Code No: 136FK

R16

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech III Year II Semester Examinations, November/December - 2020
INTRODUCTION TO MECHATRONICS
(Mechanical Engineering)

Time: 2 hours   Max. Marks: 75

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

1. Describe the working of a Automatic Camera by drawing labeled line diagram.   [15]

2. Explain two Hardware implementations of ADC and DAC.   [15]

3. Name Basic elements CNC machines. Write short notes on G and Mcodes of Manual Part Programming.   [15]

4. Write Short note on Bipolar Transistor.   [15]

5. Explain the working of 4 quadrant servo drives with line diagrams.   [15]

6. Draw and explain 8051 Microprocessor Architecture.   [15]

7. Elaborate what do you mean by Ladder diagram and Ladder logic.   [15]

8. Write down Laplace transformation for first order and second order differential equations. Explain various feedback devices.   [15]

---ooOoo---