

1. What are the main goals of a successful data communications?
2. Explain the difference between analogue and digital data.
3. Explain why radio communications is a half-duplex system.
4. How long would it take to transfer 200 MB data at 80 Mbs?
5. Describe the role of a communications modem.
6. Describe the role of the error control part of message header.
7. Describe a method of recovery of bad data received.
8. Suggest why ring topology prevents collisions.
9. A switch can selectively target destinations. Explain.
10. What is meant by broadband transmission?
11. How do microcontrollers process analogue signals?
12. Where is a microcontroller's program code stored?
13. Explain why microcontroller timers may be needed.
14. Identify one use of PWM timer.
15. What is sampling period of 20 KHz sampling frequency?
16. Explain what a vectored interrupt is.
17. What is the primary function of watchdog timer?
18. Describe two characteristics of a real-time OS.
19. What is pre-emptive priority task scheduling?
20. How does a microcontroller wake up from sleep?