

Code No: 132AD**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)****Time: 3 hours****Max. Marks: 75****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. Each question carries 10 marks and may have a, b, c as sub questions.

PART- A**(25 Marks)**

- 1.a) Explain the conversion of Decimal number to Hexadecimal number with an example. [2]
- b) Differentiate between declaration and definition of a variable. [3]
- c) What is a user defined function? [2]
- d) What is the use of type qualifier? [3]
- e) Differentiate between *p++ and p++. [2]
- f) What is a pointer? Explain how the pointer variable declared and initialized. [3]
- g) Explain about the structures containing pointers with an example. [2]
- h) Explain about self-referential structures. [3]
- i) What is the usage of fget() and fput() functions. [2]
- j) List the positioning functions in files. [3]

PART-B**(50 Marks)**

- 2.a) Describe different Computing Environments.
 - b) Explain about type conversion mechanism available in C language. [5+5]
- OR**
- 3.a) Write an algorithm to find the factorial of a given number.
 - b) Differentiate between While and Do While with an example. [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.
 - b) What is recursion? Explain the limitations of recursion. [5+5]
- 6.a) Write a program to find the length of the given string.
 - b) Explain the memory allocation functions with an example. [5+5]
- OR**
- 7.a) Explain the concept of pointers to pointers with an example.
 - b) Write a 'C' program to append a string to the end of other string by using string manipulation function. [5+5]

- 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 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]

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