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SUBJECT CODE NO: - BB - 2438
FACULTY OF SCIENCE AND TECHNOLOGY
B.Sc (CBCGS)(Pattern 2022) S.Y SEM III
Examination November / December 2025
Zoology-VII Developmental Biology of Vertebrates

[Time: 1:30 Hours]

[Max. Marks:40]

N. B

Please check whether you have got the right question paper.

1. All questions are compulsory.
2. All questions carry equal marks.
3. Draw neat diagram whenever necessary.

Q1 Describe the Preformation and Germplasm Theory regarding developmental biology 10

OR

Explain in Brief:

- a) Cleavage
- b) Structure of Human Sperm

Q2 Describe the process of Gastrulation up to the formation of germ layers. 10

OR

Explain in Brief:

- a) Structure of Egg of Hen
- b) Fertilization

Q3 Write short notes on (Any Two): 10

1. Types of Eggs
2. Blastulation
3. Spermatogenesis
4. Placenta in Mammals

Q4 Multiple Choice Questions 10

- 1) Who among the following proposed Germplasm Theory?
 a) August Weismann b) Swammerdam
 c) Mendel d) Darwin
- 2) Transformation of a spermatid into a mature sperm is called _____.
 a) Spermatogenesis b) Spermiogenesis
 c) Spermiation d) Spermatocytogenesis
- 3) Sperms are produced during spermatogenesis by the process _____.
 a) Mitosis b) Meiosis
 c) Both (a) and (b) d) None of the above

4) Unicellular Zygote converted by repeated division, this process is Called as

- a) Oogenesis b) Cleavage
c) Vitellogenesis d) Invagination

5) During ovulation, ovum is released from ovary in the form?

- a) Primary oocyte b) Secondary oocyte
c) Ovum (matured) d) Oogonium

6) Which of the following cavity formed during gastrulation?

- a) Antrum b) Pseudocoel
c) Archenteron d) Blastocoel

7) Zygote divide & redvide to form ball of cells, this process is called as

- a) Blastulation b) Cleavage
c) Morulation d) Gastrulation

8) Blastopore is found in which stage of frog development?

- a) Morula b) Blastula
c) Neurula d) Gastrula

9) Spring-like structure that maintains the position of yolk in the centre of the albumen of Hen's egg is called _____

- a) Yolk b) Chalaza
c) Amnion d) Chorion

10) Which extra-embryonic membrane encloses the embryo in a fluid-filled cavity?

- a) Allantois b) Chorion
c) Amnion d) Yolk sac

