

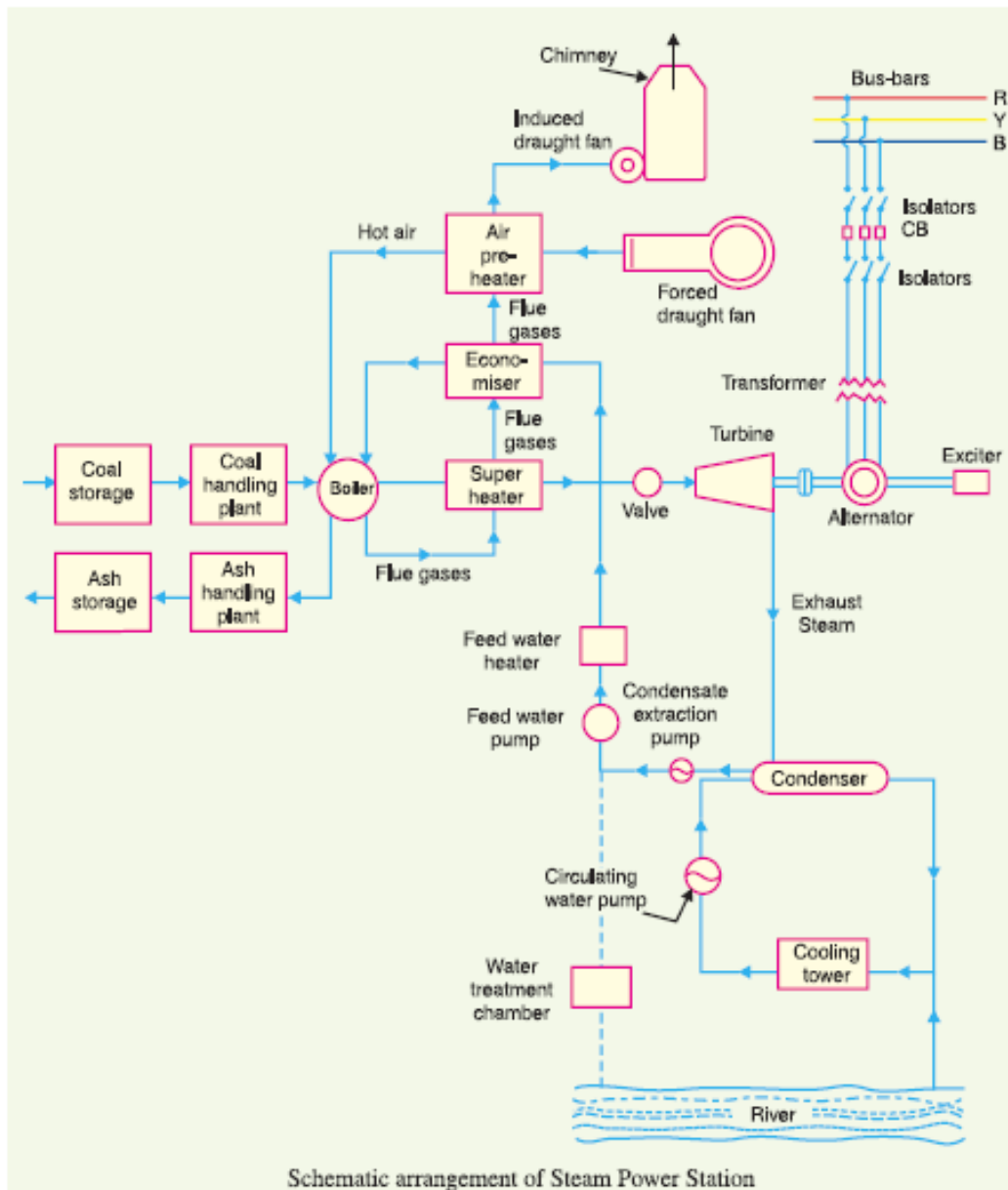
Assignment No. 1

Subject : Basic Electrical and Electronics Engineering

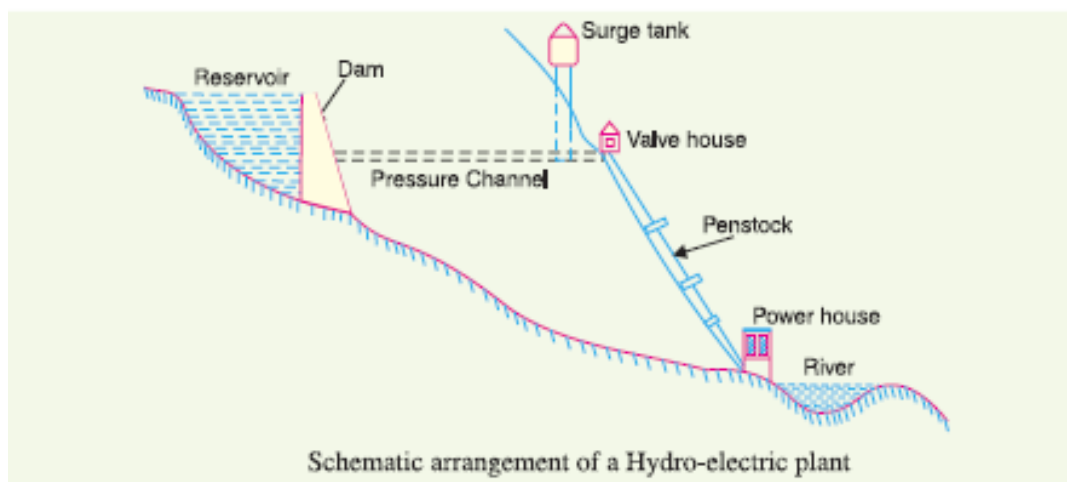
Semester I(Computer and Mechanical Engineering)

Q1	Explain principle of operation of the following power plants. a. Thermal Power Plant d. Solar Power Plant b. Hydro Power Plant e. Wind Power Plant c. Nuclear Power Plant	CO1	CL2
Q2	Explain advantages and disadvantages of the following power plants. a. Thermal Power Plant d. Solar Power Plant b. Hydro Power Plant e. Wind Power Plant c. Nuclear Power Plant	CO1	CL2
Q3	Draw and list the various blocks of the Thermal power plant. Explain the functions of the following blocks of thermal power plant. (i) Coal and ash handling plant (vi) Steam Turbine (ii) Boiler (vii) Alternator (iii) Air pre-heater (viii) Condenser (iv) Economizer (ix) Cooling Tower (v) Feed water heater	CO1	CL2
Q4	Draw and list the various blocks of the Hydro power plant. Explain the functions of the following blocks of Hydro power plant. (i) Reservoir/ Dam (iv) Turbine (ii) Intake (v) Alternator (iii) Penstock	CO1	CL2
Q5	Draw and list the various blocks of the Nuclear power plant. Explain the functions of the following blocks of Nuclear power plant. (i) Control rods (vi) Alternator (ii) moderator (vii) Condenser (iii) Control rods and Fuel rods (viii) Cooling Tower (iv) Heat exchanger (ix)Coolant (v) Steam Turbine	CO1	CL2
Q6	Draw and list the various blocks of the Solar power plant. Explain the functions of the following blocks of Solar power plant. (i) Solar Photovoltaic Panel (iii) Battery bank (ii) Charge Controller (iv) Inverter	CO1	CL2
Q7	Draw and list the various blocks of the Wind power plant. Explain the functions of the following blocks of Wind power plant. (i) Rotor (iii) Gear Box (ii) Pitch and Yaw Control (iv)Generator	CO1	CL2
Q8	Differentiate between Conventional and Non- Conventional Energy Sources.	CO1	CL2

