22218

11819

Instructions:

| 3 I | Hours / | 70 | Marks | Seat No. | | |
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| | | | | | | |

(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. (5) Preferably, write the answers in **sequential** order. Marks 1. Solve any five: $(5 \times 2 = 10)$ A) List 4 datatypes used in C. 2 2 B) State use of * and & used in pointers. C) Give syntax of switch case statement. 2 D) State any four control statements. 2 2 E) Define Array. 2 F) List 2 mathematical functions used in C programming. 2 G) Define structure. 2. Solve any three: $(3 \times 4 = 12)$ A) Distinguish between compiler and interpreter. B) Explain while loop with syntax and example. 4 C) Explain the use of the following function with syntax: i) Stremp() ii) Strlen() 4 D) Write a program to calculate nth power of a number using function. 4 **3.** Solve any three: $(3 \times 4 = 12)$ A) Write a program to accept ten numbers in array and arrange them in ascending order. 4 B) Explain use of arrow (\rightarrow) operator with example. 4

| | | Marks |
|----|--|--------|
| | C) Write an algorithm and flowchart to swap the contents of two variables. | 4 |
| | D) Write a program to find whether the character entered through keyboard is a vowel or | not. 4 |
| 4. | Solve any three: | ×4=12) |
| | A) Explain how to initialize two dimensional array with example. | 4 |
| | B) Explain recursive function with suitable example. | 4 |
| | C) State and explain four arithmetic operations perform on pointer. | 4 |
| | D) Explain conditional operator with example. | 4 |
| 5. | Solve any two: | ×6=12) |
| | A) Write a program to add two 3 × 3 matrices. | 6 |
| | B) Write a program to add two numbers using function. | 6 |
| | C) Write a program to exchange values of two variables using pointers. | 6 |
| 6. | Solve any two: | ×6=12) |
| | A) Write a program to declare a structure student having data members roll_no, name and agg_marks. Accept data and display this information for one student. | d 6 |
| | B) Write a program to print table of a given number. | 6 |
| | C) Write a program to concatenate two strings. | 6 |
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