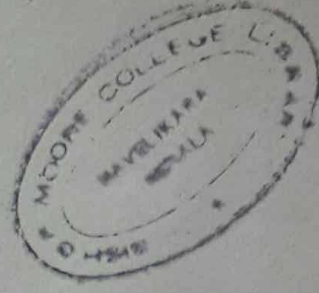


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L – 1638

Reg. No. :

Name :

Sixth Semester B.Sc. Degree Examination, March 2021

First Degree Programme Under CBCSS

Zoology

Core Course IX

**ZO 1641 — DEVELOPMENTAL BIOLOGY AND
EXPERIMENTAL EMBRYOLOGY**

(2018 Admission Regular)

Time : 3 Hours

Max. Marks : 80

Draw diagrams only if specified in the question

SECTION – A

Answer **all** questions in **one** or **two** sentences. **Each** question carries **1** mark.

1. What are Macrolecithal eggs?
2. Give the significance of Fertilization Cone.
3. List any two patterns of Cleavages.
4. What is a Stereoblastula?
5. Graffian Follicle.
6. Capacitation.

P.T.O.

7. Oogenesis.
8. Amphimixis.
9. Parturition.
10. Autoimmunization.

(10 × 1 = 10 Marks)

SECTION – B

Answer **any eight** out of sixteen questions. **Each** question carries **2** marks and should not exceed **one** paragraph.

11. Comment on Germ Layers.
12. AFP Estimation
13. Homeotic Genes.
14. Organizer.
15. Epibolytic movement.
16. Define Coeloblastula.
17. Polarity of an Egg.
18. Gradients.
19. Thelytoky.
20. Delamination.
21. Notogenesis.
22. Teratogens.
23. Comment on Barr bodies.

24. Write a short note on Animal Cloning.
25. Explain Chorionic Villus sampling.
26. Recapitulation theory.

(8 × 2 = 16 Marks)

SECTION – C

Answer **any six** out of twelve questions. **Each** question carries **4** marks. **Each** answer should not exceed **120** words.

27. Mention the subdivisions of Developmental Biology.
28. Describe different types of Blastula.
29. Explain the Construction of Fate Maps.
30. Briefly comment on the Cell Lineage in Planocera.
31. What is the significance of Parthogenesis?
32. Describe the various morphogenetic movements in Gastrulation.
33. Define Amniocentesis.
34. Mention the contribution of Spemann in Experimental Embryology.
35. Elaborate on Stem Cell Therapy.
36. Explain types of Foetal Membranes.
37. Comment on Embryonic Induction.
38. Describe Totipotency of embryonic cells.

(6 × 4 = 24 Marks)

SECTION – D

Answer **any two** out of six questions. **Each** question carries **15** marks. Answer as a **short essay**.

39. Describe the Transplantation experiments in Amphibia.
40. Citing *Drosophila*, explain Gene Action.
41. Write an essay on In vitro fertilization, and Test Tube babies.
42. Describe the theories of Developmental Biology.
43. Elucidate the main concepts in Fertilization.
44. Explain Types and Patterns of Cleavages.

(2 × 15 = 30 Marks)
