

**DSC – 320 (ZOO-UG)**

**Final Year B.Sc. Degree Examination, November 2008  
Directorate of Distance Education Course  
ZOOLOGY**

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

Time : 3 Hours

Max. Marks : 75

- Instructions :** 1) *All questions are compulsory.*  
2) *Simple questions should be answered in the first two pages of the answer book.*  
3) *Draw labelled diagram wherever necessary.*

**I. Simple questions :**

**(10×1=10)**

Answer in a word or a phrase or a sentence :

- 1) Define cleavage.
- 2) What is Morula ?
- 3) What is primitive streak ?
- 4) Define our Ecosystem.
- 5) Define food web.
- 6) Define our endangered animals.
- 7) Expand W.W.F.
- 8) What is catadromous migration ?
- 9) Define parental care.
- 10) Define learned behaviour.

**II. Short answer questions :**

**(5×3=15)**

Answer **any FIVE** of the following :

- 11) Draw a neat labelled diagram of frog egg.
- 12) What is placenta ? State its function.

**P.T.O.**



13) Explain Liebig's law of Minimum.

14) Define :

- a) Lentic habitat
- b) Lotic habitat

15) Briefly explain the hatching hapas.

16) Describe the parental care in Ichthyophis.

17) Write a note on fish byproducts.

III. Medium answer questions :

(5×6=30)

Answer any FIVE of the following :

18) Explain the process of gastrulation in Amphioxus with neat labelled diagram.

19) Draw a neat labelled diagram of Hen's egg.

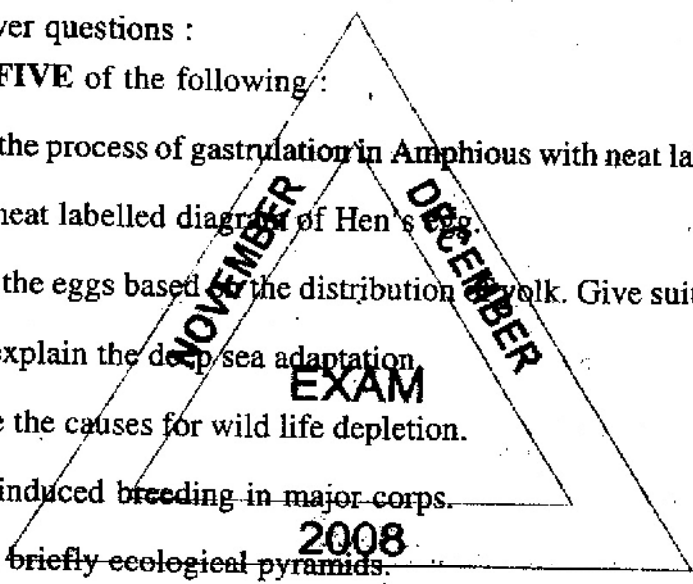
20) Classify the eggs based on the distribution of yolk. Give suitable examples.

21) Briefly explain the deep sea adaptation.

22) What are the causes for wild life depletion.

23) Explain induced breeding in major crops.

24) Describe briefly ecological pyramids.



IV. Long answer questions :

(2×10=20)

Answer any TWO of the following :

25) Explain the structure of Gastrula and Neurula of Frog. With neat labelled diagram.

26) What is pollution ? Explain the sources, causes and effects of water pollution.

27) Give a detailed account of Birds migration.

28) Explain courtship behaviour in three spined stickle backfish.