1.

What is the time complexity of the following loop:

```
for( int i = 1 ; i <= n ; i++ )
{
    for( int j = 0 ; j <= n ; j++ )
    {
        //O(1) statement/s
    }
}
```

A. O(n/2)
B. O(2n)
C. O(n^2)
D. None of the above

Answer: C

2.
Measures of analysis of an algorithm are

A. Time & Space
B. Variables and Functions
C. Both A & B
D. None of the above

Answer: A

3.
_____ is a mathematical way to calculate space and time complexity of an algorithm without implementing it in any programming language.

A. Mathematical Analysis
B. Asymptotic Analysis
C. Algorithm Analysis
D. All of the above

Answer: B

4.
What is the time complexity of the following loop:
//whereas "n" is any constant

```
for( int i = 1 ; i <= n ; i++ )
{
    //O(1) statement/s
}
```

A. O(n)
B. O(1)
C. O(log n)
D. O(2*n)

Answer: B

5.
To represent worst case time complexity following asymptotic notation is used _____.

A. Big Omega
B. Big Theta
C. Big Oh
D. None of the above

Answer: C

6.
When the running time of an algorithm is neither minimum nor maximum it is reffered as _____.

A. Average case time complexity
B. Moderate case time complexity
C. Best case time complexity
D. Worst case time complexity

Answer: A

7._____notation is used to represent asymptotic lower bound.

A. Big Omega
B. Big Theta
C. Big Oh
D. None of the above

Answer: A

8.
_____notation is used to represent asymptotic upper bound.

A. Big Omega
B. Big Theta
C. Big Oh
D. None of the above

Answer: C

9.
_____notation is used to represent asymptotic tight bound.

A. Big Omega
B. Big Theta
C. Big Oh
D. None of the above

Answer: B

10.
What is the time complexity of the following loop:

```
for( int i = 1 ; i <= n ; i *= 2 )
{
    //O(1) statement/s
}
```

A. O(n/2)
B. O(2*n)
C. O(log n)
D. None of the above

Answer: C