

**Final Year B.Sc., Degree Examinations**

**December 2017**

*(Directorate of Distance Education)*

**ZOOLOGY**

**DSC311 : Paper IV : Developmental Biology, Environmental Biology, Ethology,  
Inland Fisheries and Wild Life Management**

*Time: 3 hrs.]*

*[Max.Marks:75/85*

***Instruction to the Candidates :***

- 1. Students who have attended 25 Marks IA scheme will have to answer for total of 75 marks.*
- 2. Students who have attended 15 Marks IA scheme will have to answer for total of 85 marks.*
- 3. One mark questions should be answered in first two pages of the answer book.*
- 4. Draw neat diagram wherever necessary.*
- 5. All questions are compulsory.*
- 6. Q.No. V is compulsory for 85 marks scheme.*

**I. *Simple answer questions :***

***10 X1= 10 Marks***

***Answer in a word, or a phrase or a sentence.***

- 1. Define Telolecithal egg.*
- 2. What is Blastocyst? Define.*
- 3. Define ecosystem.*
- 4. What are oviparous animals?*
- 5. What is Anadromous migration?*
- 6. Define climatic climax.*
- 7. Define aquaculture.*
- 8. Name any two endangered mammals.*
- 9. What is acid rain?*
- 10. What are Morphogenetic movements.*

**II. *Short answer questions :***

***Answer any FIVE of the following.***

***5X 3= 15 Marks***

- 11. Explain the classification of eggs based on the amount of yolk.*

***Contd...2***

12. Write a note on parasitic food chain.
13. Explain ecological niche.
14. Draw a neat labeled diagram of V.S. of Blastula of Frog.
15. Explain parental care in Ichthyophis.
16. Explain courtship in common terns.
17. Write a note on National parks.

**III. *Medium answer questions :***

*Answer any FIVE of the following.*

**5X6= 30 Marks**

18. Discuss the causes for depletion of wild life.
19. Explain catadromous migration with an example.
20. List the significances of courtship behavior.
21. Explain pond ecosystem with a neat labeled diagram.
22. Write a note on fate map.
23. Explain hen's egg with a neat labeled diagram.
24. Explain head and trunk organizer.

**IV. *Long answer questions :***

**2X10=20 Marks**

*Answer any TWO of the following.*

25. Explain the sources, causes, effects and controlling measures of water pollution.
26. Classify the placenta based on the distribution of Villi.
27. Briefly explain techniques of culturing of Indian major carps. Add a note on the by products of Fisheries.
28. Explain the zonation of sea, biota and add a note on deep sea adaptations.

**V. *Compulsory question for 85 marks scheme only. Long answer questions.***

*Answer any ONE of the following.*

**1X10=10 Marks**

29. Explain different types of ecological pyramids.
30. What is gastrula ? Explain the process of gastrulation in Frog.

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