Lecture 41

1. **A balanced, three-phase, star-connected load of 100 kW takes a leading current of 80 A, when connected across a three-phase, 1100-V, 50-Hz supply. Find the circuit constants of the load per phase.**
   [ANS: R= 5.21 Ω, C=531.25μF]

2. **A balanced three-phase star-connected load of (8 + j6) Ω per phase is supplied by a 400 V,50 Hz supply. Calculate the line current, power factor, active, and reactive power.**
   [ANS: IL= 23.09A, CosØ=0.8 Lag, P=12.79KW,Q=9.59 KVAR]