

Q.P.Code No. 56961

**M.Sc., (Final) Degree Examinations
September/October 2015**

(Directorate of Distance Education)

ZOOLOGY

DPB 510 : Paper – V : Aquaculture and Wildlife Studies

Time: 3 hrs.]

[Max.Marks:75/85

Instructions to the Candidates:

- 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

2 X 15=30

1. Give a detailed account of techniques of culturing in fishes
2. Distinguish and describe the types of capture fishery.
3. Write in detail the food and feeding habits of culturable fishes.
4. With suitable examples, describe the endoparasitic diseases of fishes.

SECTION – B

2 X 15=30

5. Explain in brief the various wildlife categories in India
6. Discuss nesting and roosting in weaver bird.
7. Give in detail the territoriality in monkeys.
8. Outline the wildlife sanctuaries in Karnataka

SECTION – C

9. *Write short notes on any THREE of the following :* **3 X 5=15**

- a) Induced breeding
- b) Algal toxins
- c) Vulnerable species
- d) Polyculture
- e) Wildlife corridors

SECTION –D

1 X 10=10

10. Explain briefly the conflict between Elephant and man.

Q.P.Code No. 56962

M.Sc. (Final) Degree Examinations

September/October 2015

Directorate of Distance Education

ZOOLOGY

DPB 520 : Paper – VI : Environmental Pollution and Ecotoxicology

Time: 3 hrs.]

[Max.Marks:75/85

Instructions to the Candidates:

- 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

2X15=30

1. Write an essay on urban solid waste management.
2. Comment on noise pollution and its control.
3. Describe atmospheric pollutants and add a note on photochemical smog formation.
4. Give a detailed account on basic elements of Environmental impact assessment.

SECTION – B

2X15=30

5. Describe bioassay using fish as a test model.
6. Comment on the active and passive smoking and its effects on human health.
7. Describe the toxicity of heavy metals and their effects on animal system.
8. With suitable example comment on food toxicants and adulterants.

SECTION – C

3X5=15

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

- a) Ozone depletion
- b) Eutrophication
- c) Acid rain
- d) Safety standards
- e) Plant toxins

SECTION –D

1X10=10

10. Comment on soil pollution and its abatement.

Q.P. Code 56963

M.Sc., Final Degree Examinations

September/October 2015

(Directorate of Distance Education)

ZOOLOGY

DPB 530: Paper VII - Sericulture and Apiculture

Time: 3 hrs.]

[Max.Marks:75/85

Instructions to the 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. Question No. 10 in Section – D is applicable to only freshers.

SECTION –A

2X15 =30

1. Write in detail the races of mulberry silkworms and classify them based on voltinism with suitable examples.
2. Give a detailed account on fungal diseases of silkworm *Bombyx mori* L.
3. What is grainage? Explain its activities in detail.
4. Write a note on pests and predators of silkworms with suitable examples.

SECTION –B

2X15 =30

5. Explain the relationship between floral design and mouth parts of honeybees.
6. What is beekeeping? Write briefly the management of beekeeping during summer, rainy and winter seasons.
7. Write a note on social life of honeybees. Add a note on structural modifications in the body of honeybee.
8. Give a detailed account on honeybee diseases with their control measures.

SECTION –C

3X15 =15

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

- a) Structure and functions of silk glands
- b) Effect of mutation on silkworms
- c) Muga & Eri silkworms
- d) Medicinal importance of honey
- e) Honeybee predators.

SECTION –D

1 X 10 =10

10. Discuss the role of sericulture in tribal welfare.

**** * * * ***

Q.P. Code 56964

M.Sc., (Final) Degree Examinations

September/October 2015

(Directorate of Distance Education)

ZOOLOGY

DPB 540: Paper VIII - Molecular Genetics and Biotechnology

Time: 3 hrs.]

[Max.Marks:75/85

Instructions to the Candidates:

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

SECTION –A

2X15 =30

1. Explain the regulatory mechanisms of gene expression.
2. What is genetic code? Explain the mechanism of protein synthesis.
3. Give a comparative account of transcription mechanism in prokaryotes and eukaryotes.
4. Give an account of enzymes involved in DNA replication.

SECTION –B

2X15 =30

5. What are artificial chromosomes? Add a note on their applications in genetic engineering.
6. What is monoclonal antibody? Describe the method of Hybridoma technology.
7. Give a detailed account of restriction enzymes and their applications.
8. Describe the different methods used to identify the recombinants.

SECTION –C

3X5 =15

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

- a) Polymerase Chain Reaction
- b) Antisense RNA technology
- c) Transgenic fish
- d) cDNA library
- e) Splicing

SECTION –D

10. Write comprehensive notes on animal cell culture and applications. **1X10 =10**
