

## Computer Science Ics Part 1 Chapter 4 Online Test

| Sr | Questions   | Answers Choice   |
|----|---|--|
| 1  | What does abstraction mean in computing.                                  | <p>A. &lt;p&gt;Hide data&lt;/p&gt;</p> <p>B. &lt;p&gt;combine simple&lt;/p&gt;</p> <p>C. &lt;p&gt;Parts into complex systems&lt;/p&gt;</p> <p>D. &lt;p&gt;Use high level languages&lt;/p&gt;</p>   |
| 2  | 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>   |
| 3  | What is the purpose of the pop operation in a stack                       | <p>A. &lt;p&gt;Add an item to the top&lt;/p&gt;</p> <p>B. &lt;p&gt;Remove the top item&lt;/p&gt;</p> <p>C. &lt;p&gt;Count the numebr of items&lt;/p&gt;</p> <p>D. &lt;p&gt;Print the stack&lt;/p&gt;</p>   |
| 4  | Which of the following best describes primitive computational structures. | <p>A. &lt;p&gt;Advanced tools&lt;/p&gt;</p> <p>B. &lt;p&gt;Complex Algorithms&lt;/p&gt;</p> <p>C. &lt;p&gt;Basic building blocks of computing&lt;/p&gt;</p> <p>D. &lt;p&gt;High level data types&lt;/p&gt;</p>   |
| 5  | 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;Cheeks 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>   |
| 6  | A scenario where a graph data structure is most suitable.                 | <p>A. &lt;p&gt;Managng a to do list&lt;/p&gt;</p> <p>B. &lt;p&gt;Modeling a line of customers in a store&amp;nbsp;&lt;/p&gt;</p> <p>C. &lt;p&gt;Representing connections in a social network&amp;nbsp;&lt;/p&gt;</p> <p>D. &lt;p&gt;All of the above&lt;/p&gt;</p>   |
| 7  | How are lists created in Python.  | <p>A. &lt;p&gt;Using parentheses ( )&lt;/p&gt;</p> <p>B. &lt;p&gt;Using square brackets []&lt;/p&gt;</p> <p>C. &lt;p&gt;Using curly braces {}&lt;/p&gt;</p> <p>D. &lt;p&gt;Using angle brackets&lt;/p&gt;</p>  |
| 8  | What is the dequeu 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 from he front&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>  |
| 9  | Which of the following is a difference between trees and graphs.          | <p>A. &lt;p&gt;Trees have cycles&lt;/p&gt;</p> <p>B. &lt;p&gt;Trees have many path&lt;/p&gt;</p> <p>C. &lt;p&gt;Trees have root ; graph may not&lt;/p&gt;</p> <p>D. &lt;p&gt;Trees are more flexible&lt;/p&gt;</p>   |
| 10 | Which of the following is NOT a primitive computational structure.        | <p>A. &lt;p&gt;integers&lt;/p&gt;</p> <p>B. &lt;p&gt;Loops&lt;/p&gt;</p> <p>C. &lt;p&gt;Artificial intelligence&lt;/p&gt;</p> <p>D. &lt;p&gt;Boolean values&lt;/p&gt;</p>  |
| 11 | True statemetn about the height of a tree.                                | <p>A. &lt;p&gt;Number of edges from he root to the deepest node&lt;/p&gt;</p> <p>B. &lt;p&gt;Number of nodes from the root to the deepest node&lt;/p&gt;</p> <p>C. &lt;p&gt;Number of children of the root node&lt;/p&gt;</p> <p>D. &lt;p&gt;Always equal to the number of nodes in the tree&lt;/p&gt;</p> |
| 12 | Why are primitive computationl structures important in computer sciecnce. | <p>A. &lt;p&gt;They reduce memory&lt;/p&gt;</p> <p>B. &lt;p&gt;They for all software&lt;/p&gt;</p> <p>C. &lt;p&gt;Only for web dev&lt;/p&gt;</p> <p>D. &lt;p&gt;Increase hardware cost&lt;/p&gt;</p>   |

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| 13 | What is the degree of a vertex in a graph.              | A. <p>The number of loops</p><br>B. <p>The number of edges connected to it</p><br>C. <p>The total number of vertices</p><br>D. <p>The weight of the vertex</p> |
| 14 | The operation used to add an item to a queue            | A. <p>Dequeue</p><br>B. <p>Enqueue</p><br>C. <p>Remove</p>   |
| 15 | In which structures can cycles exist.                   | A. <p>Graph</p><br>B. <p>Tree</p><br>C. <p>Stack</p><br>D. <p>Queue</p>  |
| 16 | What is a list in Python.                               | A. <p>Unordered items</p><br>B. <p>Changeable sequence</p><br>C. <p>Print function</p><br>D. <p>Loop type</p>  |
| 17 | What is the dequeue operation in a queue.               | A. <p>Removing an item from the front</p><br>B. <p>Adding an item to the back</p><br>C. <p>Sorting the queue</p><br>D. <p>Copying the queue</p>                |
| 18 | Which principle does a stack follow.                    | A. <p>FIFO</p><br>B. <p>LIFO</p><br>C. <p>FILO</p><br>D. <p>LILO</p>   |
| 19 | Which operation removes an item by its index in a list. | A. <p>Pop()</p><br>B. <p>delete ()</p><br>C. <p>Remove()</p><br>D. <p>clear ()</p>   |
| 20 | Which node is the starting point of a tree.             | A. <p>Leaf node</p><br>B. <p>Child node</p><br>C. <p>Root node</p><br>D. <p>Parent node</p>  |