

1)

Meets the actual need of people.

Environmentally friendly.

3)

Sources of renewable energy in Nepal:

Wind

Hydropower

Solar

4)

Indicators of HDI

life expectancy

education

per capita income

5)

Solar insolation value is  $\text{Wh/m}^2/\text{day}$ . For Nepal the yearly average insolation can be taken around 4500 to 5500  $\text{Wh/m}^2/\text{day}$ .

7)

Fill factor will be equal one for ideal solar cell with no losses due to series or shunt resistances, which means practical solar cell will always have a fill factor lower than one.

8)

power of hydropower in watts =  $P = \eta \rho Qgh$

where,  $\eta$  = efficiency of turbine

$\rho$  = density of water

$Q$  = flow in cubic meters

$g$  = acceleration due to gravity

$h$  = height difference between inlet and outlet

9)

Amp Hour or C20 is an indicator of how much energy is stored in a battery. It is the energy a battery can deliver continuously for 20 hours at 80°F without falling below 10.5 volts.

10)

V2G stands for “vehicle to grid” and is a technology that enables energy to be pushed back to the power grid from the battery of an electric car.