

R09

Code No: 09A60204

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, HYDERABAD

B. Tech III Year II Semester Examinations, June - 2014

MICROPROCESSORS AND MICRO CONTROLLERS

(Common to EEE, ECE, EIE, ETM, ICE)

Time: 3 hours

Max. Marks: 75

**Answer any five questions
All questions carry equal marks**

- 1.a) Compare 8085 and 8086 microprocessors.
b) Draw the functional diagram of 8086 microprocessor and explain.
- 2.a) List out and explain instruction formats of 8086 microprocessor.
b) Write an 8086 program to average two temperatures.
- 3.a) Explain how 8255 PPI is interfaced with 8086 microprocessor.
b) Write ALP to interfacing stepper motor with Processor.
- 4.a) Explain about interrupt structure of 8086 microprocessor.
b) Write a short note on vector interrupt table.
- 5.a) With neat diagram explain how 8251 USART interfacing with IEEE 488.
b) Write short notes on serial communication standards.
- 6.a) Explain the architecture of 8051 micro controller with neat block diagram.
b) Write an ALP for 8051 to find the sum of a series of 8-bit numbers.
7. Explain the interfacing of 7-segment display with 8051 microcontroller.
- 8.a) Write a short notes on AVR family architecture.
b) Explain about the interrupt driven input output.
