

Seat No.: _____
No. _____

Enrolment

GUJARAT TECHNOLOGICAL UNIVERSITY

Diploma Engineering - SEMESTER-III • EXAMINATION – SUMMER • 2015

Subject Code: 3330602

Date: 02-05-2015

Subject Name: Construction Technology

Time: 02:30 pm - 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. Use of programmable & Communication aids are strictly prohibited.
5. Use of only simple calculator is permitted in Mathematics.
6. English version is authentic.

- Q.1** Answer any seven out of ten. **14**
1. Write the functions of stair and lintel.
 2. Define shallow foundation and deep foundation.
 3. Write any four tools for excavation.
 4. Write uses of cofferdam.
 5. Explain frog with sketch.
 6. What are the methods of compaction of concrete?
 7. Explain curing of concrete.
 8. What is scaffolding?
 9. What is anti-termite treatment?
 10. Explain Needle Vibrator.
- Q.2** (a) Write four differences of load bearing structure and framed structure. **03**
OR
(a) State the purposes of foundation. **03**
(b) Explain wall type footing with sketch. **03**
OR
(b) Explain under reamed pile. **03**
(c) Give classification of civil engineering structures and give at least one example of each. **04**
OR
(c) Write four differences between load bearing pile and friction pile. **04**
(d) Explain any four causes of failures of foundations in detail. **04**
OR
(d) State different types of bonds in brick masonry and explain English bond. **04**
- Q.3** (a) Explain following terms related with masonry construction. **03**
(1) Stretcher (2) Queen closer (3) Hearting
OR
(a) Write the constituents of concrete and state the function of any one in detail. **03**
(b) List different types of scaffolding. **03**
OR
(b) Draw a neat sketch of column form work. **03**
(c) State any four important points to be kept in mind during stone masonry work. **04**
OR
(c) Enumerate various methods of concreting under water and explain any one. **04**
(d) Describe requirements of good form work. **04**
OR

- (d) Write the purposes of plastering. **04**
- Q.4** (a) What are different types of joints provided in concrete? Write short note about any one. **03**
- OR
- (a) State various types of pointing with its sketches. **03**
- (b) List measures to be taken to prevent dampness in buildings. **04**
- OR
- (b) Discuss factors affecting the selection of construction equipments. **04**
- (c) Enumerate various types of plants and equipments used in construction. Draw a line diagram of any one. **07**
- Q.5** (a) List safety measures for masonry work. **04**
- (b) State purpose of building maintenance. **04**
- (c) Enumerate safety equipments required at construction site. Write short note about any one. **03**
- (d) Write steps for repair of plaster. **03**
