

1079
B.E. (Civil) First Semester
CS-101: Programming Fundamentals
(Common with CSE)

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit.

x-x-x

I. Attempt the following:-

- a) What are static 'variables'?
- b) Explain the task performed by the fseek() function
- c) Differentiate between while and do while statements.
- d) What do you understand by NULL pointer?
- e) Differentiate between structure and union.

(5x2)

UNIT – I

- II. a) Describe switch statement. What is the difference between switch and else-if statement?
b) What do understand by recursion? WAP of factorial using recursion? (2x5)
- III. a) What are operators? Explain Relational and Logical operators.
b) Write a program to multiply matrix A of size m x n by matrix B of size p x q, provided that n=p. (2x5)
- IV. a) Differentiate between call by value and call by references with suitable example in C.
b) What do understand by strings? Explain strlen() and strcat() functions. (2x5)

UNIT – II

- V. a) What are the mean reason for using structure ?How a structure different from union?
b) Write a program to compare two dates enter by user. Make a structure named DATE to store the elements day, month and year to store the dates, if dates are equal, display "equal dates" otherwise display "not equal dates". (2x5)

P.T.O.

(2)

- VI. a) Discuss about different types of pointers? How pointers are used with structure?
b) Write a program to read the contents of the file and count the number of characters in the file. (2x5)

VII. Write a short note on:-

- a) Bit fields
- b) stderr
- c) C-Preprocessor
- d) fgets()

(4x2½)

x-x-x