



Ahmad Bilal

A - Communication Engineering

Multiple Choice Questions Practice Sheet . For AM MCQ practice, please refer to the hard copy of AM available at Book shop

1. Non-electric input signal is converted to electrical signal for communication using_____
 - a. Modulation
 - b. Input transducers
 - c. Analogue to digital converters
 - d. None
2. Input signal for communication is known as_____
 - a. Base band signal
 - b. Communication signal
 - c. Broad band signal
 - d. Analogue signal
3. _____modifies the base band signal for efficient transmission
 - a. Transducers
 - b. Amplifiers
 - c. Channel
 - d. Transmitter
4. Transmitter output is sent using_____in communication systems
 - a. Modulators
 - b. Amplifiers
 - c. Channels
 - d. All
5. By increasing the signal power _____of signal increases
 - a. Quality
 - b. Noise
 - c. Attenuation
 - d. All
6. The power ratio between a signal (meaningful information) and the background noise (unwanted signal) is called
 - a. Signal gain
 - b. Amplification
 - c. Attenuation
 - d. SNR (signal to noise ratio)
7. By increasing the signal power SNR_____
 - a. Decreases

- b. Increases
 - c. Remains same
 - d. Signal power is independent of SNR
8. The travelling distance of signal increases when SNR is _____
- a. Low
 - b. High
 - c. Very low
 - d. Travelling distance of signal not depends on SNR
9. By increasing the signal power _____ reduces
- a. Signal gain
 - b. Amplification
 - c. Attenuation
 - d. Noise
10. If signal power “s” increases then SNR _____
- a. Increases
 - b. Decreases
 - c. No effect
 - d. Remain same
11. Channel capacity increases by _____
- a. Increasing bandwidth
 - b. Increasing attenuation
 - c. Decreasing bandwidth
 - d. Decreasing attenuation
12. Unit of channel capacity is _____
- a. Nibble/sec
 - b. Byte/sec
 - c. MB/sec
 - d. Bit/sec
13. Communication signal is carried from one system to another by means of _____
- a. Transmission media
 - b. Guided transmission media
 - c. Un-guided transmission media
 - d. All above
14. Fiber optics is an example of _____
- a. Guided transmission media
 - b. Unguided transmission media
 - c. Both
 - d. None
15. _____ media guides the data signals along a specific path
- a. Guided transmission
 - b. Unguided transmission
 - c. Both
 - d. None
16. Which one is an example of unguided media

- a. Radio waves
- b. Micro waves
- c. Infrared waves
- d. All of these

17. Unguided media is also called_____

- a. Cabling media
- b. Wireless media
- c. Both

18. _____ is an example of guided media

- a. Radio waves
- b. Co-axial cable
- c. Fiber-optic cables
- d. Both b& c

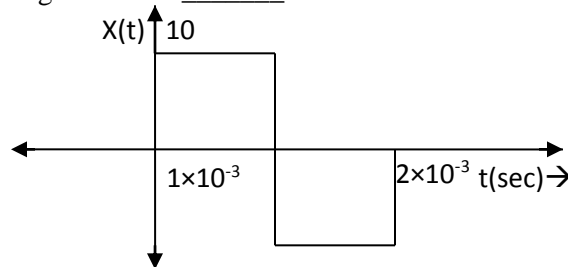
19. Which transmission mode is used for data communication along telephone lines?

- a. Parallel
- b. Serial
- c. Synchronous
- d. Asynchronous

20. Range of frequencies that a channel can transmit is known as_____

- a. Channel capacity
- b. Bandwidth
- c. Channel power
- d. None

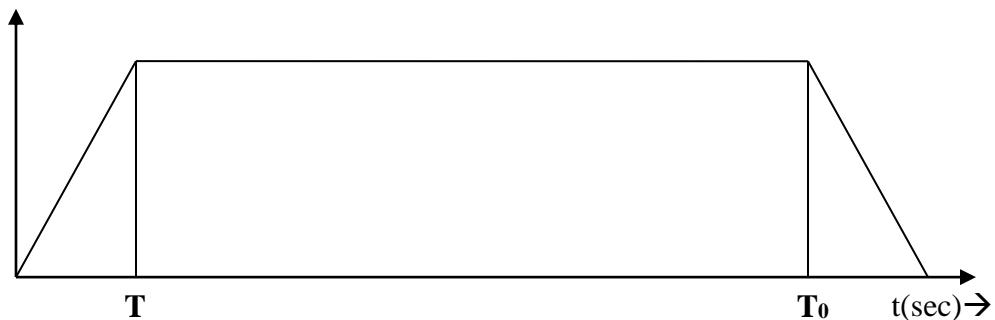
21. The band width of signal blow is_____Hz. a. 0 b. 10^{-3} c. 10^3 d. 10



