**R16** 

Max. Marks: 75

[5+5]

Code No: 132AD

Time: 3 hours

## JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD B.Tech I Year II Semester Examinations, May - 2019 COMPUTER PROGRAMMING IN C

(Common to EEE, ECE, CSE, EIE, IT, ETM)

**Note:** This question paper contains two parts A and B. Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. question carries 10 marks and may have a, b, c as sub questions. **PART-A (25 Marks)** Explain the conversion of Decimal number to Hexadecimal number with an example. [2] 1.a) Differentiate between declaration and definition of a variable. b) What is a user defined function? c) [2] What is the use of type qualifier? d) [3] Differentiate between \*p++ and p++. e) [2] f) What is a pointer? Explain how the pointer variable declared and initialized. [3] Explain about the structures containing pointers with an example. g) [2] Explain about self-referential structures. h) [3] i) What is the usage of fget() and fput() functions. [2] List the positioning functions in files. i) [3] **PART-B** (50 Marks) Describe Offerent Computing Environments. 2.a) Explain about type conversion mechanism available in C language. b) [5+5]OR 3.a) Write an algorithm to find the factorial of a given number. Differentiate between While and Do While with an example. **b**) [5+5]4.a) Explain the different types of storage classes with an example. b) Write a program to search the element in the given list by using the binary search. [5+5] OR 5.a) Write a program to sort the elements by using bubble sort. What is recursion? Explain the limitations of recursion. **b**) [5+5]Write a program to find the length of the given string. 6.a) b) Explain the memory allocation functions with an example. [5+5]Explain the concept of pointers to pointers with an example. 7.a) Write a 'C' program to append a string to the end of other string by using string b)

manipulation function.

8.a)	Explain about the enumerated data types with an example.		
b)	Explain about bit fields with an example.	[5+5]	
	OR		
9.a)	Explain how the structure variable passed as a parameter to a function with exan	ain how the structure variable passed as a parameter to a function with example.	
b)	Explain the Command line arguments with an example.	[5+5]	
10.a)	Differentiate between text and binary files with an example.		
b)	Write a 'C' program to append the contents of one file to another.	[5+5]	
	OR		
11.a)	Write a 'C' program to count number of words and lines in the given text file.		
b)	Explain about file i/o operations in 'C'.	[5+5]	

