

A. is high c. leaching  
(principle) d. less



**ASSIGN  
BUSTER**

a.

Red loam b. Red sandy soil ( $Fe^{++}$ ) 2. Laterite soil a. Low level (leaching) b.

High level 3. Black soil a. Shallow black b.

Medium black c. Deep black soil 4. Alluvial soil a.

Coastal alluvium b. Coastal sand c. Deltaic alluvium 5. Desert soil 6.

Tarai soil 7. Hill soil (brown) 8. Saline and Alkali soil 9. Peaty soils 1. Red Soil:

Tamil Nadu, a part of A. P, M.

P, Orissa, Bihar, U. P., W.

B., Rajasthan a.  $Fe^{++}$  b. Porosity is high c. Leaching (principle) d. Less in  $N_2$  and  $P_2O_5$  (a) Red loam a.

Derivative form weathering of granites, gneiss b. Rich in clay mineral and poorer in silicon c. Texture of the soils loam to silt and clayloam d. PH is neutral but slightly acidic. (b) Red sandy soil a. Derived from granites, gneiss quartzite and sandstone b.

Colour red hematite or yellow c. CEC 5 to 20 mg d. pH acidic (4.5 - 6.5) 2.

Laterite Soil: Maharashtra, Kerala, M. P, Orissa and U. P etc i.

They exhibit plasticity, cohesion, shrinkage and expansion. ii. CEC 2 to 4 mg/100g of soil, poor water retention High organic matter poor in lime and Mg, deficient in P and K. pH 5-6. 3. Black Soil: Maharashtra, Gujarat, M. P, Rajasthan, U. P, A.

P., Tamil Nadu, Karnataka i. Clay % of 40 – 60 % ii. Clay – montmorillonite. iii. PH – 7.5 to 8.5 Shallow black soil: (depth – 30 cm) i.

Texture – silt loam to clay lime is usually present in fine grains ii. Dark brown to dark yellow iii. Structure is granular, blocky Medium black soil: (30 to 100cm) iv. Basaltic traps, Dharwar, Schists, basic granite, gneisses, hornblend. v. Moderately rich in organic matter and well drained vi.

Gypsum is available in upper surface. Deep black soil: i. Derived from basalt ii.

% of clay – 40 to 60 % iii. Lime is present in irregular nodules iv. Alkaline v. Clay minerals 4. Alluvial soil (T<sup>k</sup> vN ? P<sub>2</sub>O<sub>5</sub>): Rajasthan, U.

P., Bihar, W. B., Gujarat, Assam, Orissa Mainly formed deposition of silt over ages, i. High K less in N and P<sub>2</sub>O<sub>5</sub> (a) Coastal alluvium: i. Structure – sand and silt, deep reddish brown to yellowish brown grey ii.

Derived from calcareous materials iii. It is mainly for agriculture (b) Coastal sands: i. Lack of profile development. ii.

Salinity is high. (c) Delatic Alluvium: i. It is formed by river deposition.

### **Soil Process and Formation:**

Soil Formation is a process of two distinct phases.

I. Weathering of Rocks and Minerals (Destructive Process) II. Development of True Soil (Constructive Process) I. Weathering: Process & transformation of solid rocks into soil Five Stage of Soil Development: