# Telecommunication

# Fundamental Elements of TC

#### 1.Transmission Media

- a.Wired Media
- b.Wireless

### 2. Switching Systems

- a.Circuit Switching
- b.Packet Switching

## 3. Transmission Systems

- a. Analog Transmission
- b.Digital Transmission

#### 4. Network Protocols:

- a. TCP/IP
- b.Ethernet

#### 5. Communication Devices

a.Modems

b.Routers

c.Switches

## **6. Network Topologies**

Star, Ring, Mesh, Bus

# **Evolution Of Telecommunication**

- Early Communication Methods (Smokes or Drum beating)
- 2. Telegraphy (1830s-1840s) (Morse Code)
- 3. Telephony (1876) (Telephone)
- 4. Radio Communication (1890s)(Wireless Telegraphy)
- 5. Satellite Communication (1960s)
- 6. Internet and Data Networks (1990s)(TCP/IP)

# Telegraphy(Morse Code)

#### **Symbols Used**

Dots (·)

Dashes (-)

Spaces:

#### **Characters represented**

- Letters (A-Z)
- O Numbers (0-9)
- Punctuation and special symbols (e.g., comma, period)

# Thank You