



DATA COMMUNICATIONS

LECTURE 1 / INTRODUCTION PART 1



اللهم صل على محمد وعلى آل محمد، كما صليت على إبراهيم وعلى آل إبراهيم
إنك حميد مجيد، اللهم بارك على محمد وعلى آل محمد كما باركت على إبراهيم
وعلى آل إبراهيم إنك حميد مجيد

AMR SHOUKRY

[ANSWERED]

- 1) The fundamental purpose of a communications system is the exchange of data between ... or more parties (end systems)
 - a) 1
 - b) 2 *(Slide 9)
- 2) deals with the transmission of signals in a reliable and efficient manner over a communication channel
 - a) Networking
 - b) Data communications *(Slide 9)
- 3) Transmitter is located in the .. stage
 - a) Source *
 - b) Destination(Slide 9)
- 4) Receiver is located in the .. stage
 - a) Source
 - b) Destination *(Slide 9)
- 5) is a device that captures the physical phenomena and transforms into an electrical signal
 - a) transmitter
 - b) transducer *
 - c) Receiver
 - d) Channel(Slide 12)
- 6) is a function that conveys information about the behavior or attributes of some phenomenon
 - a) transmitter
 - b) transducer
 - c) Signal *
 - d) Channel(Slide 12)
- 7) Microphone, Microphone, Microphone, touch, Digital Thermometer, Sensor are examples of
 - a) transmitter
 - b) transducer *
 - c) Signal
 - d) Channel(Slide 12)

- 8) The signal produced by a transducer is called the ...signal
a) Throughput
b) baseband *
(Slide 12)
- 9) A is an electronic device which produces radio waves using an antenna
a) transmitter *
b) transducer
c) Signal
d) Channel
(Slide 13)
- 10) Can include more than one stage or subsystems - A/D Converter, Encoder, Modulator
a) transmitter *
b) transducer
c) Signal
d) Channel
(Slide 13)
- 11) can be a medium – physical
a) transmitter
b) transducer
c) Signal
d) Channel *
(Slide 14)
- 12) can be a sequence of mediums — logical Network
a) transmitter
b) transducer
c) Signal
d) Channel *
(Slide 14)
- 13) Copper wires, Fiber optics cables, Air, Water
a) transmitter
b) transducer
c) Signal
d) Channel *
(Slide 14)

14) Used to convey an information signal

- a) transmitter
- b) transducer
- c) Signal
- d) Channel *

(Slide 14)

15) A ... counters the activity of the Transmitter

- a) receiver *
- b) transducer
- c) Signal
- d) Channel

(Slide 15)

16) Can include more than one stage or subsystems – Demodulator, Decoder, D/A Converter

- a) transmitter
- b) transducer
- c) receiver *
- d) Channel

(Slide 15)

17) Usually, transmitter and receiver are housed in the same device, called ...

- a) receiver *
- b) transducer
- c) transceiver *
- d) recducer

(Slide 15)

18) ... Transducer: Converts the receive signal into the intended message

- a) Input
- b) Output *

(Slide 16)

19) Screen, Speakers, headphones, Motion (remotely controlled cars or robots)

- a) Input Transducer
- b) Output Transducer *

(Slide 16)

20) ...is the alteration of the original shape of a signal

- a) Orientation
- b) Distortion *

(Slide 17)

21) Distortions

- a) Linear
- b) Non-Linear
- c) Any of them *

(Slide 17)

22) ... distortions impact frequency and phase

- a) Linear
- b) Non-Linear *

(Slide 17)

23) Non-Linear distortions impact ...

