Code No: 131AD

R16

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B.Tech I Year I Semester Examinations, December - 2016
COMPUTER PROGRAMMING IN C
(Common to CE, ME, MCT, MMT, MIE, CEE, MSNT)

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) Define the term algorithm and how it is different from a flow chart.   [2]
  b) Distinguish between if and switch statements.   [3]
  c) Explain auto and register storage classes.   [2]
  d) What is meant by type qualifier?   [3]
  e) What is meant by array of pointers? When it will be useful?   [2]
  f) Distinguish between string and character.   [3]
  g) Explain how to define a union.   [2]
  h) Explain the concept of enumerated type.   [3]
  i) What is meant by a text file?   [2]
  j) Discuss about rewind function?   [3]

PART-B

(50 Marks)

2. Write a C program to find factorial of a given number N by using 'while' loop and
    'do-while' loop.   [10]

OR

3. What are the C operators? Explain their usage with suitable examples to each of them.
                                                                                      [10]

4.a) Distinguish between iteration and recursion.
  b) What is meant by user defined functions? Explain with an example C Program.   [5+5]

OR

5.a) Explain the binary search method.
  b) Perform bubble sort of the following numbers:
        20, 5, 30, 10, 65, 3, 90   [5+5]

6.a) What are the advantages and drawbacks of pointers?
  b) With a sample C program and explain about passing an array to a function.   [5+5]

OR

7. What are the string manipulation functions? Explain their usage.   [10]

8.   Explain about self referential structures with a sample C program.   [10]

OR

9.a)   Discuss the significance of preprocessor commands.
  b)   Explain about nested structures.   [5+5]

10.   What is meant by state of a file? Write a C program to copy the contents of one text file to another text file.   [10]

OR

11.   What is meant by binary file? Discuss about file positioning functions?   [10]

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