# NETWORKS STANDARD, PROTOCOLS AND NETWORK MODELS

CHAPTER THREE
COMPUTER SCIENCE
Fourth class

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### Network Criteria

A network must be able to meet a certain number of criteria. The most important of these are

**Performance** 

reliability

security.

#### a) Performance

including transit time and response time.

**Transit time** is the amount of time required for a message to travel from one device to another.

Response time is the elapsed time between an inquiry and a response.

The performance of a network depends on a number of factors:

- Number of users.
- 2) Type of transmission medium.
- 3) Capabilities of the connected hardware.
- 4) Efficiency of the software.

Performance is often evaluated by two networking metrics: throughput and delay.

## • throughput:

Indicate the level of successful packets (actual rate) delivery from one point on the network to another (measures in bit per second bps)

#### Delay:

How long it takes for a bit of data to travel a cross the network from one communication end point to another.

We often need more throughput and less delay.