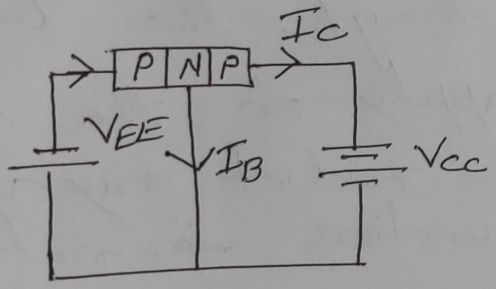
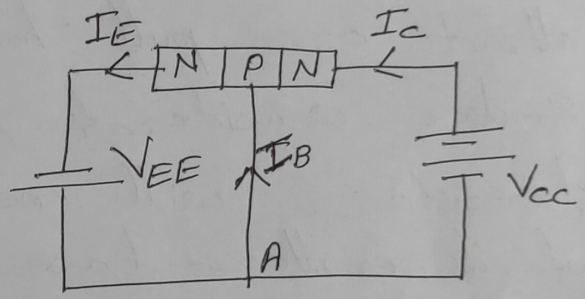
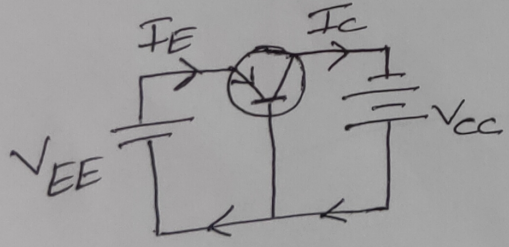
Transistor Biasing

For proper working of a transistor, it is essential to apply voltages of correct polarity across its two junctions. It is worthwhile to remember that for normal operation;

1. Emitter - base junction is always forward - biased and
2. collector - base junction is alway reverse-biased.

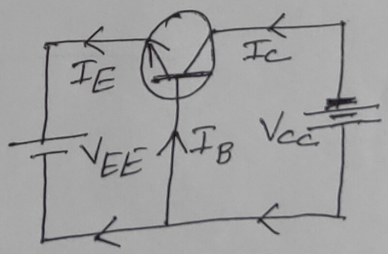






(a)

Fig



(b)

Fig

This type of biasing is known as FR biasing. In figure, two batteries respectively, provide the dc emitter supply voltage V_{EE} and collector supply voltage V_{cc} for properly biasing the two junctions of the transistor. In fig. (a) positive terminal of V_{EE} is connected to p-type emitter in order to repel or push holes into the base.

The negative terminal of V_{cc} is connected to the collector so that it may attract or pull holes through the base. Similar considerations apply to the NPN transistor. will never conduct any current, if its emitter-base junction is not forward-biased.

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