

All the Multiple Choice Question and Answer (MCQs) have been compiled from the books of Data Communication and Networking by the well known author *behrouz A forouzan*.

This Data Communication and Networking – **Transmission Media** Multiple choice Questions and Answers (MCQ) PDF covers the below lists of topics.

1. Transmission media Multiple Choice Question and Answer.
2. Twisted pair cable, coaxial cable, and optical fiber cable Multiple Choice Question and Answer.
3. Multimode step-index propagation Multiple Choice Question and Answer.
4. Multimode graded-index propagation Multiple Choice Question and Answer.
5. Unguided media – ground propagation, sky propagation, and line-of-sight propagation Multiple Choice Question and Answer.
6. Radio waves, Microwaves, or Infrared waves Multiple Choice Question and Answer

Transmission Media multiple choice questions and answers MCQ
Set-1

1. **Transmission media are usually categorized as _____.**
 - A. fixed or unfixd
 - B. guided or unguided
 - C. determinate or indeterminate
 - D. metallic or nonmetallic

2. **Transmission media lie below the _____ layer.**
 - A. physical

- B. network
- C. transport
- D. application

3. _____ cable consists of an inner copper core and a second conducting outer sheath.

- A. Twisted-pair
- B. Coaxial
- C. Fiber-optic
- D. Shielded twisted-pair

4. In fiber optics, the signal is _____ waves.

- A. light
- B. radio
- C. infrared
- D. very low-frequency

5. Which of the following primarily uses guided media?

- A. cellular telephone system
- B. local telephone system
- C. satellite communications
- D. radio broadcasting

6. Which of the following is not a guided medium?

- A. twisted-pair cable
- B. coaxial cable
- C. fiber-optic cable
- D. atmosphere

7. What is the major factor that makes coaxial cable less susceptible to noise than twisted-pair cable?

- A. inner conductor
- B. diameter of cable
- C. outer conductor
- D. insulating material

8. In an optical fiber, the inner core is _____ the cladding.

- A. denser than
- B. less dense than
- C. the same density as
- D. another name for

9. The inner core of an optical fiber is _____ in composition.

- A. glass or plastic
- B. copper
- C. bimetallic
- D. liquid

10. When a beam of light travels through media of two different densities, if the angle of incidence is greater than the critical angle, _____ occurs.

- A. reflection
- B. refraction
- C. incidence
- D. criticism

Answer key for MCQ SET- 1

Q-1	Correct Answer :guided or unguided
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Q-2	Correct Answer :physical
Q-3	Correct Answer :Coaxial
Q-4	Correct Answer :light
Q-5	Correct Answer :local telephone system
Q-6	Correct Answer :atmosphere
Q-7	Correct Answer :outer conductor
Q-8	Correct Answer :denser than
Q-9	Correct Answer :glass or plastic
Q-10	Correct Answer :reflection

Transmission Media multiple choice questions and answers MCQ
Set-2

1. When the angle of incidence is _____ the critical angle, the light beam bends along the interface.

- A. more than
- B. less than
- C. equal to
- D. none of the above

2. Signals with a frequency below 2 MHz use _____ propagation.

- A. ground
- B. sky
- C. line-of-sight
- D. none of the above

3. Signals with a frequency between 2 MHz and 30 MHz use _____ propagation

- A. ground
- B. sky
- C. line-of-sight
- D. none of the above

4. Signals with a frequency above 30 MHz use _____ propagation

- A. ground
- B. sky
- C. line-of-sight
- D. none of the above

5. A parabolic dish antenna is a(n) _____ antenna.

- A. omnidirectional
- B. bidirectional
- C. unidirectional
- D. horn

6. A(n) _____ medium provides a physical conduit from one device to another.

- A. guided
- B. unguided

- C. either (a) or (b)
- D. none of the above

7. _____ cable consists of two insulated copper wires twisted together.

- A. Coaxial
- B. Fiber-optic
- C. Twisted-pair
- D. none of the above

8. _____ cable is used for voice and data communications.

- A. Coaxial
- B. Fiber-optic
- C. Twisted-pair
- D. none of the above

9. _____ consists of a central conductor and a shield.

- A. Coaxial
- B. Fiber-optic
- C. Twisted-pair
- D. none of the above

10. _____ cable can carry signals of higher frequency ranges than _____ cable.

- A. Twisted-pair; fiber-optic
- B. Coaxial; fiber-optic
- C. Coaxial; twisted-pair
- D. none of the above

Answer key for MCQ SET- 2	
Q-1	Correct Answer :equal to
Q-2	Correct Answer :ground
Q-3	Correct Answer :sky
Q-4	Correct Answer :line-of-sight
Q-5	Correct Answer :unidirectional
Q-6	Correct Answer :unguided
Q-7	Correct Answer :Twisted-pair
Q-8	Correct Answer :Twisted-pair
Q-9	Correct Answer :Coaxial
Q-10	Correct Answer :Coaxial; twisted-pair

Transmission Media multiple choice questions and answers MCQ
Set-3

1. _____ cables are composed of a glass or plastic inner core surrounded by cladding, all encased in an outside jacket.

- A. Coaxial
- B. Fiber-optic
- C. Twisted-pair
- D. none of the above

2. _____ cables carry data signals in the form of light.

- A. Coaxial
- B. Fiber-optic
- C. Twisted-pair

D. none of the above

3. In a fiber-optic cable, the signal is propagated along the inner core by _____

- A. reflection
- B. refraction
- C. modulation
- D. none of the above

4. _____ media transport electromagnetic waves without the use of a physical conductor

- A. Guided
- B. Unguided
- C. Either (a) or (b)
- D. None of the above

5. Radio waves are _____

- A. omnidirectional
- B. unidirectional
- C. bidirectional
- D. none of the above

6. Microwaves are _____

- A. omnidirectional
- B. unidirectional
- C. bidirectional
- D. none of the above

7. _____ are used for cellular phone, satellite, and wireless LAN communications.

- A. Radio waves
- B. Microwaves
- C. Infrared waves
- D. none of the above

8. _____ are used for short-range communications such as those between a PC and a peripheral device.

- A. Radio waves
- B. Microwaves
- C. Infrared waves
- D. none of the above

Answer key for MCQ SET- 3	
Q-1	Correct Answer :Fiber-optic
Q-2	Correct Answer :Fiber-optic
Q-3	Correct Answer :reflection
Q-4	Correct Answer :Unguided
Q-5	Correct Answer :omnidirectional
Q-6	Correct Answer :unidirectional
Q-7	Correct Answer :Microwaves
Q-8	Correct Answer :Infrared waves
Q-9	
Q-10	