

CS4331/5331: Wireless Networks and Mobile Computing
Fall 2021

Quiz #5 Solution

- Full name only: _____
- Release date: Oct 22nd, 2021 (Friday)
- Closed book/note; No electric device; No discussion/chatting; This should be done individually.
- Total 10 points;

1. What does MANET stands for?

[1 pt]

- Mobile ad hoc network

2. The access point buffers all frames destined for stations operating in power-save mode. With every beacon sent by the access point, a [] is transmitted that contains a list of stations for which unicast data frames are buffered in the access point.

[1 pt]

- Traffic indication map (TIM)

3. (i) *Agent advertisement* messages can be sent as a beacon broadcast into the subnet. For these advertisements, [] messages according to RFC1256 are used with some mobility extension. (ii) [True/False] For *registration reply*, TCP packets are used for authentication and reliability.

[1 pt]

- Internet control message (or Internet control message protocol (ICMP); False

4. [True/False] In TCP congestion control, the TCP sender tries not to overwhelm the TCP receiver's buffer space.

[1 pt]

- False

5. [True/False] In indirect TCP, the mobile node replies an acknowledgment to the corresponding host.

[1 pt]

- False

6. What does DSR stand for?

[1 pt]

- Dynamic source routing

7. In DSR, there are four major packets to consider, *Data*, *RREQ*, [], and [].

[1 pt]

- RREP (or route reply packet), RERR (or route error packet)

8. [] reduces the number of client requests sent to an origin server and satisfies client requests without involving the origin server.

[1 pt]

- Web cache (or Web caching) or Proxy server

9. [True/False] In wireless networks, the link quality between two communication parties can be different depending on the direction of transmission.

[1 pt]

- True

10. [] is a routable address for telephone call segment between home MSC and visited MSC, visible to neither the mobile nor the correspondent.

[1 pt]

- Mobile Station Roaming Number (MSRN), or "roaming number"