R16

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B.Tech I Year I Semester Examinations, December - 2017
COMPUTER PROGRAMMING IN C
(Common to CE, ME, MCT, MMT, AE, MIE, PTM, 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)	Explain rules of variables.	[2]
b)	Give the symbols of flow chart.	[3]
c)	What are the limitations of recursion.	[2]
d)	What are uses of binary search as compared with linear search.	[3]
e)	Differentiate between gets() and scanf().	[2]
f)	List the substrings that can be formed from the string "ABCD".	[3]
g)	Differentiate between Union and Structure.	[2]
h)	Explain about the typedef with an example.	[3]
i)	What is the use of rewind( )?	[2]
j)	What is the impact of fclose( ) on buffered data.	[3]

PART-B

(50 Marks)

2.a)   Explain the different types of bitwise operators are used in C.
 b)   Write an algorithm to find the greatest number among the three given numbers.   [5+5]
OR
3.a)   Write a program to swap the two numbers without using a temporary variable.
 b)   Explain the different types of operators are used in C.   [5+5]

4.a)   Write a program to implement the binary search by using functions.
 b)   Explain the two dimensional arrays for Inter Function Communication.   [5+5]
OR
5.a)   Write a program to generate Pascal's triangle by using an array.
 b)   What is recursion? Explain the different types of recursion.   [5+5]

6.a)   Explain the dynamic memory functions.
 b)   Write a program to count the number of times a given character appears in the
 string.   [5+5]
OR
7.a)   Write a program to sort the names of employees alphabetically.
 b)   Explain the rules for pointer operations.   [5+5]

8.a) Write a program using pointer to structure to initialize the members in the structure. Use functions to print the student's information.

b) Explain the Enumerated data types with an example. [5+5]

OR

9.a) Explain the command line arguments with an example.

b) Write a program to define a structure for hotel that has members - name, address, grade, number of rooms and room charges. Write a function to print the names of a hotel in a particular grade. Also write a function to print names of a hotel that have room charges less than the specified value. [5+5]

10.a) Explain the different types of files are used in C.

b) Write a program to print the records in reverse order. The file must be opened in binary mode. [5+5]

OR

11.a) Write a program to append a binary file at the end of another.

b) Explain the function calls of fseek( ). [5+5]

---ooOoo---