Seat No.: Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI • EXAMINATION – SUMMER 2013

•	•	Code: 160601 Date: 24-05-2013	
Subject Name: Advanced Construction Technology Time: 10.30 am - 01.00 pm Total Marks: 70 Instructions:			
	1. 2.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a) (b)	7 7 7	07 07
Q.2	(a)	Define coffer dam. Enlist and explain factors that affect the types of coffer dam.	07
	(b)	Discuss points to be considered for planning of earthquake resistant construction.	07
	(b)		07
Q.3	(a) (b)	Differentiate between cased cast in situ piles and uncased cast in situ piles. Discuss various measures to reduce leakage through coffer dam.	07 07
		OR	
Q.3	(a)	Explain under reamed pile. Describe with sketches construction of under reamed piles.	07
	(b)	Enlist different types of coffer dam. Describe with sketches construction of double wall type coffer dam.	07
Q.4	(a) (b)	Enlist and explain essential requirement for good formwork. Sketch typical well caisson. Discuss function of each element of well caisson. OR	07 07
Q.4	(a)	Sketch typical formwork for (i) column (ii) slab and beam floor.	07
	(b)	Explain tilt of caisson Discuss remedial measures to rectify tilting of caisson.	07
Q.5	(a)	Enlist methods to determine load carrying capacity of pile. Explain pile load	07
	(b)	test with sketches. Describe with sketches well point systems of dewatering.	07
Q.5	(a)	OR Sketch typical pneumatic caisson. Discuss function of each element of pneumatic	07
-	(b)	caisson. Describe with sketches electro osmosis method of dewatering.	07
