DATA COMM FILL-IN TRIALS

Here are some fill-in questions generated from the provided paragraphs:

1. Data communications concerns the transmission of digital messages to _____ devices external to the message source.

2. A communications channel is a pathway over which information can be _____.

3. In a digital communications channel, the information is represented by individual _____.

4. A byte, which consists of _____ bits, is an example of a message unit that may be conveyed through a digital communications channel.

5. A channel whose direction of transmission is unchanging is referred to as a _____ channel.

6. Bit-serial transmission conveys a message _____ through a channel.

7. The baud rate refers to the signalling rate at which data is sent through a channel and is measured in _____ per second.

8. The channel efficiency is the number of _____ passed through the channel per second.

9. A communications protocol is an agreed-upon convention that defines the order and meaning of bits in a _____ transmission.

10. In asynchronous systems, a separate timing channel is _____ used.

11. Data communications aims to provide the highest possible transmission rate at the lowest possible _____.

12. A communications channel may be defined by a physical wire that connects communicating devices or by a _____ energy source.

13. Information sent through a communications channel has a source from which the information originates and a _____ to which the information is delivered.

14. In a telephone call, one party speaks while the other listens, illustrating a _____ channel.

15. A full-duplex channel allows simultaneous message exchange in _____ directions.

16. Serialized data is generally sent at a burst of regularly spaced binary data bits followed by a _____.

17. Manchester coding and non-return-to-zero are methods for encoding a data stream into an electrical waveform for _____.

18. The baud rate and bit rate are identical in EIA232 serial interface standard when _____.

19. Channel efficiency is determined by the protocol design rather than by _____ considerations.

20. In asynchronous systems, the transmitter and receiver must be preset to an agreed-upon _____ rate.

21. The maximum permissible transmission rate of a message is directly proportional to signal _____.

22. A channel whose direction of transmission may be reversed is known as a _____ channel.

23. Bit-serial transmission conveys a message one _____ at a time through a channel.

24. The simplest transmission media consists of a pair of _____.

25. In Manchester coding, a separate _____ channel is not used.

26. The data rate of a channel is often specified by its _____ rate.

27. Two basic techniques employed to ensure correct synchronization are synchronous and _____ systems.

28. Channel efficiency does not include framing, formatting, and error detecting bits, and will always be _____ than one.

29. Asynchronous systems require the transmitter and receiver to be preset to an agreed-upon _____ rate.

30. A communications protocol specifies how many data bits compose a message unit, framing and formatting bits, and any error-detecting bits that may be added before _____.

ANSWERS

Certainly! Here are the answers for the fill-in questions:

1. independently powered

2. conveyed

3. data bits

4. eight

5. simplex

6. one bit at a time

7. transitions

8. number of bits

9. serial

10. not

11. power, noise

12. radio, laser, or other radiated

13. destination

14. half-duplex

15. both

16. pause

17. transmission

18. at most one signal transition occurs per bit

19. digital hardware

20. baud

21. power

22. half-duplex

23. bit

24. conductors

25. timing

26. bit rate

27. asynchronous

28. less

29. baud

30. transmiss