22. Which one is Shannon's equation for channel capacity

- a. $C = B \log_2(1 + SNR)$
- b. $C = B \log_2(1 - SNR)$
- c. $C = B \log_2(SNR + 1)$
- d. $C = B \log_2(SNR - 1)$

23. The band width of signal blow is



- a) $T - T_0$
- b) $T + T_0$
- c) $\frac{1}{T_0} - \frac{1}{T}$
- d) $\frac{1}{T} + \frac{1}{T_0}$

24. Modulating signal has

- a. low frequency
- b. low modulation
- c. high frequency
- d. none of these

25. A signal has a fundamental frequency of 1000 MHz what is the period?

- a. 1msec
- b. 1μsec
- c. 1nsec
- d. 1secs

26. Messages travel from transmitter to receiver with help of

- a. Transmitter
- b. Receiver
- c. channel
- d. antennas

27. Carrier signal for modulation possesses _____ frequency

- a. High
- b. Low
- c. Medium
- d. Both a & b

28. Modulated signal is demodulated at the end of communication to _____

- a. Reconstruct the baseband signal
- b. Reconstruct the broadband signal
- c. Medium
- d. Both a & b

29. Sound signals in TV are _____

- a. amplitude modulated
- b. dc modulated
- c. frequency modulated
- d. a and c

30. Video signals in TV are

- a. amplitude modulated

- b. de modulated
- c. frequency modulated
- d. none of these

31. An example for an analog signal

- a. Sine wave
- b. impulse signal
- c. simple signal
- d. none

32. Power for a sinusoidal signal $g(t)=C\cos(\omega t+\phi)$ is

- a. $\frac{2C}{10}$
- b. $\frac{C}{10}$
- c. $\frac{C^2}{10}$
- d. $\frac{10}{2C}$

33. A signal which has different values at each point is called_____

- a. Digital signal
- b. Analogue signal
- c. Discrete signal
- d. Continuous signal

34. A signal which may have different values at one point is called_____

- a. Digital signal
- b. Analogue signal
- c. Discrete signal
- d. Continuous signal

35. A signal having different values at discrete intervals of time is called_____

- a. Digital signal
- b. Analogue signal
- c. Discrete signal
- d. Continuous signal

36. If discrete signal is defined with in specific levels say 0,1 (binary) then signal is called_____

- a. Digital signal
- b. Analogue signal
- c. Discrete signal
- d. Continuous signal

37. Sinusoidal signal is an example of

- a. Digital signal
- b. Analogue signal
- c. Discrete signal
- d. Continuous signal

38. Heart pulse is an example of
- Digital signal
 - Analogue signal
 - Discrete signal
 - Continuous signal

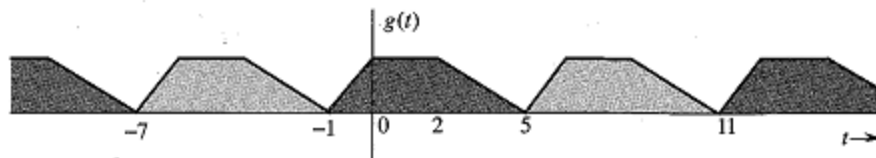
39. The energy of power signal is

- Zero
- Unity
- ∞
- none of these

40. A signal which repeats itself after a certain time period is known as

- Even signal
- Odd signal
- Aperiodic signal
- Periodic signal

41. The signal below is



- Aperiodic signal
- Periodic signal
- Both
- None

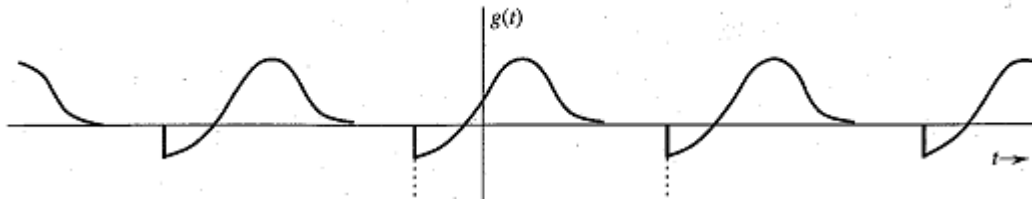
42. A signal with finite energy is known as

- Even signal
- Power signal
- Energy signal
- Periodic signal

43. A signal with finite power is known as

- | | |
|---|--|
| <ol style="list-style-type: none"> Even signal Power signal | <ol style="list-style-type: none"> Energy signal Periodic signal |
|---|--|

44. Signal below is _____



- a. Aperiodic signal
- b. Periodic signal
- c. Discrete signal
- d. Digital signal

45. If $x(t)$ is a given signal and $x(t)=x(-t)$ then $x(t)$ is

- a. Even signal
- b. Power signal
- c. Odd signal
- d. Periodic signal

46. If $x(t)$ is a given signal and $x(t)=-x(-t)$ then $x(t)$ is

- a. Even signal
- b. Power signal
- c. Odd signal
- d. Periodic signal