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Question Paper Code: 35502

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2018

Fifth Semester

Electronics and Instrumentation Engineering

01UEI502 – MICROPROCESSOR AND INTERFACING

(Regulation 2013)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions.

PART A - (10 x 2 = 20 Marks)

1. State the role of RESETIN and RESETOUT signals in 8085.

2. List five interrupts available in 8085 microprocessor.

3. Write the functions of an assembler.

4. Define : Stack and Subroutine.

5. List the main features of 8259*A* interrupt controller.

6. Mention the applications of *A/D* converters.

7. What is BHE.

8. Define pipelining?

9. Point out the salient features interrupt structure of an 8086 microprocessor.

10. Mention any four flag manipulation instructions.

PART - B (5 x 16 = 80 Marks)

11. (a) (i) Explain the operation of the following 8085 signals: Ready, S1 and S0, HOLD and HLDA and ALE. (8)

    (ii) Draw the structure of the flag register and explain each flag with an example. (8)

Or

    (b) Discuss the execution of OUT instruction in 8085 processor and also draw the timing diagram. (16)

12. (a) (i) Write an 8085 assembly language program to find average of an array. (10)

    (ii) Explain in detail the steps involved in execution of CALL instruction. (6)

Or

    (b) Point out the instructions required for using stack in 8085 processor. Also explain its functions. (16)

13. (a) (i) Describe the block diagram of 8259 interrupt controller. (10)

    (ii) Explain the operations of different I/O modes in 8255. (6)

Or

    (b) With a neat block diagram, explain in detail the internal architecture of 8255 and its registers. (16)

14. (a) Illustrate in detail about the architecture of 8086 microprocessor. (16)

Or

    (b) Classify the various addressing modes of 8086 microprocessor. (16)

15. (a) (i) Explain the different logical instructions in the 8086 with suitable examples. (8)

    (ii) Explain the different data transfer instructions in the 8086 with suitable examples. (8)

Or

    (b) Draw the structure of 8086 flag register and explain the function of the flags with examples. (16)

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