

[illegible]

- Colluvium
- Eluviation
- Volatilization
- Denitrification
- Marshy soils
- Soil colloid
- Cation exchange capacity
- Bulk density
- Infiltration rate
- Charge on clay micelle

### SECTION-B

2. Explain the composition of earth crust with the help of diagram.
3. Bulk density and particle density of a field were reported as 1.60 and 2.75 respectively. Calculate the percent porosity of soil.
4. Derive a relation among bulk density, particle density and porosity.
5. Enlist processes of soil formation and discuss role on **any one** in detail.
6. What is the source of negative charge on silicate clay minerals?

### SECTION-C

7. Derive mathematically Darcy's law showing movement of water under unsubmerged conditions.
8. Describe the conditions under which acidic soils are formed and write in detail about their reclamation.
9. Define rock and explain its detailed classification.

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