

## **PRISM WORLD**

Std.: 9 (English) <u>Geography.</u>

# Chapter: 3:

### Q.1 Answer in one sentence..

5

Identify the type on the basis of the statement/ Diagram.Water which has accumulated in the crevices of the rocks freezes. Consequently, the rock breaks.

Ans Mechanical weathering.

2 Identify the type on the basis of the statement/ Diagram. The rock rusts.

Ans Chemical weathering.

3 Identify the type on the basis of the statement/ Diagram.
The pipes supplying water in colder regions break.

Ans Mechanical weathering

4 Identify the type on the basis of the statement/ Diagram. Sand formation occurs in deserts.

Ans Mechanical weathering

5 Identify the type on the basis of the statement/ Diagram.
Some animals live inside the grounds by making burrows.

Ans Biological weathering

e grounds by making burrows.

Colours of your Dreams

### Q.2 Differentiate the following

1 Weathering and Mass Wasting.

Ans

	Weathering	Mass Wasting
i.	Breaking or weakening of rocks is called weathering.	The process of moving down of weathered particles due to gravity alone is called mass wasting.
ii.	Mechanical weathering, chemical weathering and biological weathering are the three types of weathering.	Rapid mass wasting and slower mass wasting are the types of mass wasting.

## Q.3 State whether the given statement is right or wrong and correct the wrong one.

1 Mechanical weathering is less effective in humid climate.

Ans Right

2 Mechanical weathering happens on large scale in dry climates.

Ans Right

3 Lateritic rocks are formed through exfoliation.

Ans Wrong. Lateritic rocks are formed through chemical weathering.

4 Climate affects earthquakes.

**Ans** Wrong. Internal movements affect (lead to) earthquake.

-

.

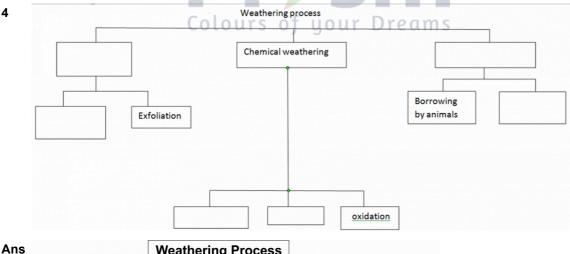
5 The breaking down of rocks into smaller particles is called weathering.

Ans Right

#### Q.4 Answer in detail/ brief

1 How does biological weathering occur?

- Ans i. Biological weathering occurs because of human beings, animals and plants.
  - ii. Trees grow in cracks and crevices of rocks of old forts or buildings. Roots of trees grow bigger, they create tension in the rocks and start breaking them.
  - iii. Rats, mice, rabbits, etc. make burrows in the ground. Ants make large anthills. Because of the activities of these burrowing animals, biological weathering of rocks occurs.
  - iv. Algae, moss, lichen and other flora grow in the rocks. They also help in biological weathering.
- **2** What is mechanical weathering?
- Ans i. Breaking or weakening of rocks is a natural phenomenon. It is called weathering.
  - ii. Weathering can be of three types: mechanical (physical), chemical and biological.
  - iii. In arid climates, mechanical weathering is dominant.
  - Mechanical weathering mainly occurs because of temperature, frost, crystal growth, release of pressure iv. and water.
- 3 What are the main types of chemical weathering?
- **Ans** i. The process of decomposition of rocks by changes in the chemical composition of it is called chemical weathering.
  - ii. Carbonation, solution and oxidation are the main types of chemical weathering.
  - iii. Dilute carbonic acid is formed in rainwater before it reaches the ground. This process is known as carbonation. Materials like limestone gets easily dissolved (weathering) in such acid.
  - iv. Some minerals in the rock get dissolved in water. This process is known as solution. Due to solution, alkalis in the rock dissolve and make them brittle.
  - v. The iron in the rock comes in contact with water and chemical reaction takes place between iron and oxygen. This process is known as oxidation. Oxidation leads to chemical weathering of rocks.



Weathering Process Mechanical Weathering **Chemical Weathering Biological Weathering** Exfoliation Carbonation Solution Granular Weathering, Block disintegration Burrowing Breaking of rocks as the roots of trees grow bigger in Shattering bv the cracks of rocks, Weathering due to growth of animals algae, moss, lichen in the rocks.

16