

Final Year B.Sc., Degree Examinations

September/October 2015

(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 :*

1 X 10= 10Marks

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

1. Expand IUCN?
2. What is Potamodromous migration?
3. What is Biome?
4. What is BOD?
5. What is edge effect?
6. Define an instinct
7. What is deciduate placenta?
8. What is poaching?
9. What is Hapa?
10. What is stereoblastula ?

II. *Short answer questions :*

Answer any FIVE of the following.

5X 3= 15Marks

11. What is Climatic climax?

Contd...2

12. Discuss the chemical nature of inducer.
13. Draw a neat labeled diagram of gastrula of frog.
14. Explain the pyramid of energy.
15. What are the causes of Bird migration?
16. Explain Wild Life Protection Act 1972.
17. Explain the scope of Inland fisheries.

III. Medium answer questions :

Answer any FIVE of the following.

5X6= 30Marks

18. Bring out the differences between National Parks and Wild life sanctuaries. Give two examples for each.
19. Give an account of induced breeding of major carps.
20. What is an organizer? Explain the nature of primary organizer with an experiment.
21. Give an account of migration in salmon fish.
22. Describe the biota of desert biome and their adaptations.
23. Explain the parental care in *Ichthyophis* and *Hyla goeldi*
24. Explain the gastrulation in *Amphioxus*.

IV. Long answer questions :

2X10=20 Marks

Answer any TWO of the following.

25. Explain the sources, causes, effects and controlling measures of air pollution.
26. What is placenta? Mention its functions and explain the classification of placenta based on histology.
27. What is courtship? Explain the courtship in *Betta splendens* and Bower bird. Add a note on significances of courtship behavior.
28. Explain the zonation of lotic habitat, its biota and their adaptations

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

Answer any ONE of the following.

1X10=10 Marks

29. Explain the process of gastrulation in chick embryo.
30. Write notes on
 - a) Learned behavior
 - b) Endangered species.
