

**Dr. Ambedkar Open University**  
**Faculty of Science**  
**Department of Zoology**  
**M.Sc First Year (Zoology)**  
**Course-I (Animal Diversity & Ecology)**  
**Assignment-1 (2017-2018)**

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 Reptilia.
  2. Describe the circulatory system in Echinodermata.

**Section –B (5marks)**

- II. Answer any one of the following questions in about 15 lines.**
1. Explain theories of origin of coelom.
  2. What are the various types of neurons and describe them.

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**M.Sc First Year (Zoology)**  
**Course-I (Animal Diversity & Ecology)**  
**Assignment-2 (2017-2018)**

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 different biomes and related biodiversity with typical examples.
  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. Write a note on value of biodiversity.
  2. Write a note on Mammalian heart.

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**M.Sc First Year (Zoology)**  
**Course-II (Cell and Molecular Biology)**  
**Assignment-1 (2017-2018)**

Maximum Marks-15

Minimum Marks-06

**Section- A (10 marks)**

- I. Answer any one of the following questions in about 30 lines.**
1. Explain the transport functions of Plasma membrane with suitable examples.
  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 Lactose (lac) Operon.

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**Assignment-2 (2017-2018)**

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 eukaryotic cell cycle and its regulation.
  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 DNA Polymorphism.
  2. Write a short note on the types of RNA

**Faculty of Science**  
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**M.Sc First Year (Zoology)**  
**Course-III (Animal Physiology & Physiological Chemistry)**  
**Assignment-1 (2017-2018)**

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. Explain the mechanism of cell mediated and humoral immunity.

**Section –B (5marks)**

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

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**Course-III (Animal Physiology & Physiological Chemistry)**  
**Assignment-2 (2017-2018)**

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. 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 prostaglandines.
  2. Write a note on the hormones involved in the regulation of digestion in mammals. .

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**M.Sc First Year (Zoology)**  
**Course-IV (Human Cytogenetics & Developmental Biology)**  
**Assignment-1 (2017-2018)**

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 different types of staining.
  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 short note on Regeneration.

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**M.Sc First Year (Zoology)**  
**Course-IV (Human Cytogenetics & Developmental Biology)**  
**Assignment-2 (2017-2018)**

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 short note on dominance and recessiveness.
  2. Explain cellular mechanism during gastrulation.