

Final Year B.Sc., Degree Examinations

August/September 2011

Directorate of Distance Education Course

ZOOLOGY

Paper IV: Developmental Biology, Environmental Biology, Ethology, Inland Fisheries and Wild life Management.

Time: 3 hrs.]

[Max.Marks:75/85

Instructions 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. All questions are compulsory.
4. Simple questions should be answered in first two pages of the answer book.
5. Draw labelled diagrams wherever necessary.
6. Question No. V is compulsory for 85 marks scheme.

I. Simple answer questions :

10 X 1= 10Marks

Answer in a word, a phrase or a sentence.

1. Define autecology.
2. What is primitive streak ?
3. Define taxes.
4. What is eutrophication ?
5. What is aquaculture ?
6. Define endangered species.
7. Define food web.
8. What is Alecithal egg ?
9. Define learned behaviour.
10. Define Holoblastic cleavage.

II. Short Answer Questions.*Write any FIVE of the following.*

5X 3= 15Marks

11. What is placenta and state its functions?
12. With a diagram describe the structure of blastula of Frog.

Contd...2

13. Write a note on superficial cleavage.
14. Explain the pyramid of energy.
15. Describe the parental care in Rhacophorus
16. Explain Shelfords law of tolerance with an example.
17. Write the significance of courtship behaviour.

III. *Medium answer questions.*

Answer any FIVE of the following.

5X6= 30Marks

18. Briefly describe the reasons for depletion of wildlife.
19. Describe induced breeding in major carps.
20. Explain catadromous migration in fishes with suitable example.
21. What is a primary organizer? Give an experimental evidence to prove that dorsal lip of blastopore in frog is an organizer.
22. Classify the eggs based on amount and distribution of Yolk.
23. Explain courtship behaviour in sea horse and Arius
24. With a neat labelled diagram explain the pond ecosystem.

IV. *Long answer questions :*

2X10=20 Marks

Answer any TWO of the following.

25. Explain the sources, causes and effects of air pollution.
26. With labelled diagrams describe the structure and function of foetal membranes.
27. What is bird migration? Mention the types advantages and causes for bird migration.
28. With a neat labelled diagram describe the Zonation of sea.

V. *(Compulsory Question for 85 Marks Scheme only)*

Long answer questions :

1X10=10 Marks

Answer any ONE of the following questions.

29. What is Biome? Mention the fauna of desert biome with their adaptations.
30. Classify and explain placenta based on distribution of Villi with examples.
