Exam.Code:0905

Sub. Code: 6653

#### 1128

## B.E. (Civil Engineering) First Semester

# CS-101: Programming Fundamentals (Common with CSE)

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt <u>five</u> questions in all, including Question No. I which is compulsory and selecting two questions from each Unit.

x-x-x

- I. Attempt the following:
  - a) What is the purpose of main () function?
  - b) Differentiate between system software and application software.
  - c) What is the difference between ++a and a++?
  - d) Differentiate between structure and union.
  - e) Distinguish between printf() and fprint() functions

(5x2)

### UNIT-I

- II. a) What are the flow control statements? Explain looping statements in detail.
  - b) What are Arrays? Explain different types of arrays.

(5.5)

- III. a) Write a program using while loop to reverse the digits of the number.
  - b) What do you understand by operators? Explain increment and decrement operators.
- IV. a) Differentiate between call by value and call by references with suitable example in
  - b) Write a program to copy one string into another and count the number of character copied. (5,5)

### <u>UNIT - II</u>

- V. a) What is structure? How can entire structure be passed to a function?
  - b) Define a structure called Cricket that will describe the information *player\_name*, *team-name*, *batting\_avg*. using Cricket declare an array player with 50 elements and write a program to read the information about all the 50 players and print a team\_wise list containing name of player with their batting\_avg. (4,6)

P.T.O.

- VI. a) What is pointer? Discuss pointer arithmetic in detail?b) Write a program to read a character from one file and write it to another file. (5,5)
- VII. a) What is the purpose of the typedef feature? How this feature used in structure (4)
  - b) What are the primary advantages of using a data files.

c) How can a function return a pointer to its calling routine? (4,3,3)

x-x-x