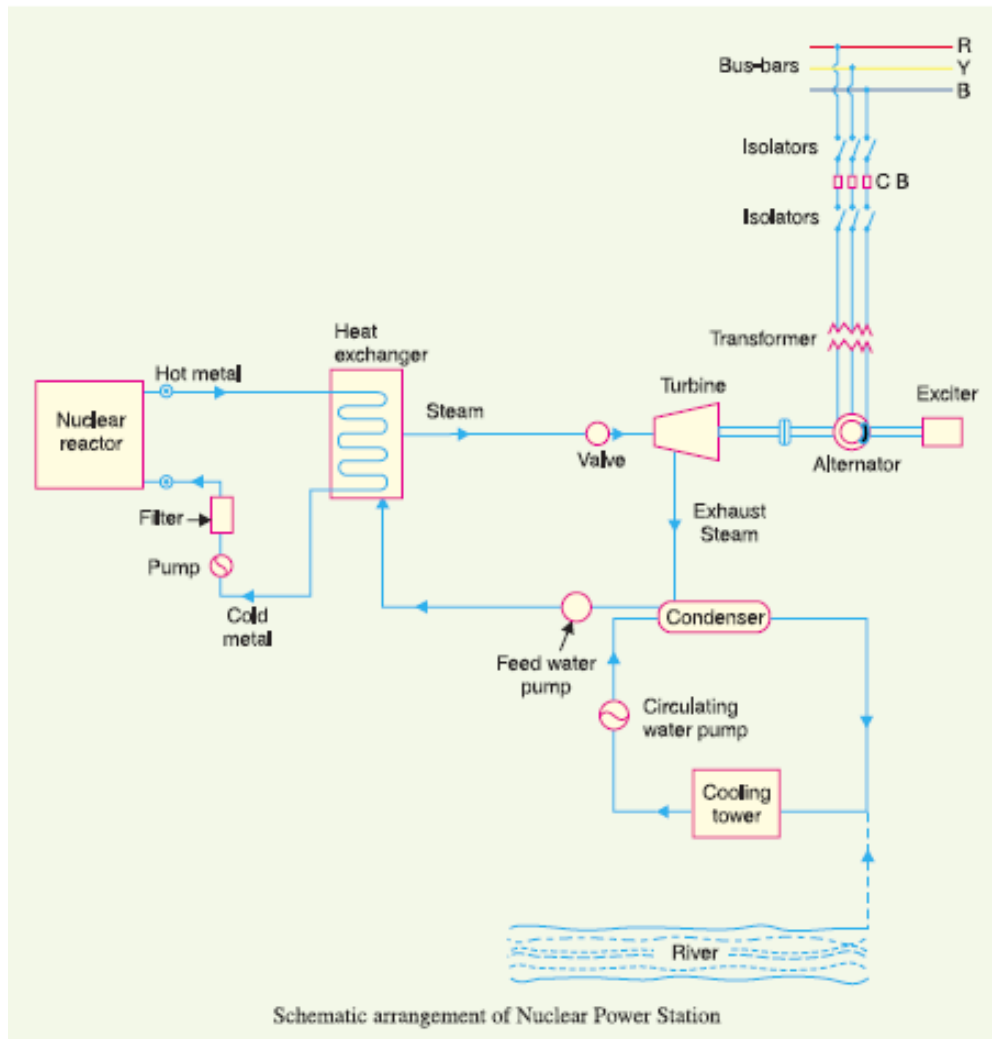
Steam Power Station (Thermal Station)



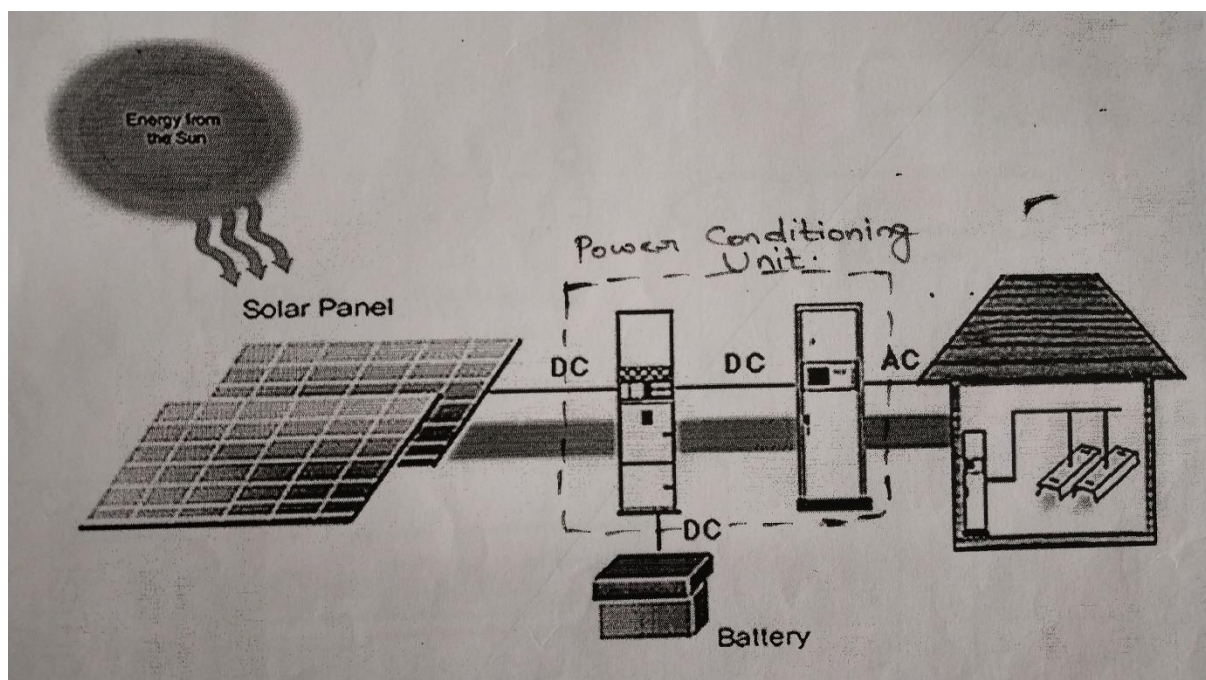
Hydro-electric Power Station



Nuclear Power Station



Solar power plant



Wind power plant

