Seat No.:	Enrolment No.

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

BE - SEMESTER-VI (OLD) - EXAMINATION - SUMMER 2017

Subject Name: Advanced Construction Technology		t Code: 160601 Date: 10/05/20	Oate: 10/05/2017 Total Marks: 70	
		10:30 AM to 01:00 PM Total Marks:		
1n;	1	1. Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks.		
Q.1	(a)	Give classification of Piles based on their function. Discuss any one pile in detail.	07	
	<b>(b)</b>	What are the types of caisson? Discuss Box caisson with neat sketch.	07	
Q.2	(a)	Which are the methods of controlling ground water during excavation of foundation? Discuss pumping from well point system in detail.	07	
	<b>(b)</b>	Enlist types of coffer dam. Explain any one in detail  OR	07	
	<b>(b)</b>	Discuss methods for leakage prevention in coffer dam.	07	
Q.3	(a) (b)	Explain Pile driving rig with neat sketch.  What is caisson? How caissons are different from coffer dam?  OR	07 07	
Q.3	(a)	Discuss Pile load test with neat sketch.	07	
	<b>(b)</b>	Discuss stages of construction of open well caisson with neat sketches.	07	
Q.4	(a) (b)	Describe cellular coffer dam with neat sketch.  Explain form work for RCC wall.	07 07	
0.4	(-)	OR	07	
Q.4	(a) (b)	What are the requirements of a good formwork?  Discuss various types of centering for big arches of bridges.	07 07	
Q.5	(a) (b)	Describe general principles of earthquake resistant building.  What is pre-stressed concrete? Discuss methods of pre-stressing.  OR	07 07	
Q.5	(a)	What is meant by demolition of structures? Discuss points to be considered during safe demolition of structures.	07	
	<b>(b)</b>	Discuss electro osmosis method of ground water control.	07	

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