

Roll No: _____

MCA(Integrated)
(SEM II) THEORY EXAMINATION 2021-22
ADVANCE PROGRAMMING IN C

Time: 3 Hours

Total Marks: 70

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt all questions in brief.

2 x 7 = 14

a.	Define the function of:- (i) strncpy (ii) strdup.
b.	Define and compare malloc and realloc library functions.
c.	What is the difference between structure and union?
d.	Define call by value and call by reference.
e.	Define void pointer and null pointer with example.
f.	What is an array? How do you declare an array?
g.	Explain graphics driver.

SECTION B

2. Attempt any three of the following:

7 x 3 = 21

a.	Write a program to convert a string to lower case.
b.	Explain sorting? Also explain the working of selection sort with example?
c.	What is multidimensional array? Write a program to find the transpose of a given matrix?
d.	Explain file handling. Discuss any four functions used in file handling?
e.	Define macro and its application. Write macro definition with arguments of compound interest and amount.

SECTION C

3. Attempt any one part of the following:

7 x 1 = 7

(a)	Write a program to perform multiplication of two matrices.
(b)	Define the two basic properties of array. Explain how one dimensional, two dimensional and multi-dimensional arrays are represented in memory.

4. Attempt any one part of the following:

7 x 1 = 7

(a)	What is pointer? How pointer variables are initialized. Write a program to perform pointer arithmetic operations.
(b)	What do you mean by function to pointer? Explain * and & operator in pointer.

5. Attempt any one part of the following:

7 x 1 = 7

(a)	Explain nested structure and array structure. Explain with the help of program.
(b)	What do you mean by enumerated data type? Write a program to check whether given string is palindrome or not. https://www.aktuonline.com

6. Attempt any one part of the following:

7 x 1 = 7

(a)	Explain various file handling modes. Explain any one mode through program.
(b)	What is meant by bitwise operator? Discuss the three logical bit operators with example.

7. Attempt any one part of the following:

7 x 1 = 7

(a)	What do you mean by C Preprocessor? What are the two forms of #include directive? Distinguish between #ifdef and #if directive.
(b)	Explain any three functions used in drawing in C language.