Assignment 2

The due date for submitting this assignment has passed.

As per our rules, students are not allowed to submit this assignment.

Due on 2019-08-21, 23:59 IST.

1. As per the EI classification for Type II cement, we can use extenders up to 65%, but the only allowable extender is _______.
   - Calcium fly ash
   - Fly ash
   - Natural pozzolan
   Accepted Answer: Fly ash
   0 points

2. As per EI classification, strength classes 42.5 N should have a minimum strength of 105MPa at _______ days.
   - 3 days
   - 7 days
   - 14 days
   - 28 days
   Accepted Answer: 7 days
   0 points

3. As per EI classification, strength classes 42.5 N should have a strength of _______ to _______ MPa at _______ days.
   - 40.5 to 52.0; 28
   - 40.5 to 52.0; 28
   - 40.5 to 52.0; 28
   - 40.5 to 52.0; 28
   No, the answer is incorrect.
   0 points

4. As per EI classification, strength classes for 38.5 N the compressive strength compliance should be checked at the ages of:
   - 1 day
   - 7 days
   - 14 days
   - 28 days
   No, the answer is incorrect.
   0 points

5. The decreasing order of heat of hydration of the pure cement compounds are:
   C3A > C3S > C4AF > C4AF
   C3A > C3S > C4AF > C4AF
   C3A > C3S > C4AF > C4AF
   C3A > C3S > C4AF > C4AF
   Accepted Answer: C3A > C3S > C4AF > C4AF
   0 points

6. A portable pump by Bajaj, approximately half of the total heat of hydration in OPC is recovered in _______.
   - 1 day
   - Between 1 and 5 days
   - Between 5 and 7 days
   - Between 7 and 10 days
   No, the answer is incorrect.
   0 points

7. In an afterburner calorimeter the _______ (heat/temperature) is measured.
   - Heat
   - Temperature
   Accepted Answer: Heat
   0 points

8. In an afterburner calorimeter the _______ (heat/temperature) of the system is maintained as constant.
   - Heat
   - Temperature
   Accepted Answer: Temperature
   0 points

9. In the heat evolution curve for Portland cement, the peak (36) or the shoulder after the main peak occurs when:
   - C3S forms C3S
   - C3S forms C3A
   - Formation of ettringite: 1:3:6:1:2
   - C3A forms C3A
   No, the answer is incorrect.
   Accepted Answer: Formation of ettringite: 1:3:6:1:2
   0 points

10. The strength development in a hygrothermal cementitious system can be lagged along the data on:
    - Heat of setting
    - Heat flow
    - Compressive initial heat
    - Damage factor
    No, the answer is incorrect.
    Accepted Answer: Compressive initial heat
    0 points

11. Heat in the statements below is answer the question:
    
    Statement 1. Reducing the water/cement ratio reduces the peak temperatures of the curing cementitious system.
    
    Statement 2. The dormant period of a curing cementitious system can be increased by increasing the water/cement ratio.
    
    Statement 1 is true and in line
    
    Statement 2 is true and in line
    
    Both statements are true
    
    Both statements are false
    
    No, the answer is incorrect.
    
    Accepted Answer: Both statements are false
    
12. Increasing loads on the support structure, in a Portland cement system results in:
    
    - Lowered rate of heat evolution and reduced demand period
    - Lowered rate of heat evolution and increased demand period
    - Enhanced rate of heat evolution and reduced demand period
    - Enhanced rate of heat evolution and increased demand period
    
    No, the answer is incorrect.
    
    Accepted Answer: Enhanced rate of heat evolution and reduced demand period
    
13. A Portland cement with _______ is not a good choice in the chloride environment.
    
    - Low cement factor
    - High cement factor
    - Medium cement factor
    - High water/cement ratio
    
    No, the answer is incorrect.
    
    Accepted Answer: High water/cement ratio
    
14. A Portland cement with _______ is not a good choice in the chloride environment.
    
    - Low cement factor
    - High cement factor
    - Medium cement factor
    - High water/cement ratio
    
    No, the answer is incorrect.
    
    Accepted Answer: High water/cement ratio
    
15. A Portland cement with _______ is not a good choice in the chloride environment.
    
    - Low cement factor
    - High cement factor
    - Medium cement factor
    - High water/cement ratio
    
    No, the answer is incorrect.
    
    Accepted Answer: High water/cement ratio
    
16. A Portland cement with _______ is not a good choice in the chloride environment.
    
    - Low cement factor
    - High cement factor
    - Medium cement factor
    - High water/cement ratio
    
    No, the answer is incorrect.
    
    Accepted Answer: High water/cement ratio
    
17. A Portland cement with _______ is not a good choice in the chloride environment.
    
    - Low cement factor
    - High cement factor
    - Medium cement factor
    - High water/cement ratio
    
    No, the answer is incorrect.
    
    Accepted Answer: High water/cement ratio