

**B.SC DEGREE EXAMINATION  
DECEMBER 2020**

**FIRSTYEAR**

**ZOOLOGY**

**INVERTEBRATE ZOOLOGY**

Time: 3 Hours

Maximum Marks: 75

**PART A (3X5=15 Marks)**

**Answer any FIVE questions:**

1. Write short notes on classifications of Animal Kingdom.
2. Explain the canal system of Sponges.
3. Describe the general characters of Helminthes.
4. Give a note on Nematode parasites and disease.
5. Write a short note on classification of Annelida.
6. Comment on circulatory system of Prawn.
7. Describe the digestive system of freshwater mussel.
8. Write about the external features of Star fish.

**PART A (5X10=50 Marks)**

**Answer any FIVE questions:**

9. Write an account on life cycle of Plasmodium.
10. Explain the concept of polymorphism with reference to Coelenterate.
11. Give the distinguishing features of the Toenia solium.
12. Write an essay on parasitic adaptation in Helminthes.
13. Draw a neat diagram on appendages of Prawn.
14. Write an account on nervous system of Earthworm.
15. Explain the respiratory system of Freshwater mussel.
16. Critical evaluation of water vascular system.

**UG-C-574**

**BZOOI-1A**

**B.Sc. DEGREE EXAMINATION –  
DECEMBER 2020**

**Second Year**

**Zoology**

**GENERAL CHEMISTRY**

**Time : 3 hours**

**Maximum marks : 75**

**PART A — (5 × 5 = 25 marks)**

**Answer any FIVE questions out of Eight questions.**

1. (a) Define: Weight percentage. (2)  
(b) Discuss the coordinate-covalent bond with example. (3)
2. (a) What is Polymerisation reaction? Give example. (3)  
(b) What is RF value? (2)
3. (a) What is Buna-S rubber? (2)  
(b) Define: Autocatalysis with example. (3)
4. (a) What is a monomer? (2)  
(b) Give the preparation of polythene. (3)

5. (a) What is disaccharides? Give an example. (3)  
(b) Point out the uses of Chloramine-T. (2)
6. (a) What are water soluble vitamins? (2)  
(b) Discuss the diseases caused by the deficiency of vitamin A. (3)
7. (a) What is greenhouse effect? (3)  
(b) How would you handle the easily vaporisable chemicals. (2)
8. (a) Discuss the effect of air pollution. (3)  
(b) Give any two laboratory safety rules. (2)

PART B — ( $5 \times 10 = 50$  marks)

Answer any FIVE questions out of Eight questions.

9. (a) Discuss about inter and intra molecular hydrogen bond with suitable example. (6)  
(b) Write a short note on primary and secondary standard solution? (4)
10. (a) Write a note on ionic bond. (4)  
(b) Elaborate on molarity, molality and normality with example. (6)

11. (a) Write a note on elimination reactions with suitable example. (5)  
(b) Elaborate on fractional crystallisation. (5)
12. (a) Compare the principle and applications of thin layer and paper chromatography. (6)  
(b) Write a note on fractional distillation method. (4)
13. (a) Discuss the preparation and applications of Teflon. (4)  
(b) Write a note on Michaelis Menton equation. (6)
14. (a) Write a note on Analgesic and anti-inflammatory drugs. (4)  
(b) Discuss about vitamin B and C. (6)
15. (a) Discuss the use of penicillin, chloromycetin and tetracycline. (6)  
(b) Define the terms : Antibiotics and anaesthetics. (4)
16. (a) Write a note on radioactive pollution. (5)  
(b) Discuss about first aid techniques. (5)

**UG-C-572**

**BZOOI-2A**

**B.Sc. DEGREE EXAMINATION –  
DECEMBER 2020**

**First Year**

**Zoology**

**GENERAL BOTANY**

**Time : 3 hours**

**Maximum marks : 75**

**PART A — (5 × 5 = 25 marks)**

**Answer any FIVE questions.**

1. State the general characters of the family Liliaceae.
2. Sketch, label and describe the structure of a mature ovule.
3. Describe the structure of a pollen grain.
4. Differentiate between C3 and C4 plants.

5. Write an essay about water pollution.
6. Explain the food chain.
7. Give brief account on chromosome mapping.
8. Define back cross. Explain with an example.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

9. Give the outline of Bentham and Hooker's system of classification.
10. Narrate the distinguishing characters and economic importance of family Euphorbiaceae.
11. Explain the structure and development of male gametophyte.

12. Mention the physiological role of macro elements and their deficiencies.
  13. Explain the reactions involved in Kreb's cycle.
  14. Describe the properties, structure and functions of pond ecosystem.
  15. Define dihybrid cross. Explain with an example.
  16. What are pollutants? Mention their types and effects on environment.
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