

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
M.Tech. Winter 2019 - 20 Examination

Semester: 1**Subject Code: 203216133****Subject Name: ADVANCED CONSTRUCTION TECHNOLOGIES****Date: 18/12/2019****Time: 10:30 am to 01:00 pm****Total Marks: 60****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

- Q.1** A) What is Form work? Enlist and explain its types? (05)
B) What do you mean by Automation? Explain objectives of Automation in Construction. (05)
C) Write short note on Self Compacted concrete (05)
- Q.2 Answer the following questions.** (Attempt any three) (Each five mark) (15)
A) Write the different operations for construction of tunnel in rock.
B) What is dewatering technology and why it is required? Enlist Dewatering techniques.
C) Write short note on "Nanotechnology & Concrete".
D) Write down the advantages of mechanical compaction of concrete.
- Q.3** A) Write a note on: Storage of Various Precast Element (07)
B) Explain Well-point system in details. (08)
- OR**
- B) Write short note on NATM (New Austrian Tunneling Method). (08)
- Q.4** A) What is grouting. Describe Chemical grouting method in detail. (07)
- OR**
- A) Enlist methods of compaction and discuss in detail compaction of vibration. (07)
B) Enlist and explain any one trenchless techniques for new underground utilities. (08)