

School of Engineering and Technology

Subject: BEEE Subject Code: 24BEELY104

UNIT 3

Sample Questions: 2 Marks

- ✓ Define an electrical machine?
- ✓ Mention any two applications of PN diode?
- ✓ Why a series resistor is necessary when a diode is forward biased?
- ✓ What is hole and electron in p-n junction diode?
- ✓ What are the two types of semiconductors?
- ✓ What is a diode?
- ✓ What are the main types (any two) of diodes?
- ✓ What are the three regions in which diodes function?
- ✓ What is a PN Junction? How is it formed?
- ✓ What are the types of extrinsic semiconductor?
- ✓ Define extrinsic semiconductor.
- ✓ Define intrinsic semiconductor.
- ✓ What is P-type semiconductor?
- ✓ What is N-type semiconductor?
- ✓ Define doping.
- ✓ Define biasing.
- ✓ What are the types of bias?
- ✓ What is meant by forward bias?
- ✓ What is meant by reverse bias?
- ✓ What is depletion region?

Sample Questions:

5 Marks

- ✓ Explain PN junction diode with necessary equations and diagrams?
- ✓ Draw the equivalent circuit of PN junction diode?



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- ✓ Compare the Silicon and Germanium diodes with respect to cut-in voltage and reverse saturation current.
- ✓ Draw the VJ characteristics of a PN junction diode.
- ✓ Mention differences between N type and P type semiconductors.

Sample Questions:

10Marks

✓ What is a PN junction diode? With a neat diagram explain the forward and reverse characteristics of PN junction diode?

Note: The question will be added to this after the completion of 3rd module.