

Seat No.: _____

Enrolment No.: _____

GUJARAT TECHNOLOGICAL UNIVERSITY
DIPLOMA ENGINEERING – SEMESTER – • EXAMINATION – WINTER - 2017

Subject Code: 360603

Date: 06 - 11-2017

Subject Name: Advance Construction Technology

Time: 02:30 PM TO 05:00 PM

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Each question carry equal marks (14 marks)

- Q.1** (a) List advance types of civil engineering structures with its use (any 7) **07**
(b) Enlist different excavating equipment and explain any one in detail **07**
- Q.2** (a) What is earth compaction ? List different rollers and explain any one in detail **07**
(b) State and explain machineries and equipment used for large concrete work **07**
- OR
- (b) State factors affecting selection of construction equipment **07**
- Q.3** (a) What is dewatering ? Explain freezing method of dewatering **07**
(b) Differentiate shallow foundation and deep foundation **07**
- OR
- Q.3** (a) Give detailed classification of pile.Explain friction pile with sketch **07**
(b) Write shortnotes on (1)caisson sickness (2) Underreamed pile **07**
- Q.4** (a) Enlist suggestion for new construction in earthquake sensitive area **07**
(Minimum 7)
- (b) Explain with sketch Rockfill cofferdam **07**
- OR
- Q.4** (a) What is caisson ? List types of it and explain any one in detail **07**
(b) Distinguish cofferdam and caisson **07**
- Q.5** (a) State and explain fire safety measures in building **07**
(b) Explain with neat sketch erection of steel roof truss **07**
- OR
- Q.5** (a) Which precautions are require during blasting?List different explosives used **07**
in blasting and explain any one
- (b) Sketch form work of RCC beam and column and label their parts **07**