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

Computer Programming using C

Master of computer application/Post-Graduate diploma in Computer Application/Master of Science in Information Technology

(MCA/PGDCA/MSc.IT-11/12/16/17)

First Semester, Examination, 2019

Time : 3 Hours   *[Maximum Marks : 80*

Note : This paper is of Eighty (80) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein.

Section–A

(Long Answer Type Questions)

Note : Section A contains Five (05) long-answer-type questions of Fifteen (15) marks each. Learners are required to answer any three (03) questions only.   **(3×15=45)**

1. What are the different operators used in 'C'? Also explain operator precedence and associtivity?

2. 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 numbers of times it appears in the array.

3. What is the difference between Union and structure? Also explain the term 'passing structure to function' with help of an example?

4. What do you mean by dynamic memory allocation? Write down the syntax for malloc( ) & calloc ( ) function?

5. Explain the general format the fseek( ) function? Also explain the difference between fread and fwrite? Explain above by giving an example?

Section–B

(Short-Answer-Type Questions)

Note : Section 'B' contains Eight (08) short-answer-type questions of Seven (07) marks each. Learners are required to answer any Five (05) questions only.   **(5×7=35)**

1. What is an array of characters in C? Explain with the help of a program.

2. Write a program in C to check whether the number is even or odd?

3. What are the keywords in C? What restrictions apply to their use?

4. A five digit number is entered through the key board. Write a program to obtain the reversed number.

5. What is pointer? Explain pointer to a function with example?

6. What is recursion? What are the uses of recursion?

7. What is meant by static, external and register variables?

8. What is the difference between call by value and call by reference? Explain each with a suitable example?