PAPER CODE- 52006

University Institute of Engineering & Technology

(Recognised Under Section 2(f) and 12B of UGC)

Kurukshetra University, Kurukshetra

Roll No. -

THEORY EXAMINATION – May 2019	
B.TECH – ECE/Mech.	SEMESTER – I

TIME – 3 Hrs.

M.M. - 75

COURSE NO. - ES-105

COURSE TITLE - Programming for Problem Solving

Note: All questions in Part-A and Part-B are compulsory. Attempt any four questions from Part-C selecting at least one from each unit.

PART-A (15 Marks)

Q. No. – 1 Answer the following questions. **15x1=15**

(i)	Discuss EEPROM?
(ii)	What is the range for float for 16-bit compiler?
(iii)	What is the purpose of getw ().
(iv)	Discuss SRAM.
(v)	Write the binary operators used in C.
(vi)	Write the assignment operators.
(vii)	What is the difference between functions fgetc() and fgetw()?
(viii)	What is syntax of structure?
(ix)	Difference between formal argument and actual argument?
(x)	Which one is illegal: ++*ptr or *++ptr
(xi)	How can we initialize union?
(xii)	Explain definition of variable ?
(xiii)	Difference between & and && operators?
(xiv)	Differentiate between strcpy and strncpy.
(xv)	What is the use of typecast?

PART-B (20 Marks)

	UNIT-I	
2	**Solve the following:** i. $(593E.03D)_{16} = (?)_r$ where r = 8 and 10 ii. $(5FCD)_{16} - (30D8)_{16}$ using r' complement.	 3 2
	UNIT-II	
3	i. Write the relational and bitwise operators in C with example. ii. Differentiate between While and do-While loops with example.	3 2
	UNIT-III	
4	i. Write a program to sort the element from an array. ii. Explain function prototype?	3 2
	UNIT-IV	
5	Write a program to handle the record of students	5

PART-C (40 Marks)

	UNIT-I	
6	Solve the following: i. $(577)_8$-$(1476)_8$, ii) $(A7D7E.5A)_{16}$ +$(F6E5.B4)_{16}$ ii.Explain the primary and secondary memory devices in details.	 4 6
7	Solve the following: i. $(9AB3)_{12} + (74A5)_{12}$ $(453)_6 - (132)_6$ using 8' complement. ii. What do you understand by algorithm? Write algorithm forsearch an element from the array.	 4 6
	UNIT-II	
8	i. Write a program to find largest out of three numbers using conditional operator in C. ii. Define the storages classes in C with example.	5 5
9	i. Write a program to find the Fibonacci series. ii. Explain the use of break and continue statement in C with suitable examples.	5 5
	UNIT-III	
10	i. Write a program to check whether sting is palindrome or not without using string function. ii. How user defined function with argument but no return can be created, explain with suitable example.	5 5
11	i. What is recursion? Write a program to find the factorial of a number using recursion ii. Write a program for transpose of a matrix.	5 5
	UNIT-IV	
12	i. How the structure within structure can be handled in C language. Explain with suitable example? ii.Write a program to copy content of one file into another file.	5 5
13	i. How the array can be handled by the pointers in C language. Explain? ii. Explain the use of array within union with suitable example	5 5