HYDROELECTRIC POWER

1. Fill in the gaps with words provided. Beware of the spelling or it will be marked as a mistake.

dam	demand	electricity	electromagnetic	elevation
flow	flowing	gravitational	level	mechanical
pumped	released	reservoir	rotors	

HEP is energy obtained from fast --------- water. The ---------- energy created by moving water spins --------- on a turbine, which is connected to an ---------- generator that produces ----------. A ------- is a large barrier built to raise the --------- of water and control its -------. The ---------- created by the dam creates a ---------- force for turning the turbine when water is ----------. Some dams contain an additional ---------- at the base where water is stored to be ---------- to the higher reservoir for release when electricity is in --------.

2. Classify the following statements into advantages (A) or disadvantages (D) of HEP:

- Building of dams impacts the natural flow of water
- Creates very little pollution
- Dams are expensive to build
- Decomposition of plants under water generates methane.
- HEP dams help reduce the risk of flooding
- It does not contribute to global warming, ozone depletion and does not cause acid rain
- It does not produce carbon dioxide
- Large amounts of cement are used to build the dam, which produces carbon dioxide.
- Large areas of farm land are flooded
- Limited choice of suitable sites, generally in remote areas so distance power lines need to be built.
- Loss of biodiversity

- Once up and running, it is one of the cheapest ways of making electricity
- People may be forced to relocate
- Renewable (Unlimited supply)
- Reservoirs may be used for recreation
- Villages and ecosystems may be destroyed when dam and reservoirs are built
- Water is neither consumed nor contaminated so it can be used downstream for other purposes
- Wildlife habitats are lost