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Question Paper Code: 53102

B.E./B.Tech. DEGREE EXAMINATION, NOV 2023

Third Semester

Civil Engineering

15UCE302 -ENGINEERING GEOLOGY AND CONSTRUCTION MATERIALS

(Regulations 2015)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

- Name the types of rocks which deposit and accumulate minerals in the strata's CO1- R
(a) Igneous rocks (b) Metamorphic rocks (c) Sedimentary rocks (d) Soft rocks
- The study about movement of Earth plate is called CO1- R
(a) Lithification (b) Continental drift (c) Plate tectonics (d) Plate stratification
- Bedded structure exists in which of the following rocks CO2- R
(a) Sedimentary (b) Extensive igneous (c) Metamorphic (d) Intensive igneous
- Which of the following is Coarse grained Igneous rock CO2- R
(a) Pegmatite (b) Quartzite (c) Shale (d) Slate
- A good quality stone must absorb water less than CO3- R
(a) 2.5% (b) 5% (c) 10% (d) 15%
- The colour of the brick is due to CO3- R
(a) Iron oxide (b) Silica (c) Magnesia (d) Alumina
- Initial setting time of Cement is CO4- R
(a) 10 minutes (b) 30 minutes (c) 50 minutes (d) 40 minutes
- Falkiness index test is done for CO4- R
(a) Sand (b) Rocks (c) Coarse aggregates (d) Cement

9. Which of the following is an example of Soft Wood CO5- R
 (a) Sal (b) Oak (c) Deodar (d) Mahogany
10. What is the life time of a moderately durable Timber CO5- R
 (a) 1-5 Years (b) 5-15 Years (c) 10- 15 Years (d) 5-10 Years

PART – B (5 x 2= 10Marks)

11. How will you distinguish Joint from Fault CO1- Ana
12. Enumerate any three types of rocks. CO2- U
13. List any four characteristics of a good brick. CO3- U
14. Name any two test conducted in stone aggregates. CO4- R
15. List the various common defects found in Timber. CO5- U

PART – C (5 x 16= 80Marks)

16. (a) Summarize the classification of Igneous rocks and Metamorphic rocks CO1- U (16)
 Or
- (b) Write the physical properties of following minerals CO1- U (16)
 (i) Conglomerate
 (ii) Limestone
 (iii) Schist
 (iv) Marble
17. (a) Explain the interior structure of the Earth and its composition with neat sketches. CO2- U (16)
 Or
- (b) Describe the various types of Faults with neat sketches. CO2- U (16)
18. (a) What are the tests conducted on stones. Explain any one in detail. CO3- U (16)
 Or
- (b) Describe the method of manufacturing of bricks with neat diagram. CO3- U (16)

19. (a) Discuss the manufacturing process of Cement with flow diagram and sketches.. CO4- U (16)
- Or
- (b) Write the procedure for following tests CO4- U (8)
- (i) Compressive strength of cement
- (ii) Crushing strength of coarse aggregates. CO4- U (8)
20. (a) List the varieties of Industrial Timber available in market. Explain any one in detail. CO5- U (16)
- Or
- (b) Discuss the manufacturing process of Steel with flow diagram. CO5- U (16)

