P P SAVANI UNIVERSITY

First Semester of B. Tech. Examination
May 2019
SECE1020 Introduction to Computer Programming

24.05.2019, Friday   Time: 12:30 p.m. To 3:00 p.m.   Maximum Marks: 60

Instructions:
1. The question paper comprises of two sections.
2. Section I and II must be attempted in separate answer sheets.
3. Make suitable assumptions and draw neat figures wherever required.
4. Use of scientific calculator is allowed.

SECTION – I

Q - 1	**Answer the following. (Any Five)**	**[05]**
(i)	ROM stands for _____.	
(ii)	The control string for 'int' datatype is_____.	
(iii)	Algorithm is step by step solution of any problem (True/False).	
(iv)	In a pretest loop, if body is executed n times, the test expression is executed n+1 times (True or False).	

(v)	How many times printf statement will execute?
	     for(; ;)
	     printf("hello");	

(vi)	What is Ternary Operator in C?	
(vii)	C was developed by _____	
Q - 2 (a)	Explain any five operator categories (with examples) present in C language.	**[05]**
Q - 2 (b)	Write a program to display following pattern. * ** ***	**[05]**

OR

Q - 2 (a)	Explain the block diagram of computer.	**[05]**
Q - 2 (b)	Explain different kinds of tokens present in C.	**[05]**
Q - 3 (a)	Draw a flowchart to find largest among three numbers.	**[05]**
Q - 3 (b)	Explain different control structures present in C language.	**[05]**

OR

Q - 3 (a)	Differentiate between flowchart and algorithm	**[05]**
Q - 3 (b)	Write a program to develop calculator application using switch-case statement.	**[05]**
Q - 4	**Attempt any One**	**[05]**
(i)	Differentiate between RAM and ROM.	
(ii)	Differentiate between Machine level language and High level language.	

SECTION – II

Q - 1	**Answer the following (Any Five)**	**[05]**
(i)	Differentiate between 'variable' and 'array'.	
(ii)	Union is collection of different type of elements (True/False).	
(iii)	Two operators used in Pointer are _____ and _____.	
(iv)	Which file management function is used to move the control from position of file to another?	

(v)	_____ operator is used to access the data elements of Structure.	
(vi)	What is Array of Pointers?	
(vii)	What is inbuilt function?	
Q - 2 (a)	Write a program with output and explanation to calculate the sum and average of an array using for loop.	[05]
Q - 2 (b)	What is Pointer? Write a note on Pointer initialization.	[05]
	OR	
Q - 2 (a)	Explain any four string inbuilt functions (with example).	[05]
Q - 2 (b)	Write a program to find maximum as well as minimum element from an array.	[05]
Q - 3 (a)	Write a program to concatenate two strings in C.	[05]
Q - 3 (b)	Differentiate between Array and Structure.	[05]
	OR	
Q - 3 (a)	Write a program to find factorial of a number using recursive function.	[05]
Q - 3 (b)	Explain different file management functions used in C.	[05]
Q - 4	**Attempt any One.**	[05]
(i)	Differentiate between Structure and Union.	
(ii)	Differentiate between call by value and call by reference.	

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