

**FIRST SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2022
(Regular/Improvement/Supplementary)**

**PSYCHOLOGY
GPSY1C01T: HUMAN PHYSIOLOGY**

Time: 2 Hours

Maximum Marks: 60

**SECTION A: Answer the following questions. Each carries 2 marks.
(Ceiling 20 Marks)**

1. Distinguish between monosaccharide and polysaccharide. Give one example for each.
2. What is the importance of the S phase in the cell cycle?
3. Explain cell theory.
4. Define alleles with examples.
5. Discuss the functions of ribosomes.
6. What is crossing over?
7. Citing one example, explain sex chromosomal anomaly.
8. Mention the four main components of an interphase nucleus.
9. Explain the genetics behind albinism?
10. What do you mean by trisomy? Give an example.
11. What is peptide linkage?
12. What are mutagens? Give one example.

**SECTION B: Answer the following questions. Each carries 5 marks.
(Ceiling 30 Marks)**

13. Describe the structure of DNA with the help of a diagram.
14. Describe mitotic prophase and metaphase with the help of diagrams.
15. Discuss the genetics and phenotypic features of Klinefelter's syndrome.
16. What are multiple alleles? Explain with one example.
17. What are the different types of mutations?
18. Discuss the major differences between mitosis and meiosis.
19. Briefly discuss Mendel's laws of inheritance.

SECTION C: Answer any 1 question. Each carries 10 marks

20. Write an essay on the major types of tissues in animals.
21. Illustrate the morphology, structure, organization and types of chromosomes.

(1 × 10 = 10 Marks)