

- (b) What is arithmetic expression ? Explain briefly. 3
- (c) Explain briefly the concept of recursion. 3
- (d) What do you understand by nested loop ? Explain. 3
- (e) What is sorting ? Explain. 3

No. of Printed Pages : 04

Roll No.

18A13

B. Tech. EXAMINATION, 2022

(First Semester)

(C Scheme) (Main & Re-appear)

(Common for All Branches)

CSE101C

Programming for Problem Solving

Time : 3 Hours]

[Maximum Marks : 75

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit. Q. No. 9 is compulsory.

Unit I

1. (a) What is Computer ? Draw the block diagram of the computer and explain the various components of it. 9
(b) Differentiate between the compiler and interpreter. 6
2. What is Flowchart ? Explain the various symbols used in flowcharts. Also discuss the various steps to solve logical and numerical problems. 15

Unit II

3. (a) What is for loop ? Explain. Also write a program to display the numbers in increasing and decreasing order using infinite for loop. 10
(b) Differentiate between while and do while loop. 5
4. What is Function ? Explain the call by value and call by reference parameter passing in functions. 15

M-18A13

2

Unit III

5. (a) What is a Structure ? How are structure elements stored in memory ? Explain the use of dot operator. 9
(b) What is array of structure ? Explain the relationship between an array and a pointer. 6
6. What are Pointers ? Why are they important ? Explain the features of pointer. Also discuss the use of pointers in self-referential structures. 15

Unit IV

7. Write short notes on the following :
(a) File Handling 7
(b) Bubble Sort. 8
8. What is Searching ? Explain in detail linear and binary search. 15
9. (a) What do you understand by syntax and logical error ? 3

(2-N22-20/17) M-18A13

3

P.T.O.