Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY PDDC - SEMESTER-II • EXAMINATION – SUMMER 2013

Subject Code: X20602 Date: 10-06-2013 **Subject Name: Construction** Time: 02.30 pm - 05.00 pm **Total Marks: 70 Instructions:** 1. Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks. **Q.1** (a) Discuss the causes of failure of piles. 07 Give classification of piles and differentiate between 07 friction piles and end bearing piles. **Q.2** (a) Discuss the factors affecting choice of piles 07 Write short note on Non-load bearing piles. 07 Twenty eight piles are arranged in four rows and seven 07 columns; calculate their group efficiency by Fed-rule. State the various types of coffer dams and explain any one **Q.3 07** of them. **(b)** What are the factors affecting selection of coffer dam. **07** Q.3 (a) State the various methods of pumping and explain any one 07 **(b)** Write short note on freezing process. **07 07 Q.4** (a) Write short note on Pneumatic caisson. (b) Define a caisson. Point out the difference between caisson 07 and cofferdam. OR **Q.4** Write short note on earthquake resistance housing. **07** Explain the design features of temporary works 07 0.4 What is pre stressed structure? Explain its importance. **Q.5 07** (a) . Explain the necessity of demolition. **07** (a) Explain cellular cofferdam with a neat sketch **Q.5 07**

07

(b) Write short note on load tests on piles