Code No: 121AF **R15**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, HYDERABAD
B.Tech I Year Examinations, August/September - 2016
COMPUTER PROGRAMMING
(Common to all Branches)

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 ternary operator? Explain.	[2]
b)	Give syntax of simple switch case statement.	[3]
c)	List out the limitations of recursion.	[2]
d)	What do you mean by type qualifiers?	[3]
e)	What is the use of strcat() function?	[2]
f)	Explain pointer to an array in detail.	[3]
g)	Discuss briefly about union.	[2]
h)	What is the use of rewind()?	[3]
i)	Give an example to explain the concept of doubly linked list.	[2]
j)	Write short notes on Bubble sorting technique.	[3]

PART-B

(50 Marks)

2. Write a C program to find the maximum of N numbers. [10]

OR

3. Explain with example where a ‘for’ loop is suitable and where a ‘do-while’ loop is suitable. [10]

4. What is recursion? Using recursion find the Fibonacci series. [10]

OR

5. Give a matrices A of N × M and B of M × N. Write a C program to multiply two matrices and store the result in C matrix. [10]

6. Write a C program that implements string concatenate operation *STRCAT* (str1, str2) that combines a string *str1* to another string *str2* without using library function. [10]

OR

7. Write a C program to add two numbers using call by pointers method. [10]

8. Write a program in 'C' to store the roll no. and marks of 10 subjects of a student in a file. Read the contents of file and display the roll no. and total marks obtained by each student in a class. [10]

OR

9. Explain how the structure variable passed as a parameter to a function with example. [10]

10. Write a C program to read n unsorted numbers to an array of size n and pass the address of this array to a function to sort the numbers in ascending order using selection sort technique. [10]

OR

11. Write a C program to delete a node from a doubly linked list. Accommodate all the cases of deletion in your program. [10]

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