



12. (a) Discuss about physical properties of minerals with suitable examples. (16)

Or

- (b) Write the Physical properties of following minerals :

(i) Quartz

(ii) Garnet

(iii) Hornblende

(iv) Mica.

(4 × 4 = 16)

13. (a) Describe the petrological and engineering properties of the following rocks

(i) Schist

(ii) Marble

(iii) Sandstone

(iv) Gneiss.

Or

- (b) Bring out the distinguishing characters and properties of Igneous, Sedimentary and Metamorphic rocks.

14. (a) Describe with a neat diagram the various classifications of faults. Add a note on civil engineering significance of faults.

Or

- (b) Explain the seismic refraction survey for the determination of the depth to bed rock.

15. (a) What are the geological conditions necessary for design and construction of dams? Explain each condition using diagrams.

Or

- (b) Explain in detail, the role of remote sensing in studying geological Conditions of a major civil engineering project site.