

**Unit III : Assessment: Assignments****Assignment – Lecture 44****1.**

**A balanced three-phase star-connected load of  $(8 + j6) \Omega$  per phase is supplied by a 400 V, 50 Hz supply. Calculate the line current, power factor, active, and reactive power.**

**[ANS:  $I_L = 23.09\text{A}$ ,  $\cos\phi = 0.8$  Lag,  $P = 12.79\text{KW}$ ,  $Q = 9.59\text{KVAR}$ ]**