Roll No.

MCA-03/PGDCA-03/M.Sc.(IT)-03

Computer Programming Using C

Master of Computer Applications/P.G. Diploma in Computer Applications/Master of Science in Information Technology (MCA/PGDCA/M.Sc.(IT)-11/12/16/17)

First Semester, Examination, 2018

Time : 3 Hours

Max. Marks : 80

Note: This paper is of eighty (80) marks containing three (03) Sections A, B and C. Attempt the questions contained in these Sections according to the detailed instructions given therein.

Section-A

(Long Answer Type Questions)

- **Note :** Section 'A' contains four (04) long answer type questions of nineteen (19) marks each. Learners are required to answer *two* (02) questions only.
- 1. Answer the following :
 - (a) What are the different data types used in 'C' ? Also explain signed int and unsigned int.
 - (b) Explain function call by, call by value and call by reference. Give suitable example as required.

- 2. Answer the following :
 - (a) What are the different types of function in 'C' ?Write a function to find out that the entered number is palindrome or not.
 - (b) Write a program in 'C' to find out all prime number upto 1000.
- 3. Answer the following :
 - (a) What is recursion ? Can it be replaced by the 'for' loop ? Justify your answer.
 - (b) What is the difference between user defined function and predefined function ? Explain with the help of suitable example.
- 4. Answer the following :
 - (a) Write a C program to compute the sum of all Armstrong number from 100 to 1000.
 - (b) Compare the following pair of statement with respect to their syntax and function :
 - (i) getchar and putchar
 - (ii) while and do.... while

Section-B

(Short Answer Type Questions)

- **Note :** Section 'B' contains eight (08) short answer type questions of eight (08) marks each. Learners are required to answer *four* (04) questions only.
- 1. What is flowchart ? Explain flowchart with the help of example.
- 2. What is the difference between Arithmetic and Bitwise operator ? Give an example.

- 3. What is the algorithm ? What are its benefit ?
- 4. What is the difference between "break and continue" statement ? Give an example.
- 5. What are binary operators ? How many operands are associated with a binary operator ?
- 6. What is two-dimensional array in C ? Explain with the help of a program.
- 7. What is the difference between pre-decrement operator and post-decrement operator (-A and A -)?
- 8. How will you perform opening and closing of files in file handling ?

Section-C

(Objective Type Questions)

- **Note :** Section 'C' contains ten (10) objective type questions of one (01) mark each. All the questions of this Section are compulsory.
- 1. What will be the output of statement printf(printf('hello')) ?
 - (a) hello
 - (b) 'hello'
 - (c) hello5
 - (d) hell
- 2. Size of char is :
 - (a) One byte
 - (b) Two byte
 - (c) Three byte
 - (d) Four byte

- 3. Which one is an example of derived data type ?
 - (a) Array type
 - (b) Pointer type
 - (c) Function type
 - (d) All of the above
- 4. In a C language, pointer is :
 - (a) Address of a variable
 - (b) A variable for storing address
 - (c) Constant operator
 - (d) None of these
- 5. Array index in C language starts from :
 - (a) 1
 - (b) 0
 - (c) Any integer value
 - (d) None of these
- 6. Comma operator is a/an :
 - (a) Unary operator
 - (b) Binary operator
 - (c) Ternary operator
 - (d) Assignment operator
- 7. Which of the following function is used to start a C program ?
 - (a) sub_main()
 - (b) procedure()
 - (c) main()
 - (d) stdio.h

- 8. <, >, < =, > = are :
 - (a) Logical operator
 - (b) Relational operator
 - (c) Arithmetic operator
 - (d) Bitwise operator
- 9. Two-dimensional Arrays are used to store the element of :
 - (a) The same type
 - (b) Multiple types
 - (c) Different types
 - (d) None of these
- 10. Structure is a :
 - (a) User-defined data types
 - (b) Pre-defined data types
 - (c) Different types
 - (d) None of these