

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
Diploma Engineering, Mid semester Examination

Semester: 6th

Subject Code: 03605353

Subject Name: Construction Management

Date: 19 -1 - 2023

Time: 7:50 to 9:20 (1hr: 30min)

Total Marks: 40

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. English version is considered to be Authentic.

Q.1	Answer any six out of Ten. (2 Marks Each)	(12)	CO/PO NAME	Blooms Taxonomy Words																														
	1. Define Organization		CO1	Knowledge																														
	2. Enlist different types of organization		CO3	CREATE																														
	3. Write full form of CPM and PERT.		CO1	Apply																														
	4. Write full form of EST, EFT, LST, LFT		CO2	Knowledge																														
	5. Define Float.		CO1	Apply																														
	6. Define Scheduling.		CO3	Understand																														
	7. Define Dummy activity.		CO3	Knowledge																														
	8. Enlist causes of project failure for any construction activity.		CO2	Knowledge																														
	9. Draw flow chart for Line Organization for Construction Project		CO4	Understand																														
	10. Write advantages of functional organization.		CO3	Apply																														
Q.2	A) Write Role of various personnel in construction organization.	(03)	CO3	CREATE																														
	OR																																	
	A) Write advantages and disadvantages of line and staff organization.	(03)	CO3	CREATE																														
	B) Explain characteristics of organization.	(03)	CO3	CREATE																														
	OR																																	
	B) Write difference between Event and Activity	(03)	CO3	CREATE																														
	C) Write network rules.	(04)	CO3	CREATE																														
	OR																																	
	C) Enlist types of organization and explain any one in detail.	(04)	CO2	Knowledge																														
	D) What is Gantt Bar chart and explain advantages and disadvantages of Gantt bar chart.	(04)	CO2	Apply																														
Q.3	A) Define float and explain types of floats in detail.	(03)																																
	OR																																	
	A) Define the following terms: 1. Network 2. Earliest event time 3. Event	(03)	CO1	Knowledge																														
	B) Enlist types of schedules and explain any one schedule in detail.	(03)	CO1	Knowledge																														
	OR																																	
	B) Explain in detail Agencies associate with construction work.	(03)	CO1	Knowledge																														
	C) From the data given below in table prepare Network diagram and calculate TE and TL.	(04)	CO3	EVALUATE																														
	<table><tr><td>ACTIVITY</td><td>NODES</td><td>DURATION</td></tr><tr><td>A</td><td>1-2</td><td>6</td></tr><tr><td>B</td><td>1-3</td><td>4</td></tr><tr><td>C</td><td>2-4</td><td>5</td></tr><tr><td>D</td><td>2-3</td><td>3</td></tr><tr><td>E</td><td>4-6</td><td>6</td></tr><tr><td>F</td><td>3-5</td><td>10</td></tr><tr><td>DUMMY</td><td>5-6</td><td>0</td></tr><tr><td>G</td><td>5-7</td><td>10</td></tr><tr><td>H</td><td>6-7</td><td>12</td></tr></table>	ACTIVITY	NODES	DURATION	A	1-2	6	B	1-3	4	C	2-4	5	D	2-3	3	E	4-6	6	F	3-5	10	DUMMY	5-6	0	G	5-7	10	H	6-7	12			
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C)	From the data given below in table prepare Network diagram and calculate TE and TL.			(04)	CO3	EVALUATE
	Activity	Activity Arrow	Duration			
	A	1-2	8			
	B	1-3	6			
	C	1-4	10			
	D	2-5	8			
	E	2-7	15			
	F	3-5	10			
	G	4-5	8			
	H	4-6	10			
	I	5-6	10			
	J	5-7	10			
	K	6-7	8			
	L	7-8	7			
D)	From the above example Calculate Total Float, Free Float and Independent Float. Locate critical path for network.			(04)	CO3	EVALUATE