Q.P. Code - 50831

Final Year B.Sc. Degree Examination OCTOBER/NOVEMBER 2014

(Directorate of Distance Education)

Zoology

(DSC 311) Paper IV – DEVELOPMENTAL BIOLOGY, ENVIRONMENTAL BIOLOGY, ETHOLOGY, INLAND FISHERIES AND WILD LIFE MANAGEMENT

Time : 3 Hours] [Max. Marks : 75/85

Instructions to Candidates:

- 1) Students who have attended **25** marks I-A scheme will have to answer for total of **75** marks.
- 2) Students who have attended **15** marks I-A scheme will have to answer for total of **85** marks.
- 3) Simple questions should be answered in first two pages of the answer book.
- 4) Draw diagrams wherever necessary.
- 5) All questions are **compulsory**.
- 6) Question No. **V** is **compulsory** for **85** marks scheme.
- I. Simple Answer Questions:

Answer in a word or in a phrase or in a sentence :

 $10 \times 1 = 10$

- 1. What is Alecithal egg?
- 2. Define ecosystem.
- 3. Name any two national parks of India.
- 4. Define ecological niche.
- 5. What is aquaculture?
- 6. Define innate behaviour.
- 7. What is oceanodromous migration?
- 8. Define synecology.
- 9. What is holoblastic cleavage?
- 10. Define natality.

1 **P.T.O.**

Q.P. Code - 50831

II. Short Answer Questions:

Answer any **FIVE** of the following:

 $5 \times 3 = 15$

- 11. Draw a labelled diagram of Frog's blastula.
- 12. Explain project tiger.
- 13. Discuss the effects of noise pollution.
- 14. Bring out the classification of eggs based on the distribution of yolk.
- 15. Explain courtship in peacock.
- 16. What is food chain? Mention the types.
- 17. Explain the zonation of a pond.
- III. Medium Answer Questions:

Answer any **FIVE** of the following:

 $5 \times 6 = 30$

- 18. Give an account of migration in anguilla.
- 19. With the help of a diagram, explain energy flow in an ecosystem.
- 20. Describe the methods of wild life conservation.
- 21. Describe the types of placenta based on distribution of villi.
- 22. Give an account of culturing of Indian major carps.
- 23. Describe Speeman's experiment on organiser phenomenon.
- 24. Write a note on fish by products.

Q.P. Code - 50831

IV. Long Answer Questions:

Answer any **TWO** of the following:

 $2 \times 10 = 20$

- 25. Explain the importance of wild life and reasons for wild life depletion.
- 26. Describe the sources, causes, effects and controlling measures of water pollution.
- 27. Describe the structure, development and functions of foetal membranes in chick.
- 28. What is parental care? Explain parental care in amphibians.
- V. **Compulsory** for **85** marks scheme only:

Answer any **ONE** of the following:

 $1 \times 10 = 10$

- 29. Explain the process of gastrulation in frog with neat labeled diagrams.
- 30. With a neat labeled diagram describe the zonation of sea.