

Seat No.: _____
No. _____

Enrolment

GUJARAT TECHNOLOGICAL UNIVERSITY
BE – SEMESTER – VI EXAMINATION – WINTER 2015

Subject Code:160601

Date:15/12/ 2015

Subject Name: Advanced construction Technology

Time:2:30pm to 5:00pm

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) What are the factors that affects the selection of piles? **07**
(b) Discuss the uses of piles. **07**
)
- Q.2** (a) What are the causes of failures of piles? **07**
(b) How you will make choice between caisson and cofferdam? **07**
)
- OR**
- (b) Write short note on rock fill cofferdam. **07**
)
- Q.3** (a) Explain Repair, Restoration and Retrofitting. **07**
(b) Describe in brief the methods of demolition. **07**
)
- OR**
- Q.3** (a) What are the advantages and disadvantages of cast in situ concrete piles? **07**
(b) What types of loads are coming on the caissons? **07**
)
- Q.4** (a) What are the requirements of good form work? **07**
(b) Explain with neat sketch, the form work of RCC column. **07**
)
- OR**
- Q.4** (a) Describe the methods employed for the floating of caisson. **07**
(b) Discuss the load tests on piles. **07**
)
- Q.5** (a) Calculate the group efficiency of 36 piles arranged in 6 rows and 6 columns. **07**
(b) How you will prevent leakage in cofferdam? **07**
)
- OR**
- Q.5** (a) What are the important points to be considered for safe demolition of structure? **07**
(b) Discuss the economic height of cofferdam. **07**
)
