Construction Management

① Introduction to construction Mgmt

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(1) Define construction management.
(2) Name various stages in construction.
(3) what type of construction comes under heavy construction?
(4) What is the purpose of Briefing stage in construction work?
(5) what is the role of owner in a construction team?
(6) what do you mean by tendering stage?
(7) Define stabbing.
(8) Define commissioning stage.
(9) What types of material used for construction?
(10) what activities involved in designing stage

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(1) what are the various objectives of construction management?
(2) Describe various types of construction.

(3) Describe the various resources for a construction industry.

(4) With a flow diagram show the relationship between various constituents of the construction team.

(5) Describe the Tendering stage in construction.

(6) Describe the role ~~in~~ of a contractor in construction.

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(1) Describe the functions of construction management.

(2) Briefly describe various stages in construction.

(3) Briefly describe about the construction team components, their functions and interrelationship.

(2) Constructional Planning

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(1) Define construction planning.
(2) what is equipment schedule?
(3) Define scheduling.
(4) How many types of networks are there?
(5) what do you mean by an activity?
(6) what is the need of a dummy activity?
(7) How many types of events are there?
(8) How the expected completion time of an activity is calculated in PERT?
(9) what do you mean by slack and a critical path?
(10) what do you mean by float. How many types of float are there?

(1) What are the limitations of bar charts?

(2) Explain with example, the concept of work break down structure in construction planning.

(3) What are the difference b/w PERT & CPM network?

(4) What are the various stages in construction planning? Describe briefly.

(5) Describe how to prepare material schedule.

(6) Estimate the expected time of each of the following activities from 3 time estimates:

Sr. No.	Activity	Time estimate in days		
		t_o	t_l	t_p
1	Driving piles	22	30	50
2	Erecting roof truss	11	14	17
3	Concreting for generator	3	$5\frac{1}{4}$	6
4	Fabricating for AC ducts.	12	16	17

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(1) Draw the network diagram.

(i) C follows D but precedes F.

(ii) C follows B but precedes H.

(iii) G follows F but precedes I.

(iv) E follows A but precedes I

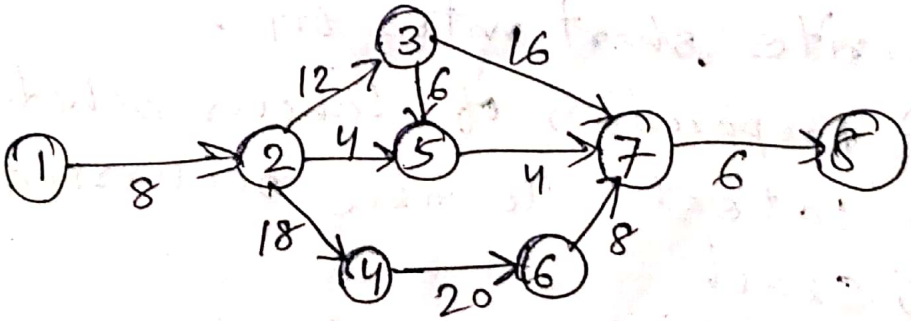
(v) D follows A

(vi) H & I terminates at the same time.

(vii) A & B start at the same time

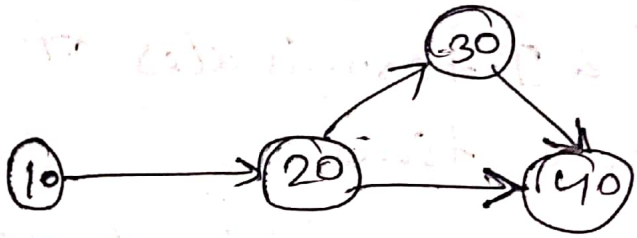
Also by Fulkerson's rule number the events in the above network diagram.

(2) Identify the critical path and determine project completion time.



(Duration in weeks)

(3) For the project network shown in figure and data given below, determine the optimum time duration and optimum cost. Also plot a curve of total cost vs. time and indicate on it the optimum time and optimum cost.



Activity	Normal time (T_n) days	Crash time (T_c) days	Normal cost (C_n) ₹	Crash cost (C_c) ₹	Cost slope ₹/day
10-20	4	3	400	600	200
20-30	5	2	300	750	150
20-40	7	5	360	540	90
30-40	4	2	500	1000	250

Indirect cost = ₹ 250/- per day.

(4) write short notes on -
(a) Preparation of Labour schedule
(b) Latest allowable occurrence time
(c) Slack
(d) Crashing of network.

