

8. The process of determining particle size distribution in sand is CO1-U
 (a) Fineness test (b) Grading (c) Bulking (d) Silt test
9. The process of removing moisture from timber is CO1-U
 (a) Sawing (b) Seasoning (c) Preserving (d) Finishing
10. Paint mainly provides CO1-U
 (a) Colour (b) Decoration and protection (c) Polishing (d) Adhesion

PART – B (5 x 2= 10 Marks)

11. Define geology and state its importance in civil engineering. CO1-U
12. Why is the study of geology important for site selection? CO1-U
13. State the applications of hollow blocks CO1-U
14. List out the various grades of cement in India. CO1-U
15. Enumerate the various defects in timber. CO1-U

PART – C (5 x 16= 80 Marks)

16. (a) Explain minerals and Describe the physical properties of minerals with neat sketches where necessary. CO1-U (16)
 Or
 (b) Compare the physical and engineering properties of igneous, sedimentary, and metamorphic rocks. CO1-U (16)
17. (a) Describe the various geological structures such as folds, faults, and joints. Illustrate each with neat sketches and explain their engineering importance. CO1-U (16)
 Or
 (b) Use sketches of folds, faults and joints to explain how these structures can affect the design and safety of civil engineering structures. CO1-U (16)
18. (a) Explain various tests on bricks such as compressive strength, water absorption, and efflorescence. CO1-U (16)
 Or
 (b) With the sketches explain in detail about the manufacturing process of bricks. CO1-U (16)

19. (a) Apply the quality measures for conducting the experiment to determine fineness, standard consistency test and compressive strength, of cement in during the laboratory assessment. **CO5-App (16)**
- Or
- (b) During inspection, aggregates are found flaky and elongated. **CO5 - App (16)**
How would you calculate Flakiness Index and Elongation Index, and why are these important for concrete quality?
20. (a) Explain the different types of paints and describe the common defects of paints and their causes. **CO1-U (16)**
- Or
- (b) Explain in detail the application of timber in construction. **CO1-U (16)**

