A **Reg. No. :** | | | | | | | | | | |

Question Paper Code: 95303

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2024

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- U

   (a) FILO (b) FIFO (c)LIFO (d) LILO

2. What is the formula to calculate the (kV)B on the LT section? CO1- U

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

3. LXI H,d16 specifies _____ addressing mode CO2- U

   (a) Register (b)Immediate (c)Indirect (d) Implicit

4. What is the required baud rate for an efficient operation of serial port devices in 8051 microcontroller? CO2- U

   (a) 1200 (b)2400 (c)4800 (d) 9600

5. The 8051 has _____ parallel I/O ports. CO3- U

   (a) 2 (b)3 (c) 4 (d) 5

6. On power up, the 8051 uses which RAM locations for register R0- R7 CO3- U

   (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 porting? CO4- U

   (a) LIFO (b)FIFO (c)FILO (d) LILO

8. How much time period is necessary for the slave to receive the interrupt and transfer the data? CO4- U

   (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- U

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

10. What is the processor used by ARM7? CO5- U

(a) 8-bit CISC (b) 8-bit RISC (c) 32-bit CISC (d) 32-bit RISC

PART – B (5 x 2= 10 Marks)

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

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

13. List the Interrupts in 8051 Microcontroller CO3-U

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 cycles with neat diagram CO1- U (16)

Or

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

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

Or

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

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

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 embedded in a system CO4- U (16)

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 controller. CO5- U (16)

Or

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