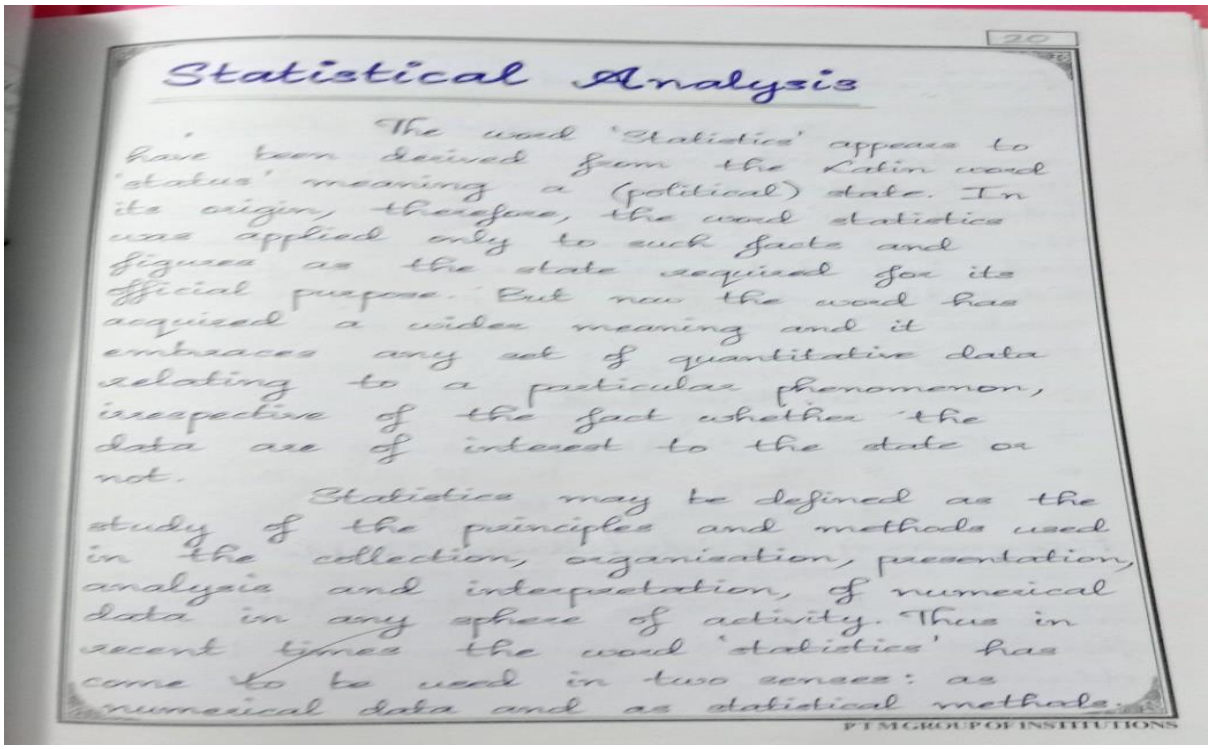
PATTOM THANUPILLAI MEMORIAL
COLLEGE OF EDUCATION
Maruthoorkonam, Kottukal P.O., Balaramapuram, Thiruvananthapuram, Kerala - 695501
Phone : 0471-2267420
(Recognised by : NCTE and Affiliated to Kerala University)

DOCUMENTS SHOWING DIFFERENT ASSIGNMENTS GIVEN AND ASSESSED FOR THEORY COURSES



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Statistical Analysis

The word 'Statistics' appears to have been derived from the Latin word 'status' meaning a (political) state. In its origin, therefore, the word statistics was applied only to such facts and figures as the state required for its official purpose. But now the word has acquired a wider meaning and it embraces any set of quantitative data relating to a particular phenomenon, irrespective of the fact whether the data are of interest to the state or not.

Statistics may be defined as the study of the principles and methods used in the collection, organisation, presentation, analysis and interpretation of numerical data in any sphere of activity. Thus in recent times the word 'statistics' has come to be used in two senses: as numerical data and as statistical methods.