- a) frequency
- b) Phase
- c) Both of them *

(Slide 17)

24) distortion can be frequency-selective

- a) Linear
- b) Non-Linear *

(Slide 17)

25) Message

- a) Analog
- b) Digital
- c) any of them *

(Slide 19)

26) ...messages are ordered combinations of finite symbols or codewords

- a) Analog
- b) Digital *

(Slide 19)

27) ... messages are characterized by data whose values vary over a continuous range & are for a continuous range of time

- a) Analog *
- b) Digital

(Slide 19)

28) Text, Speech, Music

- a) Analog
- b) Digital *

(Slide 19)

29) Temperature, Pressure, Sound

- a) Analog *
 - b) Digital
- (Slide 19)

30) Usually owned by same organization as attached devices

- a) LAN *
 - b) MAN
 - c) WAN
 - d) PAN
- (Slide 22)

31) Crossing public rights of way

- a) LAN
 - b) MAN
 - c) WAN *
 - d) PAN
- (Slide 23)

32) Rely in part on common carrier circuits

- a) LAN
 - b) MAN
 - c) WAN *
 - d) PAN
- (Slide 23)

33) Private or public network

- a) LAN
 - b) MAN *
 - c) WAN
 - d) PAN
- (Slide 24)

34) Square meter distance

- a) LAN
 - b) MAN
 - c) WAN
 - d) PAN *
- (Slide 24)

35) Used for Building Space

- a) LAN *
- b) MAN
- c) WAN
- d) PAN

(Slide 26)

36) Used for Campus Space

- a) LAN *
- b) MAN
- c) WAN
- d) PAN

(Slide 26)

37) Used for continent Space

- a) LAN
- b) MAN
- c) WAN *
- d) PAN

(Slide 26)

38) Used for Planet Space

- a) LAN
- b) MAN
- c) WAN
- d) PAN
- e) The Internet *

(Slide 26)

39) Used for City Space

- a) LAN
- b) MAN *
- c) WAN
- d) PAN

(Slide 26)

40) Used for Room Space

- a) LAN *
- b) MAN
- c) WAN
- d) PAN

(Slide 26)

41) Used for 1m Space

- a) LAN
- b) MAN
- c) WAN
- d) PAN *

(Slide 26)

42) Used for 10m – 1km Space

- a) LAN *
- b) MAN
- c) WAN
- d) PAN

(Slide 26)

43) Used for 10km Space

- a) LAN
- b) MAN *
- c) WAN
- d) PAN

(Slide 26)

44) Used for 100km – 1000 km Space

- a) LAN
- b) MAN
- c) WAN *
- d) PAN

(Slide 26)

45) Used for 10000km Space

- a) LAN
- b) MAN
- c) WAN
- d) PAN
- e) The Internet *

(Slide 26)

46) Support High speed in large area

- a) LAN
- b) MAN *
- c) WAN
- d) PAN

(Slide 25)

47) Usually administered by multiple service providers.

- a) LAN
- b) MAN
- c) WAN *
- d) PAN

(Slide 23)

48) Data rates much higher (higher bandwidth)

- a) LAN *
- b) MAN
- c) WAN
- d) PAN

(Slide 22)

49) Support Small geographical area

- a) LAN *
- b) MAN
- c) WAN
- d) PAN

(Slide 22)

50) Usually broadcast systems

- a) LAN *
- b) MAN
- c) WAN
- d) PAN

(Slide 22)

51) LANs and WANs have always had one thing in common, though, and that is the use of the term bandwidth to describe their capabilities

- a) T *
- b) F

(Slide 29)

52) Bandwidth is the measure of how much information can flow from one place to another in a given amount of time.

- a) T *
- b) F

(Slide 29)

53) The most basic unit of information is the ...

- a) bit *
 - b) byte
- (Slide 29)

54) The basic unit of time is the second.

- a) T *
 - b) F
- (Slide 29)

55) To describe the AMOUNT of information flow in a SPECIFIC period of time, we could use the units "bits per second" to describe this flow (bps).

- a) T *
 - b) F
- (Slide 29)

56) refers to actual, measured, at a specific time of day, using specific internet routes, while downloading a specific file

- a) Bandwidth – Throughput
 - b) Throughput – Bandwidth*
- (Slide 31)

لا تنسوننا من صالح دعائكم

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وعلى آل إبراهيم إنك حميد مجيد

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