

## Computer Science Ics Part 1 Chapter 4 Online Test

Sr	Questions	Answers Choice
1	What is a leaf node.	<p>A. &lt;p&gt;A node with many children&lt;/p&gt;</p> <p>B. &lt;p&gt;A node with one child&lt;/p&gt;</p> <p>C. &lt;p&gt;A node with no children&lt;/p&gt;</p> <p>D. &lt;p&gt;A node with no parent&lt;/p&gt;</p>
2	What is the dequeue operatin ina queue.	<p>A. &lt;p&gt;Adding an item to th eback&lt;/p&gt;</p> <p>B. &lt;p&gt;Removing an item fromt he fornt&lt;/p&gt;</p> <p>C. &lt;p&gt;Sorting the queue&lt;/p&gt;</p> <p>D. &lt;p&gt;Copying the queue&lt;/p&gt;</p>
3	The purpose of the inkeywrod used with a Pythonlist	<p>A. &lt;p&gt;Add an item to the list&lt;/p&gt;</p> <p>B. &lt;p&gt;Remvoes an itemfrom the list&lt;/p&gt;</p> <p>C. &lt;p&gt;Checks if an item exists int he list&lt;/p&gt;</p> <p>D. &lt;p&gt;Returns the length of the list&lt;/p&gt;</p>
4	If you have a list f{Apple"banana". "cherry"}ruits = l" what is fruit (1)	<p>A. &lt;p&gt;Apple&lt;/p&gt;</p> <p>B. &lt;p&gt;Banana&lt;/p&gt;</p> <p>C. &lt;p&gt;Cherry&lt;/p&gt;</p> <p>D. &lt;p&gt;Error&lt;/p&gt;</p>
5	Wha is a list in Python.	<p>A. &lt;p&gt;Unordered items&lt;/p&gt;</p> <p>B. &lt;p&gt;Changeable sequence&lt;/p&gt;</p> <p>C. &lt;p&gt;Print function&amp;nbsp;&lt;/p&gt;</p> <p>D. &lt;p&gt;Loop type&lt;/p&gt;</p>
6	What is a tree in data structures.	<p>A. &lt;p&gt;Linear data&lt;/p&gt;</p> <p>B. &lt;p&gt;Math function&amp;nbsp;&lt;/p&gt;</p> <p>C. &lt;p&gt;Hiearchical structure&lt;/p&gt;</p> <p>D. &lt;p&gt;Loop&lt;/p&gt;</p>
7	What hapens when you use the append () method on a list.	<p>A. &lt;p&gt;It deletes the last item&lt;/p&gt;</p> <p>B. &lt;p&gt;It adds an item to the end of the list&lt;/p&gt;</p> <p>C. &lt;p&gt;It sorts the list&lt;/p&gt;</p> <p>D. &lt;p&gt;It creates a new list&lt;/p&gt;</p>
8	What is a stack.	<p>A. &lt;p&gt;Add/remove at both ends&lt;/p&gt;</p> <p>B. &lt;p&gt;Add /remove from the top&lt;/p&gt;</p> <p>C. &lt;p&gt;Add front, remvoe back&lt;/p&gt;</p> <p>D. &lt;p&gt;No specific order&lt;/p&gt;</p>
9	Which operation remvoes an intem by its index in a list.	<p>A. &lt;p&gt;Pop()&lt;/p&gt;</p> <p>B. &lt;p&gt;delete ()&lt;/p&gt;</p> <p>C. &lt;p&gt;Remove()&lt;/p&gt;</p> <p>D. &lt;p&gt;clear ()&lt;/p&gt;</p>
10	What is a queue.	<p>A. &lt;p&gt;Add/remvoe from top&lt;/p&gt;</p> <p>B. &lt;p&gt;Add/remvoe from both ends&lt;/p&gt;</p> <p>C. &lt;p&gt;Add at back , remvoe form front&lt;/p&gt;</p> <p>D. &lt;p&gt;Store items randomly&lt;/p&gt;</p>
11	Which operation remvoes an item by its value in a list.	<p>A. &lt;p&gt;delete ()&lt;/p&gt;</p> <p>B. &lt;p&gt;pop ()&lt;/p&gt;</p> <p>C. &lt;p&gt;remove()&lt;/p&gt;</p> <p>D. &lt;p&gt;clear ()&lt;/p&gt;</p>
12	Which of the following is NOT a characteristic of a graph	<p>A. &lt;p&gt;Vertices&lt;/p&gt;</p> <p>B. &lt;p&gt;Edges&lt;/p&gt;</p> <p>C. &lt;p&gt;One directional flow only&lt;/p&gt;</p> <p>D. &lt;p&gt;Weighted or unweighted edges&lt;/p&gt;</p>
13	What is the enqueue operation in a queue.	<p>A. &lt;p&gt;Removing an item from the front&lt;/p&gt;</p> <p>B. &lt;p&gt;Printing the queue&lt;/p&gt;</p> <p>C. &lt;p&gt;Adding an item to the back&lt;/p&gt;</p> <p>D. &lt;p&gt;Searchign for an item&lt;/p&gt;</p>

14	Why are primitive computational structures important in computer science.	A. They reduce memory B. They for all software C. Only for web dev D. Increase hardware cost
15	The function used to add an item at the end of a list in Python.	A. Append() B. Insert () C. remove () D. Pop ()
16	Which of the following is an application of lists.	A. Storing a single number B. Implementing stacks and queues C. Creating images D. Playing music
17	In which structures can cycles exist.	A. Graph B. Tree C. Stack D. Queue
18	What is the height of a tree.	A. No of nodes B. Longest path C. Memory used D. No of leaves
19	Which principle does a stack follow.	A. FIFO B. LIFO C. FILO D. LILO
20	An operation that removes an item from the top of the stack	A. Push B. Pop C. Peek D. Add