

CHAPTER 12

A list of bullet points with important information is given to help you learn the subject matter of this chapter.

- 1.- The important factors in soil formation are the: (1) parent material; (2) climate; (3) vegetation; (4) slope; (5) time.
- 2.- Decomposition of feldspar leads to the formation of clay.
- 3.- Intense chemical weathering in humid, tropical climates may lead to the development of soils called laterites that are composed primarily of iron oxides.
- 4.- Intense chemical weathering in humid, tropical climates may lead to the development of soils called bauxites that are composed primarily of aluminum oxides.
- 5.- The humus that accumulates in rich soils is composed of vegetable matter.
- 6.- Neutral pH in soils is 7.
- 7.- Red colors in soils generally are caused by the presence of iron oxides.
- 8.- The soils that lack any developed horizons within them are known as entisols.
- 9.- The soils that contain large amounts of organic matter such as peat in their upper layers are known as histosols.
- 10.- The soils that are commonly developed under deciduous forests and that have clay-rich B horizons are known as alfisols.
- 11.- The soils that develop under temperate grasslands with a thick, dark organic-rich surface layer are known as mollisols.
- 12.- The soils that develop in dry climates with accumulations of salt, sulfates, and carbonates are known as aridosol.
- 13.- Desert soils are estimated to cover 17 percentage of the Earth's land surface.
- 14.-The principal cause of desertification is overgrazing and wood cutting.
- 15.- The country most famous for its recovery of 20% of its land area from beneath the sea is The Netherlands.
- 16.- A natural lump of material in a soil is called a ped.
- 17.- The "seventh approximation" refers to a soil classification system.
- 18.- The thick, dark, organic-rich soils of temperate grasslands are called mollisols.
- 19.- The elements added in substantial amounts to soils as fertilizers are nitrogen, phosphorus and potassium.
- 20.- The material being removed from the Amazon River drainage basin is 780 million metric tons.
- 21.- The name given to a surface coating on a planet that is not a true soil (being devoid of living matter as on the moon or Mars) is a regolith.
- 22.- A lateritic soil is rich in iron.
- 23.- The taking up of hydrocarbon molecules or metal atoms into minerals in soils is called chelation.
- 24.- Muskeg is a thick, surficial accumulation of peat.
- 25.- Base cations in soils include: (1) Ca^{2+} ; (2) Na^{+} .
- 26.- Soils develop as a result of the combined effects of: (1)* chemical and mechanical weathering.
- 27.- The A layer in a soil is a zone in which soluble constituents are leached.
- 28.- The most important minerals in soils are clays.
- 29.- Laterites are a special kind of oxisol.
- 30.- Caliche is a layer of calcite found at the top of the C zone in a soil.
- 31.- Ion exchange, a property of soil clays, is a process that makes fertilizer elements available to plants.
- 32.- Through the high Sierra and high Rocky Mountains, the main soils are entisols.
- 33.- Tropical soils are: (1) generally very poor because they are so highly leached by rainfall, and (2) are commonly enriched in iron and aluminum.

34.- In the weathering of granite (and many other crystalline rocks) to form a soil, the original quartz grains become residual quartz grains.

35.- In the weathering of granite (and many other crystalline rocks) to form a soil, the original feldspar grains become clays.

36.- The "Dust Bowl" in the central United States in the 1930s: (1) was caused primarily by an extended period of low rainfall (2) was aggravated by farming practices, and (3) caused many farmers to leave the area.

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