R16

Code No: 131AD

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B.Tech I Year I Semester Examinations, May/June - 2017
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) What is the size of the double data type? Which conversion specifier is used?   [2]
  b) Write program in C to interchange the two values without using third variable.   [3]
  c) Distinguish between built – in and user – defined functions.   [2]
  d) How one dimensional arrays are initialized? Give example.   [3]
  e) List the dynamic memory handling functions used in 'C'.   [2]
  f) List the advantages and disadvantages of using pointers.   [3]
  g) Write the syntax for enumerated data type. Give example.   [2]
  h) Give brief information about self referential structures.   [3]
  i) Write the syntax for opening a file. Give example.   [2]
  j) List the advantages of using files.   [3]

PART-B

(50 Marks)

2.a) Write and explain the steps in writing a 'C' program.
  b) Discuss about the various bitwise operators supported by Language 'C'.   [5+5]
                              OR
3.a) Write 'C' program to print the Fibonacci sequence.
  b) In what way a do – while loop differs from while loop. Explain.   [5+5]

4.a) What is a function? What are its advantages? Explain various parameter passing
     techniques.
  b) Write a 'C' program to search for an element by using Linear Search.   [5+5]
                              OR
5. Why we need storage classes? List and explain the various storage classes present in
   language 'C'.   [10]

6. With the help of syntax and example program explain the various string handling
   functions.   [10]
                              OR
7.a) Write in detail about the various dynamic memory allocation functions.
  b) Write a program to accept a set of names and display them by using array of pointers.
                                                                          [5+5]

8.a) Write a 'C' program using functions to return the sum of two complex numbers passed as parameters.

 b) Write short notes on typedef. [5+5]

OR

9.a) Create a structure called **student** and the members of the structure are Stu_Name, Stu_Rno, M1, M2, M3. Create a **pointer variable** for the structure, store the values and fetch the values present in the structure student.

 b) In what way a Union differs from structures. [5+5]

10.a) Discuss in detail about the file positions functions.

 b) Write a 'C' program to count the number of words, white spaces and tab spaces present in a file. [5+5]

OR

11.a) Explain the file input and output functions with example programs.

 b) Distinguish between r, r+ and w, w+ modes of files. [5+5]

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