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Frequency Distribution

It is a method of classifying raw data into number of classes or groups. After listing down the class intervals the frequencies of occurence of the scores within each class is counted and indicated against each. A frequency distribution shows a tallying of the number of times each score occurs in a group of scores.

Scores in the Test

7	10	10	6	9	11	10	11	13	8
6	10	8	12	8	6	16	18	18	13
19	13	19	19	19	16	18	17		

Frequency Distribution Table

Frequency distribution table is an organised plan of arranging the data

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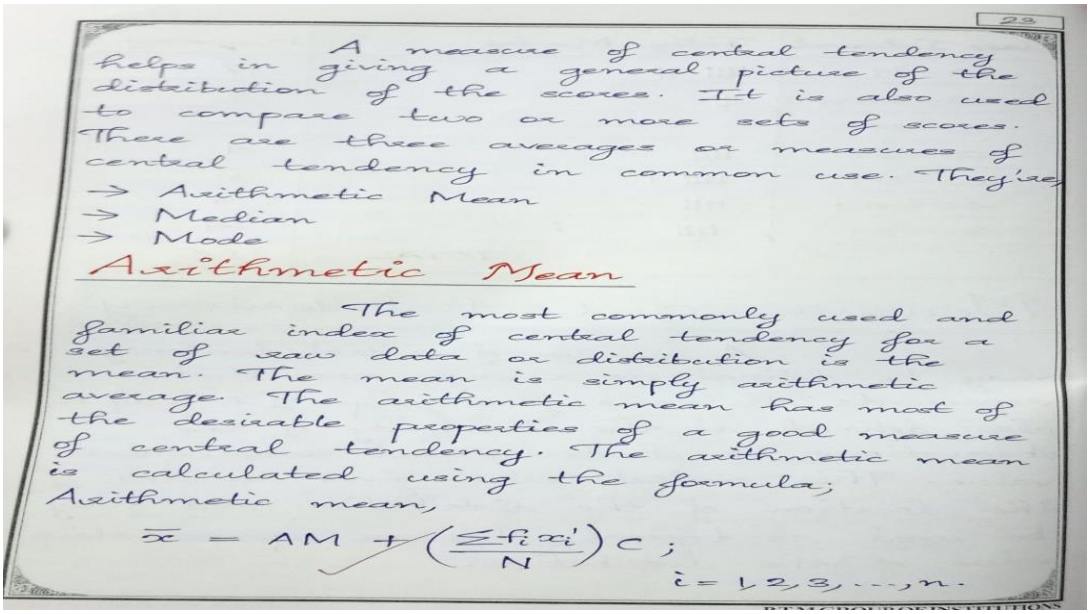
Class Interval	Tally Marks	Frequency
90 – 99	𝍸 II	7
80 – 89	III	3
70 – 79	—	—
60 – 69	IIII	4
50 – 59	𝍸 I	6
40 – 49	IIII	4
30 – 39	IIII	4
	TOTAL	28

Measures of Central Tendency

A measure of central tendency may be defined as a single score that represents all scores of a group. It may be also defined as the tendency of the observations to cluster round some central value. This central value gives an idea of the location of the distribution and may be used as typical value or representative value of the distribution.



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A measure of central tendency helps in giving a general picture of the distribution of the scores. It is also used to compare two or more sets of scores. There are three averages or measures of central tendency in common use. They are,

