

**U.G. 1st Semester Examination - 2020****COMPUTER SCIENCE****[HONOURS]****Generic Elective Course (GE)****Course Code : Com.Sc-H-GE-L-101****(Computer Fundamentals and Programming using C)**

Full Marks : 40

Time : 2½ 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
- What are syntax error and logical error?
  - What is the difference between while loop and do-while loop?
  - What is ternary operator?
  - What is type casting?
  - What do you mean by scope of a variable?
  - What is structure? Give an example.
  - What is recursive function?

*[Turn over]***GROUP-B**

2. Answer any **two** questions: 5×2=10
- Explain break and continue statements using examples. 5
  - State and explain five string functions with examples. 5
  - What do you mean by function argument, function call and function prototype? 5
  - Define array. Write a C program to check whether a number is even or odd. 1+4=5

**GROUP-C**

- Answer any **two** questions: 10×2=20
3.
  - Explain different logical operators in C with examples.
  - Describe briefly various built-in read and write functions used to handle data in text and binary files. 4+6=10
4.
  - What do you mean by library function and user defined function? Explain with examples.
  - Write a C program using function to compute the product of the digits of a given integer. 4+6=10

5. a) Write a C program to check whether a number is perfect or not. A perfect number is a positive integer that is equal to the sum of its positive divisors, excluding the number itself.
- b) While purchasing certain items, a discount of 10% is offered if the quantity purchased is more than 1000. If quantity and price per item are given input through the keyboard, write a C program to calculate the total expenses.

$$5+5=10$$

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

$$5 \times 2 = 10$$

- a) Data types in C
- b) Storage classes in C
- c) Logical error and syntax error

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