

DR. KALAM POLYTECHNIC COLLEGE, AVANAM

DEPARTMENT OF CIVIL ENGINEERING

UNIT-I

SUB. NAME /CODE: 21061/CONSTRUCTION MANAGEMENT

WITH MIS

PART-A

1. Define construction management?
2. Explain the following (1) PWD (2) CPWD.
3. What are the two types of sectors carrying out the construction projects?
4. Write any one objective of planning?
5. Define ecological analysis.
6. What is mean by public sector?
7. What is sub contract?
8. What is the necessity of EMD?
9. Write different types of specifications?
10. What are the classifications of construction planning?
11. What are the types of estimate?
12. Define building economics?
13. What you understand by technical feasibility?
14. What do you mean by land acquisition?

15. What is meant by private sector?

16. What is EMD? why it is collected?

17. State any two function of construction management.

18. Define sub – contract.

19. State any two limitation in planning of construction projects?

PART-B

1. Discuss briefly the duties and responsibilities of owner consultant and contractor? **(APR-15)**
2. Discuss in detail the various stages in the construction of a project? **(OCT-14)**
3. Explain in detail the various aspects of feasibility study of a construction project? **(APR-14)**
4. Explain the different types of contract system in details. **(APR-14)**
5. Explain briefly about :(i)Advantages of planning to the client and engineer.(ii) scurnity and acceptance of tender. **(OCT-14)**
6. Define tender document. What are the information's to be furnished in tender document? **(APR-15)**
7. Explain objectives of planning and site utilization?

8. What are the roles of government on construction agencies in construction Activities?

UNIT-II

PART-A

1. What is cash book?
2. What is nominal muster role?
3. State any two requirements of project office?
4. Mention the different types of construction organizations?
5. What is the purpose of measurement book?
6. What is meant by engineering ethics?
7. What is meant by payroll?
8. Define decentralization.
9. Define percentage completion report.
10. Mention any one function of a chief engineer?
11. How PWD is administratively organized?
12. Define partnership.
13. What is works register?
14. What is imprest?
15. What is meant by consumable materials?
16. State any two qualities of an efficient construction manager?

17. Define work charged establishments?

PART-B

1. Explain the different forms of business organization and mention its merits and demerits? **(APR-14)**
2. Explain the following partnership company and joint stock company? **(APR-15)**
3. Define M-book. What are the points to be kept in mind while recording in M-book? **(APR-15)**
4. Write short notes on. (i) nominal muster roll (ii) imprest and temporary accounts. **(APR-14)**
5. Explain construction supervision and superintendence. **(OCT-14)**
6. Explain : (i) Organization setyp of PWD (ii) nominal muster roll.
 - (i) What do you mean by check measurement? Explain them?
 - (ii) Write short notes on NMR, daily labour report and work charged establishment? **(OCT-14)**
7. Explain the duties and responsibilities of chief engineer and superending engineer of state PWD.

UNIT-III

PART-A

1. What is meant by project scheduling?
2. What is bar chart?

3. What is meant by human resources?
4. Define the term nominal cost?
5. What is meant human resources?
6. What is the significance of critical path?
7. What do you mean by resource leveling?
8. Define slack.
9. What is crash time and crash cost?
10. What is the expansion of CPM?
11. What is PERT?
12. Define “variance”.
13. Define resource management.
14. What do you mean by “cost slope”?
15. Define float and its types?

PART-B

1. The following are the three time estimate of activities.

Draw the project network. Calculate T_E , T_L and slack for each node. Identify the critical path. **(APR-14)**

Activity	1-2	1-3	1-4	2-4	2-5	3-5	3-6	4-6	5-6
T_O	2	3	2	5	6	1	3	3	5
T_L	5	12	5	14	15	4	6	6	8

T_p	14	21	8	17	30	7	21	9	17
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1. Explain different classification of scheduling. **(APR-14)**
2. Explain :i) Bar chart ii) optimum utilization of resources. **(OCT-14)**
3. Explain the following : (i) Resource leveling and (ii) Time –cost optimization curve. **(APR-15)**
4. A project consists of the following activities from A to H .

