R13

Code No: 111AF

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

Time: 3hours **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 meant by assembly language? Give example.	[2]
b)	Differentiate between pre test and post test loops.	[3]
c)	What are the limitations of recursion?	[2]
d)	List any three applications of arrays.	[3]
e)	Give the syntax of calloc function.	[2]
f)	What is the use of atoi function?	[3]
g)	What is the functionality of ungetc function?	[2]
h)	Give an example for self-referential structure.	[3]
i)	Define data structure.	[2]
j)	List the operations on enqueue and dequeue.	[3]

PART-B **(50 Marks)**

2.a) What is an algorithm? Give an example.
b) Explain 'while' statement along with an example. [5+5]

OR

3.a) What is the need of type conversion? Discuss type casting.
b) List the demerits of go to statement.
c) Why is switch statement known as multi way selection? [3+3+4]

4.a) Describe parameter passing techniques to functions.
b) With suitable examples explain storage classes. [5+5]

OR

5.a) Write a program to multiply two matrices.
b) How to initialize multi dimensional arrays? Give examples. [5+5]

6.a) Discuss the programming applications of pointers.
b) Explain the role of pointers in inter function communication. [5+5]

OR

7.a) Write a program to count number of occurrences of character in a sentence and display the count.
b) Briefly discuss string compare functions. [5+5]

8.a) Differentiate between structure and union. Give examples for each.
b) With examples discuss Array of Structures and Structure of Arrays. [5+5]

OR

9.a) Write a program to merge two given files and store in a target file.
b) How to handle errors in file management? [5+5]

10.a) Write an algorithm for binary search technique.
b) Explain the concept of selection sort using a suitable example. [5+5]

OR

11.a) Discuss the role of structures in singly linked list implementation.
b) Write a program to implement stack using arrays. [5+5]

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