A

Reg. No. :

B.E. / B.Tech. DEGREE EXAMINATION, DEC 2021

Fifth Semester

Electrical and Electronics Engineering

19UEE503 - POWER SYSTEM ANALYSIS

(Regulation 2019)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

1. Stack pointer operates in the _____ fashion.   CO1- R

    (a) FILO   (b) FIFO   (c)LIFO   (d) LILO
2. What is the formula to calculate the (kV)B on the LT section?   CO1- R

    (a) INTR   (b)TRAP.   (c)RST6.5.   (d)RST6.6.

3. LXI H,d16 specifies _____ addressing mode   CO2- R
    (a) Register   (b)Immediate   (c)Indirect   (d) Implicit
4. What is the required baud rate for an efficient operation of serial port   CO2- R
    devices in 8051 microcontroller?
    (a) 1200   (b)2400   (c)4800   (d) 9600

5. The 8051 has _____ parallel I/O ports.   CO3- R
    (a) 2   (b)3   (c) 4   (d) 5
6. On power up, the 8051 uses which RAM locations for register R0- R7   CO3- R
    (a) 00-2F   (b)00-07   (c)00-7F   (d) 00-0F
7. Which of the following is the most commonly used buffer in the serial   CO4- R
    porting?
    (a) LIFO   (b)FIFO   (c)FILO   (d) LILO
8. How much time period is necessary for the slave to receive the interrupt and   CO4- R
    transfer the data?
    (a) 4 clock time period   (b) 8 clock time period

    (c) 16 clock time period   (d) 24 clock time period

9. What is the capability of ARM7 f instruction for second?   CO5- R

    (a) 110 MIPS   (b) 150 MIPS   (c) 125 MIPS   (d) 130 MIPS

10. What is the processor used by ARM7?   CO5- R
    (a) 8-bit CISC   (b) 8-bit RISC   (c) 32-bit CISC   (d) 32-bit RISC

11. What is flag register in 8085 microprocessor?   CO1-R

12. Define microcontroller and write any two real time applications of   CO2-U
    microcontroller.

13. List the Interrupts in 8051 Microcontroller   CO3-R

14. What is interrupt service Mechanism?   CO4-U

15. What is RISC?   CO5-U

PART – C (5 x 16= 80Marks)

16. (a) Explain the timing diagram for opcode fetch and IO write machine   CO1-App   (16)
        cycles with neat diagram

                                    Or

    (b) Illustrate the pin outs of 8085with neat sketch.   CO1- U   (16)

17. (a) Illustrate the architecture of Microcontroller 8051 with functional CO2- U (16)
        block diagram

                                    Or

    (b) Explain different Addressing Modes of 8051 Microcontroller with   CO2- U   (16)
        examples.

18. (a) Explain the Timer / Counter functional unit of Microcontroller 8051 CO3- U (16)
        with relevant diagrams

                                    Or

    (b) Discuss the internal memory organization of 8051 microcontroller   CO3- U   (16)

19. (a) Briefly Explain about I/O Ports, Buses and Interrupt handlers that are CO4- U (16)
        embedded in a system

                                    Or

    (b) Discuss in detail about design issues in Embedded System   CO4- U   (16)

20. (a) Discuss in detail about the memory organization of PIC micro   CO5- U   (16)
        controller.

                                    Or

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(b) Explain various operating models of ARM, what is coprocessor? and   CO5- U   (16)
how it works. Explain the working of MPU and MMU related
memory

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