

Unit 7 - Week 5

Course outline

How does an NPTEL online course work?

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Week 5

● Lecture 22: 8085 Microprocessors (Contd.)

○ Lecture 23: 8051 Microcontroller

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● Lecture 25: 8051Microcontroller (Contd.)

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Assignment 5

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2020-03-04, 23:59 IST.

- 1) A microcontroller at-least should consist of:
- RAM, ROM, I/O devices, serial and parallel ports and timers
 - CPU, RAM, I/O devices, serial and parallel ports and timers
 - CPU, RAM, ROM, I/O devices, serial and parallel ports and timers
 - CPU, ROM, I/O devices and timers
- a.
 b.
 c.
 d.
- No, the answer is incorrect.
Score: 0
Accepted Answers: c.
- 2) What is the size internal ROM memory of 8051 Microcontroller?
- 128 bits
 - 128 bytes
 - 4K bits
 - 4K bytes
- a.
 b.
 c.
 d.
- No, the answer is incorrect.
Score: 0
Accepted Answers: d.
- 3) Number of pins present in 8051 Microcontroller?
- 20
 - 30
 - 40
 - 80
- a.
 b.
 c.
 d.
- No, the answer is incorrect.
Score: 0
Accepted Answers: c.
- 4) Which of the following is true in the context of 8051 microcontroller?
- I/O port 0 is used as 8 bit R/W general purpose input output operations
 - I/O port 1 is used as an address bus for external memory design
 - I/O port 2 is used for internal timers and external interrupts
 - None of the above
- a.
 b.
 c.
 d.
- No, the answer is incorrect.
Score: 0
Accepted Answers: a.
- 5) What is the time taken by one machine cycle if crystal frequency is 20MHz?
- 1.085 micro seconds
 - 0.60 micro seconds
 - 0.75 micro seconds
 - 1 micro seconds
- a.
 b.
 c.
 d.
- No, the answer is incorrect.
Score: 0
Accepted Answers: b.
- 6) The contents of SP register after RESET?
- 06H
 - 00H
 - 0AH
 - 07H
- a.
 b.
 c.
 d.
- No, the answer is incorrect.
Score: 0
Accepted Answers: d.
- 7) Which pin of port 3 is has an alternative function as write control signal for external data memory?
- P3.0
 - P3.3
 - P3.6
 - P3.7
- a.
 b.
 c.
 d.
- No, the answer is incorrect.
Score: 0
Accepted Answers: c.
- 8) The SP is of ___ wide register. And this may be defined anywhere in the ____.
- 8 byte, on-chip 128 byte RAM.
 - 8 bit, on chip 256 byte RAM.
 - 16 bit, on-chip 128 byte ROM.
 - 8 bit, on chip 128 byte RAM.
- a.
 b.
 c.
 d.
- No, the answer is incorrect.
Score: 0
Accepted Answers: d.
- 9) Match the following:
- | | |
|---------|---------------------------------------|
| 1) TCON | i) contains status information |
| 2) SBUF | ii) timer / counter control register. |
| 3) TMOD | iii) idle bit, power down bit |
| 4) PSW | iv) serial data buffer for Tx and Rx. |
| 5) PCON | v) timer/ counter modes of operation. |
- 1->ii, 2->iv, 3->v, 4->i, 5->iii.
 - 1->i, 2->v, 3->iv, 4->iii, 5->ii.
 - 1->v, 2->iii, 3->ii, 4->iv, 5->i.
 - 1->iii, 2->ii, 3->i, 4->v, 5->iv.
- a.
 b.
 c.
 d.
- No, the answer is incorrect.
Score: 0
Accepted Answers: a.
- 10) How many 16 bit registers present in 8051 microcontroller?
- 1
 - 2
 - 3
 - 4
- a.
 b.
 c.
 d.
- No, the answer is incorrect.
Score: 0
Accepted Answers: b.
- 11) Which of the following is true, if the contents of PSW is 16H?
- Program uses registers from bank3
 - Carry flag set to 1
 - program uses registers from bank2
 - Program uses registers from bank0
- a.
 b.
 c.
 d.
- No, the answer is incorrect.
Score: 0
Accepted Answers: c.
- 12) An alternate function of port pin P3.0 in the 8051 is:
- Timer 0 external input
 - Serial input port
 - External data memory write strobe
 - External data memory read strobe
- a.
 b.
 c.
 d.
- No, the answer is incorrect.
Score: 0
Accepted Answers: b.
- 13) How many 16 bit timers/counters present in 8051 microcontroller?
- 8
 - 4
 - 2
 - 1
- a.
 b.
 c.
 d.
- No, the answer is incorrect.
Score: 0
Accepted Answers: c.
- 14) Which of the following Flag is not present in PSW?
- Carry Flag (CY)
 - Parity Flag (P)
 - Overflow Flag (OV)
 - GF0
- a.
 b.
 c.
 d.
- No, the answer is incorrect.
Score: 0
Accepted Answers: d.
- 15) When PUSH instruction is executed.
- The SP is incremented by one
 - The SP is incremented by two
 - The SP is decremented by one
 - The SP is decremented by two
- a.
 b.
 c.
 d.
- No, the answer is incorrect.
Score: 0
Accepted Answers: a.