

MODULE 4

Microprocessors versus Microcontrollers, ARM Embedded Systems :The RISC design philosophy, The ARM Design Philosophy, Embedded System Hardware, Embedded System Software, ARM Processor Fundamentals : Registers , Current Program Status Register

1. Differentiate between Microprocessors and Microcontrollers (5M)
2. Summarize the ARM Embedded System (5M)
3. Illustrate the RISC design Philosophy (5M)
4. Brief the ARM design Philosophy (5M)
5. Explain the features of ARM processor (5M)
6. Explain with neat diagram the ARM register set (5M)
7. Brief the CSPR with a neat diagram (5M)
8. Explain the programming model of ARM Processor with complete (4M)
9. With a diagram explain the various blocks in a 3 stage pipeline of ARM processor organization (4M)
10. Explain the various blocks in a 3 stage pipeline of ARM processor (4M)
11. Explain registers used in under various modes (4M)
12. Explain the structure of ARM cross development tool kit (6M)
13. Explain the Banked Register (4M)
14. Explain the functional block of a Microcontroller with a neat diagram (2M)
15. Explain the Block diagram of a Microcontroller (2M)

16.Explain the Instruction Set for Embedded system (5M)

17.With A neat diagram, explain the Embedded System Hardware and the
ARM bus technology (7M)

18.Write short notes on Embedded Software system with a neat diagram
(2M)