

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

FIRST SEMESTER M.TECH DEGREE EXAMINATION

Civil Engineering

(Structural Engineering and Construction Management)

04 CE 6405- Construction Management

Max marks : 60

Duration : 3 hours

PART- A

Answer all questions

Each question carries 3 marks

1. Define Motion Study.
2. List the Principles of an Organization.
3. Define MIS.
4. Write short notes on interest formulas.
5. Explain Long- Term Financing.
6. Write notes on Benefit Cost Analysis.
7. Define Work Scheduling.
8. Define Resource Allocation.

PART- B

Answer one choice in each question

Each question carries 6 marks

9. Discuss the principles of Scientific Management according to Frederick Winslow Taylor.

OR

10. Explain Henry Fayol's 14 principles of Management.
11. Explain Maslow's hierarchy of needs.

OR

12. Discuss the different Types of Organization.

13. Explain MIS effectiveness and efficiency criteria.

OR

14. List the different Organizational Theory. Explain each in three to four sentences.

15. A person who is now 35 years old is planning for his retired life. He plans to invest an equal sum of rupees 10,000 at the end of every year for the next 25 years starting from the end of the next year. The bank gives 10% interest rate, compounded annually. Find the maturity value of his account when he is 60 years old.

OR

16. A company has to replace a present facility after 15 years at an outlay of rupees 5,00,000. It plans to deposit an equal amount at the end of every year for the next 15 years at an interest rate of 9 % compounded annually. Find the equivalent amount that must be deposited at the end of every year for the next 15 years.

17. Write short notes on Profitability Index. (Explain using equation).

OR

18. Write notes on break even analysis. Explain the concept with an example.

19. A project has 14 activities A through M. The relationships amongst these activities are as follows:

- 1) A is the first activity.
- 2) B and C can be performed in parallel and are immediate successors to A.
- 3) D, E and F follows B.
- 4) G follows E.
- 5) H follows D, but it cannot start until E is complete.
- 6) I and J succeed G.
- 7) F and J precede K.
- 8) H and I precede L.
- 9) M succeeds L and K.
- 10) The last activity N succeeds M and C.

Construct the network diagram and number the event according to Fulkerson's rule.

OR

20. Define Planning. Discuss the steps involved in Planning. Explain the objectives and principles of Planning.