C 806A2 Total Pages: 2

Register No.: Name:

SAINTGITS COLLEGE OF ENGINEERING (AUTONOMOUS)

(AFFILIATED TO APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, THIRUVANANTHAPURAM)

FIRST SEMESTER M.TECH DEGREE EXAMINATION (Regular), DECEMBER 2022 STRUCTURAL ENGINEERING AND CONSTRUCTION MANAGEMENT (2021 Scheme)

Course Code: 21SC103

Course Name: Construction Planning and Management

Max. Marks: 60 Duration: 3 Hours

PART A

(Answer all questions. Each question carries 3 marks)

- 1. What do you mean by float in network analysis? Differentiate between the different types of floats.
- 2. Briefly explain the contributions of Fredrick Winslow Taylor in management studies.
- 3. List out the principles of an organization.
- 4. How will you incorporate information systems for decision-making?
- 5. What is the importance of cash flow diagrams in the construction industry?
- 6. What is break-even analysis?
- 7. Explain long-term and short-term financing.
- 8. Differentiate between Single Payment Compound Amount and Single Payment Present Worth Amount.

PART B

(Answer one full question from each module, each question carries 6 marks)

MODULE I

9. Write the differences between CPM and PERT methods. Explain the time (6) estimates associated with PERT.

OR

10. The following table shows the cost and duration of each activity. The indirect cost is Rs.3150/week. Determine the optimum duration of the project and minimum cost.

Activity	Predecessor	Normal Duration (weeks)	Normal Cost (Rs)	Crash Duration (weeks)	Crash Cos (Rs)
A	- 1	7	8,000	4	15500
В	- 1	9	5,000	6	9500
С	A	5	7,000	2	10,000
D	A	6	9,000	4	16,000
E	B, C	6	6,000	4	12,000

806A2 Total Pages: **2 MODULE II** Explain 'The evolution of management theory'. 11. (6)OR 12. Illustrate Principles of management with reference to the construction (6)industry. **MODULE III** 13. Briefly explain the Behavioral science theory with the help of Maslow's (6)hierarchy of needs. OR 14. Discuss the types of organization setup. (6)**MODULE IV** 15. Explain the requirements of a management information system. (6)OR 16. Define the 'M', 'I' and 'S' in MIS. Also, discuss the failure of MIS. (6)**MODULE V** 17. Discuss any six types of interest formulas and their applications. (6)**OR** What is present worth, annual equivalent and rate of return methods of 18. (6)

18. What is present worth, annual equivalent and rate of return methods of (6 evaluating alternatives?

MODULE VI

19. What are capital budgeting and working capital management?

(6)

OR

20. What do you mean by benefit-cost analysis? Briefly explain the same (6) with an example.
