AIM OF THE EXPERIMENT:- 6

Output characteristics of PNP/NPN transistor in common emitter configuration and measure of dc current amplification factor from the graph ($\Delta I_C / \Delta I_B$).

APPARATUS REQUIRED	Quantity
1. Bread board or universal trainer	1
2. Transistor power supply(TPS)	2
3. D.C. micro ammeter	1
4. Digital-multi meter	1
5. Transistor	1
6. Resistor(22k, 1K)	2

PROCEDURE:-

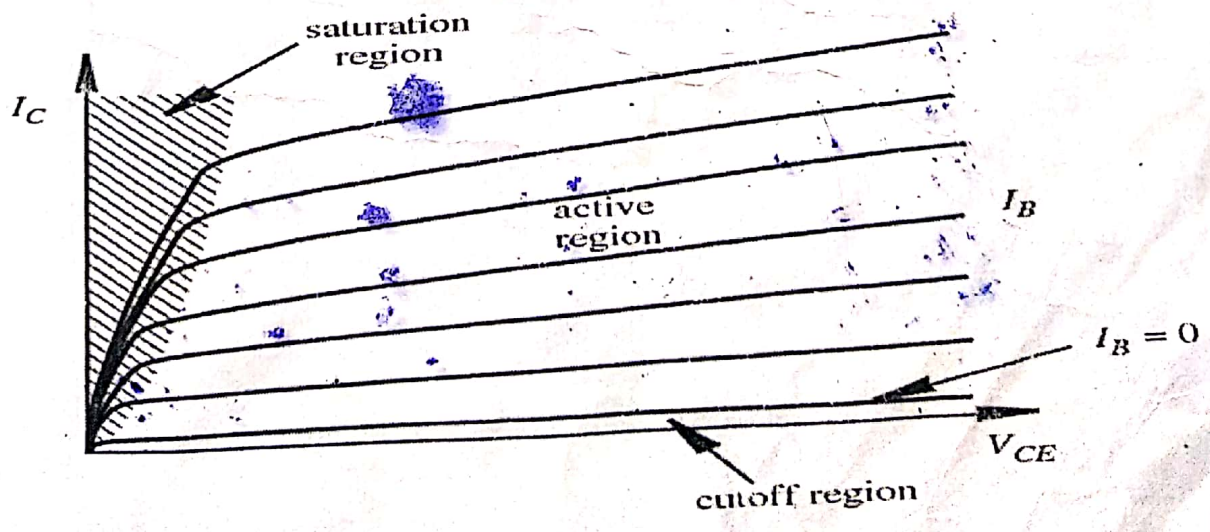
Connect the instruments and components as per the circuit diagram given below, on bread board by following the proper rules of it.

Set I_B at different values by varying V_{BB} . Apply dc voltage V_{CE} from TPS at the interval of 1v for a constant I_B value and measure I_C by the multimeter.

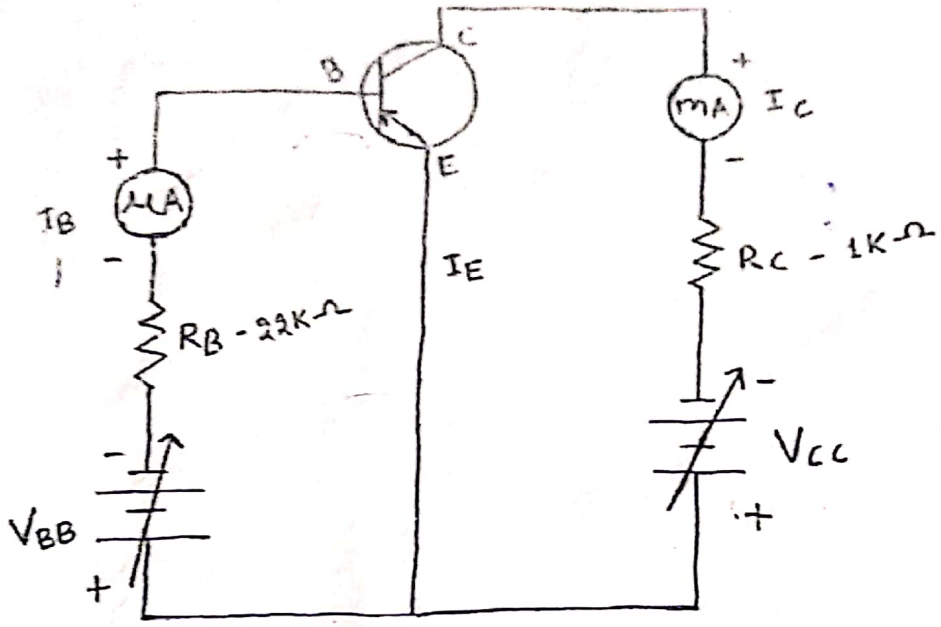
Plot the ΔI_C and ΔI_B in the graph and calculate the current amplification factor by using the above formula.

Output Characteristics

Output characteristic is drawn taking Vce in X-axis and Ic in Y-axis for different Ib values.



circuit diagram for PNP transistor:-



Note: For NPN transistor the supplies and meters polarities will be reverse of the above circuit.

PRECAUTIONS:-

Check the connection before switched on.

TABULATION:-

Sl. no.	V_{CE} in volt	I_B in μA	I_B inμA	I_B inμA	I_B inμA
		I_C in mA	I_C in mA	I_C in mA	I_C in mA