

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. Learners are required to 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 pointers ? Describe the features of pointers. Write a program to display array of pointer and pointer to function.
 - (b) What is the difference between Union and Structure ? Also explain the term ‘passing structure to function’ with help of an example.

2. Answer the following :
 - (a) Write a program in 'C' to check whether the given number is prime or not.
 - (b) What are iteration statements in C program ? Give their example.
3. Answer the following :
 - (a) Twenty-five numbers are entered from the keyboard into an array. The number to be searched is entered through the keyboard by the user. Write a program to find if it is present in the array. Also display the number of times it appears in the array.
 - (b) Write a C program to find out that a particular number is palindrome number or not.
4. Answer the following :
 - (a) What is recursion ? Write a program for generating the Fibonacci series using recursion.
 - (b) What do you mean by the different function of prototype ? Write a user defined function to find out greatest of three numbers.

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 do you understand by storage class ? Explain.

2. What are data types ? Explain all basic data type of C language.
3. Explain the difference between while and do..while loop.
4. What are different operators used in C language ?
5. What is string in C language ? Write all functions of string handling.
6. What is pointer ? Explain pointer to a function with example.
7. Differentiate between Structure and Union.
8. What is enumerated data type ? Explain with suitable example.

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. By default the return type of function is :
 - (i) char
 - (ii) int
 - (iii) float
 - (iv) void
2. The output of `printf(scanf(‘%s’, &variable))`
(Note : assuming “variable” to be defined variable under C) :
 - (i) No output
 - (ii) Compilation error
 - (iii) Variable
 - (iv) Runtime error

3. How long does this loop run ?
for(int x = 0; x = 3; x++)
- (i) Never
 - (ii) Three times
 - (iii) Forever
4. Size of char is :
- (i) One byte
 - (ii) Two byte
 - (iii) Three byte
 - (iv) Four byte
5. ||, && and ! are :
- (i) Logical operators
 - (ii) Bitwise operator
 - (iii) Arithmetic operator
 - (iv) Relational operator
6. Which one is an example of derived data type ?
- (i) Array type
 - (ii) Pointer type
 - (iii) Function type
 - (iv) All of these
7. C is a/an :
- (i) Assembly level language
 - (ii) High level language
 - (iii) Machine level language
 - (iv) None of these

8. In C language, pointer is :
- (i) Address of a variable
 - (ii) A variable for storing address
 - (iii) Constant operator
 - (iv) None of these
9. Array index in C language starts from :
- (i) 1
 - (ii) 0
 - (iii) Any integer value
 - (iv) None of these
10. Comma operator is a/an :
- (i) Unary operator
 - (ii) Binary operator
 - (iii) Ternary operator
 - (iv) Assignment operator

