DATA STRUCTURES & ALGORITHMS (BCSE2361)

Question **1**
Not yet answered
Marked out of 0.50
Flag question

1. The number of edges from the root to the node is called _____ of the tree?

Select one:
- a. Height .
- b. Weight.
- c. Depth.

Clear my choice

Question **2**
Not yet answered
Marked out of 0.50
Flag question

10. Which of the following is incorrect with respect to binary trees?

Select one:
- a. Let T be a binary tree with N nodes. Then the number of levels is at least floor(log (N + 1)).
- b. Let T be a binary tree with N nodes. Then the number of levels is at least ceil(log (N + 1)).
- c. Let T be a binary tree with λ levels. Then T has no more than 2λ – 1 nodes.

Clear my choice

Question **3**
Not yet answered
Marked out of 0.50
Flag question

2.The number of edges from the node to the deepest leaf is called _____ of the tree?

Select one:
- a. Depth
- b. Height

Clear my choice

Question **4**
Not yet answered
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3. What is a full binary tree?

Select one:
- a. Each node has exactly two children

Quiz navigation

1 2 3 4 5 6 7 8 9 10

Finish attempt ...

Time left **0:04:56**

Question **4**
Not yet answered
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Flag question

3. What is a full binary tree?

Select one:
- a. Each node has exactly two children
- b. Each node has exactly zero or two children.
- c. All the leaves are at the same level

Clear my choice

Question **5**
Not yet answered
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4.What is a complete binary tree?

Select one:
- a. A binary tree, which is completely filled, with the possible exception of the bottom level, which is filled from right to left.
- b. Each node has exactly zero or two children.
- c. A binary tree, which is completely filled, with the possible exception of the bottom level, which is filled from left to right.

Clear my choice

Question **6**
Not yet answered
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5.What is the average case time complexity for finding the height of the binary tree?

Select one:
- a. h = O(n).
- b. h = O(nlogn).
- c. h = O(loglogn).
- d. h = O(log n).

Clear my choice

Question **7**
Not yet answered
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6.Which of the following is not an advantage of trees?

Select one:
- a. Hierarchical structure

Question **7**
Not yet answered
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6.Which of the following is not an advantage of trees?

Select one:

- a. Hierarchical structure
- b. Router algorithms
- c. Faster search
- d. Undo/Redo operations in a notepad

Clear my choice

Question **8**
Not yet answered
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7. In a full binary tree if number of internal nodes is I, then number of leaves L are?.

Select one:

- a. L = I – 1
- b. L = 2*I – 1
- c. L = I + 1
- d. L = 2*I

Clear my choice

Question **9**
Not yet answered
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Flag question

8. In a full binary tree if number of internal nodes is I, then number of nodes N are?

Select one:

- a. N = 2*I
- b. N = 2*I + 1
- c. N = I + 1
- d. N = I – 1

Clear my choice

Question **10**
Not yet answered

9. In a full binary tree if there are L leaves, then total number of nodes N are ?

Select one:

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Flag question

b. L = 2*I – 1

c. L = I + 1

d. L = 2*I

Clear my choice

Question **9**

Not yet answered

Marked out of 0.50

Flag question

8. In a full binary tree if number of internal nodes is I, then number of nodes N are?

Select one:

a. N = 2*I

b. N = 2*I + 1

c. N = I + 1

d. N = I – 1

Clear my choice

Question **10**

Not yet answered

Marked out of 0.50

Flag question

9. In a full binary tree if there are L leaves, then total number of nodes N are ?

Select one:

a. N = 2*L – 1

b. N = 2*L

c. N = L – 1

d. N = L + 1

Clear my choice

Finish attempt ...