

Reg. No.

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B.E./ B.TECH. DEGREE EXAMINATIONS, MAY 2024

Second Semester

IT22251 – COMPUTER PROGRAMMING AND PRACTICE*(Common to AE, BT, CE & CH)***(Regulation2022)****TIME:1 HOUR 30 MINUTES****MAX. MARKS: 50**

COURSE OUTCOMES	STATEMENT	RBT LEVEL
CO 1	Understand the model of a computer, software design methodologies, and represent solutions to computational problems as algorithms.	3
CO 2	Analyze problem scenarios and develop C programs using sequential, conditional, and iterative constructs.	4
CO 3	Appraise problem scenarios and develop C programs using complex storage structures.	4
CO 4	Design modularized solutions for larger problems.	3
CO 5	Inspect storage structure in a computer and design C programs to access permanent storage.	4

PART- A(10x2=20Marks)

(Answer all Questions)

	CO	RBT LEVEL
1. Analyze the advantages and disadvantages of hardware and software.	1	3
2. Write algorithm to check positive or negative number	1	3
3. Compare and contrast the behavior of a loop with and without a continue statement.	2	4
4. Display the output for the program. #include<stdio.h> int x=40; main() { int x=20; printf("%d\n", x); }	2	4
5. Point out the method to initialize two dimensional arrays.	3	4
6. If you were given a string "Hello, World!" how would you use the library function to determine its length?	3	4
7. Summarize how recursive functions call themselves to solve a problem.	4	2
8. Develop a scenario where Call by Value is preferable over Call by Reference, and vice versa.	4	3
9. Identify the advantages of Dynamic memory allocation.	5	2
10. Justify the need of typedef.	5	2

PART- B (2x 10=20Marks)

		Marks	CO	RBT LEVEL
11. (a)	(i) Compare and contrast different flowchart symbols and their meanings.	(5)	1	4
	(ii) Write a C program to read the age of a candidate and determine whether he/she is eligible to cast his/her own vote.	(5)	2	3
(OR)				
(b)	(i) Demonstrate the organizations of computer and explain its functional components.	(5)	1	4
	(ii) Write a C program to display a pattern like a right angle triangle with a number.	(5)	2	3
12. (a)	(i) Read 10 elements of integer type using One Dimensional Array and replace all even elements by 0 and Odd by 1.	(5)	3	4
	(ii) Write a C program to read name and marks of n number of students from user and store them in a file.	(5)	5	3
(OR)				
(b)	(i) Write a program in C to print individual characters of a string in reverse order without library function.	(5)	3	4
	(ii) Write a program in C to store n elements in an array and print the elements using a pointer.	(5)	5	3

PART- C (1x 10=10Marks)

(Q.No.13 is compulsory)

		Marks	CO	RBT LEVEL
13.	Create a structure named "Employee" to store employee details such as employee ID, name, and salary. Write a program to input data for three employees, find the highest salary employee, and display their information.	(10)	4	5
