S No	Question	Correct Answer
1.	**What is a queue?** a) A linear data structure b) A non-linear data structure c) A sorting algorithm d) A searching algorithm	*Correct Answer: a) A linear data structure*
2.	**Which operation adds an element to the back of the queue?** a) Enqueue b) Dequeue c) Peek d) Push	*Correct Answer: a) Enqueue*
3.	**What is the result of dequeuing an element from an empty queue?** a) Queue Overflow b) Queue Underflow c) Null Pointer Exception d) No change in the queue	*Correct Answer: b) Queue Underflow*
4.	**In a queue, which element is considered the first one to be added?** a) Front b) Rear c) Head d) Tail	*Correct Answer: a) Front*
5.	**What is the data structure that follows the First In, First Out (FIFO) principle?** a) Stack b) Queue c) Linked List d) Tree	*Correct Answer: b) Queue*
6.	**Which of the following data structures uses the queue data structure for its implementation?** a) Stack b) Binary Tree c) Expression evaluation d) Breadth-First Search (BFS)	*Correct Answer: d) Breadth-First Search (BFS)*
7.	**What is the time complexity of the enqueue operation in a queue implemented using an array?** a) O(1) b) O(log n) c) O(n) d) O(n^2)	*Correct Answer: a) O(1)*

8.	**Which operation checks the element at the front of the queue without removing it?** a) Enqueue b) Dequeue c) Peek d) Front	*Correct Answer: c) Peek*
9.	**What happens when a queue is full and an enqueue operation is performed?** a) Queue Overflow b) Queue Underflow c) No change in the queue d) Data is pushed to the back of the queue	*Correct Answer: a) Queue Overflow*
10.	**Which of the following data structures can be efficiently implemented using a queue?** a) Stack b) Linked List c) Binary Tree d) Depth-First Search (DFS)	*Correct Answer: d) Depth-First Search (DFS)*
11.	**Which data structure can be used to implement the scheduling of processes in an operating system?** a) Stack b) Queue c) Linked List d) Tree	*Correct Answer: b) Queue*
12.	**In a queue, which element is considered the last one to be removed?** a) Front b) Rear c) Head d) Tail	*Correct Answer: b) Rear*
13.	**Which of the following is not a valid application of a queue data structure?** a) Round-robin scheduling b) Breadth-First Search (BFS) c) Implementing a depth-first search (DFS) d) Print spooling	*Correct Answer: c) Implementing a depth-first search (DFS)*
14.	**What data structure is used by the operating system to handle interrupt requests?** a) Stack b) Queue c) Linked List d) Array	*Correct Answer: b) Queue*
15.	**Which of the following is not a queue implementation?** a) Linked List	*Correct Answer: c) Stack*

	b) Array c) Stack d) Circular Buffer	
16.	**What is the time complexity of the dequeue operation in a queue?** a) O(1) b) O(log n) c) O(n) d) O(n^2)	*Correct Answer: a) O(1)*
17.	**Which of the following operations cannot be performed on an empty queue?** a) Enqueue b) Dequeue c) Peek d) All of the above	*Correct Answer: b) Dequeue*
18.	**Which of the following is not true about a queue?** a) It follows the First In, First Out (FIFO) principle b) Elements can be accessed randomly c) Operations like enqueue and dequeue are performed on different ends d) It has linear access to elements	*Correct Answer: b) Elements can be accessed randomly*
19.	**Which of the following algorithms does not require a queue for its implementation?** a) Breadth-First Search (BFS) b) Depth-First Search (DFS) c) Topological sorting d) Shortest Path Algorithm	*Correct Answer: b) Depth-First Search (DFS)*
20.	**What data structure is typically used for implementing job scheduling algorithms in an operating system?** a) Stack b) Queue c) Linked List d) Tree	*Correct Answer: b) Queue*