

# **Advance Construction - X20602**

(2<sup>nd</sup> Sem Civil PDDC 2013)

## **Topic Wise Assignment for Both Batch**

**Date : 06-02-2014**

### **Assignment – 1 (Pile Foundations)**

1. Explain uses of (or necessity) of pile foundations.
2. Explain factors affecting the selection of type of piles.
3. Explain about precast concrete piles with neat sketch.

### **Assignment – 2 (Cofferdams)**

1. Enlist common types of cofferdam.
2. Write a short note on economic height of cofferdam.
3. List the forces considered in design of a cofferdam.

### **Assignment – 3 (Caissons)**

1. What is a Caisson? Write uses of Caissons.
2. Explain about floating of caissons.
3. Explain problem in well sinking.

### **Assignment – 4 (Control of Ground Water in Excavations)**

1. What is dewatering?
2. Short note on deep well system (or bored well system).
3. Explain about vacuum system.

### **Assignment – 5 (Temporary Work)**

1. What is temporary structure? Explain requirement of good formwork.
2. What are the design features are considered in temporary works.
3. Explain about failure of formwork.

### **Assignment – 6 (Construction of Earthquake Resistant Building)**

1. Explain with sketch beam jacketing and column jacketing.
2. Give suggestion for construction of new masonry building in earthquake sensitive area.
3. Explain repair, restoration and retrofitting.

### **Assignment – 7 (Special Structures)**

1. Discuss important point to be considered while constructing tall structures.
2. What is Pre Stressing? Explain Concept of Pre Stressing.
3. Explain Pre-Tensioning and Post-Tensioning with Sketches.

### **Assignment – 8 (Demolitions of Structures)**

1. Describes in brief, the various methods of demolition.
2. Explain Implosion technology of demolition.
3. Explain protection measures to public during demolition.

### **Assignment – 9 (Construction Equipment and Plants)**

1. Explain by drawing sketch working of Power Shovel.
2. Explain working of Tower Crane and Belt Conveyers.
3. Explain factors affecting selection of construction equipments.