

Reg. No. :

--	--	--	--	--	--	--	--	--	--

Question Paper Code: 54423

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

Fourth Semester

Computer Science and Engineering

(Common to Information Technology)

01UEC423 - MICROPROCESSORS AND MICROCONTROLLERS

(Regulation 2013)

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
 - Increment by two
 - Decrement by one
 - Increment 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. Explain the architecture of microprocessors 8085. (8)
12. Explain briefly about the internal hardware architecture of 8086 microprocessor with a neat diagram. (8)
13. Explain in detail about closely coupled configurations and compare with loosely coupled configurations. (8)
14. Explain the block diagram of the 8279 keyboard/display interface and its operations. (8)
15. Explain the functional pin diagram of 8051 microcontroller. (8)