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N – 1366

Reg. No. :

Name :

Sixth Semester B.Sc. Degree Examination, April 2022

First Degree Programme under CBCSS

Zoology

Core Course X

**ZO 1642 : DEVELOPMENTAL BIOLOGY AND EXPERIMENTAL
EMBRYOLOGY**

(2014 Admission)

Time : 3 Hours

Max. Marks : 80

SECTION – A

Answer **all** questions. Each question carries **1** mark.

1. Agglitination
2. Epigenesis
3. Blastulation
4. Totipotency
5. Neurogenesis
6. Germplasm
7. Amphimixis
8. Parthenogenesis

P.T.O.

9. Discoblastula
10. Oogenesis.

(10 × 1 = 10 Marks)

SECTION – B

Answer **any eight** of the following. Each question carries **2** marks.

11. Embryonic induction
12. Hox genes
13. Recapitulation theory
14. Involution
15. Epiboly and emboly
16. Stereoblastula
17. Polarity of egg
18. Delamination
19. Aminocentesis
20. Stem cell therapy
21. Ultrasound scanning
22. Cloning.

(8 × 2 = 16 Marks)

SECTION – C

Answer **any six** questions. Each question carries **4** marks.

23. Differentiate between arrhenotoky and thelytoky.
24. On the basis of yolk, explain the classification of egg.
25. Differentiate between holoblastic and meroblastic cleavage.
26. Describe Spemann's constriction experiments.

27. Describe prenatal diagnosis.
28. Explain fate map.
29. Explain the morphogenetic movements.
30. Differentiate between convergence and divergence.
31. Explain different types placenta.

(6 × 4 = 24 Marks)

SECTION – D

Answer **any two** of the following. Each question carries **15** marks.

32. Describe the physiological and biochemical changes during and after fertilization.
33. Explain the derivatives of germ layers.
34. Explain the nuclear transplantation experiments in Amphibians.
35. Describe the development of extra-embryonic membranes in Chick.

(2 × 15 = 30 Marks)
