

Register No.: Name:

SAINTGITS COLLEGE OF ENGINEERING (AUTONOMOUS)

(AFFILIATED TO APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, THIRUVANANTHAPURAM)

SEVENTH SEMESTER B.TECH DEGREE EXAMINATION (S), FEBRUARY 2024**CIVIL ENGINEERING****(2020 SCHEME)****Course Code : 20CET451****Course Name: Construction Planning and Management****Max. Marks : 100****Duration: 3 Hours****PART A*****(Answer all questions. Each question carries 3 marks)***

1. Compare CPM and PERT network techniques.
2. Enumerate the characteristics of a good organization.
3. Compare BIM surface models and solid models.
4. Explain any three benefits of BIM.
5. Describe the objectives of manpower planning.
6. Explain the three basic elements of quality.
7. Describe cash flow diagram.
8. Define Earnest money deposit (EMD).
9. Define Working Capital Management.
10. Enumerate the salient features of budgetary control.

PART B***(Answer one full question from each module, each question carries 14 marks)*****MODULE I**

11. Compare Line Organization and Line and Staff Organization. Explain their merits and demerits. (14)

OR

12. Explain the step-by-step procedure for Cost Optimization through the crashing of a network with the help of an example. (14)

MODULE II

13. Explain BIM Maturity Levels and the various BIM dimensions. (14)

OR

14. Explain the following: (14)
- i. Payment of Wages Act
 - ii. Minimum Wages Act
 - iii. Workmen's Compensation Act

MODULE III

15. Explain ABC analysis used for selective control in material management with a suitable example. (14)

OR

16. a) Describe the method for manpower estimation at various stages of construction project. (7)
b) Explain the need for construction safety management. (7)

MODULE IV

17. Explain the following: (14)
i. Administrative approval
ii. Technical sanction
iii. Secured advance

OR

18. Discuss the major steps involved in e-tendering and the process of awarding the contract. (14)

MODULE V

19. Explain the following: (14)
i. Financial statement analysis
ii. Financial ratio analysis
iii. Fund flow analysis

OR

20. a) Describe Long term financing. (9)
b) Explain the various aspects of the Profit center approach. (5)