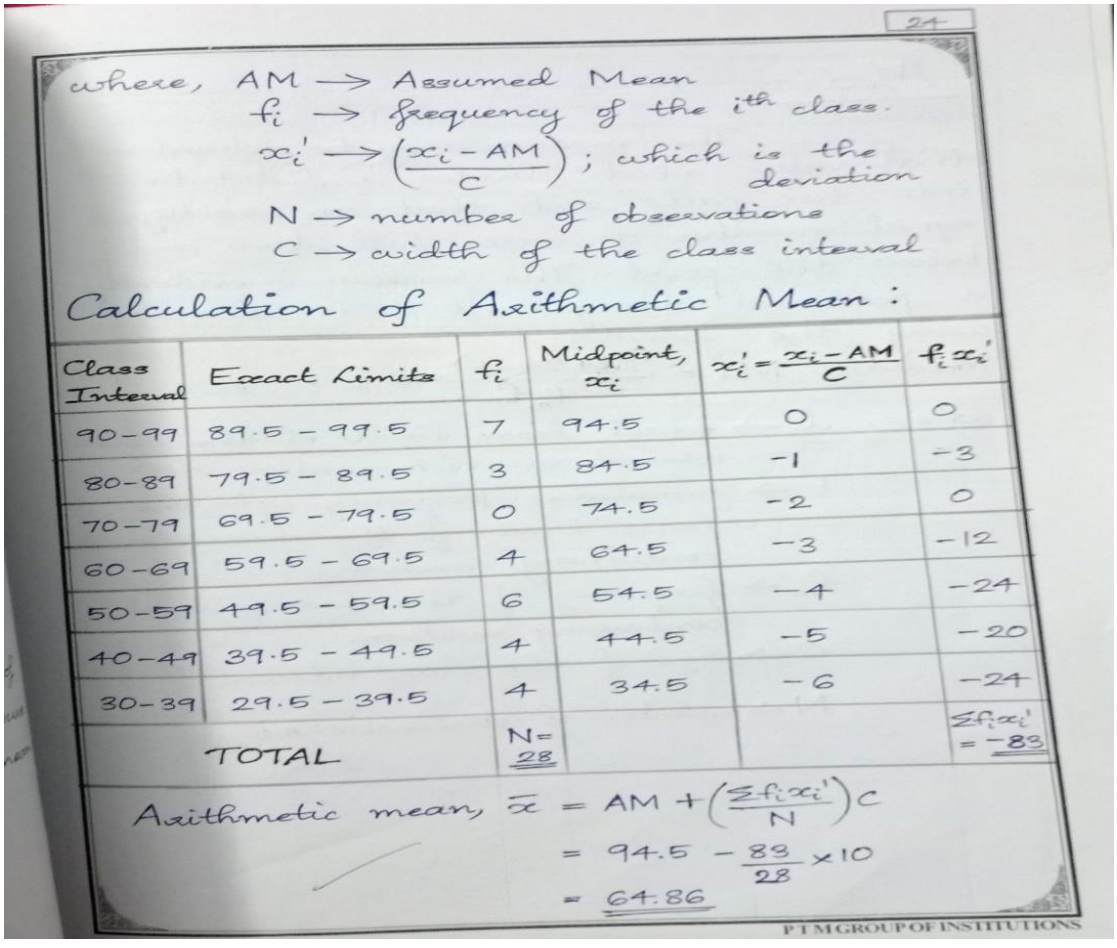
→ Arithmetic Mean
→ Median
→ Mode

Arithmetic Mean

The most commonly used and familiar index of central tendency for a set of raw data or distribution is the mean. The mean is simply arithmetic average. The arithmetic mean has most of the desirable properties of a good measure of central tendency. The arithmetic mean is calculated using the formula;

Arithmetic mean,

$$\bar{x} = AM + \left(\frac{\sum f_i x_i'}{N}\right) C \; ; \quad i = 1, 2, 3, \ldots, n.$$



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where, AM → Assumed Mean
f_i → frequency of the i^{th} class.
x_i' → $\left(\frac{x_i - AM}{C}\right)$; which is the deviation
N → number of observations
C → width of the class interval

