**ALGORITHMS**

1. What is an Algorithm.

Algorithm is a sequence of steps to be followed to solve a problem.

2. What do you understand by O notations.

O notation is a language used to articulating how long an algorithms take to run.

3. What are NP hard and NP complete problems.

NP hard: A problem is NP hard if an algorithm for solving it can be translated into one for solving any problem.

NP complete: A problem which is both NP and NP hard

4. Give some popular scenarios where time complexity is the key for choosing an algorithm.

The time complexity in real world examples are:

Google maps to sort the user's key.

KMP Algorithm.

5. How do we calculate time complexity of a program.

The time complexity of a program is calculated by the number of statements and number of times the statements are executed.