

BANKURA UNIVERSITY

B.SC(HONS) FIRST SEMESTER EXAMINATIONS, 2021

Subject: Computer Science

Course ID: 11511

Course Title: Programming Fundamentals using C/C++

Full Marks: 25

Time: 1Hr 15 minutes

The figures in the margin indicate full marks

Answer all the questions.

UNIT I

1. Answer *any five* of the following questions: (5x1=5)

- a) What is symbolic constant? Give example.
- b) Define variable.
- c) Write difference between static and auto storage class in C.
- d) Write function of sizeof() operator.
- e) What is ternary operator?
- f) What is pointer variable?
- g) What is recursion?
- h) Write two differences between procedure oriented and object oriented programming languages.

UNIT II

2. Answer *any two* of the following questions: (5x2=10)

- a) Write an iterative C program to calculate factorial value of a given integer. Write difference between while and do-while loop in C. 4+1=5
- b) Write a program in C to replace all vowels in a string by a character given by a user. Write difference between character array and string. 4+1=5
- c) What is switch case statement? How does it differ from if-else if-.....-else statement? What is the difference between a long integer and a short integer variable? 2+2+1=5
- d) What is call by reference? How does it differ from call by value? 2+3=5

UNIT III

3. Answer any one of the following questions:

(10x1=10)

- a) Write a C program to add two matrices of size 4x5. Write a C function to calculate the length of a string. Write differences between strcmp () and strcmp (). 5+4+1=10
- b) Write a C program to copy the content of one file into another. Write a program in C that compares two files and return 0 if they are equal and returns 1 if they are not equal. 5+5=10