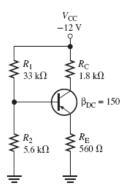
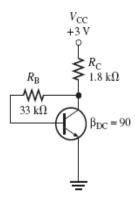
1. Determine I_B , I_c and I_E in the following circuit



2. Determine VB, VC and IC in the following circuit



- 3. Determine I_B , I_C and V_{CE} for a bias biased transistor circuit with the following values: β_{DC} =90, V_{CC} =12V, R_B =22 $k\Omega$ and R_C =100 Ω
- 4. Determine the following dc values for the amplifier in following circuit (a) I_E (b) V_E (c) V_B (d) I_C (e) V_C (f) V_{CE} (g) R_{in} (h)Av (i)Ai

