Reg. No…….. Name…… **20U608**

B. Sc. DEGREE END SEMESTER EXAMINATION - MARCH 2020

SEMESTER **–6: ZOOLOGY (CORE COURSE)**

COURSE: **15U6CRZOO09: REPRODUCTIVE AND DEVELOPMENTAL BIOLOGY**

(Common for Regular 2017 Admission /Supplementary 2016 /2015 Admissions)

Time: Three Hours Max.Marks:60

PART A

Answer all Questions of the following

1. Distinguish between descriptive and experimental embryology.
2. Name two viruses that are Teratogenic agents.
3. Name an organism in which bilateral cleavage takes place in its egg,
4. Distinguish between Epigenesis and Biogenetic Law.
5. Distinguish between epiboly and emboly.
6. Mention the significance of obligatory parthenogenesis.
7. Define induction, mention its role in development.
8. Distinguish between Indeterminate eggs and Determinate eggs. (1 x 8 = 8)

PART B

Answer any Six of the following

9. Briefly explain the different types of regeneration in animals.
10. Mention the significance of IVF in animal husbandry.
11. Mention the uses of extra embryonic membranes.
12. Describe the various methods of construction of Fate maps.
13. Distinguish between Ameiotic and Meiotic parthenogenesis with examples.
14. Briefly explain the mode of maintaining species specificity in fertilization.
15. Describe briefly the metamorphosis in frog development.
16. Describe characteristic features of gastrulation. (2 x 6 = 12)

PART C

Answer any Four of the following

17. Explain spermatogenesis mention its significance.
18. Explain the procedure of Cloning, mention its significance.
19. What is cell lineage, explain with an example.
20. Describe the development of the nervous system in frog.

21. Mention brief account of 18 hour chick embryo.
22. Explain the hormonal regulation of Menstrual Cycle. (5 x 4 = 20)

PART D

Answer any Two of the following

23. Describe in detail the process of Fertilization, the approach and binding of spermatozoa, activation of the egg and amphimixis.
24. Classify eggs on the basis of amount, distribution and position of yolk, type of development. Mention the influence of yolk on development.
25. What are Congenital malformations? Explain the various causes.
26. Who are the pioneers of Experimental embryology? Describe Spemann's constriction experiments to prove the role of Organizer and embryonic induction. (10 x 2 = 20)

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