

Final Year M.Sc. Degree Examinations

December 2017

Directorate of Distance Education

ZOOLOGY

DPB – 510 : Paper – V : Aquaculture and Wildlife Studies

Time: 3 hrs.]

[Max.Marks:75/85

- Note : 1. Answer any TWO questions from Section - A TWO from Section - B, and Section - C -compulsory.
2. Illustrate the answers wherever necessary.
3. Question No. 10 in Section D is applicable to only freshers.*

SECTION – A

Answer any TWO of the following :

2 X 15=30

1. Describe methodology Carp culture.
2. Write an account on potential of coastal aquaculture.
3. Give an account of pen culture.
4. Discuss on Fish diseases.

SECTION – B

Answer any TWO of the following :

2X15=30

5. Describe the present status of Project Tiger.
6. Discuss the census methods available for mammals.
7. Give a detailed account of rangelands.
8. Give salient features of Wildlife Protection Act 1972.

SECTION – C

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

3X5=15

- a) Poly culture
- b) Bird migration
- c) Mariculture
- d) Protected area Network (PAN)
- e) Fish nutrition

Contd...2

SECTION - D

10. Explain wildlife management with reference to Bhadra Wildlife Sanctuary.

1X10=10

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Final Year M.Sc. Degree Examinations

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DPB – 520 : Paper – VI : Environmental Pollution and Ecotoxicology

Time: 3 hrs.]

[Max.Marks:75/85

- Note : 1. Answer any TWO questions from Section - A TWO from Section - B, and Section - C -compulsory.
2. Illustrate the answers wherever necessary.
3. Question No. 10 in Section D is applicable to only freshers.*

SECTION – A

Answer any TWO of the following : 2 X 15=30

1. Give an a brief account of effects of atmospheric pollutants on man and environment.
2. Write an essay on solid waste management.
3. Comment on water pollutants and their effects.
4. Give an account of EIA (Environmental Impact Assessment) related to industries establishments.

SECTION – B

Answer any TWO of the following : 2X15=30

5. Write a detailed account on different types of pesticides and their effects on animals.
6. Describe the process of biotransformation of DDT in insects, mouse and man.
7. Describe different types of toxins produced by animals and their possible effects.
8. Explain different statistical methods employed in toxicological studies.

SECTION – C

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

3X5=15

- a) Hydrological cycle
- b) Noise

Contd...2

- c) Soil pollution
- d) Global warming
- e) Tolerance limits

SECTION - D

10. Give an account of Thermal pollution and its abatement. **1X10=10**

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Final Year M.Sc. Degree Examinations

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DPB – 530 : Paper – VII : Sericulture and Apiculture

Time: 3 hrs.]

[Max.Marks:75/85

- Note : 1. Answer any TWO questions from Section - A TWO from Section - B, and Section - C compulsory.
2. Illustrate the answers wherever necessary.
3. Question No. 10 in Section D is applicable to only freshers.*

SECTION – A

Answer any TWO of the following : 2 X 15=30

1. Write a detailed account on races of Mulberry silkworms and add a note on voltinism.
2. Explain the effects of radiation and chemicals on silkworm.
3. Write an account on non-mulberry silkworms.
4. Describe the various tools used in silkworm rearing.

SECTION – B

Answer any TWO of the following : 2 X 15=30

5. Explain classification and morphology of honeybees.
6. Give a detailed account of pests and predators of honeybees.
7. Explain the social organization in Honeybees and add a note on chemical communication.
8. Write an essay on chemical composition of Honey and its medicinal importance.

SECTION – C

9. Answer any THREE of the following : 3X5=15

- a) American foul brood disease
- b) Pebrine disease
- c) Uses of sericulture waste
- d) Global silk production
- e) Uzifly

Contd...2

SECTION – D

10. Write an essay on morphology and lifecycle of silk worm. **1X10=10**

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Final Year M.Sc., Degree Examinations

December 2017

(Directorate of Distance Education)

ZOOLOGY

Paper VIII : Molecular Genetics and Biotechnology

Time: 3 hrs.]

[Max.Marks:75/85

Instructions to Candidates :

- 1) *Answer any TWO questions from Section – A. Two from Section B, and Section C is Compulsory.*
- 2) *Illustrate the answer wherever necessary.*
- 3) *Section – D is applicable to only freshers.*

SECTION - A

Answer any TWO questions :

2X15=30

1. Explain the mechanism of transcription in eukaryotes.
2. Explain the regulatory mechanisms of gene expression.
3. Describe the structural organization of DNA polymerases.
4. Describe the various models of prokaryotic genomes.

SECTION - B

Answer any TWO questions :

2X15=30

5. Give an account of restriction enzymes and their uses in genetic engineering.
6. Describe the Polymerase chain reaction (PCR). Add a note on its types and applications.
7. Describe the methods used in selection of recombinants.
8. Explain how animal viruses are used in genetic engineering.

SECTION – C

9. Answer any THREE questions :

3X5=15

- a) siRNA
- b) Splicing
- c) Genetic code
- d) Dolly
- e) Hybridoma technology

Contd...2

SECTION – D

1X10=10

10. Give a detailed account of Animal cell culture and its applications.

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