



UNIT 1: Concept of Statistics

Q.1 The weekly observations on cost of living index in a certain city in the year 1990-91 are given below:

Cost of living	150-160	160-170	170-180	180-190	190-200	200-210
No. of workers	20	18	42	28	25	50

Prepare Less than and more than cumulative frequency distribution.

Q.2 From the following data construct histogram.

Class	15-19	20-24	25-29	30-34	35-39
Frequency	12	18	20	10	22

Q.3 Draw the histogram for the following data

class	10-20	20-25	25-40	40-50
frequency	30	15	45	25

Q.4 Distinguish between – Inclusive classes and Exclusive classes

Q.5 From the following data construct ogive curve.

class	0-1000	1000-2000	2000-3000	3000-4000	4000-5000
frequency	200	180	400	320	100

Q.6 From the following data construct frequency polygon and frequency curve.

class	10-20	20-30	30-40	40-50
frequency	15	35	25	50

Q.7 what is Data? Explain the different types of data.

Q.8 what is Statistics? Explain the scope of Statistics.

Q.9 what is Attributes, Variables and Constants?

Q.10 what is graph? Explain the different types of Graph.



UNIT 2 :Measures of Central Tendancy and Dispersion

Q.1 The following are the sales in Rs for 6 days in a certain week.

3020,4120,3600,3250,3830,4000 Obtain the mean sale.

Q.2 Find the mean of the following frequency distribution.

X	f
4	10
5	6
6	1
7	4
8	9

Q.3 Compute arithmetic mean for the following data.

class	frequency
0-20	12
20-40	8
40-60	14
60-80	6
80-100	10

Q.4 Find A.M. of first n natural numbers.

Q.5 State the properties of A.M.

Q.6 Arithmetic mean of weight of 150 boys is 55 kg and arithmetic mean of 100 girls is 50kg. Calculate A. M. of combined group of boys and girls.



Q.7The mean of 100 items was 50. Later on it was discovered that one figure was misread as 80 instead of 18. Find the correct mean :

Q.8The daily expenditure of 120 families is given below:-

Daily expenditure	20-29	30-39	40-49	50-59	60-69
No. of families	20	-	28	-	15

If the mode of the frequency distribution is 43. Find the missing frequencies.

Q.9For the following frequency distribution

Marks	0-10	10-20	20-30	30-40	40-50
No.of students	5	12	43	32	8

Find i) Mean ii) Mode iii) Median

Q.10Define A.M., Median, Mode and state the formula for each, in case of individual observations and frequency distribution

Q.11Find the median of the given observations: 10, 12, 14, 12, 9, 8, 7, 10 , 5, 9, 10.

Q.12 Find the median of the following distribution.

Class	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Frequency	8	12	10	20	9	10	1

Q.13Find median of the following data.

Weekly Wages(Rs)	50	55	60	65	70
No. of workers	3	7	20	6	4

UNIT 3: Measures of Dispersion

1. Compute range and coefficient of range the following data

100,24,14,105,21,3,106,16,100,72,68,103,61,90,20,15,102,104

2.

The prices of shares of a certain company from Monday to Friday are as follows :

Days : Mon Tues Wed Thu Fri

Price (in Rs.) : 524 502 544 519 558

Calculate the range.

3

Example 1. From the following data compute inter quartile range, quartile Deviation and Coefficient of Quartile Deviation.

24	7	11	9	17	3	20	14	4	22	27
----	---	----	---	----	---	----	----	---	----	----

4.

Example 1. Compute Inter Quartile Range, Coefficient of Quartile Deviation for following data.

X :	4	8	12	16	20	24	28	32
f :	4	9	17	40	53	37	24	16

5.

Example 1. Compute Coefficient of Quartile Deviation for following data.

Class Interval :	0-10	10-20	20-30	30-40	40-50	50-60	60-70
Frequency :	8	16	22	30	24	12	6



Unit No. 4 Correlation and Regression(for ungrouped data)

Example 1. Calculate Karl Pearson's coefficient of correlation between the age and weight of the children :

Age (years) :	1	2	3	4	5
Weight (kg.) :	3	4	6	7	12

Example 2. Calculate coefficient of correlation between death and birth rate for the following data.

Birth Rate	24	26	32	33	35	30
Death Rate	15	20	22	24	27	24

Example 3. Calculate coefficient of correlation between X series and Y series using Karl Pearson's Method.

X :	14	12	14	16	16	17	16	15
Y :	13	11	10	15	15	9	14	17

Example 4. Compute coefficient of correlation by Karl Pearson Method for the following data

X :	1800	1900	2000	2100	2200	2300	2400	2500	2600
f :	5	5	6	9	7	8	6	8	9