

- Q-5** **Attempt all questions** **(14)**
- a.** Write a short note on Zener Diode. **07**
 - b.** Give mathematical analysis of a Full Wave Rectifier. **07**
- Q-6** **Attempt all questions** **(14)**
- a.** Compare the properties of α , β and γ radiations. **07**
 - b.** Describe production of X-rays using a Coolidge Tube with necessary diagrams. **07**
- Q-7** **Attempt all questions** **(14)**
- a.** Explain the working of a P-N-P transistor. **07**
 - b.** Describe Common Base Transistor configuration with circuit diagram. **07**
Explain it's I/P & O/P characteristic curves.
- Q-8** **Attempt all questions** **(14)**
- a.** Discuss Full wave Center Tap rectifier in detail. **07**
 - b.** What are Miller Indices? Illustrate the steps to find out Miller indices of a
Crystal plane with necessary diagram. **07**

