

**Final Year B.Sc., Degree Examination****August/September 2010***(Distance Education)**(Freshers)***ZOOLOGY****Paper - IV: Developmental Biology, Environmental Biology, Ethology,  
Inland Fisheries and Wild Life Management**

Time: 3 hrs]

[Max.Marks: 85

**Instructions to Candidates:**

1. Simple questions should be answered in the first two pages of the main answer book.
2. Draw labelled diagrams wherever necessary.

**I. Simple Questions.***Answer in a word, phrase or in a sentence:*

12 X 1 = 12 Marks

1. What is microlecithal egg? Give one example.
2. What is Disco blastula? Give one example.
3. What are extra-embryonic membranes?
4. Define Lentic habitat.
5. Define Liebig's law of minimum.
6. What is ecological niche?
7. What is Innate behaviour? Give one example.
8. What is courtship behaviour?
9. What is migration?
10. What is Inland fisheries?
11. What is monoculture? Give one example.
12. Define endangered species.

**II. Short Answer Questions.***Answer any SIX of the following:*

6 X 3 = 18 Marks

13. Mention the planes of cleavage.
14. Explain briefly structure of gastrula of Amphioxus.
15. Mention any six deep sea adaptations.

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16. Name three National parks of Karnataka.
17. Explain parental care in *Pipa Americana*.
18. Explain briefly factors influencing on bird migration.
19. Write a note on six fish byproducts.
20. Explain importance of wildlife studies.

**III. Medium Answer Questions.**

*Answer any SEVEN of the following:*

7 X 5 = 35 Marks

21. With a neat labelled diagram describe the development of Neural tube in frog.
22. Describe the structure of: a) Chorion b) Amnion
23. What are ecological pyramids? Describe briefly ecological pyramids.
24. Define ecotone and climatic climax.
25. Explain the Anadromous migration in fish with a suitable example.
26. Explain courtship behaviour in Seahorse and Aurius.
27. Explain briefly culturing of carps.
28. Describe different methods of wild life conservation.
29. Give an account of setting up of National parks.

**IV. Long Answer Questions.**

*Answer any TWO of the following:*

2 X 10 = 20 Marks

30. What is placenta? Classify the placenta based on distribution of villi. Mention the four functions of placenta.
31. What is pollution? Explain the sources, causes and effects of air pollution.
32. Give a detailed account of Birds migration.
33. Give an account of: a) Project Tiger b) Project Crocodile

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