

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