

S. B. Roll. No.....

ADVANCED CONSTRUCTION TECHNOLOGY
6th Exam/Civil/9516/Nov'24
(For Batch 2018 onwards)

Duration: 3Hrs.

M.Marks:75

SECTION-A

Q1. Define the following terms.

15x1=15

- a. Pre-stressed concrete
- b. Dewatering
- c. Shoring
- d. Piles
- e. Embankment
- f. Pre-tensioning
- g. Grouting
- h. Concreting
- i. Post-tensioning
- j. Admixture
- k. Galvanisation
- l. Bracing
- m. Curing
- n. Corrosion
- o. Compaction

SECTION-B

Q2. Attempt any six questions.

6x5=30

- i. Describe the excavation in hard soils.
- ii. Explain the various uses of pre-stressed concrete.
- iii. State the various precautions to be taken during execution of the excavation work.
- iv. Describe the difference between pre-tensioning and post-tensioning.
- v. Explain briefly the various methods of pile testing.
- vi. Describe the safety aspects to be taken care of during construction work.
- vii. Discuss the special techniques of pre-tensioning.
- viii. Describe the various problems in pile construction.
- ix. Name the various construction techniques for chimneys and cooling towers.

SECTION-C

Q3. Attempt any three questions.

3x10=30

- a. Explain the various dewatering techniques.
- b. Explain the basic methods for various types of piles. Also explain the methods of pile driving.
- c. Explain the construction techniques for high rise buildings.
- d. Explain the various materials of pre-stressing.
- e. Explain the various techniques of post-tensioning.