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Question Paper Code: 95B01

B.E./B.Tech. DEGREE EXAMINATION, NOV 2022

Fifth Semester

Biomedical Engineering

19UBM501- Microprocessor and Microcontroller

(Regulations 2019)

Duration: Three hours

Maximum: 100 Marks

Answer All Questions

PART A - (10x 2 = 20 Marks)

1. List few applications of microprocessor-based system. CO1- U
2. What are the functions of an accumulator? CO1- U
3. Examine the significance of EA line in 8051 microcontroller CO3- Ana
4. Describe about the baud rate in 8051 CO1- U
5. Define DPTR CO1- U
6. Which Register is used for serial port programming in 8051? Illustrate it. CO1- U
7. List the units present in the PIC memory Module. CO1- U
8. What are the groups of instruction set in PIC micro controller? CO1- U
9. Describe about the VIC CO1- U
10. Write the Applications of ARM processor. CO1- U

PART – B (5 x 16= 80Marks)

11. (a) Draw the block diagram of 8085 microprocessor and explain its architecture? CO1- U (16)
- Or
- (b) Define addressing mode? And Explain the addressing modes of 8086 Microprocessor? CO1- U (16)

12. (a) Draw the pin diagram of 8051 Microcontroller and explain the I/O port circuits in detail CO1- U (16)
- Or
- (b) Elaborate in detail about internal architecture of 8051 microprocessor and explain it detail? CO1- U (16)
13. (a) Explain in detail about an interface of 16x2 LCD display using a 8051 microcontroller CO1- U (16)
- Or
- (b) Explain in detail about External memory interface in 8051 microcontroller CO1- U (16)
14. (a) Briefly describe about the internal architecture of PIC16F877 microcontroller CO1- U (16)
- Or
- (b) With a Proper example explain about the addressing modes of PICF877 Microcontroller. CO1- U (16)
15. (a) Draw and explain the architecture of ARM Processor CO1- U (16)
- Or
- (b) Explain in detail about an interface of LCD display using ARM processor CO1- U (16)