The precedence relationships between the activities are as follows: A and B are starting activities; H is the end activity; C follows A ;D follows A;E follows B;F follows C ;G follows D and E;H follows G and F. The duration in days of various activities are A=7,B=8,C=9,D=5,E=4,F=6,G=9 and H=3.

draw the network diagram .identify the critical path. Find the project completion time. **(APR-15)**
5. The following tables list the jobs (activities) of a network with three time estimates. Draw the project network .calculate T_E , T_L and slack for each event. Identify the critical path. What is the project time? **(OCT-14)**

Durati on In days	Activity	1-2	1-6	2-3	2-4	3-5	4-5	6-7	5-8	7-8
T_o		3	2	6	2	5	3	3	1	4
T_L		6	5	12	5	11	6	9	4	19
T_p		15	14	30	8	17	15	27	7	28

6. The following are the three time estimate of activities. Draw the project network. Calculate T_E , T_I and slack for each node.

Identify the critical path.

Activit y	1-2	1-3	1-5	2-4	3-4	4-5	4-6	5-6
T_o	2	4	2	1	5	3	2	1
T_L	3	5	2	2	6	4	3	2
T_p	5	5	4	4	8	9	6	5

7. Write short notes on (i) work breakdown chart(WBC)
(ii) time vs cost Optimization curve (iii) resource leveling
8. What are the advantages of network analysis?

UNIT-IV

PART-A

1. What is meant by accident?
2. What is arbitration?
3. Define ethics and engineering ethics.
4. Mention any one mode of settlement.
5. What are the elements of quality?
6. State the need for labour legislation.

7. What are the three quality assurance techniques?
8. What is EPF?
9. What is the purpose of contract labour act?
10. Define quality control.
11. What is the function of trade union?
12. What are the categories of disputes?
13. Define database.
14. Write any two objectives of quality control?
15. Mention any two major ethical issues.
16. List out different modes of settlement of disputes.

PART-B

1. Explain the different forms of quality assurance techniques. **(APR-14)**
2. Write short notes on: i) Payment of wages act ii) Employees provident fund. **(APR-14)**
3. Discuss the quality assurance techniques with reference to (i) Inspection (ii) Resting and (iii) sampling **(OCT-14)**
4. write short notes on (i) Arbitration (ii) Payment of wages act. **(OCT-14)**
5. Explain different approaches to improve safety in

construction.

(APR-15)

6. Write short notes on: (i) Contract labour regulation and abolition and (ii) Employees provident fund act. **(APR-15)**

7. i) What are the causes of accidents in the construction site?(6)

ii) What is the need of labour legislation?(6)

8. Explain the engineering ethics and integrity?

UNIT-V

PART-A

1. Define MIS.
2. Define entrepreneurship.
3. What is SIDCO?
4. What is function of rural bank?
5. Define database.
6. What is meant by cash inflow and cash outflow?
7. Name any two types of bank.
8. What is time value of money?
9. What do you mean by present value of money?
10. What is IRR?
11. What is simulation?

12. Define profitability index.

13. Write any one public sector bank.

14. Write the basic concepts of estimation.

PART-B

1. Explain the activities of different types of bank. **(OCT-14)**

2. (i) Explain function of SIDCO, DIC.(6)

(ii) What are the requirements of entrepreneurship?(6) **(OCT-14)**

3. Write briefly about (i) Risk and Rewards in entrepreneurship

(ii) Construction automation and robotics. **(APR-15)**

4. Explain the function of DIC and TANSIDCO entrepreneurship

Development. **(APR-15)**

5. Calculate the NPV of a project which has the following cash flow stream. Also state whether the project can be accepted or rejected.

Year	1	2	3	4	5
Cash in flow	100000	150000	200000	220000	260000
				0	

Initial investment is €500000. The interest rate is 10% and the discounting factors for next five years are 0.909, 0.826, 0.751, 0.683 and 0.621 respectively. **(APR-14)**

6. Explain in detail the project management and operations simulation

Packages. **(APR-14)**

7. (i) Explain the function of entrepreneurship.

(ii) Explain the elements of cash flow.

8. Mention the different types of entrepreneurial development

Programs existing in India?