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| **Branch/Semester** | B.Tech CSE (AI, ML & DS) / Semester I |
| **Subject Name:** | Computer Programming |
| **Subject Code:** | 01CE2101 |
| **Assignment:** | Practice Questions (Structures and Unions) |
| **Date:** | 8th October 2025 |
| **Faculty Name:** | Prof. Abhishek Chauhan |

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| **Sr.** | **Question** | **CO** | **BL** |
| **1** | Write a C program to define a structure Student with members id, name, and marks, and display the values entered by the user. | CO4 | BL3 |
| **2** | Create a structure Book with members title, author, and price. Write a program to input and display book details. | CO4 | BL3 |
| **3** | Write a C program to initialize and print structure members without taking input from the user. | CO4 | BL3 |
| **4** | Write a C program to declare a structure and access its members using the . (dot) operator. | CO4 | BL3 |
| **5** | Write a C program to demonstrate structure within structure (nested structure) for Student having Address structure inside it. | CO4 | BL3 |
| **6** | Write a C program to store and display details of 3 employees using an array of structures. | CO4 | BL3 |
| **7** | Write a program to copy data from one structure variable to another structure variable. | CO4 | BL3 |
| **8** | Write a program to pass a structure as a function argument and display its data inside the function. | CO4 | BL3 |
| **9** | Write a program to demonstrate accessing structure members using a pointer. | CO4 | BL3 |
| **10** | Write a C program using typedef with structure to simplify structure declaration. | CO4 | BL3 |
| **11** | Write a program to define and use a union named Data having members int a, float b, and char c. Display all values and observe the output. | CO4 | BL3 |
| **12** | Write a C program to compare how structure and union store data differently (by printing memory sizes). | CO4 | BL4 |
| **13** | Write a program using union to store either an integer, float, or character based on user choice. | CO4 | BL3 |
| **14** | Write a program to input student records (roll, name, marks) using structure and display all in formatted output. | CO4 | BL3 |
| **15** | Write a program that demonstrates the difference in memory size between a structure and a union having the same data members. | CO4 | BL4 |