

Q.1. Multiple Choice Questions (Choose Correct Answer)

- (1) Distilled water contains no _____.
a) TS b) TSS c) TDS d) None
- (2) TOM = TOC x _____.
a) 1.742 b) 1.724 c) 1.274 d) 1.247
- (3) Ionized water contains more _____ ions.
a) OH⁻ b) H⁺ c) Cl⁻ d) Mg⁺
- (4) The size of gravels is always more than _____.
a) 0.002 cm b) 0.02 cm c) 0.2 cm d) 2 cm
- (5) Oceanic crust is very dense, which is made of _____.
a) Granite b) Mica c) Basalt d) Silicon
- (6) Exfoliation or Onion Weathering occurs due to the actions of _____.
a) Temperature & Pressure b) Heat & Wind c) Heat & Pressure d) Precipitation & Heat
- (7) _____ mineral has a cleavage in one direction.
a) Galena b) Mica c) Feldspar d) Calcite
- (8) Aphanitic rocks contain _____ grains.
a) Coarse b) Fine c) Medium d) Lower

[14]

Q.2. Write a Short Note on followings (Any Seven).

- (1) Block Disintegration due to frost
- (2) Difference between chemical and biochemical reaction
- (3) Elaborate: Lopoliths, Laccoliths
- (4) Enlist renewable raw materials for chemical synthesis
- (5) Explain: Infiltration, Leaching
- (6) Geological work of glaciers
- (7) Major components of soil
- (8) Moh's Scale of Mineral Hardness
- (9) Soil permeability

- Q.3. (a) Write a note on types of metamorphisms. Explain the different types of metamorphic rocks. [06]

- (b) Explain chemical types of sedimentary rocks with suitable examples. [06]

OR

- (b) What do you mean by minerals? How these minerals are formed? [06]

- Q.4. (a) Explain sorting by graphical representation. Mention three different modes of sediment transportation by running water. [06]

- (b) What are the different processes of chemical weathering? Explain with examples. [06]

OR

- (b) What do you mean by Coriolis effects? Discuss three-cell circulation model. [06]

- Q.5. (a) Describe in detail about soil horizons. Add a note on its importance. [06]

- (b) Briefly explain soil textures with suitable examples. Add a note on its significance. [06]

OR

- (b) Write a brief note on bulk density and particle density of soil. Add a note on its importance. [06]

- Q.6. (a) Discuss twelve principles of green chemistry. [06]

- (b) Explain synthesis of polycarbonate material by green method. Discuss advantages of green method over conventional method. [06]

OR

- (b) Describe exfoliation and granular disintegration of rocks due to temperature changes. How minerals are formed? Explain it using Moh's scale. [06]