

**U.G. 6th Semester Examinations 2022**

**MATHEMATICS (General)**

**Paper Code : SEC - 04**

**[ BASIC COMPUTER PROGRAMMING (C) ]**

[CBCS]

Full Marks : 32

Time : Two Hours

*The figures in the margin indicate full marks.  
Candidates are required to give their answers in their own words as far as practicable.*

**Group-A**

(4 Marks)

1. Answer any **four** questions : 1×4=4

- (a) Write the full form of “ROM”.
- (b) What is the size of a character variable in “C” Language?
- (c) Assume that  $x = 50$ . Then what is the value of  $y$  where  $y = (++ x + 1) + x++$ ?
- (d) What are the basic data types used in “C” Language?
- (e) Write an operator which represents Logical “AND”?
- (f) How many times will the loop be executed?

```
for (m = 1 ; m <= 10; m++ )  
    { Print f (“In Google”);  
      m + = 3;  
    }
```

(g) What is CPU?

**Group-B**

(10 Marks)

Answer any **two** questions : 5×2=10

2. Write a C program to find the real roots of the quadratic equation  $ax^2 + bx + c = 0$ .

[P.T.O.]

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3. What do you mean by scope of variable? Explain briefly the scope of different types of variables.
4. Define infinite loop with an example.
5. Write a short note on the history of computer.

**Group-C**

(18 Marks)

Answer any *two* questions :

9×2=18

6. (a) By generating pseudo-random numbers find the probability of head of a unbiased coin. 5  
(b) Write a C program using any of decision statement to find the maximum between three given numbers. 4
  7. (a) Write a C programs to find all the prime number between 1 and  $n$ . 5  
(c) What are the basic differences between while, do while and for loop? 4
  8. (a) Write a C program to print first  $n$  terms of the Fibonacci sequence 0, 1, 1, 2, 3, 5, 8, 13, 21,.....using array. 7  
(b) Why is nested if-else loop used? 2
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