Couse: Embedded System Course Code: EMS198011

Semester: 5 CSE

List of Questions

1. Discuss various microcontroller used in embedded System. 3/4
2. Describe abstraction of steps in the Design process. 6
3. Which parameters should be considered selecting processor in embedded systems? 4
4. Explain the process of converting an assembly language program into the machine codes and finally obtaining ROM image with suitable diagram. 6/8
5. Discuss various software tools used in embedded system. 4/6
6. What are the different memories used in Embedded Systems. 3/4
7. Differentiate and discuss the components used in a PC and in an embedded systems. 4
8. Describe different hardware components in an embedded system. 4/6
9. Explain ACVM with appropriate diagram. 6
10. What could be challenges in Embedded System design? Explain. 6/8
11. Explain design process in embedded system. 6
12. Explain design metrics used in embedded system. 6
13. Explain the SPI with diagram. State use of pull up resister.
14. Explain SCI and SI with neat diagram. 4
15. Explain the properties of CAN bus. (10) 6
16. How arbitration take place in I2C bus. Explain with frame forma t. 4
17. Discuss the types of errors occurred in CAN. 6/4
18. Explain the frame format of CAN with diagram. 3/4
19. Explain the frame format of IIC with neat diagram. 4/6
20. Explain characteristic to be taken care into consideration when interfacing a device port. 6
21. Explain USB system overview with suitable diagram and specify specification. 4
22. Enlist applications of timer device. 3
23. Describe watchdog timer. 3/4
24. Enlist the components in Computer system.
25. Enlist timer control bits of timer. 3/4
26. Explain context switching. 3/4
27. Explain term interrupt latency. 3/4
28. List and define any 4/6 function(Services) of RTOS 4-6
29. Explain mutual exclusion with the help of example 4/6
30. Define term Starvation 3/4
31. Explain deadlock with example 4/6
32. All the best

4/6

**It’s not about how bad you want it. It’s about how hard you’re willing to work for it.**