Quiz 1

1- how do networked computers communicate and coordinate their actions?

By passing messages, The components interact with each other in order to achieve a common goal

2- The role of firewall is to control access to internal network sought by the user , and The purpose of the firewall is to protect the resources in all of the computers inside the organization from access by external users or processes and to control the use of resources outside the firewall by users inside the organization.

3- What are the trends of DS?

Distributed systems are undergoing a period of significant change and this can be traced back to a number of influential trends.

- the emergence of pervasive networking technology.
- the emergence of ubiquitous computing coupled with the desire to support user mobility in distributed systems.
- the increasing demand for multimedia services.
- the view of distributed systems as a utility.

4- What is the difference between an application and Service ?

An application is a program which you interact with on the desktop. This is what you spend almost all of your time using on the computer. Internet explorer, microsoft word, iTunes, skype - they are all applications.

A service is a process which runs in the background and does not interact with the desktop

5- Give two examples explained that the security is an important parameter in exchanging data on DS..

1- A doctor might request access to hospital patient data or send additions to that data2- In electronic commerce and banking , users send their credit card numbers across the internet .

6- What are the different type of System model?

<u>Physical models</u> are the most explicit way in which to describe a system; they capture the hardware composition of a system in terms of the computers (and other devices, such as mobile phones) and their interconnecting networks.

<u>Architectural models</u> describe a system in terms of the computational and communication tasks performed by its computational elements; the computational elements being individual computers or aggregates of them supported by appropriate network interconnections.

<u>Fundamental models</u> take an abstract perspective in order to examine individual aspects of a distributed system. In this chapter we introduce fundamental models that examine three important aspects of distributed systems.

7- What is the use of Middleware?

The term middleware applies to a software layer that provides a programming abstraction as well as masking the heterogeneity of the underlying networks, hardware, operating systems and programming languages. middleware provides a uniform computational model for use by the programmers of servers and distributed applications. Middleware generally converts the failures of networks and processes into programming-level exceptions