

Register No.: ..... Name: .....

**SAINTGITS COLLEGE OF ENGINEERING (AUTONOMOUS)**

(AFFILIATED TO APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, THIRUVANANTHAPURAM)

**FIRST SEMESTER M.TECH DEGREE EXAMINATION (R), DECEMBER 2023****STRUCTURAL ENGINEERING AND CONSTRUCTION MANAGEMENT****(2021 Scheme)****Course Code: 21SC105-B****Course Name: Construction Planning, Scheduling and Control****Max. Marks: 60****Duration: 3 Hours****PART A*****(Answer all questions. Each question carries 3 marks)***

1. Comment on "Selecting the right technology and construction techniques is paramount to achieving project success".
2. Provide examples of three project that can be benefited from the application of advanced scheduling techniques.
3. What should be the practical approach to evaluate the problems encountered in the construction industry?
4. Enumerate the components of financial accounting system.
5. Justify the statement considering the safety concerns in the construction industry "Safety doesn't happen by accident".
6. Explain the concept of quality control in construction and its role in preventing defects and ensuring compliance with specifications.
7. Explain the hierarchical model for organising databases.
8. How do centralized database management systems differ from decentralized or distributed systems in terms of data control and access?

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

9. Illustrate the various ways you can present the project schedule. (6)

**OR**

10. Substantiate the relevance of coding system in construction industry. (6)

**MODULE II**

11. Explain in detail the calculations involved in the Monte Carlo schedule simulation. (6)

**OR**

12. Illustrate the importance of improving the existing scheduling process. (6)

**MODULE III**

13. Comment on the role of project budget in having a proper project monitoring and control. (6)

**OR**

14. Explain in detail the influence of crashing in Time/Cost trade offs. (6)

**MODULE IV**

15. Comment on the importance of schedule and budget updates. (6)

**OR**

16. Discuss financial accounting systems and cost accounts. (6)

**MODULE V**

17. Justify the importance of total quality control in construction management. (6)

**OR**

18. Explain in detail the role of work and material specifications in maintaining the proper quality control. (6)

**MODULE VI**

19. Illustrate the importance of having computerised organisations for effective functioning in construction industry. (6)

**OR**

20. Explain the role of accuracy in project information. (6)

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