

Chapter 1

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

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

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.

CHAPTER 4

3 MARKS;

1] Draw the symbol of;

a] PNP and NPN transistor

b] N channel and p channel JFET

c] Depletion and enhancement MOSFET

2] Write advantages of JFET over BJT

3] Define with diag.

A] DC load line

B] Q point

4] Define;

A] Drain resistance

B] Trans conductance

C] Amplification factor

4 MARKS

5] Draw and explain NPN and PNP transistor with principle of working

6] Draw and explain input and output characteristics of CE config.

Explain active region, saturation region and CUT OFF REGION

7] Explain current gain α , β and give relation between α , β

8] Derive and explain with ckt diag. of v_{tg} divider bias of BJT

9] Draw and explain n channel and p channel jfet with const. and working

10] Draw and explain e and d type MOSFET with symbol and working principle

11] Compare BJT and JFET and MOSFET

CHAPTER 5;

3 MARKS

12] What is need of multirange amplifier

13] Give any 3 applications of multirange amplifier

14] Define oscillator and need of oscilloscope

15] What is multi vibrator? Give type of multi vibrator?

4 marks;

16] Draw and explain single stage CE amplifier with function of various components

17] Draw and explain freq. response of single stage CE amplr. Also explain band width and gain.

18] Draw and explain RC coupled 2 stage CE amplr. with freq. response

19] Draw and explain transformer coupled 2 stage amplr. with freq. response

20] Draw and explain critical oscillators with operating principle and applications

21] Draw and explain transistors as a switch with operating and applications

22] Draw and explain Bistable multi vibrator with working principle and application

CHAPTER 6; 3 MARKS;

23] Give any 2 advantages and disadvantages of IC's

4 MARKS;

24] Compare analog and digital IC

CHAPTER 3; 4 MARKS;

25] Draw and explain CLC filter with principle of working and input and output waveforms