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Roll No.

Total Pages : 3

753105

Mar. 2022

**M.Sc. (Maths) - I SEMESTER
Programming in C (MATH21-705)**

Time : 90 Minutes]

[Max. Marks : 25

Instructions :

1. *It is compulsory to answer all the questions (1 mark each) of Part-A in short.*
2. *Answer any three questions from Part-B in detail.*
3. *Different sub-parts of a question are to be attempted adjacent to each other.*

PART-A

1. (a) Write all relational operators in C with their meaning. (1)
- (b) Write a simple program using if statement in C. (1)
- (c) What is variable initialization and why is it important? (1)
- (d) What is the use of a '\0' character in C? (1)
- (e) What are actual arguments? (1)

- (f) Which function in C can be used to append a string to another string? (1)
- (g) What are pointers? (1)
- (h) Define use of function fscanf() in C. (1)
- (i) Write a program to compare two strings in C. (1)
- (j) Define an array in C. (1)

PART-B

- 2. (a) Write a program to print the following output using for loops in C.


```

1
2 2
3 3 3
4 4 4 4
5 5 5 5 5
      
```

 (3)
- (b) Write any program in C using all logical operators. (2)
- 3. (a) Write a program to find the sum of 10 numbers using array in C. (2)
- (b) Write a program to find the length of the string namely "Examination" in C. (3)

- 4. Write any program in C using structures. (5)
- 5. (a) Write a program using pointers to exchange the values stored in two locations in the memory in C. (3)
- (b) Write a function prime in C that returns 1 if its argument is a prime number and returns 0 otherwise. (2)
- 6. (a) Write any program in C using continue statement. (2)
- (b) Write a program in C to compute the sum of the digits of a given integer number. (3)