

<b>Mid Semester Examination (MSE) No.</b>	2	<b>Course Coordinator(s)</b>	Ranjodh Kaur, Siddharth Jain, Gagneet Kaur, Kapil Sharma, Jaswant Singh, Sita Rani, Kuljit Kaur, Paramveer Kaur, Lakhvir Kaur Grewal, Palak Sood, Meetali, Goldendeep Kaur, Kamaljeet Kaur, Randeep Kaur, Harminder Kaur
<b>Max. Marks</b>	24	<b>Time Duration</b>	1 hour 30 minutes
<b>Date of MSE</b>	02/12/24	<b>Roll Number</b>	

**Note:** Attempt all questions. All assumptions must be clearly stated.

Q. No.	Question	MM
Q1	Is it possible to declare more than one array in the same declaration statement? Justify your answer.	2
Q2	List advantages of functions.	2
Q3	Differentiate between call by value and call by reference (include example(s)).	4
Q4	Write a C++ program that uses recursion to compute the multiplication of elements in a one-dimensional integer array.	4
Q5	With the help of code snippet, justify how structures are different from unions.	4
Q6	<p>You are the HR manager of a company, and you are using employee management system to manage the employee data. The system allows you to add new employees, display all employees, search for an employee by ID, update employee salary, and delete an employee. Your task is to</p> <p>Create a struct employee with</p> <p>Attributes:  Name : String  ID : Integer  Department : String  Salary : Double</p> <p>Also, in the program add the Functions:  addEmployee ( ) : Adds the employee to the directory  displayEmployees ( ) : Displays all the employees present in directory  searchEmployee ( ) : Search for the employee with Emp ID  updateEmployeeSalary ( ) : Updates the salary of employee with Emp ID  deleteEmployee ( ) : Deletes the employee from the directory with Emp ID</p> <p>For every addition of new employee, print a message as "Employee added successfully!"</p> <p>If there are no employees left in the directory, print "No employees to display"</p> <p>If Employee not found print "Employee not found"</p>	8