1. Define (i) Conduction (ii) Convection
(iii) Radiation

(i) Conduction.

In this heat transfer, transfer of the heat between to substances that are connect with each othor.

Metal is good conduction of heat.

In this heat tranfer the energy flow is hot to down substances.

Heat transfer $Q = -KA \cdot \frac{\Delta T}{\Delta x}$

Here, K = Tharmal Conductivity
A = Areaea ⊥ to heat transfer
ΔT = Tempertaur
Δx = Thickness

(ii) Convection:

In this heat transfer, transfer of the heat

between to substance which are connected through the medium like liquid, gas etc.

Heat transfer is One medium to onthor medium.

Heat transfer $Q = hA\Delta T$

Here, h = heat Transfer coeffeient
ΔT = Temperature

(iii) Radiation

In this heat transfer of the heat is form of a Radiant wave in motion.

Radiant wave transfer heat from One medium to onthor medium.

In this heat transfer radiant wave is reqired.

Here two substance are not conneted.

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Explain in details about working principal of hydraulic turbines.

The Hydraulic turbine is like power producing machines.

Hydraulic Turbine is mostly used for electric power generation.

A Hydraulic Turbine is a device that converts the energy in a steam of fluid into mechanical energy.

Hydraulic turbine working on Newton's law.

"Force is directly proportional to change in momentum."

If there is any change in momentum of fluid then a force is generated.

The hydraulic turbine blades are provided against the flow of water which changes the momentum of it.

As the momentum is changing a resulting pressure force generated which rotates the rotor or turbine.