Magadh Mahila College
Patna University, Patna

BCA (Sem -I) Full Marks: 50
Paper: CC-2 (Programming Technique 'C') Time: 2 Hrs

i) **Choose the correct answer from the given options** **5 X 1 = 5 marks**

I. The operator which compares two values is
   a) assignment
   b) relational
   c) unary
   d) equal

II. When we place a semicolon after the for statement,
   a) the compiler will generate an error message
   b) program runs infinite times
   c) Loop executes infinite times
   d) Loop executes based on the condition given without executing the stements inside for loop

III. The function malloc() is defined in which header file
   a) stdio.h
   b) stdlib.h
   c) conio.h
   d) iostream.h

IV. Which function is used to associate a file with a stream?
   a) fread()
   b) fopen()
   c) fwrite()
   d) fflush()

V. The preprocessor directives must be preceded by which symbol?
   a) &
   b) &&
   c) #
   d) !

2. **Fill in the blanks** **5 X 1 = 5 marks**

I. Character constants are quoted using .....

II. The _____statement is used to skip statements in a loop.

III. The default storage class for variables declared inside a block is --------

IV. Strcmp(str1, str2) returns 1 if_____.

V. _____contains related information of the same data type

SECTION – B

Answer any two questions.
Each answer should not be more than 200 Words. **2 X 5 = 10 marks**

3. Write a short note on basic data types that C language supports.
4. Explain Left shift and right shift bitwise operator with examples.
5. What is recursion? Explain with an example.
6. Write a C program to search a value specified by the user, using binary search.

SECTION – C

Answer any three questions **3 X 10= 30 marks**

7. Write a C program to calculate the roots of a quadratic equation.
8. Explain call by value and call by reference in C with suitable examples.
9. Write a C program to print the Fibonacci series up to n terms using user definedfunction.
10. Write a C program to sort an array 10 elements
11. Write a c program to multiply two 3 x 3 matrices.