

## Ans → Method of tidal power generation.

1) Tidal stream generator → A tidal stream generator is machine that extracts energy from moving masses of water, or tides. These machines function very much like under water wind turbines, and are sometimes referred to as tidal turbines.

Tidal stream generators are the cheapest and the least ecologically damaging among the three main forms of tidal power generation.

2) Tidal barrage → A tidal barrage is a dam-like structure use to capture the energy from masses of water moving in and out of a bay or river due to tidal forces.

Instead of damaging water on one side like a conventional dam, Turbines are then placed at these sluices to capture the energy as the water flows in and out.

3) Dynamic Tidal power → Dynamic tidal power or DTP is a new and untested method of tidal power generation. It would involve creating large dam like structure the coasts of continental shelves, containing power hydraulic currents.

## Limitation of Tidal Steam generator

- 1) Initial capital cost of plant is very high and needs long constructional period
- 2) Output power is variable due to uneven operation
- 3) Sea water is ~~corrosive~~ ~~sedimentation~~ • Corrosive.
- 4) Sedimentation of basin is a serious problem
- 5) Due to variable tidal energy, the efficiency of plant is affected
- 6) Marine life is affected.