

Dr. Ambedkar Open University
Faculty of Science
Department of Zoology
M.Sc First Year (Zoology)
Course-I (Animal Diversity & Ecology)
Assignment-1 (2021-2022)

Maximum Marks-15
Minimum Marks-06

Section- A (10 marks)

I. Answer any one of the following questions in about 30 lines

1. Describe the general characters and classification with examples of class Mammalia.
2. Describe the excretory organs in Arthropoda.

Section –B (5marks)

II. Answer any one of the following questions in about 15 lines.

1. Explain theories of origin of coelom.
2. Write a note on accessory respiratory organs of vertebrate.

Dr. Ambedkar Open University
Faculty of Science
Department of Zoology
M.Sc First Year (Zoology)
Course-I (Animal Diversity & Ecology)
Assignment-2 (2021-2022)

Maximum Marks-15
Minimum Marks-06

Section- A (10 marks)

I. Answer any one of the following questions in about 30 lines.

1. Write about the various larval forms in Echinodermata.
2. Give a comparative account of Brain in vertebrates.

Section –B (5marks)

II. Answer any one of the following questions in about 15 lines.

1. Give a brief account on major geographical realms/ biomes and diversity.
2. Write a note on Mammalian heart.

Dr. Ambedkar Open University
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Department of Zoology
M.Sc First Year (Zoology)
Course-II (Cell and Molecular Biology)
Assignment-1 (2021-2022)

Maximum Marks-15

Minimum Marks-06

Section- A (10 marks)

I. Answer any one of the following questions in about 30 lines.

1. Write an account on organization of chromatin.
2. Describe in detail the post transcriptional processing of RNA.

Section –B (5marks)

II. Answer any one of the following questions in about 15 lines.

1. Write a note on prokaryotic ribosome.
2. Write a short note on the types of RNA.

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Maximum Marks-15

Minimum Marks-06

Section- A (10 marks)

I. Answer any one of the following questions in about 30 lines.

1. Describe the strategies of chemical signalling.
2. Describe in detail the types of DNA replication.

Section –B (5marks)

II. Answer any one of the following questions in about 15 lines.

1. Write a short note on autoradiography.
2. Write a short note on Lactose (lac) Operon.

Dr. Ambedkar Open University
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Department of Zoology
M.Sc First Year (Zoology)
Course-III (Animal Physiology & Physiological Chemistry)
Assignment-1 (2021-2022)

Maximum Marks-15
Minimum Marks-06

Section- A (10 marks)

- I. Answer any one of the following questions in about 30 lines.**
1. Write an essay on Haemostasis and blood clot formation.
 2. Illustrate the role of complement system in Immunity.

Section –B (5marks)

- II. Answer any one of the following questions in about 15 lines.**
1. Discuss the biosynthesis and degradation of purines.
 2. What is bioluminescence? Explain the types of Luminescence.

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Maximum Marks-15
Minimum Marks-06

Section- A (10 marks)

- I. Answer any one of the following questions in about 30 lines.**
1. Write a brief description on important neurotransmitters.
 2. Describe briefly the major pathways of carbohydrate metabolism.

Section –B (5marks)

- II. Answer any one of the following questions in about 15 lines.**
1. Write a short note on mechanism of absorption.
 2. Write a note on ultra structure of skeletal muscle.

Dr. Ambedkar Open University
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Department of Zoology
M.Sc First Year (Zoology)
Course-IV (Human Cytogenetics & Developmental Biology)
Assignment-1 (2021-2022)

Maximum Marks-15
Minimum Marks-06

Section- A (10 marks)

- I.** *Answer any one of the following questions in about 30 lines.*
1. Explain about the basic dysmorphology.
 2. Describe the establishment of body axis in birds and mammals.

Section –B (5marks)

- II.** *Answer any one of the following questions in about 15 lines.*
1. Write about inborn errors of metabolism with examples.
 2. Write a note on Hox genes and the evolution of Tetrapod limb.

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M.Sc First Year (Zoology)
Course-IV (Human Cytogenetics & Developmental Biology)
Assignment-2 (2021-2022)

Maximum Marks-15
Minimum Marks-06

Section- A (10 marks)

- I.** *Answer any one of the following questions in about 30 lines.*
1. Write an essay on DNA cloning.
 2. What is neural crest? Discuss the importance of neural crest and explain the main function.

Section –B (5marks)

- II.** *Answer any one of the following questions in about 15 lines.*
1. Write a note on X-linked recessive and dominant mutation.
 2. Explain cellular mechanism during gastrulation.