

M.Sc. Final (Zoology) Examination, August/September 2008
Directorate of Correspondence Course
Paper V : AQUACULTURE AND WILDLIFE STUDIES

Time: 3 Hours

Max. Marks: 75

- Note :* 1) All questions carry equal marks.
2) Answer any TWO from Part A, TWO from Part B and Part C is compulsory.
3) Illustrate the answer wherever necessary.

PART - A

(2×15=30)

1. Write an essay on live and synthetic feeds.
2. Give details of culture of pearl oyster.
3. Give detailed account on capture fishery.
4. Describe design and construction of hatcheries.

PART - B

(2×15=30)

5. Discuss protected area management in India.
6. Write an essay on range land management.
7. Give prospects and perspectives of crocodile project.
8. What are the reasons for depletion of wildlife ?

PART - C

(3×5=15)

9. Write short notes on any THREE of the following :
- | | |
|---------------------|--------------------------|
| a) Weaver bird nest | b) Bird census |
| c) Wildlife laws. | d) Gudavi bird sanctuary |
| e) Tiger and Man. | |

M.Sc. Final (Zoology) Examination, August/September 2008
Directorate of Correspondence Course
Paper – VI : ENVIRONMENTAL POLLUTION AND
ECOTOXICOLOGY

Time: 3 Hours

Max. Marks : 75

- Notes :* 1) All questions carry equal marks.
2) Answer any **TWO** questions from Part A, **TWO** from Part B and Part C is compulsory.
3) Illustrate the answers wherever necessary.

PART - A

(2×15=30)

1. Explain various sources of noise pollution and suggest the control measures.
2. Discuss the impacts of eutrophication in polluting the water.
3. Write an account on radiation pollution and its abatement.
4. Explain the pollution and loss of biodiversity.

PART - B

(2×15=30)

5. Write an essay on bioassay.
6. Give a detailed account on toxic plants and their effects.
7. Discuss various statutory provisions and safety measures for toxicants.
8. Explain the DDT metabolism in nontarget animals.

P.T.O.

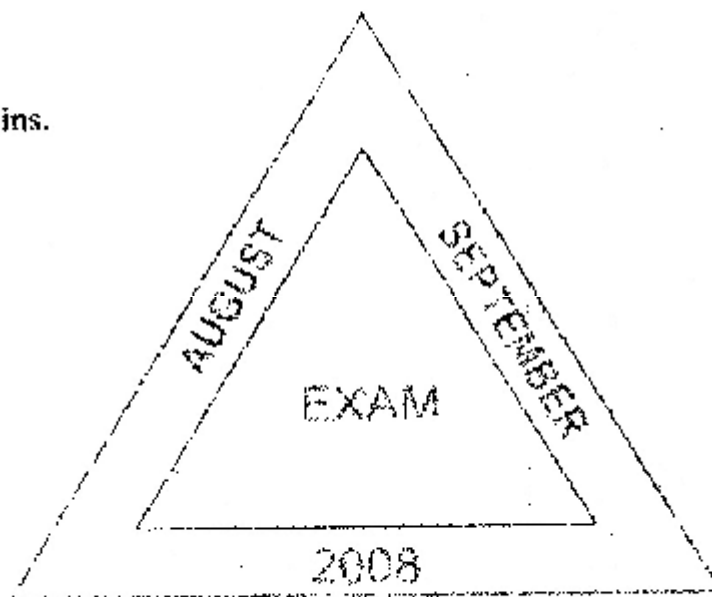


PART - C

(3×5=15)

9. Write short notes on **any THREE** of the following :

- a) Waste water treatment
- b) Bhopal gas tragedy
- c) Global warming
- d) Lead
- e) Fungal toxins.



Final M.Sc. Examination, August/September 2008

ZOOLOGY

Directorate of Correspondence Course
Paper – VII : Sericulture and Apiculture

Time : 3 Hours

Max. Marks : 75

- Notes:* 1) All questions carry equal marks.
2) Answer any TWO questions from Part A, TWO from Part B and Part C is compulsory.
3) Illustrate the answers wherever necessary.

PART – A

1. Describe the life cycle of Bombyx mori in detail. (15×2=30)
2. "Silk worm as a laboratory tool for mutagenicity studies". Justify.
3. Give an account of the fungal diseases in Bombyx mori.
4. Write an essay on the utilization of feral life waste in vermicomposting.

PART – B

5. Describe the colony building and organisation in honey bees. (15×2=30)
6. Explain the migratory beekeeping mentioning its advantages and disadvantages.
7. Give an account of composition and uses of honey.
8. Write in brief about the communication in honey bees.
9. Write short notes on any THREE of the following : (3×5=15)
 - a) Pollen calender
 - b) Queen rearing
 - c) Tasar silk
 - d) Dermastid beetle
 - e) Silk reeling.

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Paper – VIII : MOLECULAR GENETICS AND BIOTECHNOLOGY

Time : 3 Hours

Max. Marks : 75

- Note :*
- 1) All questions carry equal marks.
 - 2) Answer any TWO questions from Part A and TWO from Part B and Part C is compulsory.
 - 3) Illustrate the answers wherever necessary.

PART – A **(2×15=30)**

1. Give an account on distribution and functional significance of palindrome sequences in prokaryotes.
2. Present a contemporary account on the transcription factors and their regulatory role in of gene expression.
3. Describe the mechanisms of splicing.
4. Explain the mechanism transcriptional termination in prokaryotes and eukaryotes.

PART – B **(2×15=30)**

5. Give an account of restriction enzymes and their role in genetic engineering.
6. Describe the methods involved in construction of genomic and cDNA libraries.
7. What is polymerase chain reaction ? Explain its uses in the field of biotechnology.
8. What are transgenic animals ? With suitable examples explain their importance.

PART – C

9. Write short notes on any **THREE** of the following : **(3×5=15)**
 - a) DNA polymerase
 - b) Splicing
 - c) Antisense RNA
 - d) Insertional activation
 - e) Biopesticides.