

7. MINERALS AND ROCKS

1.
 - a)
 - Veins and loads
 - Beds and seams
 - Weathering products
 - Alluvial/places deposits
 - b)
 - causes soil erosion/encourages soil erosion
 - derelict landscape/make landscape ugly
 - destruction of bio-diversity
 - creating hiding outs of thugs/thieves
 - create breeding grounds for mosquitoes if the pits are filled with water

2.
 - a)
 - That is when minerals occur in crevices, crack or faults
 - If they occur in small quantities in cracks or crevices then they are referred to as veins while those in large quantities are said to be in lodes
 - They are formed when minerals in molten form solidify in cracks and faults or crevices
 - b)
 - tiny marine organisms called coral polyps live in colonies in the sea
 - polyps extract calcium from the sea water to make their shells
 - the polyps die and their hard skeletons of calcium carbonate accumulate into solid mass
 - successive colonies grow
 - space between the dead corals polyps are cemented by Algae to form coral rocks

3.
 - Mechanically formed sedimentary rocks.
 - Organically formed sedimentary rocks.
 - Chemically formed sedimentary rocks.

4.
 - a)
 - Dynamic/Regional/Kinetic
 - Contact
 - i)- They are sedimentary rocks which are formed from the hard parts of shells/skeletons of Marine. The rocks are rich in calcium.
 - ii)- Are sedimentary rocks which are formed from the remains of plants that were buried deep in many years. The plants are transformed into rock because of pressure of crystal rocks and resultant heat.
 - iii)- Coral limestone/dolomite/calcite/chalk/colite
 - Sandstone
 - Gypsum
 - Quartzite
 - c)
 - i) - Particles are derived from existing rocks through process of weathering /Erosion.
 - They are then transported by water/wind/ice and are deposited on land/large water bodies.
 - They are deposited in layers.
 - Over a period of time, they are compacted by pressure to form rocks such as alluvial, clay, sand, conglomerates.
 - ii) - Minerals are dissolved from land and are carried in solution into bodies such as lakes/sea.

The mixing of water of different types may result in chemical reactions followed by precipitation leading to accumulation at bottom of water body and are compressed into a rock OR

Dissolved minerals can also be precipitated directly from water through evaporation. This happens in very hot regions where there are constricted/shallow bays of lakes/seas, such rocks are known as evaporates.

5.
 - a)
 - due to pressure changes/dynamic metamorphism
 - due to intense heat/thermal metamorphism
 - due to a combination of heat and pressure/thermal-dynamic metamorphism
 - b) -Granite

- Diorite
- Peridotite
- Gabbro
- Syenite

- c) - The aquifer must be sandwiched between impermeable rocks so that it can retain water
- The aquifer must outcrop in a region which is a source of water
 - The mouth of the well must be lower than the intake area to allow water to be forced out by pressure
 - The aquifer must dip from a region of water intake and the rock layers must form a broad basin