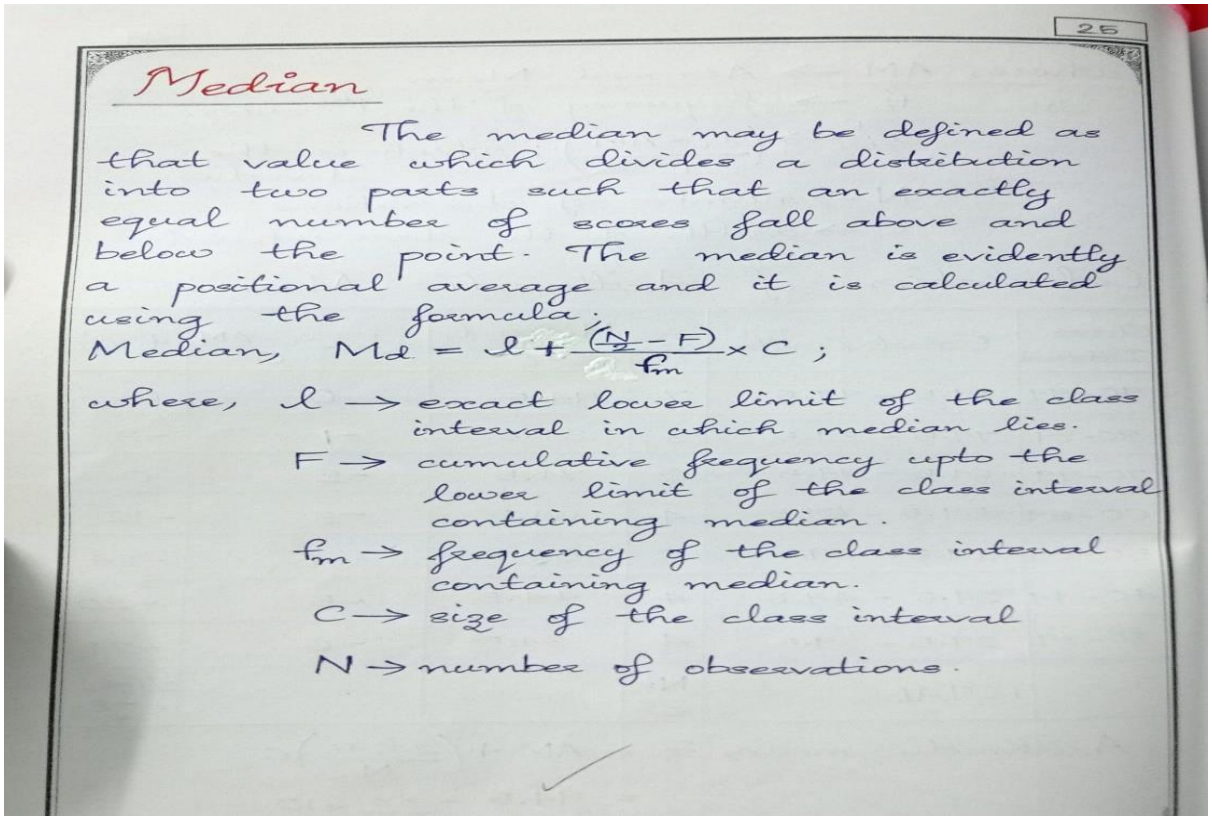
Calculation of Arithmetic Mean :

Class Interval	Exact Limits	f_i	Midpoint, x_i	$x_i' = \frac{x_i - AM}{C}$	$f_i x_i'$
90-99	89.5 - 99.5	7	94.5	0	0
80-89	79.5 - 89.5	3	84.5	-1	-3
70-79	69.5 - 79.5	0	74.5	-2	0
60-69	59.5 - 69.5	4	64.5	-3	-12
50-59	49.5 - 59.5	6	54.5	-4	-24
40-49	39.5 - 49.5	4	44.5	-5	-20
30-39	29.5 - 39.5	4	34.5	-6	-24
TOTAL		N = 28			$\sum f_i x_i' = -83$

Arithmetic mean, $\bar{x} = AM + \left(\frac{\sum f_i x_i'}{N}\right) C$

$= 94.5 - \frac{83}{28} \times 10$

$= 64.86$



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Median

The median may be defined as that value which divides a distribution into two parts such that an exactly equal number of scores fall above and below the point. The median is evidently a positional average and it is calculated using the formula;

Median, $Md = l + \frac{(\frac{N}{2} - F)}{f_m} \times C$;

