

Total No. of printed pages = 3

Co-403/Microprocessor/4th Sem/2013/N

MICROPROCESSOR

Full Marks – 70

Pass Marks – 28

Time – Three hours

The figures in the margin indicate full marks for the questions..

Answer question No.1 and any *five* from the rest.

1. Define : 2×10=20
- (a) Microprocessor
 - (b) Instruction register
 - (c) General purpose registers
 - (d) HOLD and HLDA pins
 - (e) JNZ instruction
 - (f) Address space
 - (g) Accumulator
 - (h) Handshaking
 - (i) Timing diagram
 - (j) I/O mapped I/O

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2. Draw the pin diagram of 8086 and explain the function of each pin. 10
3. (a) Why addressing modes are necessary ? Explain. 3
- (b) Mention the components of an instruction cycle. 3
- (c) Differentiate between assemblers and compilers. 4
4. (a) What is an interrupt ? Explain enabling, disabling and masking of interrupts. 2+6=8
- (b) Write the full form of RISC and CISC. 2
5. (a) Write an assembly language program to evaluate the expression —
 $A * B + C/D - 2$ 4
- (b) Describe the functions of 8259. 6
6. (a) To connect more devices to the microprocessor, which chip is used ? Explain the chip with the help of a block diagram. 5
- (b) Explain the interfacing of a 7 segment LED display with the microprocessor with the help of a diagram. 5

7. Write notes on any two : 5×2=10

- (a) Instruction set of 8085
- (b) DMA controller
- (c) Programmable Interval Timer (8253)