

ELT-53306 "Wireless networking" exam questions (date 18.05.2015)

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No calculators allowed

Please, answer in order of questions!

1. What is the application of large-scale propagation models?
2. How many bits are represented by a single symbol in 256-QAM?
3. What kind of spectrum spreading techniques do you know?
4. Is ARQ a proactive or reactive error control technique?
5. Which is better in terms of throughput ALOHA or slotted ALOHA and why?
6. Why does IEEE standardize only two lower layers for WLANs?
7. How does BEB works in IEEE 802.11 WLANs?
8. Why do we need RTS-CTS in WLANs?
9. What is the network allocation vector?
10. What is the difference between ESS and infrastructure BSS in IEEE 802.11 WLANs?
11. What is the difference between Bluetooth and BLE?
12. What is the maximum number of active nodes in a Bluetooth piconet?
13. What is the operational frequency for NFC?
14. What is the main application of ZigBee?
15. What kind of routing is used in 6LoWPAN?
16. What is the role of 3GPP?
17. Briefly describe D2D paradigm?
18. What is the role of actuator in sensor networks?
19. Which modern networking technologies have the roots in ad hoc networks?
20. Briefly explain the concept of VANETs.