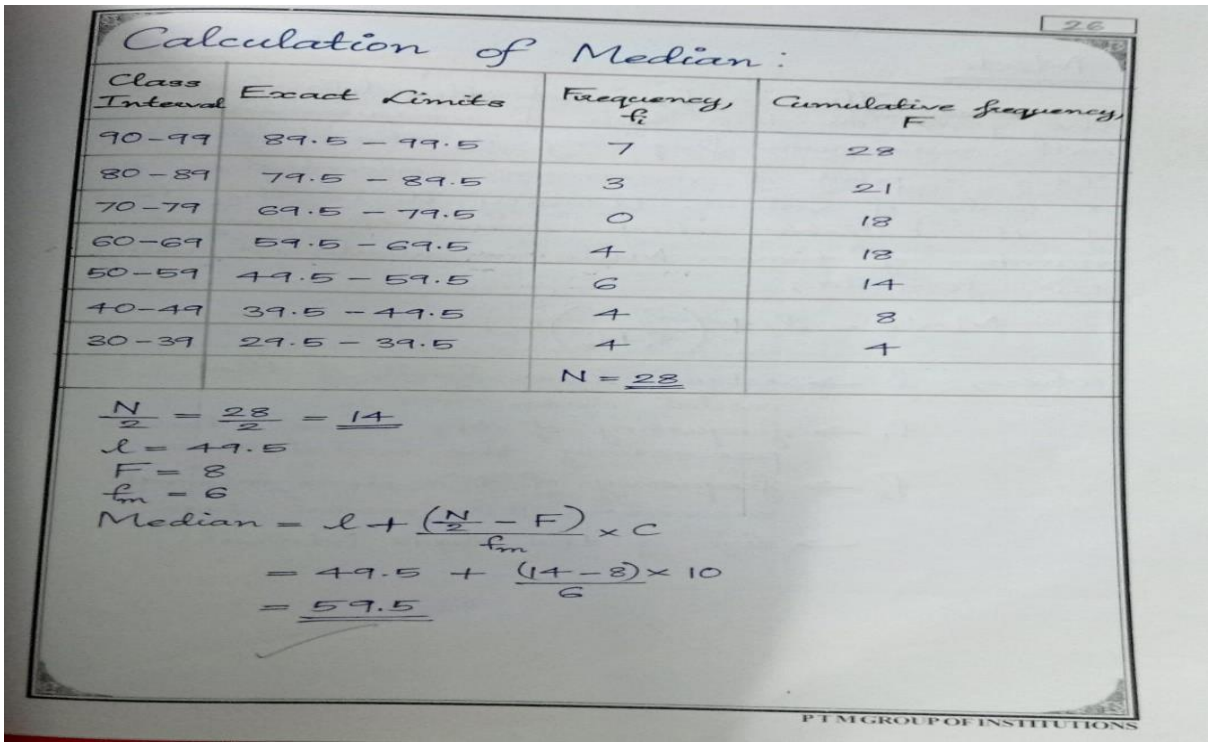
where, l → exact lower limit of the class interval in which median lies.

F → cumulative frequency upto the lower limit of the class interval containing median.

f_m → frequency of the class interval containing median.

C → size of the class interval

N → number of observations.



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Calculation of Median :

Class Interval	Exact Limits	Frequency, f_i	Cumulative frequency, F
90-99	89.5 - 99.5	7	28
80-89	79.5 - 89.5	3	21
70-79	69.5 - 79.5	0	18
60-69	59.5 - 69.5	4	18
50-59	49.5 - 59.5	6	14
40-49	39.5 - 49.5	4	8
30-39	29.5 - 39.5	4	4
		N = 28	

