

Tut 1

- 1) What does the term “Distributed Generation” (DG) refer to? List generation units that can be categorized as DG.

- 2) List the motivations towards the use of Distributed Generation.

- 3) Explain the difference between “conventional distribution system” and “distribution system with Distributed generation” in terms of power flow in a distribution network.

- 4) In a distribution system, the voltage control should always ensure the voltage magnitude remain within a set band between an “undervoltage limit” and an “overvoltage limit”.
Why, in a distribution system with distributed generation, “overvoltage limit” becomes a concern?

- 5) Explain why, in a distribution network with new DG instalment, new investment sometimes might have to be made on protection system.

- 6) What is “the fault level” in power system analysis? How it will be influenced by the connection of DG to distribution network?

- 7) What is the major concern for thyristor based DG in terms of power quality?

- 8) How DG may affect the maintenance operation of a distribution network?