U.G. 1st Semester Examination - 2021

COMPUTER SCIENCE

[PROGRAMME]

Course Code : COM.SC-G-CC-L-101A

(Computer Fundamentals and Programming using C)

Full Marks : 40   Time : $2\frac{1}{2}$ Hours

The figures in the right-hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

GROUP-A

1. Answer any **five** questions: 2×5=10

    a)   What are the naming rules of identifier?

    b)   What is library function?

    c)   Specify the use of typedef.

    d)   What is dynamic memory allocation?

    e)   What do you mean by local variable and global variable?

    f)   Differentiate between for and while loop.

    g)   What is the significance of getc(.) function?

[Turn over]

GROUP-B

2. Answer any **two** questions: 5×2=10

    a)   Explain if-else, nested if-else and cascaded if-else with examples and syntaxes.   5

    b)   How break and continue statements are used in a C program? Explain with the help of example(s).   5

    c)   Write a C program to find all prime numbers between 1 and 1000.   5

    d)   Explain different categories of pre-processor directives used in C.   5

GROUP-C

Answer any **two** questions: 10×2=20

3. a)   What is used defined function? Explain different classification of user defined functions based on parameter passing and return type with examples.

    b)   What is structure? Explain structure within a structure with the help of an example.

                    (2+4)+(2+2)

4. a)   Discuss the various operators available in C with the help of examples.

b) Write a C program to create a file and display its content. 4+6

5. a) Write a C program for binary to decimal conversion using recursion.

b) Write a program in C using functions to swap two numbers using call by value and call by reference. 5+5

6. Write short note on any **two** of the following:

5×2=10

a) Data types

b) Array

c) Storage class in C

d) Pointer

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