

B.Sc. DEGREE EXAMINATION - NOVEMBER 2017
BRANCH VI A – ADVANCED ZOOLOGY & BIOTECHNOLOGY
THIRD SEMESTER

COURSE : MAJOR CORE
PAPER : DEVELOPMENTAL BIOLOGY
TIME : 3 HOURS

MAX. MARKS: 100

SECTION - A

ANSWER ALL THE QUESTIONS.

(10 x 3 = 30)

1. State Germplasm theory.
2. What are Corpora allata?
3. Name the events that happen during Previtellogenesis.
4. State the functions of the placenta.
5. Define epiboly.
6. What are Regulative eggs? Give an example.
7. Name the germ layer and the region from which liver develops.
8. What is membranous labyrinth?
9. Define Surrogacy.
10. Comment on Cloned babies.

SECTION - B

ANSWER ANY FIVE QUESTIONS.

(5 x 6 = 30)

11. Explain Gradient theory.
12. Describe the different types of egg membranes.
13. What are fate maps? Explain natural fate maps with an example.
14. Describe the development of eye.
15. Enumerate the steps involved in “*in vitro* fertilization”.
16. Comment on the ethical issues related to Assisted Reproductive Technology
17. State the theories on fertilization

SECTION - C

ANSWER ANY TWO QUESTIONS.

(2 x 20 = 40)

18. What is regeneration? Explain the mechanism and types of regeneration.
19. Describe the process of spermatogenesis.
20. Illustrate and explain the process of cleavage in frog.
21. Describe the development of brain.