Subject:-science.

Class. - V

Chapter - 5

**Rocks and Minerals** 

### A. Answer these questions:

1. What is earth's crust made up of?

Ans Earth has three layers: the crust, the mantle, and the core. The crust is made of solid rocks and minerals. Beneath the crust is the mantle, which is also mostly solid rocks and minerals, but punctuated by malleable areas of semi-solid magma. At the center of the Earth is a hot, dense metal core.

2. Name the different kinds of rocks. Give two examples of each kind.

Ans Rocks are divided into three classes:

1. Igneous rocks

Example of igneous rocks - Granite rocks, Pumice

2. Sedimentary Rocks

Example of sedimentary rocks - Sandstone, Limestone

3. Metamorphic rocks

Example - Marble, slate,

Q 3 How are igneous rocks formed?

Ans Igneous rocks are formed when the volcanoes errupt, causing the magma to rise above the earth surface. when mangma comes on the ground, it is called lava, igneous rocks are formed as the lava cools on the ground.

Q 4 List different examples of metamorphic rocks with their uses.

Ans The examples of metamorphic rocks are given below -

1. Marble - It is quite popular as a material for flooring too.

- 2. Slate It is used in making bricks and cements.
- 3. Gneiss It is used as building stone for making other structures.
- Q 5 What are the uses of non metallic minerals?

Ans Many minerals do not have metals in them. These are called non - metallic minerals.

Some minerals are in the form of crystals. They are hard and can be polished into gemstones. Gemstones that are usually used in making jewellery are diamond, sapphire, emerald and ruby. Diamond is the hardest non-metallic mineral known.

6. How are rocks useful to us?

Ans Rocks are very useful to us because:

- ♦ Like minerals, rocks are of great resource value, some directly and some as constituents of minerals.
- ◆ Soils are derived from weathering of rocks.
- ♦ Almost all types of building materials used for paving roads, floors or building walls of houses or various other structures including bridges come from rocks.
- ◆ Rocks are a source of precious metals like gold, silver, platinum, etc.

### B. Write short notes on:

- 1. Igneous rocks These rocks are among the oldest rocks of the earth. Almost 95 percent of the earth's crust is made up of igneous rocks. These contain minerals like mica, feldspar, and magnesium. Igneous rocks are called fire rocks. Igneous rocks are also formed when volcanoes erupt. causing the magma to rise above the earth's surface. When magma comes on the ground, it is called lava. Igneous rocks are formed as the lava cools on the ground.
- 2. Magma magma is melted rock that is under the ground. Magma is the molten rocks in Earth's mantle. Magma exists as pockets and plumes beneath the surface of the Earth. Magma is a molten and semi-molten rock.
- 3. Minerals Minerals are chemical substances that occur in nature. They formed due to natural processes within the earth. Any natural element or compound in the earth's crust is called mineral. Many minerals contain metals. These are called metallic minerals. Many minerals do not have metals in them . These are called non metallic minerals.

### C. Fill in the blanks

- 1. Rocks are made up of minerals.
- 2. Granite contains two main minerals, quartz and feldspar.
- 3. **Gneiss** is formed from granite.
- 4. Certain minerals are added as fertilizers to help plants grow better.
- 5. Metals are extracted from their ores.

## D. Write true and false

- 1. Igneous rocks are formed from sedimentary rocks false
- 2. Metamorphic rocks are formed from soil and small rock pieces true
- 3. Granite and Pumice are igneous rocks true
- 4. Conglomerate is a sedimentary rock true
- 5. Shale is a metamorphic rock false

# E Give two examples each of the following

1. Sedimentary rocks

Ans sandstone and limestone

2. Precious metals

Ans gold and silver

3. Precious stones

Ans sapphire and ruby

### F. Match the coloums:

1. Conglomerate - Sedimentary

2. Slate - Matamorphic

3. Granite - Igneous

4. Limestone - sedimentary

5. Marble - Metamorphic

6. Pumice - igneous

# G. Tick the correct answer

1.	Rocks	formed	from	magma	are
----	-------	--------	------	-------	-----

Ans igneous rocks

2. Igneous rocks were formed due to

Ans volcanoes

3. Basalt rocks are also called

Ans scoria

4 Quartize is formed from the metamorphosis of :

Ans sandstone