

1. Given a 7-bit information frame (0, 1, 0, 1, 1, 0, 1), what is the even parity bit?

1

0

None of the mentioned

01

2. What is the binary sequence that corresponds to polynomial code  $x^3 + x^2 + 1$ ?

111

1110

0111

1101

3. What is the binary equivalent of the following polynomial arithmetic  $x^7 + x^6 + x^5 + x^2 + 1$ ?

11011101

11100111

11101101

11100101

4. Internet protocols use check bits to detect errors, instead of using CRC polynomial.

The primary rationale is \_\_\_\_\_

Strength of error detection capability

simplicity of implementation

CRC polynomial cannot work for internet protocols

None of the mentioned

5. The checksum of 0000 and 0000 is \_\_\_\_\_

0101

1010

0000

1111

6. Which of these is not a network edge device?

PC

Smartphones

Servers

Switch

7. Ensuring that information is not altered during transfer is associated with \_\_\_\_\_

- Authentication
- Integrity
- Confidentiality
- Availability

8. Which of the basic elements of ARQ is associated with negative acknowledgement?

- Error detection code
- NAKs
- ACKs
- Timeout mechanism

9. Which of the following statements are true for the best-effort service of IP?

- Packets can arrive with errors or be lost
- All of the mentioned
- Packets can arrive out-of-order
- Packets can arrive after very long delays

10. Carrier Sense Multiple Access (CSMA) is based on medium called \_\_\_\_\_

- Sense before transmit
- Sense before Collision
- Listen before sending
- Listen before talk