

## PAST PAPER QUESTIONS:-

Date: \_\_\_\_\_

### TOPIC: Energy

Q (2019).

Q3a) :- Differentiate between Renewable and Non-Renewable Energy sources of energy giving examples of each one of them? (5)

**Short and incomplete answer.**

The energy sources have been roughly split into two categories namely, Renewable energy and Non-Renewable energy.

• Renewable Energy: Energy that is collected from resources which are naturally replenished on a human timescale for e.g. - Wind, Solar, Hydro and geothermal.

• Non-Renewable Energy: Energy that comes from sources that would run out and cannot be produced comparable to its production consumption. For e.g. - fossil fuels, natural gas and petroleum.

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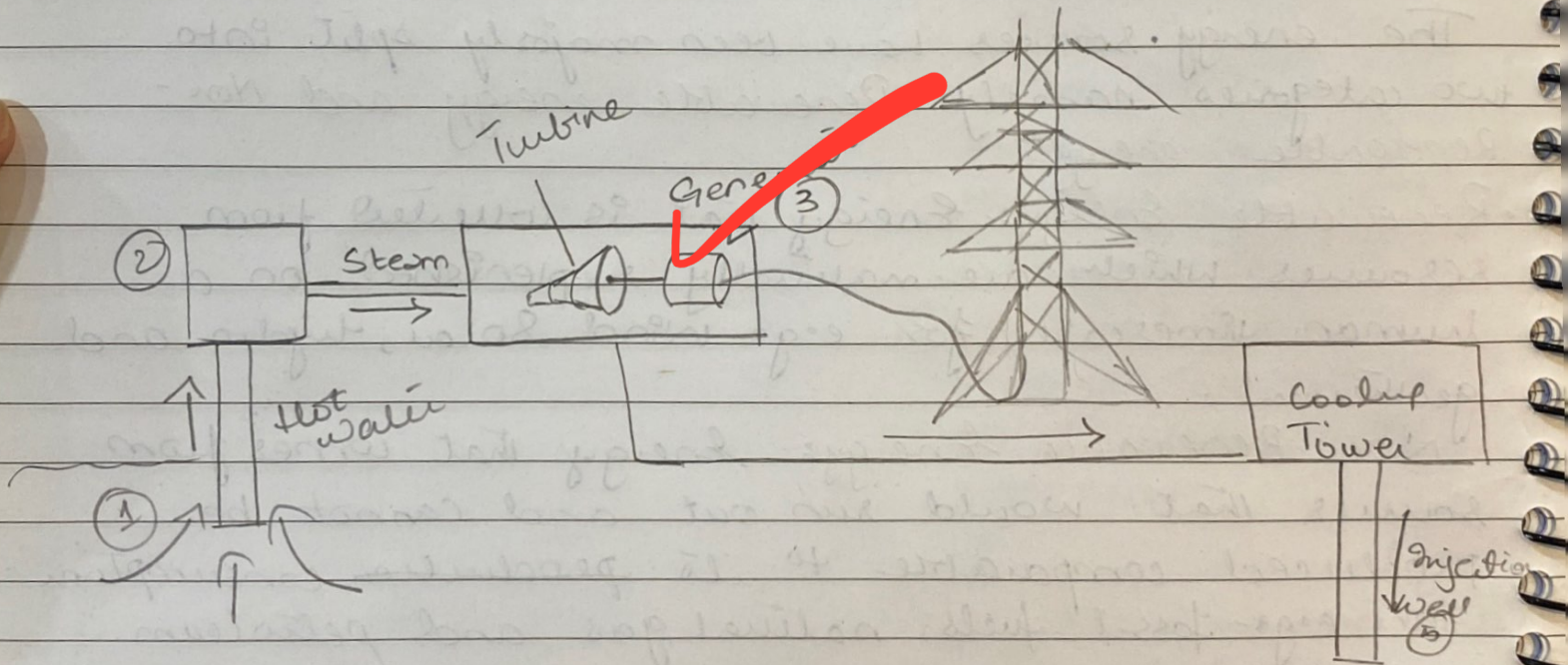
Q3d) :- Differentiate between the renewable and non-renewable energy sources. Briefly explain Geothermal energy and Hydro electricity?

Renewable energy comes from the resources which are naturally replenished on a human timescale whereas non-renewable energy's sources would run out and cannot be produced comparable to its consumption.

Date: \_\_\_\_\_

Geothermal Energy:- As the name suggests 'Geo' means Earth so, energy being produced from Earth's heat is known as Geothermal Energy. Hot water and steam from deep underground can be used to drive turbines.

### Geothermal Power Plant



High temperatures are produced continuously inside the Earth's crust. Hot rock present below the Earth's heat up the water that produces steam. The steam is captured and relayed to move the turbines. The rotating turbines then power the generators. In places with hot water close to Earth's surface, deep wells can be drilled and cold water pumped down to get hot water and steam.

MIGHTY PAPER PRODUCT

Date: \_\_\_\_\_

## Hydro Electric Energy-

Moving water has kinetic energy. This can be transferred into useful energy in many ways. Hydro-electric power schemes store water high up in dams. Water has gravitational potential energy which is released when it falls. The force and high pressure in the water turns a series of shaft in a generator. Spinning shafts in the generator changes coils and magnets to create electricity which is ~~dis~~ regulated by a transformer.

Improve the difference part.

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