

**Code No: 132AD****JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B.Tech I Year II Semester Examinations, April - 2018****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) What are flowchart symbols? Explain. [2]
- b) Explain the syntax of case statement with example. [3]
- c) What are limitations of recursion? [2]
- d) Explain the procedure for Binary search. [3]
- e) Give an example for pointers to pointers. [2]
- f) What are string functions? Explain. [3]
- g) Define structure with example. [2]
- h) What is self referential structure? Explain. [3]
- i) Write the concept of a file. [2]
- j) Explain about file status functions. [3]

**PART-B****(50 Marks)**

- 2.a) Write a C program to generate Fibonacci series.
  - b) What are operators in C? Explain with example. [5+5]
- OR**
- 3.a) Explain about decision making and branching.
  - b) Describe the structure of a C program. [5+5]
- 4.a) Write a C program for Bubble sort.
  - b) What are storage classes? Explain with examples. [5+5]
- OR**
- 5.a) What is recursion? Write a C program for factorial of n using recursion.
  - b) Write a C program for addition of two matrices. [5+5]
- 6.a) Write a C program to count the number of vowels, consonants, digits and white-spaces in a string which is entered by the user.
  - b) Explain about pointer arithmetic and arrays with example. [5+5]
- OR**
- 7.a) Write a C program to sort the 10 strings (entered by the user) in lexicographical order (dictionary order).
  - b) Explain about arrays of pointers with example. [5+5]

- 8.a) Write a C program that takes two complex numbers as structures and adds them with the use of functions. [5+5]  
b) Explain about pointers to structures with example. [5+5]

**OR**

- 9.a) Explain about pre-processor commands. [5+5]  
b) Explain about unions and functions. [5+5]

- 10.a) Write a C program to copy the content from one file to another file using fseek( ) function. [5+5]  
b) Write a C program to copy the binary file from another file. [5+5]

**OR**

- 11.a) Write a C program read and write the content of the file using fprintf( ) and fscanf( ) functions. [5+5]  
b) Briefly explain about positioning functions in files. [5+5]

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