Reg. No. : | | | | | | | | | | |

Question Paper Code: 31552

B.E. / B.Tech. DEGREE EXAMINATION, MAY 2017

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. Define microprocessors.
2. What is the function of the accumulator.
3. Give the functional categories of 8085 micro instructions set.
4. What is the function of IO/M signal in the 8085.
5. Write the control word format of 8255 in the BSR mode.
6. Mention the various modes of 8254 timer?
7. What is BHE.
8. Define pipelining?
9. What are Macros in 8086?
10. Mention any four flag manipulation instructions.

PART - B (5 x 16 = 80 Marks)

11. (a) Draw the functional block diagram of 8085 microprocessor and explain. (16)

Or

(b) Explain the pin diagram of 8085 with neat diagram. (16)

12. (a) Explain the direct addressing modes and indirect addressing modes of 8085 with example. (16)

Or

(b) With suitable examples explain 8085 instruction set in detail. (16)

13. (a) Explain the block diagram of the 8279 Keyboard/Display interface and its operations. (16)

Or

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

14. (a) Draw the pin diagram of 8086 CPU with its control signals. (16)

Or

(b) Explain the interrupt mechanism, types and priority of 8086 microprocessor. (16)

15. (a) Write a 8086 ALP to convert an 8 bit binary number into equivalent gray code. (16)

Or

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

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