



‘समानो मन्त्रः समितिः समानी’

UNIVERSITY OF NORTH BENGAL

B.Sc. Honours 1st Semester Examination, 2021

CC1-COMPUTER SCIENCE (12)

PROGRAMMING FUNDAMENTALS USING C

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks.
All symbols are of usual significance.*

1. Answer any **five** questions: 1×5 = 5
 - (a) Mention the name of two header files.
 - (b) What is the maximum value of **int** data type for a 16-bit compiler?
 - (c) Write the value of n where $n = 21/4$ and n is an integer.
 - (d) What are the Logical operators?
 - (e) What is the initial value for indexing of any array?
 - (f) Mention four keywords.
 - (g) What are the loops used in C programming?
 - (h) An array **int rn[32]** stores students roll number. Which student is indicated by **rn[2]**—First/Second/Third.

2. Answer any **three** questions: 5×3 = 15
 - (a) With suitable example discuss the use of break statement.
 - (b) Explain Pointer with appropriate example.
 - (c) Explain Typecasting with suitable example.
 - (d) Explain Formal arguments and Actual arguments with example.
 - (e) Write the output of the following program and explain your answer.

```
void main()
{
    int a,b;
    for(a=1;a<=2;a++)
    {
        for(b=1;b<=2;b++)
        {
            if(a==b)
                continue;
            printf("\n %d  %d",a,b);
        }
    }
}
```

3. Answer any *two* questions:

10×2 = 20

- (a) Compare while loop and do-while loop with suitable examples.
- (b) For function calling explain Call by value and Call by reference with examples.
- (c) Write a program using function to check whether a given number is a Prime or not.
- (d) Write a program in C to copy a file and explain your program-code in short.

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