

(6 pages)

Reg. No. : .....

Code No. : 11623 E      Sub. Code : JMZO 21/  
SMZO 21

B.Sc. (CBCS) DEGREE EXAMINATION, APRIL 2019.

Second Semester

Zoology — Main

DEVELOPMENTAL ZOOLOGY

(For those who joined in July 2016 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. Lysin is produced from  
(a) Acrosome                      (b) Nucleus  
(c) Ovum                          (d) Ribosome
2. A type of egg containing massive amount of yolk in the vegetal pole is known as  
(a) Mesolecithal                  (b) Microlecithal  
(c) Oligolecithal                  (d) Telolecithal

3. A zygote develops into a mature organism by under going  
(a) Cleavage                      (b) Collision  
(c) Fertilization                  (d) Fission
4. In test tube baby production, the hormone given to the female is  
(a) FSH                              (b) Gonadotropin  
(c) L.H.                              (d) T.S.H.
5. The heart of vertebrates are originated from  
(a) Ectodermal                      (b) Endodermal  
(c) Epithelial                      (d) Mesodermal
6. The brain of Human being is developed from the layer  
(a) Chordo mesoderm              (b) Ectoderm  
(c) Endoderm                      (d) Mesoderm
7. Inner most non-vascular embryonic membrane of higher vertebrates is known as  
(a) Acrosome                      (b) Allantois  
(c) Amnion                          (d) Chorion



8. The embryo makes contact with the uterine wall by special type of tissue called
- (a) Allantois                      (b) Chorion  
(c) Placenta                      (d) Yolk Sac
9. The replacement of the broken tail of a lizard is an example for which type of regeneration
- (a) Epimorphosis                  (b) Heteromorphosis  
(c) Morphallaxis                  (d) Prophylaxis
10. Find the intrauterine contraceptive device
- (a) Diaphragm                      (b) Lippes loop  
(c) Mala D                          (d) Niroth

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Describe how the ova is produced in a ovary.
- Or
- (b) Write short note on Artificial Parthenogenesis.

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12. (a) Explain the fate map of chick.
- Or
- (b) Describe the various aspects involved in the development of Test Tube Baby.
13. (a) Describe the formation of endocardial tubes in chick.
- Or
- (b) Explain the gradient hypothesis.
14. (a) Explain the role of Thyroxine in Amphibian metamorphosis.
- Or
- (b) Explain the development of extra embryonic membranes in chick.
15. (a) Explain the power of regeneration in planaria.
- Or
- (b) Write short notes on surgical method of contraception.

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**PART C — (5 × 8 = 40 marks)**

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Explain the sperm and egg of chick with diagrams.

Or

- (b) Describe the major events that occur in the process of fertilization.

17. (a) Explain the reasons for the infertility in Male and Female.

Or

- (b) Write an account on Invitro fertilization.

18. (a) Describe the development of Brain in chick with diagrams.

Or

- (b) What is Organizer? Explain it with examples.

19. (a) Describe the structure and physiology of extra embryonic membranes in chick.

Or

- (b) What is placenta? Classify placenta based on the histology.

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20. (a) Write an essay on nuclear transplantation in Acetabularia.

Or

- (b) Give an account on IUCD.

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