

# Soil Types and Formations

Q.1 The soils which are formed by transportation of the weathered rock materials by the wind are called

- aeolian soils
- marine soils
- lacustrine soils
- alluvial soils

Q.2 The most uniform soil deposit is

- wind-laid deposit
- delta deposit
- shore deposit
- glacial deposit

Q.3 For engineering purposes, a soil is defined as

- a natural aggregate of mineral grains, loose or moderately cohesive, inorganic or organic in nature.
- loose mantle at the surface of the earth which favours the growth of plants.
- a disintegrated rock.
- None of the above

Q.4 Consider the following statements:

- Soils transported by gravitational forces are termed as colluvial soils
- Cumulose soils are the result of the accumulation of decaying and chemically deposited vegetable matter under the conditions of excessive moisture
- Loess is the wind blown silt or silty clay having little or no stratification

Which of these statement/s is/are correct?

- both 1 and 2
- only 3
- both 2 and 3
- 1, 2 and 3

Q.5 Geologic cycle for the formation of soil, is:

- Upheaval → transportation → deposition → weathering
- Weathering → upheaval → transportation → deposition
- Transportation → upheaval → weathering → deposition
- Weathering → transportation → deposition → upheaval

Q.6 The soil moisture driven off by heat, is called

- free water
- hygroscopic water
- gravity water
- none of these

Q.7 Match List-I (type of soil) with List-II (mode of transportation and deposition) and select the correct answer using the codes given below the lists:

List-I

- Lacustrine soils
- Alluvial soils
- Aeolian soils
- Marine soils

List-II

- Transportation by wind
- Transportation by running water
- Deposited at the bottom of lakes
- Deposited in sea water

Codes:

- |     | A | B | C | D |
|-----|---|---|---|---|
| (a) | 1 | 2 | 3 | 4 |
| (b) | 3 | 2 | 1 | 4 |
| (c) | 3 | 2 | 4 | 1 |
| (d) | 1 | 3 | 2 | 4 |

Q.8 Consider the following statements in the context of aeolian soils:

- The soil has low density and low compressibility.
- The soil is deposited by wind.
- The soil has large permeability.

Which of these statements are correct?

- 1, 2 and 3
- 2 and 3
- 1 and 3
- 1 and 2

Q.9 Which of the following types of soil is not transported by gravitational forces?

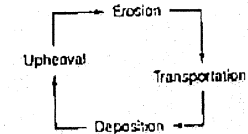
- Loess
  - Peat
  - Talus
- Only 3
  - Both 1 and 3
  - Both 1 and 2
  - 1, 2 and 3

## Answers Soil Types and Formations

- (a)
- (a)
- (a)
- (d)
- (d)
- (b)
- (b)
- (b)
- (c)

## Explanations Soil Types and Formations

- (a)  
**Alluvial Soil:** Soil that has been deposited by suspension in running water.  
**Lacustrine:** Soil that has been deposited from suspension in still fresh water of lakes.
- (d)  
The process of soil formation is called pedogenesis. The process is cyclic known as geological cycle. The steps of geological cycle are



- (b)  
Aeolian soils have high compressibility and high permeability.
- (c)  
Loess is a loose deposit of windblown silt that has been weakly cemented with calcium carbonate and montmorillonite.