

Quiz on Jan 21

Quiz on Jan 21

13.

Which of the following can help determine the end of a frame? Select all that apply

Marks: 1

Type: MULTIPLE_CHOICE

Options:

- 0) idle time
- 1) sentinel
- 2) very high voltage
- 3) byte count

Answer: [[1, 3]]

13. A repetitive code with $n = 4$ can detect how many errors? Format X (e.g. 2)

Marks: 1

Type: FLOAT_TYPE

Answer: [{ "max_val": "3", "min_val": "3" }]

13.

When the number of redundant bits are same as number of message bits, what is the code rate? Format X.xx (0.20)

Marks: 1

Type: FLOAT_TYPE

Answer: [{ "max_val": "0.5", "min_val": "0.5" }]

13. Which of the following is true of error control? Select all that apply

Marks: 1

Type: MULTIPLE_CHOICE

Options:

- 0) Higher the data rate, the higher chances of bursty errors
- 1) All link layer protocols are mandated to implement mechanisms to recover from losses
- 2) Error correction requires lesser number of redundant bits than error detection
- 3) Wireless links often employ error correction

Answer: [[0, 3]]

13.

The hamming distance between code words 11001 and 11111 is? Format X (e.g. 1)

Marks: 1

Type: FLOAT_TYPE

Answer: [{ "max_val": "2", "min_val": "2" }]

13.

Which among the services is NOT provided by the link layer? Select all that apply

Marks: 1

Type: MULTIPLE_CHOICE

Options:

- 0) Framing
- 1) Demultiplexing
- 2) Error Recovery
- 3) Routing

Answer: [[3]]

14. Which among the following is true of error detection codes? Select all that apply

Marks: 1

Type: MULTIPLE_CHOICE

Options:

- 0) Even parity detects even number of errors
- 1) 2D parity can detect all 4 bit errors
- 2) In Internet checksum, the receiver compares the final result with ffff to detect errors
- 3) Internet checksum is a very strong error detection technique

Answer: [[2]]

14.

In Bi-sync protocol employing 2D parity, if N ASCII characters are being transmitted, the amount of redundancy is $N + x$. What is x? Format X (e.g. 3)

Marks: 1

Type: FLOAT_TYPE

Answer: [{ "max_val": "8", "min_val": "8" }]

14. Which of the following is true of CRC? Select all that apply.

Marks: 1

Type: MULTIPLE_CHOICE

Options:

- 0) Transmitted message $P(x)$ is not divisible by divisor polynomial $C(x)$
- 1) Coefficients of the remainder polynomial are the redundant bits
- 2) One can detect errors if error polynomial $E(x)$ is divisible by $C(x)$
- 3) All odd number of bit errors can be detected if $C(x)$ contains the factor $(x + 1)$

Answer: [[1, 3]]

14.

For a code with code word of size n ($=m+k$), which among the following is true?
Select all that apply.

Marks: 1

Type: MULTIPLE_CHOICE

Options:

- 0) The number of legal code words are 2^n
- 1) The hamming distance is k
- 2) One of the goals in designing the code is to increase k
- 3) One of the goals in designing the code is to increase the hamming distance

Answer: [[3]]
