



United International University
Department of Computer Science and Engineering
CSE 2215 Data Structures and Algorithms(Sec BD),
Class Test 3, Summer 2024
Total Marks: 20, Time: 30 minutes

1. a. Draw the tree corresponding to the following arithmetic expression: [4]
$$((14-8)*2)*15+16/((14-7)*2)$$
- b. Write down the preorder, inorder, postorder and levelorder traversal sequence for the tree generated in question 1(a). [6]
- c. Draw the Binary tree using the following Pre-order and In-order traversing sequence (consider sequence from left to right): [6]
Pre-order: 68, 35, 11, 7, 15, 65, 21, 5, 19, 23, 14, 29, 16, 51, 32
In-order: 7, 11, 35, 65, 15, 21, 5, 68, 23, 14, 19, 51, 16, 32, 29
- d. From the tree generated in question 1(c) answer the following: [4]
- What is the depth of node 68?
 - What is the height of node 19?
 - What is the height of the tree?
 - Write down the ancestors of node 32.