Innovative Teaching Learning Activity

Subject: Concrete Technology

1. According to Bogue's compound composition, C_2S is responsible for: (1 point)

   - a) Early strength
   - b) Long-term strength
   - c) Controlling setting time
   - d) None of these

2. Cement is primarily used as a: (1 point)

   - Binding material
   - Lubricant
   - Waterproofing material
   - Fuel

3. The initial setting time of Ordinary Portland Cement (OPC) should not be less than: (1 point)

   - a) 10 minutes
   - b) 30 minutes
   - c) 45 minutes
   - d) 1 hour

4. The compound responsible for early strength in cement is: (1 point)

   - a) Tricalcium silicate (C_3S)
   - b) Dicalcium silicate (C_2S)

- c) Tricalcium aluminate (C_3A)
- d) Tetracalcium aluminoferrite (C_4AF)

5. The process of heating raw materials at high temperature in cement manufacturing is called: (1 point)
   - Calcination
   - Clinkerization
   - Hydration
   - Fusion
6. Standard consistency of cement is approximately: (1 point)
   - a) 10%
   - b) 25–35%
   - c) 45–55%
   - d) 60–75%
7. The main raw materials for manufacturing of cement are: (1 point)
   - Lime and clay
   - Lime and sand
   - Clay and gypsum
   - Sand and gypsum
8. The fineness of cement is determined by: (1 point)
   - a) Vicat apparatus
   - b) Blaine’s air permeability apparatus
   - c) Le-Chatelier flask
   - d) Compression testing machine

9. Which of the following is added during grinding of clinker to control setting time of cement? (1 point)

- Lime
- Gypsum
- Silica
- Alumina

10. The final setting time of cement should not exceed: (1 point)

- a) 30 minutes
- b) 6 hours
- c) 10 hours
- d) 12 hours