7. Find the Basic Feasible solution with different measures known to you for the following transporter matrix

Projects Plants	A	B	C	Source
1	2	7	4	50
2	3	3	1	80
3	5	4	7	70
4	1	6	2	140
Demand	70	90	180	340

14

8. Write notes on : 7x2=14

(i) Project Management

(ii) Waiting line Models

*****

PG Odd Semester (CBCS) Exam. December, 2022

Business Administration

(1st Semester)

Course No: CP-106 (O)

(Statistical Methods for Decision Making)

Full Marks: 70

Pass Marks : 28

Time: 3 hours

The figures in the right margin indicate full marks for the question.

1. Discuss in brief different types of probability sampling and non-probability sampling techniques known to you. 14

Or

2. How do you differentiate between primary data and secondary data? Discuss the different types of techniques for collecting primary data. 6+8=14

3. The frequency distribution below represents the weights in pounds of a sample of packages carried last month by a small air freight company.

Class	Frequency
10.0-10.9	1
11.0-11.9	4
12.0-12.9	6
13.0-13.9	8
14.0-14.9	12
15.0-15.9	11

16.0-16.9	8
17.0-17.9	7
18.0-18.9	6
19.0-19.9	2

(a) Compute the sample mean

(b) Compute the sample mean using the coding method with 0 assigned to the fourth class.

(c) Repeat part (b) with O assigned to the sixth class.

(d) Explain why your answer in parts (b) and (c) are the same. 3+3+3+5=14

Or

4. (a) What do you mean by Dispersion? Discuss the different measures of Dispersion.

(b) Following are the students scores on a business quiz. Find the 80th percentile.

95 81 59 68 100 92 75 67 85 79 71 88 100 94 87 65 93 72 83 91

8+6

5. Define the following :

(a) Regression Analysis

(b) Estimating equation

(c) Correlation Analysis

(d) Direct & inverse relationship

(e) Causal Relationship

(f) Linear and curvilinear relationship

(g) Multiple Regression

Or

6. The leader of MP Fiber Plant, Siddharth, has drafted a set of wage and benefit demands to be presented to management. To get an idea of worker support for the package, he randemly polls the two largest groups of workers at his point the machinists (M) and the inspectors (I). He polls 30 of each group with the following results -

Opinion of Package	M	I
Strongly Support	9	10
Mildly Support	11	3
Undecided	2	2
Mildly Oppose	4	8
Strongly Oppose	4	7
	30	30

(a) What is the probability that a machinist randomly selected from the polled group mildly supports the package?

(b) What is the probability that an inspector randomly selected from the polled group is undecided about the pachake?

(c) What is the probability that a worker (machinist or inspector) randomly selected from the polled group strongly or mildly supports the package?

(d) What types of probability estimates are these?

4+4+4+2=14