

1 Given the Ethernet address 01011010 00010001 01010101 00011000 10101010 00001111 in binary, what is the address in hexadecimal notation?

- A) 5A:88:AA:18:55:F0
- B) 5A:81:BA:81:AA:0F
- C) 5A:18:5A:18:55:0F
- D) 5A:11:55:18:AA:0F

2 If an Ethernet destination address is 07:01:02:03:04:05, then this is a _____ address.

- A) unicast
- B) multicast
- C) broadcast
- D) either multicast or broadcast

3 If an Ethernet destination address is 08:07:06:05:44:33, then this is a _____ address.

- A) unicast
- B) multicast
- C) broadcast
- D) either multicast or broadcast

4 Which of the following could not be an Ethernet multicast destination address?

- A) 43:7B:6C:DE:10:00
- B) 44:AA:C1:23:45:32
- C) 46:56:21:1A:DE:F4
- D) 48:32:21:21:4D:34

5 Which of the following could not be an Ethernet unicast destination address?

- A) B7:7B:6C:DE:10:00
- B) 7B:AA:C1:23:45:32
- C) 7C:56:21:1A:DE:F4
- D) 83:32:21:21:4D:34

6 The _____ layer of Ethernet consists of the LLC sublayer and the MAC sublayer.

- A) data link
- B) physical
- C) network
- D) None of the choices are correct

7 The _____ sublayer is responsible for the operation of the CSMA/CD access method and framing.

- A) LLC
- B) MII
- C) MAC
- D) None of the choices are correct

8 Each station on an Ethernet network has a unique _____ address imprinted on its network interface card (NIC).

- A) 16-bit
- B) 32-bit
- C) 64-bit
- D) None of the choices are correct

9 The minimum frame length for Ethernet is _____ bytes.

- A) 32
- B) 80
- C) 128
- D) None of the choices are correct

10 Fast Ethernet has a data rate of _____ Mbps.

- A) 10
- B) 100
- C) 1000
- D) 10,000

11 In _____, autonegotiation allows two devices to negotiate the mode or data rate of operation.

- A) Standard
- B) Fast Ethernet
- C) Gigabit Ethernet
- D) Ten-Gigabit Ethernet

12 Gigabit Ethernet has a data rate of _____ Mbps.

A) 10

B) 100

C) 1000

D) 10,000

13 In Ethernet addressing, if the least significant bit of the first byte is 0, the address is _____.

A) unicast

B) multicast

C) broadcast

D) None of the choices are correct

14 In Ethernet addressing, if the least significant bit of the first byte is 1, the address is _____.

A) unicast

B) multicast

C) broadcast

D) None of the choices are correct

15 In Ethernet addressing, if all the bits are 1s, the address is _____.

A) unicast

B) multicast

C) broadcast

D) None of the choices are correct

16 In the Ethernet, the _____ field is actually added at the physical layer and is not (formally) part of the frame.

A) CRC

B) preamble

C) address

D) SFD

17 In the Ethernet frame, the _____ field contains error detection information.

- A) CRC
- B) preamble
- C) address
- D) SFD