EXERCISE [PAGE 44]

Exercise | Q (A) | Page 44

How is sand that flows in a river formed? Collect some information about where the sand comes from.

Solution:

- 1. Majority of the rivers originate from the mountains, which are comprised of several rocks.
- 2. As they flow with force, through these mountains, the bigger rocks slowly and steadily get impacted.
- 3. The water percolates through these rocks and dissolves the minerals. This weakens the structural composition of the rocks.
- 4. The constant change in temperature along with the winds and the rains and fiercely flowing water, develops cracks on the rock surface, causing them to break into smaller particles (weathering of rocks). These soil particles are transported by the flowing river to the low lying areas and deposited there as sand.
- 5. Also, at the point where the flowing river enters the ocean/sea, the sand from the sea shore may enter the river flow.

Exercise | Q (B) | Page 44

Which of the following monuments are built-in igneous rock?

- 1. The Taj Mahal
- 2. Fort Raigad
- 3. The Red Fort
- 4. Ellora Sculpture

Solution: Fort Raigad and Ellora sculpture are made up of Igneous rocks.

Exercise | Q (C) . (1) | Page 44

Find the difference between

Igneous and sedimentary rocks

Solution:

Igneous Rocks	Sedimentary Rocks
These are formed due to the cooling and solidification of 'magma' and 'lava'.	These rocks are formed due to continuous deposition and compaction of weathered pieces of rocks transported to various places by wind, glaciers, rivers, etc.
These are hard, homogeneous and heavy rocks.	These are brittle, layered and light in weight.
They lack fossils	They show presence of fossils.
Example: Basalt, Granite, etc.	Example: Sandstone, limestone, etc.

Exercise | Q (C) . (2) | Page 44

Find the difference between -

Sedimentary and metamorphic rocks

Solution:

Sedimentary Rocks	Metamorphic Rocks
These rocks are formed due to continuous deposition and compaction of weathered pieces of rocks transported to various places by wind, glaciers, rivers, etc.	Metamorphic rocks are formed from Igneous and Sedimentary rocks. These rocks undergo recrystallization when they are subjected to tremendous heat and pressure caused due to volcanic activity and movements in the earth's interior.
These rocks are brittle, layered, and light in weight.	These rocks are heavy, hard, and recrystallized.
They show presence of fossils.	They lack fossils.
Example: Sandstone, limestone, etc.	Example: Marble, slate, diamond, etc.

Exercise | Q (C). (3) | Page 44

Find the difference between -

Igneous and metamorphic rocks

Solution:

Igneous Rocks

Metamorphic Rocks

Igneous rocks are formed due to cooling and solidification of 'magma' and 'lava'. These are also known as primary rocks.	Metamorphic rocks are formed from Igneous and Sedimentary rocks. These rocks undergo recrystallization when they are subjected to tremendous heat and pressure caused due to volcanic activity and movements in the earth's interior.
These are derived from the material within the earth's crust.	These are derived by recrystallization of Igneous and Sedimentary rocks.
Example: Basalt, Granite, etc.	Example: Diamond, Marble, etc.

Exercise | Q 4 | Page 44

Which types of rocks are predominantly found at the following locations?

- 1. Central Maharashtra
- 2. South Konkan
- 3. Vidarbha

Solution: Following types of rocks are predominantly found at the given locations:

- **1.** Central Maharashtra: Basalt
- **2.** South Konkan: Laterite and Granite
- **3.** Vidarbha: Basalt, Granite, and Sedimentary.