Name:	
Enrolment No:	**UPES** UNIVERSITY WITH A PURPOSE

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December 2019

Course: BCA – IoT & BFSI
Program: Programming and Data Structure
Course Code: CSEG 1002

Semester: I
Time   : 03 hrs.
Max. Marks: 100

Instructions:

SECTION A

S. No.		Marks	CO
Q 1	What is pointer? Give an example for pointer declaration and initialization.	5	CO2
Q 2	Define Stack and Queue.	5	CO4
Q 3	What is sorting? Explain Bubble sort with an example.	5	CO5
Q 4	Define Union and write its syntax.	5	CO3

SECTION B

Q 5	Write a Program using structure to read and display the information about a student.	10	CO3
Q 6	Find the maximum and minimum between two given numbers by passing those two numbers as arguments using functions.	10	CO2
Q 7	Illustrate and discuss the different types of Linked list.	10	CO4
Q 8	Write a program to enter a string through user and find whether the entered string is palindrome or not. OR Write a C program to find the frequency of character in a string.	10	CO2

SECTION-C

Q 9	Write a C Program to Open a File, Write in it, and Close the File	20	CO5

Q 10	Print the given patterns using nested for loop without using if..else statements:
	
	       *
	      * * *
	    * * * * *
	   * * * * * *
	  * * * * * * * *
	
	 OR
	
	 a. Write a menu driven C program to implement addition, subtraction, multiplication, and division using switch case in one program.
	 b. Write a C program to find whether a given number is even or odd.
		20	CO1