		GUJARAT TECHNOLOGICAL UNIVERSITY					
Su	hiect	ME – SEMESTER – III (New)– EXAMINATION – WINTER-2019 t Code: 3730008 Date: 14-11-2019					
	•	t Name: Cost Management of Engineering Projects					
	•	2:30 PM TO 05:00 PM Total Marks: 70					
	tructio						
		. Attempt all questions.					
		Make suitable assumptions wherever necessary.					
	5.	. Figures to the right indicate full marks.					
Q.1	<b>(a)</b>	Explain the following terms	07				
		a. Relevant cost					
		b. Differential cost					
		c. Incremental cost					
		d. Opportunity cost					
	<b>(b)</b>	1 0 0	07				
Q.2	<b>(a)</b>	1 0	07				
		a. Marginal costing					
	<b>(</b> 1)	b. Absorption costing	07				
	(b)	Explain cost concepts in decision making.	07				
	(b)	"Marginal Costing is a valuable technique to the management" critically evaluate	07				
	(U)	the marginal costing.	07				
Q.3	(a)	Explain Break-even analysis in detail.	07				
<b>Q</b> .0	(b)						
	()	OR	01				
Q.3	(a)	Explain Cost-Volume-Profit analysis.	07				
•	<b>(b)</b>	-	07				
Q.4							
	<b>(b</b> )	What is Total Quality Management? Explain theory of constraints.	07				
		OR					
Q.4	<b>(a)</b>	Explain the methods to solve Assignment model.	07				
~ -	<b>(b)</b>	Explain quantitative techniques for cost management.	07				
Q.5	(a)	Consider the transportation problem shown in table below. Find the initial basic	07				
	feasible solution using Northwest corner method.						
		1 $2$ $3$ $4$ $5$ Supply					
		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$					

		1	2	3	4	2	Supply
	1	20	4	32	28	20	3000
Plant	2	12	36	24	26	32	5000
	3	16	8	28	24	20	8250
	4	28	44	40	16	36	3750
Demand		3500	4000	2500	1500	4000	-

(b) Find the optimal solution of the following Transportation Problem using MODI 07 method. Use VAM to find IBFS.

	<b>M</b> 1	M2	M3	<b>M</b> 4	Supply 20
<b>F</b> 1	3	2	4	1	20
F2	2	4	5	3	15
F3	3	5	2	6	25
F4	4	3	1	4	40
Demand	30	20	25	25	-

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## OR

0.5 Distinguish between CPM and PERT. (a)

## Determine the Critical path for given activities and find out floats: **(b)**

Activity	Duration	Activity	Duration	Activity	Duration
1-2	10	2-6	3	5-7	7
1-3	6	3-8	12	6-7	15
1-4	7	4-6	9	7-9	4
2-5	3	4-8	8	8-9	6