Code No: 121AF

R15

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B.Tech I Year Examinations, August/September - 2017
COMPUTER PROGRAMMING
(Common to CE, EEE, ME, ECE, CSE, EIE, IT, MCT, ETM, MMT, AE, AME, MIE, PTE 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 are the problems associated with 'goto' statement?	[2]
b)	Give the syntax of conditional operator and explain using an example?	[3]
c)	What is difference between formal argument and an actual argument?	[2]
d)	What are the facilities provided by preprocessors?	[3]
e)	How is a string stored in "C" language?	[2]
f)	What are the advantages of using array of pointers to strings instead of an array of strings?	[3]
g)	Distinguish between a union and a structure in "C" language.	[2]
h)	Explain command-line arguments in "C" language.	[3]
i)	What is the difference between an array and a linked list?	[2]
j)	Write C program for linear search.	[3]

PART-B

(50 Marks)

2.a) Demonstrate relational, logical and bitwise operations in "C" language using examples.
  b) Give the syntax of switch statement in "C" language and explain. [5+5]

OR

3.a) Give the precedence and associativity rules in "C" language.
  b) Write a program that converts a decimal number to an octal number. [5+5]

4. What do you mean by the scope of a variable? Give the rules of scoping in "C" language and demonstrate with examples. [10]

OR

5. Explain how the following can be accomplished in "C" language with examples:
  a) Passing arrays to functions.
  b) Returning array from a function. [5+5]

6.a) Write a program to do cyclic swapping of three numbers using pointers.
  b) Demonstrate with an example how to pass string to a function. [7+3]

OR

7.a) Give an overview of pointer arithmetic in "C" language.
  b) Demonstrate standard string functions in "C" language with examples. [5+5]

8. Explain the following:
   a) Structure definition
   b) Structure declaration
   c) Accessing members of a structure
   d) Passing structures to functions.   [10]

OR

9.a) Give the list of various modes for opening a file and explain.
  b) Give an overview of enumerated data type in "C" language.   [5+5]

10.a) Demonstrate selection sort algorithm using an example.
  b) Write a program to demonstrate operations on a stack.   [5+5]

OR

11.a) Demonstrate with an example binary search algorithm using an example.
  b) Write a program to check whether a string is palindrome or not using a stack.   [5+5]

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