Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY PDDC - SEMESTER-II • EXAMINATION – SUMMER • 2014

Subject Code: X20602 Date: 24-06-2014 **Subject Name: Construction** Time: 10:30 am - 01:00 pm**Total Marks: 70 Instructions:** 1. Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks. **Q.1** What are the factors to be considered in selection of construction equipments? 07 (a) Draw the sketch of any one pile driving hammer, also describe procedure. 07 **(b) Q.2** Give the classification of piles according to material and according to function also. 07 (a) **(b)** Enlist the conveying and transporting equipments, explain by drawing sketch working of 07 power shovel. OR What is the necessity of cofferdam in construction? Describe by drawing sketch 07 **(b)** Rock filled cofferdam. **Q.3** (a) How the ground water is controlled during construction? Explain well point-method of 07 controlling ground water. **(b)** Explain different types of pile shoe and pile caps draw sketch. 07 OR Draw the sketch of form work for column and slabs. 0.3 07 (a) How the building can be made earthquake resistant? Give an example. **(b)** 07 0.4 Explain economic height of cofferdam showing table of height and cost of dam. 07 (a) What is caisson foundation? Describe the pneumatic caisson. 07 **(b) 07** 0.4 (a) Explain by drawing sketch wooden pile and steel piles. **(b)** What are the precautions to be taken for demolition of old buildings? **07** Explain by drawing sketch working of tower cranes **07 Q.5** (a) **(b)** Explain the provision of corner reinforcement, draw the sketch 07 OR

Describe 'caisson sickness'

Describe slip form work and special formworks

Q.5

(a)

(b)

07

07