FY DIPLOMA VIMP QUESTIONS
BEC

2 Marks Questions

1. List any four specifications of resistors.

2. List the types of signals.

3. Write two applications of P-N junction diode

4. Draw constructional diagram of piezoelectric transducer. (Note: Any other suitable diagram shall be considered for awarding marks)

5.Draw symbol of photodiode.

6.Draw the symbols of resistor & capacitor. State the unit of measurement of resistance & capacitor. 7.Define α and β of transistor. **(V.V.imp)**

8.Give two points of distinction between active & passive transducers.

9.Draw the symbol of N-channel and P-channel MOSFET.

10. Give different types of IC's

11. Define analog transducer.

4 Marks Questions

1. Color code for resisters.

2. Draw and explain reverse biased V-I characteristic of a zener diode. **(V imp)**

3. Draw and describe working principle of LED. **(V imp)**

4. Explain the construction of N-P-N transistor with diagram.

5. Draw and describe working of resistive transducer. **(V imp)**

6. Draw the construction and explain the operation of N-channel JRET. **(V imp)**

7. Give 4 difference between analog and digital circuits. **(V imp)**

8. Sketch the block diagram of regulated power supply. Draw the waveforms at th output of each block. **(V imp)**

9. Draw the construction of MOSFET and explain working.

10. Explain:- 1) seeback effect, 2) peltier effect. **(V imp)**

11. Draw centre tap full wave rectifier and explain its operation. **(V imp)**

12. State difficult types of electrical signals and draw all types of waveforms. **(V imp)**

13. Define PIV, TUF, nipple factor, efficiency of rectifier.

14. Draw V-I characteristics of P-N junction diode and explain it. **(V imp)**

15. Compare CB, CE CC configurations of BJI. **(V imp)**

16. Describe strain guage with diagram **(V imp)**

17. Draw Circuit diagram of single- stage RC coupled CE amplifier and describe with help of input and output waveforms. **(V imp)**

18. Describe LVDT with diagram. **(V imp)**

19. Draw diagram of bridge rectifier. Draw input output waveforms and describe it's operation. **(V imp)**

20. Draw block diagram of regulated power supply. Explain function of each block and draw waveforms of each stage.

6 Marks questions

1. Distinguish between CB, CC, CE (four points) Explain why CE configuration is the most preferred combination. **(V imp)**

2. Draw diagrams showing depletion regions before and pinch-off for N-channel JFET. **(V imp)**

3. With the help of N- channel JFET, describe the effect of input voltage VGS on the output current ID. **(V imp)**

4. Compare :- 1)Active and passive transducer , 2) Analalog and digital Transducer. **(V imp)**

5. Explain working principle of phototransitor and photodiode with neat sketches. **(V imp)**

6. Draw drain characteristics and transducer and transfer characteristic of JFET. **(V imp)**