



QP CODE: 25020494



25020494

Reg No :

Name :

**B.Sc DEGREE (CBCS) REGULAR / REAPPEARANCE / MERCY CHANCE
EXAMINATIONS, FEBRUARY 2025**

Sixth Semester

CORE COURSE - ZY6CRT09 - DEVELOPMENTAL BIOLOGY

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

2017 Admission Onwards

70069931

Time: 3 Hours

Max. Marks : 60

Part A

*Answer any **ten** questions.*

*Each question carries **1** mark.*

1. What is the role of oxytocin in pregnancy?
2. Define isolecithal eggs.
3. Write any two characteristics of Cleavage.
4. What is Parthenogenesis ? Give example.
5. What is epiboly?
6. Differentiate between totipotency and pluripotency.
7. Sketch and label frog egg.
8. Define Area Opaca.
9. Define "Avian blastopore".
10. Define reproductive cloning.
11. Define asymmetric IUGR.
12. Define Hemochorial placenta.

(10×1=10)

Part B

*Answer any **six** questions.*

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





13. "Ontogeny recapitulates Phylogeny". Who proposed the theory and explain?
14. Briefly explain five general events in fertilization process.
15. Explain fate map and their construction in frog blastula.
16. Explain the concept of germ layers and its derivatives.
17. Explain the role of maternal effect genes and zygotic genes in the development of drosophila.
18. Write an account on the hormonal and environmental Control of frog metamorphosis.
19. Discuss briefly about human placenta.
20. Define regeneration. Explain the different types of regeneration.
21. Explain factors that causes infertility in humans.

(6×5=30)

Part C

*Answer any **two** questions.*

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

22. Explain the anatomy of testis and ovary.
23. Explain the development of eye in frog with suitable diagrams.
24. With the help of a neat labelled diagram explain the salient features of 33hour chick embryo.
25. Explain prenatal diagnostic techniques.

(2×10=20)

