

FACULTY OF SCIENCE**B.Sc. Honors in Biomedical Science (CBCS) I - Semester Examination, December 2024****Subject : Basics of Medical Biology****Time: 3 Hours****Max. Marks: 80****Part-A****Note: Answer any eight questions.****(8x4 = 32 Marks)**

1. What is the composition of glycogen?
2. Explain the fate of dietary lipids on human body.
3. Give classification of drugs that interact with DNA.
4. What are the inhibitors of transcription?
5. What is the role of long non-coding RNAs?
6. What do you mean by aminoacylation?
7. Give example of frame shift mutations.
8. What is the genetic basis of Cystic Fibrosis?
9. Give differences between inversion and translocation.
10. What is the causative agent of Tuberculosis and how does it spread?
11. Distinguish between virulence and avirulence in terms of pathogenicity and disease.
12. Depict the one step growth curve of virus. Which phase can be used to determine viral quantification?

Part-B**Note: Answer all questions.****(4x12 = 48 Marks)**

13. (a) Discuss the clinical significance and optimum value range of hemoglobin, Ferritin and CRP.
(OR)
(b) Give the biological significance of MUFA and PUFA.
14. (a) Discuss about the post-transcriptional modifications.
(OR)
(b) Describe about the following:
(i) RNA polymerases (ii) Genetic code (iii) Ribosome structure
15. (a) Write about the structural chromosomal abnormalities in humans.
(OR)
(b) Discuss in detail about any two inherited human diseases.
16. (a) How probiotics impact the gut microbiome? Give few examples of probiotics.
(OR)
(b) Elaborate on clinical virology with reference to AIDS and Hepatitis.

FACULTY OF SCIENCE

B.Sc. Honors in Computer Science (CBCS) I - Semester Examination, December 2024

Subject: Programming With C

Time: 3 Hours

Max. Marks: 80

PART – A

Note: Answer any Eight questions.

(8x4=32 Marks)

1. Mention all library functions in C.
2. What are C identifiers? Explain.
3. Write about escape sequences with description for each.
4. Demonstrate conditional operator with suitable C program.
5. What is goto statement? Write its advantages and disadvantages.
6. Write a C program to demonstrate character array?
7. Explain function definition and declaration with an example.
8. What are the advantages of pointer?
9. What is calloc() function? Explain.
10. Explain the Structure declaration with a simple C program.
11. Differentiate between Structures and Unions.
12. Discuss different types of files.

PART – B

Note: Answer all the questions.

(4 x 12 = 48 Marks)

13. a) Describe various data types with syntax and examples.
OR
b) Explain all input output functions with suitable examples.
14. a) Describe While and For loops with a C program for each.
OR
b) List all the string functions. Write C programs to demonstrate any two string functions.
15. a) Mention various storage classes? Write C programs to implement each storage class.
OR
b) What is dynamic memory allocation? Illustrate with an example.
16. a) What is enumeration data type? Explain with an example.
OR
b) Explain about text file operating modes with examples.