③ Material and stores Mgmt
& ④ Construction Site Mgmt

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(1) what are the temporary services in a construction site?
(2) Define job layout.
(3) what is required for the preparation of a job layout
(4) Define bin card.
(5) Define stock
(6) classify a store.
(7) what is a credit note?
(8) what do you mean by a suspense head?
(9) Define indent and invoice.
(10) Classify T&P.

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(1) Explain the various types of temporary services required for job layout.
(2) Explain briefly store accounting procedure.

(3) what are the principles of storing material at site?
(4) Explain how to organize labours at site
(5) Explain how the location of equipment is decided at construction site.
(6) classify a store.
(7) Describe unstamped receipt.

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(1) Describe the purpose and factors affecting a job layout also explain layout of equipments.
(2) Explain how to prepare a Job layout with a layout plan diagram and also describe each parts of the layout diagram.
(3) Describe the procedure to write off the T&P account's register.
(4) write short notes on —
(a) Issue rate, (b) Indent,
(c) Stock account, (d) Unstamped receipt.

(5) Construction organisation
& (6) Construction Labour and Labour mgmt.

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(1) Define conflict and name the various conflicts.
(2) Define an organisation.
(3) what are the ~~two~~ methods of making wage payments to labour?
(4) what is the full form for AITUC, CITU, BMS and INTUC.
(5) Define leadership.
(6) styles of leadership is of how many types? Name them.
(7) Define human relation.
(8) what do you mean by mob psychology?
(9) Define motivation and name the types of motivation.
(10) Define morale. ~~Name~~ write two points which cause low morale.

(1) Describe various principles of an organisation for effective and efficient working.
(2) What are the duties of the Junior Engineer?
(3) Describe the present status of construction labour in India.
(4) Describe the different approaches to motivation.
(5) What are the factors which affect morale of an employee?
(6) Describe various methods to improve morale.
(7) What is the importance of leadership in management?
(8) What are the principles of effective supervision.

(1) Describe various types of conflicts and how to prevent them ?

(2) Describe the characteristics of group behaviours.

(3) Write short notes on
(a) Absenteeism (4)
(b) Labour welfare. (3)
(c) Handling grievances. (3)

(4) Describe various labour laws in India.

(5) Describe various types of organisations with diagram.

(6) Explain the importance of leadership and human relations in managing a construction project.

(7) Equipments Mgmt
& (8) Quality control.

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(1) Define owning and operating cost.
(2) Name some of the NDTs.
(3) What inspections needed during masonry work?
(4) Describe gamma radiography test.
(5) Define depreciation.
(6) Name various types of maintenance.
(7) What is equipment mgmt?
(8) Why standardisation of the equipments are essential?
(9) How are the different alternative equipments identified?
(10) What do you mean by equipment schedule?
(11) What do you mean by Full scale load test?

(1) Describe the need for inspection and quality control in constr^{n} works.

(2) what is the difference b/w destructive and Non-destructive tests ?

(3) Describe various factors affecting the owning and operating cost.

(4) Describe why inspection and testing of equipment is necessary ?

(5) Describe how to identify different alternative equipment ?

(6) what do you mean by equipment schedule and how is it prepared ?

(7) what are the benefits of adopting maintenance plan ?

(8) what are the principles of inspection ?

(1) Describe various destructive and non destructive tests in civil construction sites.

(2) Describe various stages of inspection and quality control.

(3) Describe various costs which constitute the cost of owning and operating an ~~an~~ equipment.

(4) Describe various types of maintenance.

(5) what are the ~~factors~~ precautions to be taken while carrying out maintenance operation? what are minor repairs?

(9) Monitoring Progress
& (10) Safety mgmt. in constr?

12.

(1). what do you mean by progress of a work?
(2) what is an equipment record?
(3) what do you mean by work study?
(4) what is job diary?
(5) what is material account?
(6) what do you mean by productivity?
(7) Distinguish between motion study and time study.
(8) what is the significance of equipment record?
(9) what is the importance of safety in construction?
(10) List items of works prone to severe accidents.

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(1) what safety measures are to be taken during excavation.

(2) what safety measures taken during hot bituminous works?

(3) what safety measures to be taken during fabrication and erection?

(4) what is the purpose of progress control?

(5) Describe safety campaign in a construction site.

(6) what are the steps involved in time study?

(7) Describe Harrow's Questionnaire.

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(1) What are the causes of construction accident? Write down the safety measures for demolition work.

(2) Describe safety measures to be taken during Drilling & blasting, Scabolding and Storage.

(3) Describe various aspects of fire safety in Buildings.

(4) Describe various methods of recording progress of work.

(5) Describe the corrective measures to be taken to prevent the delay of project.

(6) Describe various methods to increase productivity.