$\frac{N}{2} = \frac{28}{2} = 14$

$l = 49.5$

$F = 8$

$f_m = 6$

$\text{Median} = l + \frac{(\frac{N}{2} - F)}{f_m} \times C$

$= 49.5 + \frac{(14-8)}{6} \times 10$

$= 59.5$

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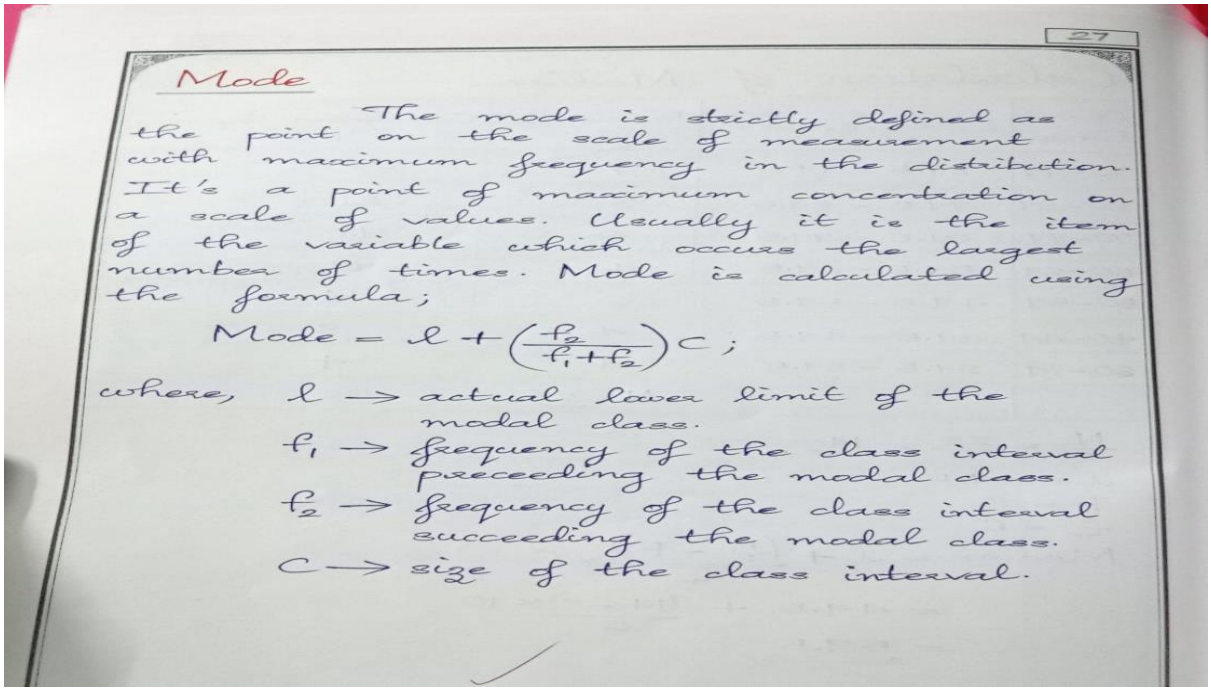

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Mode

The mode is steictly defined as the point on the scale of measurement with maximum frequency in the distribution. It's a point of maximum concentration on a scale of values. Usually it is the item of the variable which occurs the largest number of times. Mode is calculated using the formula;

