

## ME6702-MECHATRONICS

### UNIT 4

#### PART-A

1. What is key debouncing?
2. Define PPI.
3. Write down the function of OPFin 8255.
4. Name the modes available in 8255.
5. What are the applications of D/ A converter interfacing with 8255?
6. What is keyboard interfacing?
7. State the purpose of NOP instructions.
8. Show the control word format of 8255 in BSR mode.
9. Name any two types of ADCS
10. What is the bit set Reset mode of 8255 PPI?
11. What is the need for interfacing?
12. Mention some performance parameters of DAC
13. Define conversion time.
14. Define Resolution.
15. What are the kinds of interface available in stepper motor?

#### PART – B

1. Explain the operating modes of 8255 PPI.
2. Explain the interface 8085 microprocessor with A/D and D/ A converters.
3. Explain the Mode 1 input mode operation of 8255 in detail.
4. Explain the seven segment LED interface with microprocessor.
5. Describe with a neat diagram the stepper motor control using Microprocessor 8085.
6. Describe with a neat diagram the traffic light control using Microprocessor 8085
7. Describe with a neat diagram the temperature control using Microprocessor 8085