

Ex./CON/T/214/2018  
**BACHELOR OF ENGINEERING CONSTRUCTION EXAMINATION, 2018**

(2nd Year, 1st Semester)

**Materials of Construction**

Time : Three hours

Full Marks : 100

Answer Q7 & any 5 from the rest

30+14X5= 100

1. What is the importance of source of materials? Explain the engineering significance of properties of construction materials.
2. Define admixture as per IS codes. Name types of admixture and explain any three of them.
3. Mention the different properties of coarse and fine aggregates. What is bulking of sand? What is its engineering significance?
4. Define types of paints. Define the name of the properties that are tested while judging for quality of bricks? Define class of bricks.
5. How many types of cement do you know that are normally available in market for construction purpose? What do you mean by OPC-53 grade cement? What are the grades of PPC & PSC cements?
6. Define different grades of TMT bars . What is the relevant code for it? Define the test that are carried out for quality assessment at site.
7. Define chemical composition of bitumen. Make a table to compare differences between tar and bitumen. Why does bitumen need grading? What are the properties on which bitumen needs grading? What are the disadvantages & advantages of penetration grading system in Indian context? What is the reason for introduction of viscosity grading system?