

17U618

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Name:

Reg. No.....

SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2020

(CUCBCSS-UG)

(Regular/Supplementary/Improvement)

**CC15U ZO6 B13 - REPRODUCTIVE BIOLOGY, DEVELOPMENTAL BIOLOGY
AND TERATOLOGY**

Zoology - Core Course
(2015 Admission onwards)

Time: Three Hours

Maximum: 80 Marks

A. Answer **all** questions. Each question carries 1 mark.

1. Name the placental hormones.
2. What is amniocentesis?
3. What is meant by flexion?
4. What is meroblastic cleavage?
5. What is fate map?
6. What are stem cells?
7. What is archenteron?
8. What is corpus albicans?
9. What are neural crest cells?
10. What is PNDDT Act?

(10 x 1 = 10 Marks)

B. Answer any **ten** questions in two or three sentences. Each question carries 2 marks.

11. Differentiate between centrolecithal and telolecithal eggs
12. What is primitive streak? What is its significance?
13. Explain the cleavage and blastulation in man.
14. Briefly explain the structure of a graafian follicle.
15. What is grey crescent? What is its importance?
16. Distinguish between invagination and involution.
17. Dedifferentiation and redifferentiation.
18. What is yolk plug?
19. Explain the teratogenic effect of nicotine.
20. Briefly explain the cleavage in frog.
21. Briefly explain the neurulation in *Amphioxus*.
22. Differentiate between GIFT and ZIFT

(10 x 2 = 20 Marks)

C. Answer any *five* questions in not more than a paragraph. Each question carries 6 marks.

23. Explain the process of oogenesis and its significance.
24. Explain the hormonal control of amphibian metamorphosis.
25. What is meant by cell lineage? Trace the lineage of mesentoblast cell in *Planocera*.
26. Distinguish between oestrous cycle and menstrual cycle.
27. Explain different germ layers and their derivatives.
28. Briefly describe in vitro fertilization and embryo transfer.
29. With suitable diagram, explain the salient features of a 24 hour chick embryo.
30. What is meant by an organizer? Explain different types of organizers with suitable example.

(5 x 6 = 30 Marks)

D. Write essays on any *two* of the following. Each question carries 10 marks.

31. Explain the different invasive and non-invasive prenatal diagnostic techniques.
32. What is meant by parthenogenesis? Explain different types of parthenogenesis and significance.
33. With suitable diagrams explain the development of eye in frog.
34. Explain the development and functions of extraembryonic membranes in chick.

(2 x 10 = 20 Marks)
