

UG-A-1183	BPHYA-02X/ BZOOI-1AX
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U.G. DEGREE EXAMINATION –
JULY 2022.

Physics

(From CY – 2020 Onwards)

Second Year

GENERAL CHEMISTRY

Time : 3 hours

Maximum marks : 70

SECTION A — (3 × 3 = 9 marks)

Answer any THREE questions out of five question
in 100 words.

All questions carry equal marks.

1. Write the difference between molality and molarity?
2. What is a polymerization reaction? Give an example.
3. What is vulcanization?
4. Write about the use of penicillin in the health sector.
5. What is the greenhouse effect? Write the impact of the greenhouse effect on global warming.

SECTION B — ($3 \times 7 = 21$ marks)

Answer any THREE questions out of five question
in 200 words.

All questions carry equal marks.

6. How metallic and hydrogen bonds are formed. Explain with suitable examples.
7. What is reduced pressure distillation? Explain with a suitable diagram.
8. Explain addition and condensation polymerization reactions with examples.
9. What are reproductive hormones? Give examples and their role in the biological system
10. What are the general precautions that shall be taken to avoid lab accidents?

SECTION C — ($4 \times 10 = 40$ marks)

Answer any FOUR questions out of Seven question
in 500 words.

All questions carry equal marks.

11. Explain the following with a suitable example.
 - (a) Covalent bonding
 - (b) Co-ordinate bond
 - (c) Metallic bond

12. Write the basic principle and application of paper chromatography.
13. Write the preparation applications of the following:
 - (a) Polythene
 - (b) Polystyrene
 - (c) Teflon
14. What is enzyme catalysis? Write Michaelis Menton-lock and key theory.
15. Write the anyone synthesis of D-Glucose.
16. Explain the following:
 - (a) acid rain
 - (b) inorganic pollutants
 - (c) organic pollutants
 - (d) radioactive pollution
17. Write possible good practices to keep a laboratory safety and hygienic.

UG-A-1197 BZOO2-2X

U.G. DEGREE EXAMINATION - JULY 2022

Zoology

(From CY - 2020 onwards)

Second Year

VERTEBRATE ZOOLOGY

Time : 3 hours

Maximum marks : 70

PART A — (3 × 3 = 9 marks)

**Answer any THREE questions out of Five questions
in 100 words.**

All questions carry equal marks

Write short notes on :

- 1. Craniata**
- 2. Scroll Valve**
- 3. Ductuscaroticus**
- 4. Syrinx**
- 5. Petaurus**

PART B — ($3 \times 7 = 21$ marks)

Answer any THREE questions out of Five Questions in
200 words

All questions carry equal marks

6. Write short notes on origin of chordates.
7. Comment on the parental care in Amphibia.
8. Describe the biting mechanism of poisonous snake.
9. Discuss the evolutionary significance of *Archaeopteryx*.
10. Give a brief notes on aquatic mammals and their aquatic adaptations.

PART C — ($4 \times 10 = 40$ marks)

Answer any FOUR questions out of Seven questions in
500 words

All questions carry equal marks

11. Give a detail account on prochordates.
12. With neat diagram describe the digestive system of shark.
13. Describe the structure of Calotes heart.

14. Write in detail about the air sacs of Pigeon.
 15. Give a detail account on urinary system of rabbit.
 16. Write about different types of dentition in mammals.
 17. List the general characteristic features of fishes.
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