



Unit Test-II

Program Name: Computer Engineering Group

Program Code: CM

Semester: Second

Course Title: Basic Electrical and Electronics

Course Code: 312302

(2 Marks)

UNIT 3 [CO 3]

1. List the types of fuses.
2. State the function of ELCB.
3. Write any four factors affecting earth resistances.
4. State any 2 methods of reducing earth resistance.

UNIT 5 [CO 5]

1. Draw the symbol of N channel and P channel JFET.
2. List specifications of BJT.
3. State advantages of MOSFET.
4. Sketch N channel MOSFET and describe the working.

UNIT 6 [CO 6]

1. Define Transducer and name any two active transducers.
2. Compare between Active and Passive transducer.
3. Define Analog transducer and give an example.
4. State selection criteria of transducer.

(4 Marks)

Unit 3 [CO 3]

1. Write any 4 IE rules relevant to Earthing.
2. Give the working of MCCB.
3. Explain pipe earthing with a neat labeled diagram.

UNIT 5 [CO 5]

1. With a neat sketch, explain the principle of operation of ELCB. Write any 2 applications of it.
2. Compare CB, CE, CC configurations of transistors.
3. Derive the relationship between α and β of transistors.
4. Draw the circuit diagram of a single stage RC coupled CE amplifier. State any 2 advantages of it.
5. Describe the working Principle of NPN Transistor with a neat labeled diagram.
6. Compare FET and BJT.
7. Draw and Explain drain characteristics of N -channel JFET.

Unit 6 [CO 6]

1. Define Proximity sensors and list 4 types of proximity sensors.
2. Draw and explain working principle LVDT.
3. Draw and explain working principle of RTD
4. With suitable diagrams explain how photodiodes and phototransistors can be used as control devices for the given application.
5. Classification of transducer with example.