**COMSATS Institute of Information Technology, Sahiwal**

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| Course Title: |  | | | | Course Code: | |  | Credit Hours: |  |
| Course Instructor: |  | | | | Program Name: | |  | | |
| Semester: |  | Batch: |  | Section: |  | | Date: |  | |
| **Time Allowed:** |  | | | | **Maximum Marks:** | | | **20** | |
| Student’s Name: |  | | | | Reg. No. | CIIT/ /SWL | | | |
| **Important Instructions / Guidelines:**  *Read the question paper carefully and answer the questions according to their statements. Mobile phones are not allowed. Calculators must not have any data/equations etc. in their memory.* | | | | | | | | | |

**Question No: 1.** Write a Java program to update specific array element by given element and can search an element in a array list.[8]

**Question No: 2**.  Write a Java program to sort a given array list and Write a Java program to clone an array list to another array list.[5]

**Question No: 3.** Write a Java program to retrieve but does not remove, the last element of a linked list.[3]

**Question No: 4.** Write a Java program to convert a priority queue to an array containing all of the elements of the queue.[7]