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Question Paper Code: 35405

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

Fifth Semester

Electronics and Communication Engineering

01UEC505 – MICROPROCESSORS, MICROCONTROLLERS AND APPLICATIONS

(Regulation 2013)

Duration: 1:45 hour

Maximum: 50 Marks

PART A - (10 x 2 = 20 Marks)

(Answer any ten of the following questions)

1. List the 16-bit registers of 8085 microprocessor.
2. Mention the advantages of using the Direct memory access.
3. What is an assembler directive? Give two examples.
4. What are the different types of interrupts supported in 8086?
5. Give the various modes and applications of 8254 timer.
6. List the operation modes of 8255.
7. What is need for bitwise instructions in microcontroller and how many ports are bit addressable in 8051 μ C?
8. What is the significance of EA pin.
9. Draw the interface of DAC with microcontroller.
10. Give the applications of stepper motor.
11. Distinguish between the shift and rotate instructions of 8085.
12. Mention the advantages of using the Direct memory access.

13. List out the flags present in 8086 microprocessor.
14. What are the different types of interrupts supported in 8086?
15. Why interfacing is needed for I/O devices.

PART – B (3 x 10= 30 Marks)

(Answer any three of the following questions)

16. Explain in detail the addressing modes of 8085 with suitable examples. (10)
17. Enumerate about the architecture of 8086 microprocessor with a block diagram and also explain its functions in detail. (10)
18. Explain with necessary diagrams the operation of 8255 programmable peripheral interface. (10)
19. Describe in detail about 8051 microcontroller memory. (10)
20. With a neat diagram explain the interface of stepper motor with 8051 microcontroller. Also write an ALP to run the motor in both anticlockwise and clockwise direction. (10)