



SAINTGITS COLLEGE OF ENGINEERING KOTTAYAM, KERALA

(AN AUTONOMOUS COLLEGE AFFILIATED TO APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, THIRUVANANTHAPURAM)

FIRST SEMESTER M.TECH. DEGREE EXAMINATION(R), MARCH 2021 (STRUCTURAL ENGINEERING AND CONSTRUCTION MANAGEMENT)

Course Code: 20CESCT105

Course Name: CONSTRUCTION MANAGEMENT

Max. Marks: 60

Duration: 3 Hours

PART A

(Answer all questions. Each question carries 3 marks)

- 1. Explain the major contributions of Henry L Gantt towards scientific management.
- 2. Discuss Maslow's hierarchy of needs.
- 3. List out the components of 'Management Information System' framework.
- 4. A loan of Rs.2000, if the interest rate is 10% per year. If interest had not been paid each year, but had been allowed to compound, how much interest would be due to the lender as a lump sum at the end of six years?
- 5. Define economic life of an equipment.
- 6. Explain benefit cost ratio.
- 7. Discuss the significance of three time estimates associated with PERT
- 8. Differentiate between A-O-A & A-O-N network.

PART B

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

MODULE I

9. Compare & contrast the management theories put forward by Taylor & Fayol. (6)

OR

10. Is management an 'Art' or 'Science'? Discuss your views.

MODULE II

11. Define 'Line & Staff' organization. Comment on its advantages and disadvantages.

OR

12. Outline the principles of an organization.

(6)

(6)

(6)

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MODULE III

13. Discuss the advantages & disadvantages of Computer based management information (6) system.

OR

14. Illustrate the procedure for acquiring a system for 'Management Information System'. (6)

MODULE IV

15. A granite company is planning to buy a fully automated granite cutting machine. If it is (6) purchased under down payment, the cost of the machine is Rs.16,00,000. If it is purchased under installment basis, the company has to pay Rs.25,000 each. Suggest the best alternative for the company using the present worth basis at i=18%, compounded annually.

OR

16. Describe present worth, future worth and annual equivalent methods of evaluating (6) alternatives

MODULE V

(6)

(6)

17. Demonstrate Break even analysis with suitable example.

OR

18. A company is trying to diversify its business in a new product line. The life of the project is (6) 10 years with no salvage value at the end of its life. The initial outlay of the project is Rs. 20,00,000. The annual net profit is Rs.3,50,000. Find the rate of return for the new business

MODULE VI

19. Demonstrate Fulkerson's rule for numbering the events with suitable example. (6)

OR

20. Illustrate resource levelling with the help of a suitable example.
