Lecture 45

1. A balanced delta connected load of impedance (8-j6) Ω per phase is connected to a three phase 230V , 50Hz supply.
Calculate i) Line current ii) power factor iii) reactive power.

2.
A 3-phase delta connected load, each phase has a impedance of (25+j40) Ω. The load is fed from the secondary of a 3-phase star connected transformer which has phase voltage of 240V. Draw the circuit diagram and calculate
i) current in each phase of the load
ii) voltage across each phase of the load
iii) current in the transformer secondary winding
iv) power supplied to the load.