

**APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY**  
**FIRST SEMESTER M. TECH DEGREE EXAMINATION**  
**Civil Engineering**  
**(Structural Engineering and Construction Management)**  
**04CE6405—Construction Management**

Max. Marks : 60

Duration: 3 Hours

**PART A**

*Answer All Questions*

*Each question carries 3 marks*

1. Define scientific management.
2. List the principles of good organization.
3. What are the objectives of MIS?
4. Explain cash flow diagram.
5. What is replacement analysis?
6. What is capital budgeting?
7. Define resource levelling.
8. What do you mean by updating project?

**PART B**

*Each question carries 6 marks*

9. What are the principles of Scientific Management according to F W Taylor.

OR

10. What are the contributions of Scientific Management in construction industry? Explain its advantages and disadvantages.

11. Explain Maslow's hierarchy of needs.

OR

12. Explain the organizational set up of a large construction company.
13. What are the different types of Management information systems?

OR

14. Discuss the functions of MIS.
15. Illustrate time value of money with an example in construction industry.

OR

16. A person is planning for his retired life. He has 10 more years of service. He would like to deposit 20% of his salary which is 4000 at the end of first year and there after he wishes to deposit the amount with an annual increase of Rs 500 for the next 9 years with an interest rate of 15 %. Find the total amount at the end of 10 year of the above series. Draw the cash flow diagram of the same.
17. 2 mutually exclusive projects are being considered for investment. Project A1 required an initial outlay of Rs 30 lakhs with net receipts have been estimated as 9 lakhs per year for the next 5 years. The initial outlay of A2 is Rs 60 lakhs and net receipts Rs 15 lakhs per year for next 7 years. There is no salvage value assured with either of them. Using benefit cost ratio which would you choose. Assume  $i=10\%$

Project	A1	A2
Initial outlay	30 lakh	60 lakh
Net receipts	9 lakh/year	15 lakh/year
Life	5year	7 year

OR

18. What are the needs of capital budgeting. Explain with an example.
19. What is the significance of resource in preparing project schedule? Give an example to demonstrate its importance.

OR

20. Explain the applications of network techniques.