## Post-session work:

- (a) Plot  $r_i$  versus  $1 \hspace{-0.1cm} \Big/ \hspace{-0.1cm} I_{B}$  . Thus extract out  $r_{bb'}$  and  $r_{b'e}(I_B).$
- (b) From the measurement of  $r_{i}$  ( $I_{B})$  and  $\beta$  ( $I_{B}),$  find  $g_{m}$  ( $I_{B}).$
- (c) Find r<sub>ce</sub> (I<sub>C</sub>).
- (d) Plot  $g_m v/s I_B$ . Is it approximately linear?
- (e) Plot  $r_{ce}$  versus  $\frac{1}{I_C}$ . Is it approximately linear? If so, find the Early voltage  $V_A$ , defined as the slope of  $r_{ce}$  versus  $\frac{1}{I_C}$ .