Chapter 1

**INTRODUCTION**

* 1. **Overview**

Election and voting are well known things in modern days of Democracy. Electronic online voting over the Internet would be much more profitable. Many voters would appreciate the possibility of voting from anywhere. A company having their offices in different locations, can use internet voting for their election, in their employees from all offices will take part in election from their own offices. Electronic voting, as the name implies, is the voting process held over electronic media, i.e. computers. In general, an internet voting system should satisfy the requirements as follows:

1. Accuracy

2. Simplicity

3. Democracy

4. Verifiability

5. Privacy

6. Security.

For such an internet voting system, security and privacy are main concerns. From that point of view, an implementation of secure Internet voting system appears to be another application of cryptography and network security. Electronic voting has been intensively studied for over the last twenty years. Many e-voting system, therefore, have been proposed in the last several decades and both the security as well as the effectiveness has been improved.

Not many modern and complete solution has been found for large scale elections over a network, say Internet. This approach suggests a practical application of the existing cryptographic schemes and digital signature that ensures integrity of the vote cast by voter and authentication of voter at the two levels.