

41 Lecture - PHY301

Important Subjective

What is the direction of base current in an NPN BJT?

Answer: The direction of base current in an NPN BJT is from the emitter to the base.

What is the direction of collector current in an NPN BJT?

Answer: The direction of collector current in an NPN BJT is from the collector to the emitter.

What is the direction of emitter current in an NPN BJT?

Answer: The direction of emitter current in an NPN BJT is from the emitter to the collector.

What is the direction of base current in a PNP BJT?

Answer: The direction of base current in a PNP BJT is from the base to the emitter.

What is the direction of collector current in a PNP BJT?

Answer: The direction of collector current in a PNP BJT is from the emitter to the collector.

What is the direction of emitter current in a PNP BJT?

Answer: The direction of emitter current in a PNP BJT is from the collector to the emitter.

What is the significance of the direction of base current in an NPN BJT?

Answer: The direction of base current in an NPN BJT determines the amount of collector current that flows through the device.

Why is the direction of emitter current in an NPN BJT opposite to that of a PNP BJT?

Answer: The direction of emitter current in an NPN BJT is opposite to that of a PNP BJT because the majority carriers in the emitter region of an NPN BJT are electrons, while in a PNP BJT, they are holes.

What is the significance of the direction of collector current in a PNP BJT?

Answer: The direction of collector current in a PNP BJT determines the amount of emitter current that flows through the device.

Why is the direction of base current in a PNP BJT opposite to that of an NPN BJT?

Answer: The direction of base current in a PNP BJT is opposite to that of an NPN BJT because the PNP BJT is a minority carrier device, which means that it operates with holes as the majority carrier in the base region, unlike an NPN BJT which operates with electrons as the majority carrier.