BANKURA UNIVERSITY

B.Sc. 3ʳᵈ Semester (Honours) Examination, March 2021

Subject: *Electronics (H)*

Course ID: 31713   **Course Code: SH/ELC/303/C-7(TH)**

Course Title: *C Programming and Data Strucutre*

Full Marks: 25   **Time: 1 Hr 15 Min**

(The figures in the right hand side margin indicate marks
Answer all the questions)

1. Answer *any three* of the following questions   1×3=3
   a) What is the meaning of '\n' in C program?
   b) What is identifier?
   c) Mention at least four different format specifiers.
   d) What is recursion?
   e) What is structure?
   f) Comment "C is middle level language".

2. Answer *any three* of the following questions.   2×3=6
   a) Explain the meaning of scanf() and printf() statement.
   b) Mention two rules in naming the variables in C program.
   c) Write two advantages of using function in C program.
   d) Explain 'bitwise' operator in C program with example.
   e) List the short-hand assignment operators in C.
   f) How does the type 'float' differ from 'double' in C?

3. Answer *any two* of the following questions.   5×2=10
   a) Give the loop statement to print the following sequence of integers: -6 -4 -2 0 2 4 6.   5
   b) What is a loop? Explain 'while' loop/for loop in C with an example.
                                                               1+4=5

c) Explain the term 'user defined function' and 'built in function' with example. $2\frac{1}{2}+2\frac{1}{2}$

d) Write a C program to find transpose of a 3×2 matrix.

5

4. Answer *any one* of the following questions. 6×1=6

   a) Write a program to swap two values using call by value and call by reference. 6

   b) Define function. Explain its general format. Explain function with no argument and no return value with one example. 1+2+3

   c) What is an operator? Explain the arithmetic, relational, logical, and assignment operators in C language.

   2+4