

B.Sc. DEGREE END SEMESTER EXAMINATION - APRIL 2021**SEMESTER – 6: ZOOLOGY (CORE COURSE)****COURSE: 15U6CRZOO09: REPRODUCTIVE AND DEVELOPMENTAL BIOLOGY**

(Common for Regular 2018 admission & Improvement 2017/Supplementary 2017/2016 /2015 admissions)

Time: Three Hours

Max. Marks: 60

PART A***Answer all Questions of the following***

1. What are teratogens?
2. Number of polar bodies produced after an oogenesis.
3. Name the site of fertilization in humans.
4. Give an example of mesolecithal egg.
5. Define blastocyst.
6. What is vegetal pole?
7. Define spermatid.
8. The chromosome complement of Klinefelter's syndrome is. (1 x 8 = 8)

PART B***Answer any Six of the following***

9. What is fate map?
10. What are the functions of placenta?
11. Mention the types of parthenogenesis.
12. Give a brief account on neural tube formation.
13. Comment on Recapitulation theory.
14. Differentiate regulative and mosaic eggs
15. Give a brief account on the derivatives of various germ layers.
16. Explain the concept of embryonic induction. (2 x 6 = 12)

PART C***Answer any Four of the following***

17. Explain morphogenetic movements
18. Write an account on *in vitro* fertilization and embryo transfer.
19. Give an account on limb regeneration in amphibia.
20. Give an account on the ethical issues related to embryological experiments.
21. Describe Spemann's constriction experiments.
22. Explain the types of blastula with examples. (5 x 4 = 20)

PART D***Answer any Two of the following***

23. Write an Essay on cleavage.
24. Explain the features of 18 hour chick embryo with suitable diagrams.
25. Explain the embryology of Frog
26. Write an essay on the events in fertilization (10 x 2 = 20)