



QP CODE: 20100476

Reg No :

Name :

BSc DEGREE (CBCS) EXAMINATION, MARCH 2020

Sixth Semester

Core course - ZY6CRT09 - DEVELOPMENTAL BIOLOGY

B.Sc Biological Techniques and Specimen Preparation Model III, B.Sc Zoology and Industrial Microbiology Model III Double Main, B.Sc Zoology Model I, B.Sc Zoology Model II Aquaculture, B.Sc Zoology Model II Food Microbiology, B.Sc Zoology Model II Medical Microbiology

2017 Admission Onwards

3E68699F

Time: 3 Hours

Maximum Marks :60

Part A

Answer any ten questions.

Each question carries 1 mark.

1. What is rete testis?
2. Define polarity.
3. What is blastocyst?
4. What is presumptive organ forming areas?
5. What is exogastrulation?
6. What do you mean by potency of a cell?
7. Identify the germ layer from which somites are formed.
8. Briefly explain the type of blastula seen in chick development.
9. What is Chorion?
10. Cite difference between primary and secondary infertility.
11. Name the causative organism of Toxoplasmosis.
12. Name a mammal with Choriovitelline placenta.

(10×1=10)



Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Discuss various scopes of developmental biology.
14. Discuss the importance of sex education.
15. Explain the different types of cleavage.
16. Explain the influence of yolk on gastrulation.
17. Explain gene action during development with special reference to drosophila.
18. Write an account on the presumptive organ forming areas of frog blastula.
19. Explain the process of blastulation in chick embryo.
20. Explain briefly the cleavage and blastulation in human development.
21. Explain the experiment that demonstrated the plasticity of nuclei in the development of an embryo.

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **10** marks.*

22. Explain the process of fertilization with the help of diagrams.
23. Explain different morphological and anatomical changes take place in frog metamorphosis. Discuss the role of various hormones in metamorphosis.
24. Write an essay on the regeneration in animals.
25. Explain prenatal diagnostic techniques.

(2×10=20)

