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Question Paper Code: 44423

B.E. / B.Tech. DEGREE EXAMINATION, DEC 2020

Fourth Semester

Computer Science and Engineering

14UEC423 - MICROPROCESSORS AND MICROCONTROLLERS

(Common to Information Technology)

(Regulation 2014)

Duration: 1.15 hrs

Maximum: 30 Marks

PART A - (6 x 1 = 6 Marks)

(Answer any six of the following questions)

- When a *CALL* instruction is executed, the stack pointer register is
 - Decrement by two
 - Incremented by two
 - Decrement by one
 - Incremented by one
- Vector address of interrupt RST 7.5 is
 - 0.002CH
 - 0.002CH
 - 0.003CH
 - None of these
- In 8086 each segment register contains _____Kbytes of memory.
 - 8
 - 16
 - 32
 - 64
- Which of the following instruction is a logical instruction?
 - DIV AB
 - TEST
 - CALL
 - AAM
- The 8087 coprocessor operate in _____with an 8086 processor and with the same instruction_____
 - series, byte
 - parallel, byte
 - series, bits
 - parallel, bits

6. The synchronization between processor and coprocessor can be done by _____ connection and the _____ instruction.
- (a) RQ/GT₀ and RQ/GT₁, FWAIT (b) INT and NMI, WAIT
(c) BUSY and TEST, FWAIT (d) S₀ and QS₀, WAIT
7. In 8279, the keyboard entries are debounced and stored in an _____ that is further accessed by the CPU to read the key codes.
- (a) 8 -bit FIFO (b) 8 - byte FIFO
(c) 16 byte FIFO (d) 16 bit FIFO
8. The 8279 is a
- (a) DMA controller (b) programmable keyboard display interface
(c) counter (d) interrupt controller
9. The 8051 has _____ 16-bit Timer/Counter registers.
- (a) 5 (b) 4 (c) 3 (d) 2
10. What will be the output after execution of the following instruction?
MOV A, #55
ANL A, #67
- (a) 54 (b) 45 (c) 55 (d) 67

PART – B (3 x 8= 24 Marks)

(Answer any three of the following questions)

11. Describe the Architecture of 8085 with neat explanation. (8)
12. Explain the addressing modes of 8086 with examples. (8)
13. List the various types of coprocessor configurations? Explain them in detail. (8)
14. Show the function of keyboard and display controller with a neat sketch. (8)
15. Draw the architecture of 8051 microcontroller and explain each block. (8)