

B.Sc. DEGREE END SEMESTER EXAMINATION - MARCH 2025**SEMESTER 6 : ZOOLOGY****COURSE : 19U6CRZOO09 : REPRODUCTIVE AND DEVELOPMENTAL BIOLOGY***(For Regular 2022 Admission and Supplementary 2021/2020/2019 Admissions)*

Time : Three Hours

Max. Marks: 60

PART A**Answer All (1 mark each)**

1. Comment on the germ layer theory.
2. What is corpus albicans?
3. What are pole cells?
4. Define the term seminiferous tubules.
5. What is the significance of proamnion in a chick embryo?
6. Describe Blastocyst.
7. What are Teratogens?
8. What is Decidua?

(1 x 8 = 8)**PART B****Answer any 6 (2 marks each)**

9. What is Cytomegalovirus?
10. Explain the regenerative mechanism in the healing of a wound.
11. Analyze the significance of middle piece in the structure of human sperm.
12. Comment on the egg types of Amphioxus and annelid worms.
13. What is cotyledonary placenta?
14. What are Gap genes, and how can you explain them?
15. Define autonomy with example.
16. Write about blastulation in chick.

(2 x 6 = 12)**PART C****Answer any 4 (4 marks each)**

17. Explain homeotic selector gene with examples.
18. Describe the characteristics of a chick embryo that has been in the incubator for 24 hours.
19. Describe Emboly and its types.
20. Explain the different fields in embryology.
21. Describe the cleavage process in frog.
22. Elucidate the mechanism of cloning in sheep. Point out the risk factors of cloning.

(4 x 4 = 16)**PART D****Answer any 2 (12 marks each)**

23. Write an essay on male and female reproductive structures
24. Prepare a detailed essay on the classification of eggs. Use neat illustrations for each.

25. Elucidate the mechanism of preservation of animal germplasm. Reflect on the sperm freezing process.
26. Write an essay about the incubation of chick embryos for 18 hours, 24 hours, 33 hours, and 48 hours.

(12 x 2 = 24)