

Total No. of Questions : 10]

SEAT No. :

PC-5208

[Total No. of Pages : 2

[6351]-118

F.E.

FUNDAMENTALS OF PROGRAMMING LANGUAGES
(ESC - 105 - Com) (2024 Pattern) (Semester - I)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates :

- 1) Solve Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8, Q.9 or Q.10.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Assume suitable data, if necessary.

- Q1)** a) Define an algorithm and write an algorithm for addition of two numbers. [3]
b) Explain brief history of 'C' programming. [3]
c) Define an identifier in C. Explain rules of naming an identifier. [4]
d) Explain data types in C. [4]

OR

- Q2)** a) Draw a flowchart for division of two numbers. [3]
b) Explain tokens in C programming. [3]
c) Explain different storage classes in C. [4]
d) Define a constant in C. What are the different types of constants in C? [4]

- Q3)** a) Define an operator and operand in C programming. Give a suitable example. [3]
b) What is a conditional operator in C? Explain with a suitable example. [3]
c) Explain relational operators in 'C'. [4]
d) What is the use of assignment operators? Explain different assignment operators. [4]

OR

- Q4)** a) Explain different arithmetic operators with suitable example. [3]
b) What are the different logical operators in 'C'? [3]
c) Explain bitwise operators in 'C'. [4]
d) What do you mean by operator precedence? Specify the precedence of arithmetic operators. [4]

P.T.O.

- Q5)** a) Explain different conditional/branching statements in C programming. [4]
b) Explain while loop with syntax, Flowchart and give a suitable example. [5]
c) Write a program in C to find factorial of a number. [5]

OR

- Q6)** a) Explain use of break and continue statement in C programming with a suitable example. [4]
b) Explain for loop with syntax, flowchart and give a suitable example. [5]
c) Write program to check whether a number is even or odd. [5]

- Q7)** a) Explain one dimensional array with a suitable example. [4]
b) What are the different ways of initialization of arrays in C programming? [5]
c) Write a program in 'C' for addition of two matrices. [5]

OR

- Q8)** a) What are the properties of arrays in C? [4]
b) What are the different ways of string initialization? [5]
c) Write a program to count number of characters in a string using a looping statement. [5]

- Q9)** a) Explain user defined function definition with syntax and give a suitable example. [4]
b) What is a recursion? Explain it with a suitable example. [5]
c) Write a program for leap year using function. [5]

OR

- Q10)** a) Explain structure declaration and initialization. [4]
b) Explain function declaration, function definition and function call. Give a suitable example. [5]
c) Write a program for prime number using function. [5]

