

GUJARAT TECHNOLOGICAL UNIVERSITY
PDDC - SEMESTER-VI EXAMINATION – WINTER 2015

Subject Code: X60601**Date: 10/12/2015****Subject Name: Construction Management and Economics****Time: 02:30pm to 05:00pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) What is a bar chart Explain with sketches and write down limitation of bar chart **07**
(b) Differentiate between Conventional Technique and network technique **07**

- Q.2** (a) Explain the following term a) Critical Activity b) Float c) Total float **07**
(b) What is ISO? Explain ISO 9001 in detail. **07**

OR

- (b) Draw a job layout for Bridge construction. **07**

- Q.3** (a) Draw the network from following data also find out critical path, critical activity, project duration **07**

Sr.No	Activity	Duration	Precedence	Successor
1	A	5	---	E
2	B	4	----	C,D
3	C	3	B	F
4	D	2	B	G
5	E	1	A	I
6	F	6	C	H
7	G	7	D	-----
8	H	8	F	-----
9	I	9	E	-----

- (b) Differentiate between PERT & CPM **07**

OR

- Q.3** (a) Draw the network from following Data, also find out critical Activity, Critical path, Project Duration. **07**

Sr.No	Activity	Duration
1	1-2	10
2	1-3	8
3	2-5	12
4	3-4	9
5	4-7	1
6	5-6	4
7	5-7	6
8	6-8	7
9	7-8	8
10	7-9	15
11	8-10	2
12	9-10	11

- (b) Write short note on “Updating” 07
- Q.4** (a) What is break even analysis? Where we use breakeven analysis? 07
- (b) The original cost of a Excavator is 35,00,000/- and its salvage value is 8% of the original cost and its life is 5 year. Cost of owning and operating is Rs.30000/- per month. The hiring charges for the excavator inclusive of repair and maintenance is Rs. 95000/- per month. Suggest whether the equipment is buy or Hire 07

OR

- Q.4** (a) Write factors affecting Owning and Operating cost for equipment. 07
- (b) Determine the breakeven for the following 07

	Products		
	A	B	C
Sales(Units)	5000	6000	4000
Unit selling Price(Rs.)	10	15	18
Unit variable Price(Rs.)	6	4	13

Fixed cost of the product is Rs. 40000/-

- Q.5** (a) Write short notes 1)Resource allocation 2) Labour welfare and laws 07
- (b) Enlist the different type of equipment and explain Excavating equipment. 07

OR

- Q.5** (a) Write short on Labour incentive. 07
- (b) Draw and explain the Mobile tower crane. 07
