Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

PDDC– SEMESTER II– • EXAMINATION –WINTER- 2016

Subject Code: X20602 **Date:03/01/2017**

Subject Name: Construction

Time:02:30 PM to 5:00 PM **Total Marks: 70**

Instructions:

1. **Attempt any five questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	Explain the situations in which the pile foundations are preferred.	**07**
	(b)	Write a notes on : (1) Sand Pile (2) Concrete sheet pile	**07**
Q.2	**(a)**	State the factor that needs to be considered for choosing any particular type of coffer dam.	**07**
	(b)	Write a short note on Economic height of cofferdam.	**07**
Q.3	**(a)**	Explain the design features of caissons.	**07**
	(b)	What is a box caisson? Explain the method of installation of a box caisson.	**07**
Q.4	**(a)**	Why steel formwork is preferred over timber formwork. Draw the formwork of RCC beam and RCC column.	**07**
	(b)	Write a note on slip formwork.	**07**
Q.5	**(a)**	Enumerate various methods of dewatering foundation excavations. Explain any two methods in brief.	**07**
	(b)	Give advantages and disadvantages of prestressed concrete.	**07**
Q.6	**(a)**	Explain in detail – Demolition of Structures.	**07**
	(b)	Explain the general principles for earthquake resistant buildings and their design aspects with neat sketch.	**07**
Q.7	**(a)**	What do you understand by economic life of construction equipment? What are the factors to be considered while fixing it?	**07**
	(b)	Write a short note on earth excavating equipment.	**07**

****