**R16** 

## 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] Explain the syntax of case statement with example. b) [3] What are limitations of recursion? [2] c) Explain the procedure for Binary search. d) [3] Give an example for pointers to pointers. e) [2] What are string functions? Explain. [3] f) Define structure with example. g) [2] What is self referential structure? Explain. [3] h) i) Write the concept of a file. [2] i) Explain about file status functions. [3]

## PART-B

- 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]

(50 Marks)

- 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.
  - b) Explain about pointers to structures with example.

[5+5]

OR

- 9.a) Explain about pre-processor commands.
  - 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.
  - b) Write a C program to copy the binary file from another file.

[5+5]

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

[5+5]

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