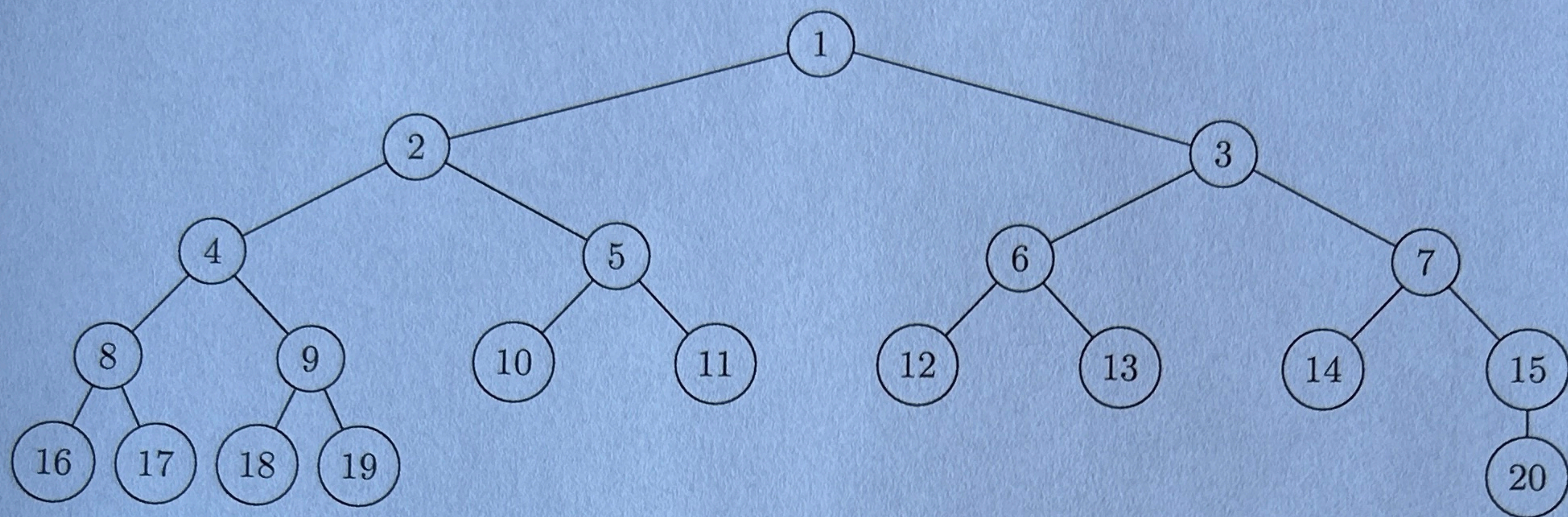


# Data Structures Quiz 3 (20 minutes)

Name: \_\_\_\_\_ NetID: \_\_\_\_\_

## Quiz Instructions:

1. Please answer the following questions as prompted.
2. By participating in this quiz, you agree to adhere to the honor code.



Question 1) (6 points) Provide the preorder, inorder, and postorder traversals of the given tree.

Question 2) (4 points) List the nodes in the sequence they are visited by depth-first search (DFS) and breadth-first search (BFS). If the visitation order matches any of the traversal orders mentioned in Question 1, you may refer to that answer instead of listing the nodes again.

2pt pre: 1 2 4 8 16 17 9 18 19 5 10 11 3 6 12 13 7 14 15 20

2pt in: 16 8 17 4 18 9 19 2 10 5 11 1 12 6 13 3 14 7 15 20

2pt post: 16 17 8 18 19 9 4 10 11 5 2 12 13 6 14 20 15 7 3 1

every permutation -0.5.

2pt DFS preorder

2pt BFS 1 2 3 4 5 6 7 8 9 ... 20.

~~The solution depends on how you choose your neighbors.~~

The solution depends on the order of how you choose neighbors.