



# DELHI SCHOOL OF BUSINESS

By Vivekananda Institute of Professional Studies - TC

Delhi School of Business  
PGDM & PGDM (FINTECH) Program  
MID-TERM EXAMINATION, October 2023  
TERM – I (Batch: 2023-25)

Course Name	Operations Management	Course Code	
Duration	1.5 Hours	Max. Marks	20

## Instructions:

1. All questions are compulsory.
2. Answers should be to the point.

Q.1

(05 Marks) CO \_\_\_\_\_

A small manufacturing facility is being planned that will feed parts to three heavy manufacturing facilities. The location of the current plants with their coordinates and volume requirements is given in the following table.

Plant location	Coordinates (X, Y)	Volume (Parts per year)
Pokhra	300, 320	4,000
Butawal	375, 470	6,000
Kathmandu	470, 180	3,000

Determine the best location for this new facility. Also calculate weight distance.

Q.2

(05 Marks) CO \_\_\_\_\_

- a) Construct QFD diagram for product design of chair for use in class room at DSB. Make all required assumptions.
- b) What factors you will consider while deciding strategic capacity for setting up a health centre in a district headquarter town?

$$\frac{13000}{2} = 6500$$

$$\frac{3000 + 4000 + 7000}{2} = 7000$$

$$\frac{4000 + 6000 + 10000}{2} = 13750$$





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Q.3

(10 Marks) CO \_\_\_\_\_

The Denver Iron & Steel Company is expanding its operations to include a new drive-in weigh station. The weigh station will be a heated/air-conditioned building with a large floor and small office. The large room will have the scales, a 15-foot counter, and several display cases for its equipment.

Before erection of the building, the project manager evaluated the project using PERT/CPM analysis. The activities with their corresponding times were recorded in a Table A.

Using PERT/CPM analysis, find the critical path, the slack times, and the expected completion time.

Table A.

#	Activity	Times			Preceding Tasks
		Optimistic	Most Likely	Pessimistic	
A	Lay foundation	8	10	13	-
B	Dig hole for scale	5	6	8	-
C	Insert scale bases	13	15	21	B
D	Erect frame	10	12	14	A,C
E	Complete building	11	20	30	D
F	Insert scales	4	5	8	E
G	Insert display cases	2	3	4	E
H	Put in office equipment	4	6	10	G
I	Finishing touches	2	3	4	H,F