

THREE YEAR B.Sc. DEGREE EXAMINATION, DECEMBER 2023/JANUARY 2024

FIRST SEMESTER

Life Science Honours

INTRODUCTION TO CLASSICAL BIOLOGY

Time: Three hours

Maximum: 70 marks

(No additional sheet will be supplied)

SECTION A — $(5 \times 4 = 20 \text{ marks})$

Answer any FIVE questions.

- 1. Binomial nomenclature
- 2. Kinds of Pollution
- 3. Structure of monocot Embryo
- 4. Various kinds of Pollination
- 5. Economic Importance of Apiculture
- 6. Unique features of Hormones
- Cell Cycle
- 8. Central dogma of molecular biology
- 9. Covalent bond
- 10. Scope of chemistry

SECTION B — $(5 \times 10 = 50 \text{ marks})$

Answer ALL questions

11. Explain about International code of Zoological Nomenclature (ICZN).

Or

- 12. Write an essay on conservation of Biodiversity.
- 13. Describe the classification of plant kingdom.

Or

14. Explain the procedure for mushroom cultivation.

Give a brief account on Gametogenesis.

Or '

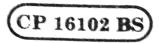
- Explain various types of metabolic disorders.
- Describe the ultra structure of prokaryotic cell.

Or

- 18. Explain various theories explaining the origin of life on earth.
- 19. Write about the benefits and principles of green chemistry.

O

20. Explain about Hydrogen bonding and Vander Waals attraction.



THREE YEAR B.Sc. DEGREE EXAMINATION, NOVEMBER 2023.

FIRST SEMESTER

Life Science Honours

INTRODUCTION TO APPLIED BIOLOGY

Time: Three hours

Maximum: 70 marks

(No additional sheet will be supplied)

PART A - (5 × 4 = 20 marks)

Answer any FIVE questions.

- 1 Contributions of Edward Jenner
- 2/ Characteristics of Archae bacteria
- 3. Isoelectric point
- 4/ Functions of proteins
- 5. Algal bio fertilizers
- 6 Transgenic animals disease models
- 7. Gene therapy
- 8. Differences between Positive eugenics and negative eugenics
- 9. Proteomic
- 10/ Primary data and secondary data

PART B — $(5 \times 10 = 50 \text{ marks})$

Answer ALL questions.

Describe the structure of bacteria.

Or

- 12/ Write about the types of Immunity.
- 13 Explain the classification of carbohydrates.

Or

Describe the Watson and Crick's model of DNA.

Give a detailed account on applications of biotechnology.

Or

- 16. Write an essay on restriction enzymes.
- 17 Describe about DNA fingerprinting.

Or

- 18. Give a detailed account on ELISA.
- Explain about median what are its merits and demerits.

Or

20 Write about the virus types of biological data bases.

