

## Computer Science Ics Part 1 Chapter 4 Online Test

Sr	Questions	Answers Choice
1	Which real life example represents an undirected graph.	<p>A. &lt;p&gt;Twitter followers&lt;/p&gt;</p> <p>B. &lt;p&gt;Facebook friendships&lt;/p&gt;</p> <p>C. &lt;p&gt;On way streets&lt;/p&gt;</p> <p>D. &lt;p&gt;Email spam links&lt;/p&gt;</p>
2	What is he degree of a vtx in a graph.	<p>A. &lt;p&gt;The numebr of loops&lt;/p&gt;</p> <p>B. &lt;p&gt;The number of edges connected to it&lt;/p&gt;</p> <p>C. &lt;p&gt;The total numebrof vertices&lt;/p&gt;</p> <p>D. &lt;p&gt;The weight of the vertex&lt;/p&gt;</p>
3	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>
4	Which of the following best describes a tree.	<p>A. &lt;p&gt;Graph with cycles&lt;/p&gt;</p> <p>B. &lt;p&gt;Graph with no cycles and a root&lt;/p&gt;</p> <p>C. &lt;p&gt;Random graph&lt;/p&gt;</p> <p>D. &lt;p&gt;Circular graph&lt;/p&gt;</p>
5	Which type of grah has edges with direction.	<p>A. &lt;p&gt;Undirected graph&lt;/p&gt;</p> <p>B. &lt;p&gt;Directed graph&lt;/p&gt;</p> <p>C. &lt;p&gt;Weighted graph&lt;/p&gt;</p> <p>D. &lt;p&gt;Binary graph&lt;/p&gt;</p>
6	Which of the following is a real world example of graph.	<p>A. &lt;p&gt;File system&lt;/p&gt;</p> <p>B. &lt;p&gt;Family tree&lt;/p&gt;</p> <p>C. &lt;p&gt;Social network&lt;/p&gt;</p> <p>D. &lt;p&gt;Web page navigation&amp;nbsp;&lt;/p&gt;</p>
7	In which structures can cycles exist.	<p>A. &lt;p&gt;Graph&lt;/p&gt;</p> <p>B. &lt;p&gt;Tree&lt;/p&gt;</p> <p>C. &lt;p&gt;Stack&lt;/p&gt;</p> <p>D. &lt;p&gt;Queue&lt;/p&gt;</p>
8	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>
9	What is a graph in data structures.	<p>A. &lt;p&gt;A linear structure&lt;/p&gt;</p> <p>B. &lt;p&gt;A hierachiecal structure&lt;/p&gt;</p> <p>C. &lt;p&gt;A set of vertices connected by edges.&lt;/p&gt;</p> <p>D. &lt;p&gt;A type of array&lt;/p&gt;</p>
10	Which traversal is used for beacking up files in a directory.	<p>A. &lt;p&gt;In order&lt;/p&gt;</p> <p>B. &lt;p&gt;Post Order&lt;/p&gt;</p> <p>C. &lt;p&gt;Pre order&lt;/p&gt;</p> <p>D. &lt;p&gt;Level order&lt;/p&gt;</p>
11	What is the height of a tree.	<p>A. &lt;p&gt;No of nodes&lt;/p&gt;</p> <p>B. &lt;p&gt;Longest path&amp;nbsp;&lt;/p&gt;</p> <p>C. &lt;p&gt;Memory used&lt;/p&gt;</p> <p>D. &lt;p&gt;No of leaves&lt;/p&gt;</p>
12	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>
13	Which node is the staring point of a tree.	<p>A. &lt;p&gt;Leaf node&lt;/p&gt;</p> <p>B. &lt;p&gt;Child node&lt;/p&gt;</p> <p>C. &lt;p&gt;Root node&lt;/p&gt;</p> <p>D. &lt;p&gt;Parent node&lt;/p&gt;</p>
14	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;Hiarchical structure&lt;/p&gt;</p>

D. `<p>Loop</p>`

15

What is the dequeue operation in a queue.

A. `<p>Adding an item to the back</p>`

B. `<p>Removing an item from the front</p>`

C. `<p>Sorting the queue</p>`

D. `<p>Copying the queue</p>`