DHANAMANJURI UNIVERSITY

JUNE - 2023

Name of Programme	:	**B.A/B.Sc. Mathematics(Honours)**
Semester	:	**4th**
Paper Type	:	**SEC (theory)**
Paper code	:	**SMA-002**
Paper Tiltle	:	**C Programming**
Full Marks	:	**40**
Pass Marks	:	**16**
Duration	:	**2 Hours**

The figures in the margin indicate full marks for the questions.
Answer any 4 (four) from the following questions:

1. Define the following terms: (1x10=10)

   (a) Application Software

   (b) High Level Language

   (c) Compiler

   (d) ASCII Values

   (e) String Constant

   (f) Modulo Division

   (g) Type Casting

   (h) Header File

   (i) Preprocessor Directive

   (j) Compound Statement

2. Differentiate the following terms: (2x5=10)

   (a) Keyword and Identifier

   (b) Pre-increment and Post-increment

   (c) Operator Precedence and Associativity

   (d) Implicit and Explicit Conversion

   (e) Break and Continue

3. Discuss the various categories of operators available in C and explain their usage. 10

4. Discuss the various decision-making statements available in C by giving their general format. Explain their differences by giving appropriate examples. 10

5. Discuss the various looping structures available in C by giving their general format. Explain their differences by giving appropriate examples. 10

6. (a) Write a C program to convert a decimal number to its equivalent binary number. 5

   (b) Write a C program to convert a binary number to its equivalent decimal number. 5

7. Write a C program to find the multiplication of two matrices. 10

8. Explain what a function is by giving an example. Differentiate between a function declaration and function definition. What are the different ways of passing arguments to a function? Discuss them by giving examples. 2+4+4=10