Assignment 6

The due date for submitting this assignment has passed.

Due on 2021-03-06, 22:59 IST.

1) To obtain the tensile strength of concrete, direct tension test is preferred over split tension test because of the ease of gripping the specimen in a direct tension test. State true or false?

   - True
   - False

   No, the answer is incorrect.
   Score: 0
   Accepted Answers: False

2) An M40 grade concrete mixture has to be designed for an office building in Chennai. It is found that 220 times of water are required to meet the Z points desired workability. If 22% of water content reduction can be achieved using a superplasticizer, calculate the amount of required cement content? (Use water-cement ratio as 0.42)

   - 348
   - 356
   - 358
   - 360

   No, the answer is incorrect.
   Score: 0
   Accepted Answers: 360

3) Identify the correct tools for finishing:

   - Vibratory screed
   - Bull float
   - Power trowel
   - Needle vibrator
   - Broom

   No, the answer is incorrect.
   Score: 0
   Accepted Answers: 0 points

4) Which of the following will help in eliminating the segregation of concrete mix?

   - Increasing the coarse aggregate content in the mixture
   - Increasing the fine aggregate content in the mixture
   - Employing hand compaction instead of vibrators while placing
   - Use of mineral admixtures to replace the cement content

   No, the answer is incorrect.
   Score: 0
   Accepted Answers: Increasing the fine aggregate content in the mixture

5) Consider that a concrete pavement has been constructed in Norway with atmospheric temperature at -5°C. Which of the following methods( ) would you recommend to cure the pavement?

   - Water spraying method
   - Steam curing method
   - Fogging method
   - Plastic sheet covering method

   No, the answer is incorrect.
   Score: 0
   Accepted Answers: Steam curing method

6) Consider that uniaxial tension test, flexural test, and splitting tensile test is conducted on M30 grade concrete specimens. Which of the following is the correct increasing order of strength in terms of its magnitude?

   - Strength of Uniaxial tension < Strength of Splitting < Strength of Uniaxial tensile
   - Strength of Uniaxial tension < Strength of Uniaxial tensile < Strength of Splitting
   - Strength of Uniaxial tension < Strength of Splitting < Strength of Uniaxial tensile
   - Strength of Splitting < Strength of Uniaxial tensile < Strength of Uniaxial tension

   No, the answer is incorrect.
   Score: 0
   Accepted Answers: Strength of Uniaxial tension < Strength of Splitting < Strength of Uniaxial tensile

7) Figure 1(a) to (d) shows the typical relationship between time Vs. Stress, and time Vs. Strain for creep and relaxation behaviour of concrete.

   Figure 1

   Identify the loading condition corresponding to (a), (b), (c), and (d) from the following options. (One or more answers are correct)

   - (a): Creep (b): Creep
   - (c): Relaxation (d): Relaxation
   - (a): Relaxation (b): Creep
   - (c): Relaxation (d): Relaxation

   No, the answer is incorrect.
   Score: 0
   Accepted Answers: (a): Creep, (b): Creep, (c): Relaxation, (d): Relaxation