R16

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech I Year I Semester Examinations, March/April - 2023
COMPUTER PROGRAMMING IN C
(Common to CE, ME, MCT, MMT, AE, MIE, MSNT)

Time: 3 Hours   **Max. Marks: 75**

Note: i) Question paper consists of Part A, Part B.
　　　ii) Part A is compulsory, which carries 25 marks. In Part A, Answer all questions.
　　　iii) In Part B, Answer any one question from each unit. Each question carries 10 marks
　　　　　and may have a, b as sub questions.

PART – A

(25 Marks)

1.a)	Convert the given decimal number to binary format: 236	[2]
b)	Give an example for number system conversion from hexadecimal to decimal number system.	[3]
c)	What are standard functions?	[2]
d)	What are limitations of recursion?	[3]
e)	Which function is used to access a particular character in a string?	[2]
f)	What do you mean by dangling pointers?	[3]
g)	What are nested structures?	[2]
h)	What is enumerated type?	[3]
i)	What do you mean by a binary file?	[2]
j)	What are the various modes a file can be opened in?	[3]

PART - B

(50 Marks)

2.	Write a C program to perform logical and bitwise operations on the given data.	[10]
	OR	
3.a)	Write a program to find greatest of four numbers.	
b)	Distinguish between while and do-while statements.	[5+5]
4.	What are various storage classes in C language? Explain them.	[10]
	OR	
5.	Write a C program to add, subtract and multiply two matrices based on the operator that has been given as input. Use switch statement.	[10]
6.	List and explain string manipulation functions.	[10]
	OR	
7.	Explain memory allocation functions. Illustrate with an example.	[10]

8. Write a C program for illustrating passing structures through pointers.   [10]

OR

9.a) Distinguish between structure and union.
  b) Write a C program illustrating array of structures concept.   [5+5]

10. List and explain file status functions. Give examples.   [10]

OR

11. Write a C program to count number of characters in a given file.   [10]

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