

Register No.: Name:

SAINTGITS COLLEGE OF ENGINEERING (AUTONOMOUS)

(AFFILIATED TO APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, THIRUVANANTHAPURAM)

SECOND SEMESTER M.TECH DEGREE EXAMINATION (Regular), MAY 2023**GEOMECHANICS AND STRUCTURES****(2021 Scheme)****Course Code: 21GS206-C****Course Name: Modern Construction Practices****Max. Marks: 60****Duration: 3 Hours****PART A*****(Answer all questions. Each question carries 3 marks)***

1. Compare the advantages and disadvantages of using small trucks at construction sites.
2. Discuss the necessity of soil compaction in construction applications.
3. Differentiate between stackability, nestability and collapsibility of containers.
4. Discuss the applications of sheet piles.
5. Describe concrete paving technologies.
6. List advantages of vacuum dewatering method of flooring
7. Discuss the importance of tunnel form construction.
8. Explain the in-situ prestressing techniques for tall structures.

PART B***(Answer one full question from each module, each question carries 6 marks)*****MODULE I**

9. Discuss the working of tunnel boring machine (6)

OR

10. Explain the application of mass diagrams in earthwork applications. (6)

MODULE II

11. Explain the working of pile driving equipments. (6)

OR

12. Explain the features of any two heavy compacting equipment. (6)

MODULE III

13. Summarize the advantages and disadvantages of closed-circuit crushing system. (6)

OR

14. How load size is determined in unit load design? (6)

MODULE IV

15. Differentiate between box jacking and pipe jacking. (6)

OR

16. Summarize the field procedure for DMC piling. (6)

MODULE V

17. Explain various techniques used for continuous concreting operation in tall buildings. (6)

OR

18. Describe vacuum dewatering method of concrete flooring with the help of a schematic diagram. (6)

MODULE VI

19. Discuss techniques used for the construction of heavy decks. (6)

OR

20. Differentiate between slip-form construction and flying-form construction. (6)
