

# Other Protocol Questions

ECEn 526

Wireless Networking

April 6, 2022

Question	Points	Score
1	1	
2	3	
3	2	
4	3	
5	1	
6	2	
7	1	
8	2	
9	1	
10	1	
11	3	
12	1	
13	2	
14	2	
<b>Total:</b>	25	

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- 2

3. (2 points) Why does BLE have particular channels for broadcast/advertisement traffic? Why does WiFi not need this feature?
4. (3 points) Give two significant differences between BLE and WiFi. Why do you think BLE differs from WiFi in those ways?

5. (1 point) Why does BLE organize its data into services and characteristics?

6. (2 points) What is M2M? Why is it essential for the future of IoT?

7. (1 point) How is Zigbee different from 802.15.4?
8. (2 points) List two techniques Zigbee uses to provide better range than WiFi.
9. (1 point) Why does 802.15.4 provide both a *contention access period* and a *contention free period* when using the beacon method of communication?

10. (1 point) How is LoRa different from LoRaWAN?

11. (3 points) Describe Class A, B, and C of LoRa devices.

12. (1 point) Why is using ACKs in a LoRa network not always a good idea?
13. (2 points) List two techniques LoRa uses to provide better range than WiFi.
14. (2 points) How does LoRaWAN deal with the same packet being received by multiple gateways? How does WiFi deal with this problem?