Reg. No	15U618	(Pages: 2)	Name:
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## SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, MARCH 2018 (CUCBCSS - UG)

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

Zoology - Core Course (2015 Admission)

Time: Three Hours Maximum: 80 Marks

- A. Answer *all* questions. Each question carries 1 mark.
  - 1. What is Corpus luteum?
  - 2. What is cryopreservation?
  - 3. What is ZIFT?
  - 4. Define PNDT Act.
  - 5. What is Recapitulation Theory?
  - 6. What is Primitive Streak?
  - 7. What is capacitation?
  - 8. What is cleidoic egg?
  - 9. What is thelytoky?
  - 10. What are Hox genes?

 $(10 \times 1 = 10 \text{ Marks})$ 

- B. Answer any *ten* questions. Each question carries 2 marks.
  - 11. What are Grafian follicle?
  - 12. What is cleavage?
  - 13. What is implantation?
  - 14. What is Vital staining?
  - 15. Mention the functions of Sertoli cells.
  - 16. What are the applications of stem cells?
  - 17. How environment causes teratogenicity?
  - 18. What are the major morphogenetic movements?
  - 19. Mention the salient features of 48 Hrs. chick embryo.
  - 20. Write an account on test tube babies.
  - 21. Mention different types of blastula.
  - 22. What is totipotency?

- C. Answer any *five* questions. Each question carries 6 marks.
  - 23. Explain gametogenesis in female reproductive system.
  - 24. Write briefly the major A.R.T.
  - 25. Explain the major steps of *invitro* fertilization and embryo transfer.
  - 26. Explain the fate map of frog.
  - 27. Explain the development and functions of extra embryonic membranes in chick.
  - 28. Write an account on Homeotic genes.
  - 29. Explain gastrulation in in Amphioxus.
  - 30. Write briefly the gradient experiments in sea urchin eggs.

(5 x 6=30 Marks)

- D. Write essays on any *two* of the following. Each question carries 10 marks.
  - 31. Write an essay on cell lineage studies in Planaria.
  - 32. Explain different types of Parthenogenesis.
  - 33. With the help of labelled diagram describe the development of eye in frog.
  - 34. Explain different types of eggs with suitable examples.

 $(10 \times 2 = 20 \text{ Marks})$ 

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