Question 1

0.5 out of 0.5 points

Operations on a queue can be carried out at \_\_\_\_\_\_.

Selected Answer:

a.

both its front and back

Question 2

0.5 out of 0.5 points

The \_\_\_\_\_\_ operation retrieves and removes the front of a queue

Selected Answer:

a.

dequeue

Question 3

0.5 out of 0.5 points

The \_\_\_\_\_\_ operation adds a new item to a queue.

Selected Answer:

b.

enqueue

Question 4

0.5 out of 0.5 points

The enqueue operation of the ADT queue is similar to the \_\_\_\_\_\_ operation of the ADT stack

Selected Answer:

a.

push

Question 5

0.5 out of 0.5 points

Which of the following operations leaves a queue unchanged?

Selected Answer:

b.

peek

Question 6

0 out of 0.5 points

A reference-based implementation of a queue that uses a circular linked list would need at least \_\_\_\_\_\_ external references

Selected Answer:

a.

two

Question 7

0.5 out of 0.5 points

Which of the following code fragments is used to delete the item at the front of a queue represented by a circular array?

Selected Answer:

c.

front = (front+1) % MAX\_QUEUE;

count = count - 1;

Question 8

0.5 out of 0.5 points

To initialize a queue that is represented by a circular array, front is set to \_\_\_\_\_\_.

Selected Answer:

d.

0

Question 9

0.5 out of 0.5 points

The Java \_\_\_\_\_\_ operator is used to obtain the wraparound effect of a circular array-based queue

Selected Answer:

c.

%

Question 10

0.5 out of 0.5 points

A node directly below node n in a tree is called a \_\_\_\_\_\_ of node n.

Selected Answer:

c.

child

Question 11

0.5 out of 0.5 points

A node on the path from the root to node n is a(n) \_\_\_\_\_\_ of node n.

Selected Answer:

a.

ancestor

Question 12

0.5 out of 0.5 points

In a tree, the children of the same parent are called \_\_\_\_\_\_.

Selected Answer:

c.

siblings

Question 13

0 out of 0.5 points

Which of the following is NOT a property of a complete binary tree of height h?

Selected Answer:

c.

when a node at level h – 1 has children, all nodes to its left at the same level have two children each

Question 14

0.5 out of 0.5 points

Each node in a binary tree has \_\_\_\_\_\_.

Selected Answer:

c.

at most two children

Question 15

0.5 out of 0.5 points

In a \_\_\_\_\_\_ of height h, all nodes that are at a level h have two children each.

Selected Answer:

c.

full binary tree

Question 16

0.5 out of 0.5 points

In an array based representation of a complete binary tree, which of the following represents the parent of node tree[i]?

Selected Answer:

b.

tree[(i–1)/2]

Question 17

0.5 out of 0.5 points

In an array based representation of a complete binary tree, which of the following represents the left child of node tree[i]?

Selected Answer:

b.

tree[2\*i+1]

Question 18

0.5 out of 0.5 points

The minimum height of a binary tree of n nodes is \_\_\_\_\_\_.

Selected Answer:

log2(n + 1)

Question 19

1 out of 1 points

Find the value of the following postfix expression:

20 5 7 + 2 / 3 \* -

Selected Answer:

2

Sunday, November 16, 2014 8:29:23 PM EST

OK