

**COMPUTER PROGRAMMING**

(Common to CE, EEE, CSE, ECE, ME, EIE and IT)

Time: 3 hours

Max. Marks: 70

**PART – A**  
(Compulsory Question)

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- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) What is the size of integer data type?
  - (b) Illustrate in which order any mathematical expression is evaluated.
  - (c) What is the size required to store any array of 25 integers?
  - (d) Explain call by reference.
  - (e) What does this statement indicate  $p = **a$ ; where  $p$  and  $a$  are variables?
  - (f) How many maximum arguments can be passes by return ( )?
  - (g) Define command line arguments.
  - (h) Declare a struct *name* containing field's first\_name, middle\_name, last\_name within a *struct student*.
  - (i) How to define a global constant?
  - (j) Write a statement to open a file in reading mode.

**PART – B**  
(Answer all five units, 5 X 10 = 50 Marks)

**UNIT – I**

- 2 Write an algorithm to add a list of n elements and display them in ascending order.

**OR**

- 3 Write a program in 'C' language to print the Fibonacci series.

Fibonacci series is 0, 0, 1, 1, 2, 3, 5, 8, 13, 21

**UNIT – II**

- 4 What is the condition to multiply two matrices? Write a 'C' program to multiply two matrices.

**OR**

- 5 Write a program to print an array in reverse order.

**UNIT – III**

- 6 Write a function to swap two integer elements.

**OR**

- 7 Explain pointers and arrays with some example programs.

**UNIT – IV**

- 8 Differentiate between structure and unions.

**OR**

- 9 Write a program using command line to print the statement "I am proud of my country".

**UNIT – V**

- 10 Explain FILE structure in detail.

**OR**

- 11 Describe formatted input output statements.

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