22232

3 Hours / 70 Marks   Seat No.

Instructions :   (1)   All Questions are *compulsory.*

(2)   Illustrate your answers with neat sketches wherever necessary.

(3)   Figures to the right indicate full marks.

(4)   Assume suitable data, if necessary.

		Marks
1.	**Attempt any FIVE of the following :**	**10**
(a)	Draw the structure of a 'C' program.	**2**
(b)	Define identifiers with example.	**2**
(c)	State any four decision making statement.	**2**
(d)	Explain the effect of following statement int a, * b = & a;	**2**
(e)	Explain '&' operator used in pointers.	**2**
(f)	Declare a structure student with element roll_No and name.	**2**
(g)	How to declare structure within structure ?	**2**
2.	**Attempt any THREE of the following :**	**12**
(a)	State various data type along with their memory sizes.	**4**
(b)	Write a 'C' program to convert accepted string in upper and lower case.	**4**
(c)	Differentiate between call by value and call by reference. (any 4 points)	**4**
(d)	Explain concept of pointer to a pointer.	**4**

3. **Attempt any THREE of the following :** **12**

    (a)   Explain the terms Assembler, Linker, Compiler and Interpreter. **4**

    (b)   Explain switch statement with flow chart. **4**

    (c)   List the categories of functions and explain any one with suitable example. **4**

    (d)   With suitable example list different pointer arithmetic operations. **4**

4. **Attempt any THREE of the following :** **12**

    (a)   Explain Hexadecimal and octal data type with example. **4**

    (b)   How the size of an array is declared ? Explain with suitable example. **4**

    (c)   Explain use of pointer in array. **4**

    (d)   Explain type def keyword in 'C' with example. **4**

5. **Attempt any TWO of the following :** **12**

    (a)   Write a program to find largest of three numbers using nested if else. **6**

    (b)   Explain initialization and declaration of 1-D and 2D array syntax with example. **6**

    (c)   Define scope of variable with suitable 'C' program. **6**

6. **Attempt any TWO of the following :** **12**

    (a)   Write a program to find whether the entered number is prime or not. **6**

    (b)   Write a program to add two matrices of size 3×3. **6**

    (c)   Explain enum keyword in 'C' with suitable 'C' program code. **6**

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