMENTAL BIOLOGY

December]

[Time : 3 Hours

Maximum : 100 Marks

SECTION-A

(10×2=20)

Answer any TEN questions

Explain the following:

1. Organiser theory.
2. Pangenesis theory.
3. Gametogenesis.
4. Primordial germ cells.
5. Spermatogenesis.
6. Homolecithal egg.
7. Parthenogenesis.
8. Blastula.
9. Amphimixis.
10. Foetal membrane.
11. Procerephalon.
12. Choron
13. Regeneration
14. Blastema
15. Tadpole

SECTION-B

(5×7=35)

Answer ALL questions

16. a) Describe the formation of separated from primordial germ cells.
(OR)
b) Describe the structure of a sperm.
17. a) Write an account on polar bodies.
(OR)
b) Classify the eggs on the basis of the amount of yolk present in them.

18. a) Describe the acrosome reaction during fertilization.
(OR)
b) Describe the planes of cleavage with suitable diagram.
19. a) Describe the development of eye of frog.
(OR)
b) List out the functions of placenta.
20. a) Explain the three steps involved in transplantation technique.
(OR)
b) Describe the events in regeneration of the limb of a newt.

SECTION-C

(3×15=45)

Answer any THREE questions

21. Write an account on theories of preformation.
22. Describe spermatogenesis.
23. Describe the gastrulation in frog.
24. Write an account on nuclear transplantation in an amphibian.
25. Classify the placenta based on the types of tissue involved.
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