

**U.G. 1st Semester Examination - 2020****COMPUTER SCIENCE****[PROGRAMME]****Course Code : Com.Sc-G-CC-L-101A****(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
- a) Distinguish between i++ and ++i statements.
  - b) What is macro?
  - c) Describe built-in data types.
  - d) What is the difference between getch() and getchar()?
  - e) What do you mean by local variable and global variable?
  - f) What is structure? Give an example.
  - g) What is the difference between break and continue statements?

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

2. Answer any **two** questions: 5×2=10
- a) Write down the advantages of macro over function. What is recursive function?  
3+2=5
  - b) State and explain five library functions used for various string operations. 5
  - c) Differentiate between do-while and while statements with suitable examples. Explain user-defined data types briefly. 2+3=5
  - d) Define array. Write a C program to check whether a number is palindrome or not.  
1+4=5

**GROUP-C**

- Answer any **two** questions: 10×2=20
3. a) What is the difference between user-defined functions and library functions? Explain different types of errors occurred at time of debugging a program.
- b) Briefly describe various file opening modes in C. 2+3+5=10

4. a) How is a structure member accessed? Describe an array of structure with the help of an example.
- b) Explain the difference between 'call by reference' and 'call by value' with examples.  
 $(2+2)+6=10$
5. a) Write a C program to check whether a number is prime or not.
- b) Write a C program to print all numbers between 100 and 200 which are divisible by 5 but not divisible by 15.  $5+5=10$
6. Write short notes on any **two** of the following:  
 $5 \times 2 = 10$
- a) Logical operators
- b) Conditional statements
- c) Storage classes
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