Question Bank (G scheme)

Name of subject: Basic electronics **Unit Test :I**
Subject code: 17213 **Course :CM/IF**
Semester: II

CHAPTER 1 Introduction to Passive Circuit Elements [8 MARKS]

3 marks

1) What is electronics? Give any three applications of electronics.
2) Explain active and passive components. Give the classification of electronic components.
3) Draw the symbol of-
   a) LDR
   b) P-N junction diode
   c) Zener diode
4) What is capacitor? List the types of capacitor.

4 marks

1) Explain brief all the applications of electronics.
2) Draw and explain LDR with symbol, principle and applications.
3) Draw and explain thermistor. Also explain NTC and PTC thermistor.
4) Draw and explain VDR with symbol.
5) Give the comparison between LDR and thermistor.

Chapter 2 Semiconductor Diode [24 MARKS]

3 marks

1) Give the comparison of silicon and germanium diode.
2) Draw the symbol of-
   a) LED
   b) Varactor diode
   c) Schottkey diode
3) Explain –
   a) Static resistor
   b) Dynamic resistor
   c) Knee voltage
   d) Barrier voltage
4) Explain PN junction with diagram.
5) Explain maximum forward current and reverse saturation current.

4marks

1) Draw and explain PN junction diode with systematic diagram and symbol.
2) Draw and explain V-I characteristics of P-N junction diode.
3) Draw and explain zener diode with V-I characteristics.

4) Draw and explain LED with V-I characteristics.
5) Draw and explain varactor diode with V-I characteristics.
6) Draw and explain schottkey diode with V-I characteristics.
7) Draw and explain tunnel diode with V-I characteristics.

Chapter-3 Rectifiers, Filters and Regulators [16 MARKS]

3 Marks

1) What is power supply & Need of regulated power supply?
2) What is rectification? Types of Rectifier.

4 Marks

1) Draw and explain block diagram of power supply? Explain each block with waveforms.
2) Compare Half wave, Centre tapped and bridge rectifier.