Reg No:

(AUTONOMOUS)

R-24

(Affiliated to Andhra University, Visakhapatnam)

I. B.Tech. - II Semester Regular Examinations, June / July – 2025

PROBLEM SOLVING USING C

(Common to **EEE**)

- 1. All questions carry equal marks
- 2. Must answer all parts of the question at one place

Time: 3Hrs. Max Marks: 70

<u>UNIT-I</u>

1. a. Outline and Explain different data types with an example for each.[7M]b. Evaluate the following expression a*b+c/d-e and describe the concept of arithmetic precedence and associativity.[7M]

OR

2. a. With suitable example explain the basic structure of C Program. [7M] b.What do you mean by type conversions? Explain different type conversions with an example for each. [7M]

UNIT-II

3. a. List and explain decision making using different if statements. [7M]
b. Write a C program to copy one string to another with and without using String manipulation functions. [7M]

OR

4. a. Write a C program to find multiplication of two matrices using arrays.[7M]b. Compare and contrast while and do-while loop. Give an example for each.[7M]

UNIT-III

5. a. What are the advantages of a function? List and explain different parameter	passing methods to a
function.	[7M]
b.Write a C program to find the sum of array elements using Pointers.	[7M]

OR

6. a. Define recursion. Write a C program to find Fibonacci series upto 10 terms	
using recursion.	[7M]
b. With suitable example explain about dynamic memory allocation.	[7M]

UNIT-IV

7. a. With an example distinguish the concepts of Structures and Unions.	[7M]
b. What are nested structures? Explain it with a program.	[7M]

OR

8. a. Apply the concept of structures and display the marks of three students in three different subjects. [7M]

b. Write about typedef and enumerated types	. Write a C program to find a particular
day in a week using enumerated types.	

<u>UNIT-V</u>

[7M]

9. a. Construct a C program using Files to copy the contents of one file to another file.	[7]\]
b .Demonstrate random access to files with a suitable program using fseek().	[7M] [7M]
OR	

10 a. Differentiate Text and Binary files with a program.	[7M]
b.Illustrate the working of file functions with a program.	[7M]