

BE [CIVIL] / Sem - VII / R - 19 / SH 2022 / 14-12-2022

(Time : 3 Hours)

QP Code : 10016365
(80 marks)

N.B:

1. Question No:1 is compulsory
2. Attempt any three questions from the remaining five questions.
3. Figures to the right indicate full marks.

Q. 1. Attempt any four. (20)

- a. Explain mud jacking and grouting for the foundation.
- b. Illustrate the construction sequence of a diaphragm wall using a neat sketch.
- c. Define dredging. State the purposes for which it is carried out
- d. What is seismic retrofitting? How is it achieved?
- e. Write a note on Smart Road Technology
- f. Explain launching techniques for heavy decks.

Q. 2 a. Write an explanatory note on the construction sequence and methods of construction of domes (10)

b. Write an explanatory note on coastal construction techniques for making them soundproof as well as air and moisture-resistant. (10)

Q. 3 (10)

a. What are pre-engineered buildings? State their merits and demerits. Give some examples (10)

b. Explain the procedure for underwater drilling and blasting (10)

Q.4 (10)

a. Explain the construction sequence in the cooling tower of a thermal power plant (10)

b. Describe the stepwise procedure of strengthening a beam (10)

using RC Jacketing.

Q.5 (10)

- a. Write an explanatory note on the trailing suction hopper dredger. (10)
- b. Describe the process of constructing concrete roads using pavers (10)

Q. 6

- a. Explain in detail various methods and techniques of ground improvement for soft soil. (10)
- b. Explain the stepwise procedure for the erection of large-span structures. (10)
