

# Quiz on Feb 7

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4. Hub provides what topology?

Marks: 1

Type: SINGLE\_CORRECT\_ANSWER

**Options:**

- 0) Star
- 1) Ring
- 2) Bus
- 3) Mesh

**Answer:** [ 0 ]

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4. Unicast means

Marks: 1

Type: SINGLE\_CORRECT\_ANSWER

**Options:**

- 0) packet intended for a specific node
- 1) packet intended for all nodes
- 2) packet intended for a subset of nodes
- 3) packet intended for no node

**Answer:** [ 0 ]

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5.  
In a random access protocol involving  $N$  users using a channel with rate  $R$ , if only one user is active, what max throughput can he achieve?

Marks: 1

Type: SINGLE\_CORRECT\_ANSWER

**Options:**

- 0)  $R$
- 1)  $R/N$
- 2)  $N/R$
- 3)  $N \cdot R$

**Answer:** [ 0 ]

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6. In the speed dating analogy, CDMA translates to?

Marks: 1

Type: SINGLE\_CORRECT\_ANSWER

**Options:**

- 0) Allocate couples different time slots
- 1) Allocate couples different spaces
- 2) Ask couples to talk in different languages
- 3) Ask couples to raise their hands

**Answer:** [ 2 ]

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7.  
Which of the following are true of channel partitioning protocols? Select all that apply/

Marks: 1

Type: MULTIPLE\_CHOICE

**Options:**

- 0) In TDM, sender can get R rate (= channel rate) when there are N users
- 1) An advantage of FDM is there is no sender-receiver channel coordination
- 2) In CDMA, sender can get R rate (= channel rate) when there are N users
- 3) There is no channel access delay in FDM

**Answer:** [ [ 3 ] ]

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8. Which of the following is true of taking turns protocols? Select all that apply.

Marks: 1

Type: MULTIPLE\_CHOICE

**Options:**

- 0) In polling protocols, a single user will get rate equal to R (=channel rate)
- 1) Token passing protocols do not suffer from single point of failure
- 2) Polling protocols suffer from single point of failure
- 3) Taking turn protocols perform better than random access protocols at high loads

**Answer:** [ [ 3, 2 ] ]

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9. What is the efficiency of slotted Aloha in percentage? Format X (e.g. 30)

Marks: 1

Type: FLOAT\_TYPE

**Answer:** [ { "max\_val": "37", "min\_val": "36" } ]

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10. Which of the following is true of Aloha based protocols? Select all that apply

Marks: 1

Type: MULTIPLE\_CHOICE

**Options:**

- 0) There is channel access delay in slotted aloha
- 1) On collision, sender immediately transmits
- 2) As the traffic load increases, the throughput rises and falls
- 3) The vulnerable period in slotted aloha is twice pure aloha

**Answer:** [ [ 0, 2 ] ]

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12. Which among the following is True about a HUB? Select all that apply

Marks: 1

Type: MULTIPLE\_CHOICE

**Options:**

- 0) Hub is a physical layer device
- 1) Hub buffers frames
- 2) Hub implements a MAC protocol
- 3) Cannot connect 10BaseT with 100BaseT via hub

**Answer:** [ [ 0, 3 ] ]

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

Marks: 1

Type: MULTIPLE\_CHOICE

**Options:**

- 0) Ethernet is connection -oriented protocol
- 1) Employs manchester encoding
- 2) Half duplex mode requires a MAC
- 3) Ethernet employs 2D parity for Error detection

**Answer:** [ [ 1, 2 ] ]

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