

MODULE 01
8051 MICROCONTROLLER
QUESTION BANK

1. With neat block diagram explain the architecture of 8051.
2. List out the salient features of 8051 Microcontroller.
3. Define Embedded System. Explain how embedded system is different from processors.
4. Sketch the pin configuration of port 0 and explain the various operations performed by the pins of port 0.
5. Sketch the pin configuration of port 1 and explain the various operations performed by the pins of port 1.
6. Draw and explain the memory organization of 8051 Microcontroller.
7. Explain the significance of program status word (PSW). Briefly discuss the PSW register of 8051 Microcontroller.
8. Interface 8K RAM to 8051 Microcontroller.
9. Interface 8K EPROM and 4K RAM to 8051.
10. Interface 16K EPROM and 8K RAM to 8051 Microcontroller.
11. Interface 4K ROM and 4K RAM to 8051.
12. Explain the PIN configuration of 8051.

OBJECTIVE TYPE QUESTIONS

1. The internal RAM memory of 8051 is
 - a. 32 bytes
 - b. 64 bytes
 - c. 128 bytes
 - d. 256 bytes
2. The 8051 has ----- 16 bit timers/counters.
 - a. 1
 - b. 2
 - c. 3
 - d. 4
3. The address space of 8051 is divided into four distinct areas: internal data, external data, internal code external code.
 - a. TRUE
 - b. FALSE
4. 8051 pin diagram has
 - a. 39 pins
 - b. 20 pins
 - c. 10 pins
 - d. 40 pins
5. 8051 has _____ bit Address bus
 - a. 10
 - b. 20
 - c. 16
 - d. 32
6. 8051 has _____ bit Data bus
 - a. 8
 - b. 20
 - c. 16
 - d. 32
7. ALE stands for
 - a. Address Enable Latch
 - b. Latch Enable Address
 - c. Address Latch Enable
 - d. Enable Latch Address
8. The internal ROM memory of 8051 is
 - a. 4K bytes
 - b. 64K bytes
 - c. 128K bytes
 - d. 256K bytes
9. How many Ports 8051 is having
 - a. 1
 - b. 2
 - c. 3
 - d. 4

10. PSW stands for
- Program Standing verb
 - Printing status word
 - Ping stats word
 - Program Status Word
11. PSW is _____ bit register
- 8
 - 16
 - 4
 - 32
12. Program Counter is
- Used to hold the address of next instruction to be fetched
 - Used to print the next data
 - Used to store the RAM address
 - None of the above
13. 8051 Microcontroller is
- Application Specific
 - General Purpose
 - All of these
 - None of the above
14. PSEN in 8051 is
- Program Specific Enable
 - Printing Screen Enable
 - Program Store Enable
 - None of the above
15. Accumulator register is
- Bit Addressable
 - Byte Addressable
 - All the above
 - None of the above
16. Program Counter is _____ bit register
- 8
 - 16
 - 4
 - 32
17. Data Pointer is _____ bit register
- 8
 - 16
 - 4
 - 32

18. DPTR stands for

- a. Data Pointer
- b. Dynamic Pointer
- c. Deletion Pointer
- d. Direct Pointer

19. Criteria for Choosing Microcontroller

- a. Speed
- b. Power Consumption
- c. Cost Per Unit
- d. All the above

20. DIP stands for

- a. Dual in Line Package
- b. Data in Line Package
- c. Degree Improvement Program
- d. None of the above

