

Long Answer Questions

- ① Draw the circuit diagram of PN Junction diode in forward Bias and in Reverse Bias and explain it it?
- ② Draw the V-I characteristics of Zener diode and explain Zener diode ~~breakdown~~ breakdown regions in detail.
- ③ Define Tunneling phenomenon? Explain the characteristics of Tunnel. What are its applications
- ④ Discuss AC and DC ~~resistance~~ resistance of Junction diode.
- ⑤ Draw the circuit diagram of CE transistor. ~~And explain~~ And explain input and output characteristics
- ⑥ Draw the circuit diagram of CB transistor. And explain input and output characteristics
- ⑦ Explain two port representation of a transistor. Explain hybrid parameters in detail
- ⑧ Explain CE transistor Amplifier using hybrid Parameters (or) Simplified hybrid equivalent model

10 Explain the construction of UJT. And explain the working (operation) of UJT in detail.

11 Discuss the characteristics of UJT.

12 Explain the application of UJT as relaxation oscillator & sawtooth wave generator.

13 Explain the working of JFET

14 Discuss the characteristics of ~~JFET~~ JFET
(i) Drain (ii) Transfer

14 Explain MOSFET characteristics

15 Definition of FET Parameters and discuss small signal FET model

16 Discuss photodiode in detail

17 Explain LDR, and discuss LDR characteristics

18 Explain LED in detail. And discuss Applications

19 working of SCR

20 characteristics of SCR

21 SCR as power control device

22 Explain CE Transistor Amplifier circuit diagram & its characteristics

Short Answer Questions

- ① Explain application of Zener diode
- ② Write a short notes on Varactor diode
- ③ Explain diode equation
- ④ Explain working of NPN Transistor
- ⑤ Explain working of PNP Transistor
- ⑥ Thermal stability
- ⑦ AC loadline Analysis
- ⑧ DC loadline Analysis
- ⑨ Fixed Bias
- ⑩ Emitter Bias
- ⑪ UJT applications
- ⑫ MOSFET application
- ⑬ write Einstein's photo electric equation
- ⑭ what is Threshold frequency, & Effect of photo metal
- ⑮ Laws of photo electric effect

* Problems on photo electric effect

* Problem on transistor

* Problem of on junction diode