1. Briefly describe how a productive borehole can be sited and developed in fractured basement complex regions?
2. DISADVANTAGES OF LARGE DAMS

* Dams can displace a significant number of people:An estimated 500 million people have been displaced by dams in the last two centuries because of the reservoirs that form behind each structure. As the surrounding dry areas get flooded, we no longer have the option to use land that was previously accessible for a variety of purposes. That means local agricultural activities go through a disruption process, even though the eventual increase in available water supports more irrigation.
* Reservoirs behind a dam can lead to higher greenhouse gas emissions:When vegetation gets engulfed in water, then the plants will eventually die. When this outcome occurs, the dead organic material releases methane that ultimately makes its way into the atmosphere. The increase in the production of greenhouse gases is significant because methane is up to 20 times more potent as a reflector than carbon dioxide.
* The use of a dam in certain areas can also contribute to the loss of forests. When we lose a significant number of trees simultaneously, then there is a corresponding uptake of carbon dioxide that occurs because there are fewer photosynthesis processes happening each day.
* Dams create a flooding issue behind the structure as a way to form a reservoir. Not only does this disrupt human activities, but it also destroys the existing wildlife habitats that exist. This issue can disrupt entire ecosystems, which can have an adverse effect on a whole regional biome. Marine life that relies on an unobstructed flow of a river, such as migratory fish, can be adversely affected by the decision to dam the water.
* Dams can have a profound impact on the overall aquatic ecosystem of a region. The transformation upstream creates a lack of settlement that moves down the waterway to support the entire marine habitat. It can also cause changes in temperature, chemical composition, and shoreline stability. Many reservoirs also host invasive species, such as algae or snails, that undermine the natural communities of the plants and animals that lived on the river before. The riverbeds that are downstream from a dam can erode by several yards within the first decade of operations. This damage can extend for hundreds of miles downstream afterward.
* Dams can have an adverse impact on the groundwater table:When riverbeds experience deepening, then this problem creates a lower groundwater table along the river. That means it is more challenging for plant roots to reach what is required for survival. Homeowners in the vicinity must also dig deeper wells to draw water for their households. This issue can even change the mineral content and salts found in the fluid, creating damage to soil structures along the way.
* The construction of a dam is a costly investment.
* Dams can block water progression to different states, provinces, and countries.
* When a dam gets built at or near a border between two states, provinces, or countries, then it might also block the progress of the water in one of those areas. That means the supply from the same river in the neighboring country is no longer under their direct control. This disadvantage can result in severe issues between neighbors, creating a constant source of conflict that can sometimes even lead to war.

1. EFFECTS OF WATER POLLUTION ON ENVIRONMENT

Deteriorating water quality is damaging the environment, health conditions and the global economy. The president of the World Bank, David Malpass, warns of the economic impact: "Deteriorating water quality is stalling economic growth and exacerbating poverty in many countries". The explanation is that, when biological oxygen demand — the indicator that measures the organic pollution found in water — exceeds a certain threshold, the growth in the Gross Domestic Product (GDP) of the regions within the associated water basins falls by a third. In addition, here are some of the other consequences:

1. Destruction of biodiversity. Water pollution depletes aquatic ecosystems and triggers unbridled proliferation of phytoplankton in lakes — eutrophication —.
2. Contamination of the food chain. Fishing in polluted waters and the use of waste water for livestock farming and agriculture can introduce toxins into foods which are harmful to our health when eaten.
3. Lack of potable water. The UN says that billions of people around the world have no access to clean water to drink or sanitation, particularly in rural areas.
4. Disease. The WHO estimates that about 2 billion people have no option but to drink water contaminated by excrement, exposing them to diseases such as cholera, hepatitis A and dysentery.
5. Infant mortality. According to the UN, diarrhoeal diseases linked to lack of hygiene cause the death of about 1,000 children a day worldwide.
6. DECONTAMINATION OF RIVERS

The Ureje river located at Afe-Babalola University may be decontaminated by:

* Dredging of the contaminated sludge from the river bad
* Handling it to the river banks for treatment.
* Establishing sludge cleaning processes
* Converting it to useful soil
* If required extracting precious material out of the sludge
* Treating the contaminating sources to the river and return clean water to the river.