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**3rd Sem. / Civil, GE, Brick Tech,  
Const. Mgmt., Highway Engg.  
Subject : Construction Materials**

**Time : 3 Hrs.**

**MM : 100**

**SECTION-A**

**Note: Multiple choice Questions. All Questions are compulsory. (10x1=10)**

- Q.1 Granite is an example of (CO1)  
a) Aqueous rocks      b) sedimentary rocks  
c) metamorphic rocks    d) igneous rocks
- Q.2 The crushing strength of a stone depends upon its (CO1)  
a) Texture               b) Specific Gravity  
c) Work ability          d) Both A & B
- Q.3 For one cubic meter of brick masonry, the numbers of bricks required are (CO2)  
a) 400                   b) 450  
c) 500                   d) 550
- Q.4 The frog of a brick is normally made on its. (CO2)  
a) Longer face          b) Shorter face  
c) Bottom face         d) Top face

- Q.5 The bricks should be burnt at temperature from: (CO2)  
a) 300°C to 500°C      b) 500°C to 800°C  
c) 800°C to 1000°C      d) 1000°C to 1200°C
- Q.6 The expansion in portland cement can be tested by. (CO3)  
a) Fineness test          b) Soundness test  
c) Setting time test      d) Normal consistency test
- Q.7 Which of following is/are roof tiles: (CO2)  
a) Flat Tiles              b) Corrugated Tiles  
c) Manglore Tiles        d) All the above
- Q.8 The wood generally used for railway sleepers is (CO4)  
a) Mango                   b) Kail  
c) Babul                   d) Deodar
- Q.9 The commonly used solvent in oil paints is. (CO5)  
a) Turpentine              b) Naptha  
c) Either A or B           d) None of these
- Q.10 Mild steel is also known as (CO6)  
a) Low carbon steel      b) Soft steel  
c) Dead steel              d) Both A & B

**Section-B**

**Note: Objective type questions. All questions are compulsory. (10x1=10)**

- Q.11 Write full form of FRP. (CO7)

(1)

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- Q.12 Name one Eco-friendly Building Material. (CO7)  
 Q.13 Write Two Commercial forms at steel. (CO6)  
 Q.14 The vehicle used in distemper is \_\_\_\_\_ (water/thinner) (CO5)  
 Q.15 Annual rings represent \_\_\_\_\_ of the tree. (CO4)  
 Q.16 Decay of Timber is due to \_\_\_\_\_. (CO4)  
 Q.17 Mortar is a mixture of cement \_\_\_\_\_ and water. (CO3)  
 Q.18 Gypsum is added to control \_\_\_\_\_ of cement. (CO3)  
 Q.19 Silica prevents \_\_\_\_\_ in brick earth. (CO2)  
 Q.20 Maible is a \_\_\_\_\_ type of rock. (CO1)

### Section-C

**Note:** Short answer type Question. Attempt any twelve questions out of fifteen Questions. (12x5=60)

- Q.21 Explain the chemical classification of stones. Give examples also. (CO1)  
 Q.22 Write down the properties and used of marble. (CO1)  
 Q.23 What are the properties of good brick making earth? (CO2)  
 Q.24 Name four types of Roofing tiles also draw neat sketches. (CO2)  
 Q.25 Draw flow diagram for manufacture of cement by wet process. (CO3)  
 Q.26 Write any four difference b/w Rapid Hardening cement and quick setting cement. (CO3)  
 Q.27 Draw neat cross-section of an exogenous tree and write name of all components. (CO4)

- Q.28 Difference b/w soft wood and Hard wood. Write any five difference. (CO4)  
 Q.29 Write short note on decay of timber due to fungi. (CO4)  
 Q.30 What are the ingredients of a Varnish ? Explain each in brief. (CO5)  
 Q.31 What are the characteristics of a good paint. (CO5)  
 Q.32 What are the properties and uses of stainless steel. (CO6)  
 Q.33 Write down 5-5 commercial forms of steel and Aluminum. (CO6)  
 Q.34 Write short note on water proofing of roofs. (CO7)  
 Q.35 Write down five properties of Eco-Friendly building materials. (CO7)

### Section-D

**Note:** Long answer questions. Attempt any two questions out of three Questions. (2x10=20)

- Q.36 Write down steps involved in manufacturing of bricks. Explain any two steps in detail. (CO2)  
 Q.37 Explain any two test of cement and also write any five properties of cement. (CO3)  
 Q.38 What are the objective of Preservation of timber. Write down any five requirement of good preservative. Explain Ascu Treatment as per BIS code. (CO4)