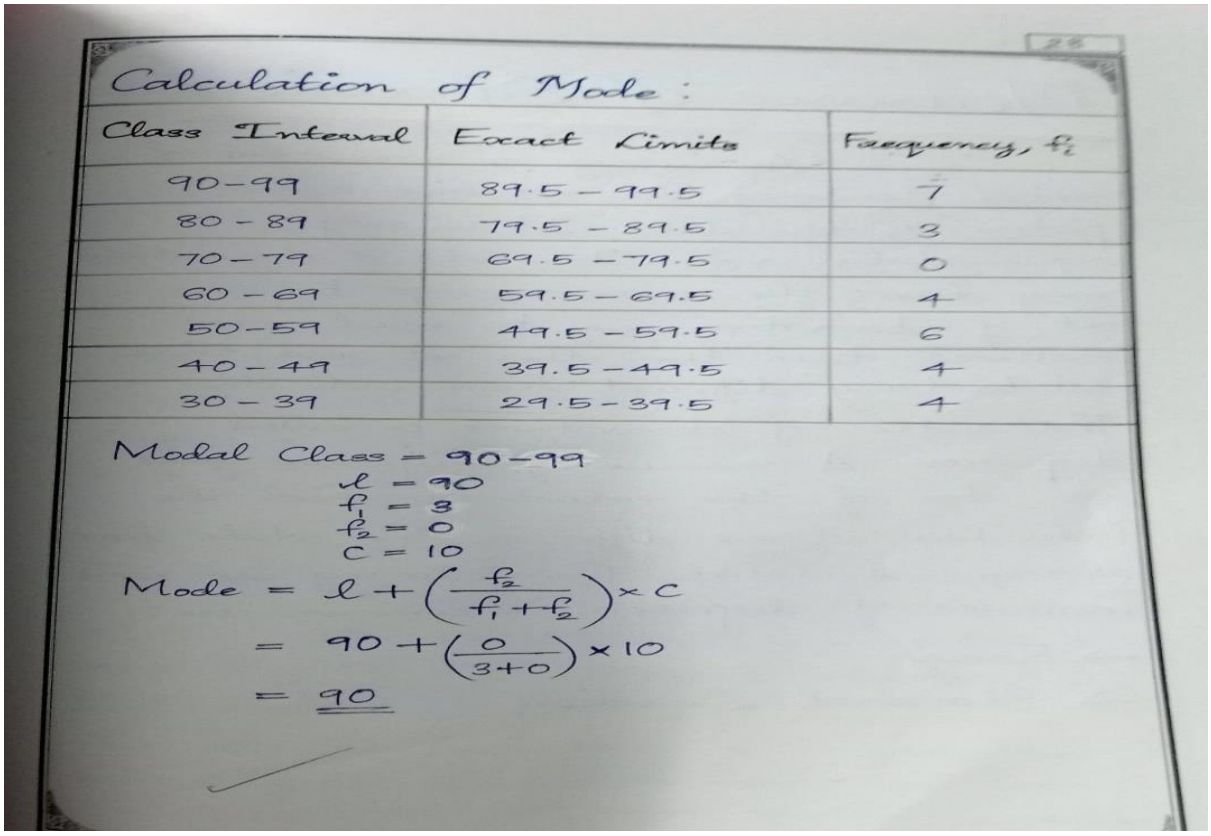
$$\text{Mode} = l + \left(\frac{f_2}{f_1+f_2}\right) C ;$$

where, $l \rightarrow$ actual lower limit of the modal class.

$f_1 \rightarrow$ frequency of the class interval preceeding the modal class.

$f_2 \rightarrow$ frequency of the class interval succeeding the modal class.

$C \rightarrow$ size of the class interval.



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Calculation of Mode :

Class Interval	Exact Limits	Frequency, f_i
90-99	89.5 - 99.5	7
80 - 89	79.5 - 89.5	3
70 - 79	69.5 - 79.5	0
60 - 69	59.5 - 69.5	4
50-59	49.5 - 59.5	6
40 - 49	39.5 - 49.5	4
30 - 39	29.5 - 39.5	4

Modal Class = 90-99

$l = 90$
$f_1 = 3$
$f_2 = 0$
$C = 10$

$$\text{Mode} = l + \left(\frac{f_2}{f_1+f_2}\right) \times C$$

$$= 90 + \left(\frac{0}{3+0}\right) \times 10$$

$$= \underline{90}$$

Calculation of Mode :

Class Interval	Exact Limits	Frequency, f_i
90-99	89.5 - 99.5	7
80 - 89	79.5 - 89.5	3
70 - 79	69.5 - 79.5	0
60 - 69	59.5 - 69.5	4
50 - 59	49.5 - 59.5	6
40 - 49	39.5 - 49.5	4
30 - 39	29.5 - 39.5	4

Modal Class = 90-99

$l = 90$
$f_1 = 8$
$f_2 = 0$
$C = 10$

$$\text{Mode} = l + \left(\frac{f_2}{f_1 + f_2}\right) \times C$$
$$= 90 + \left(\frac{0}{3+0}\right) \times 10$$
$$= \underline{90}$$

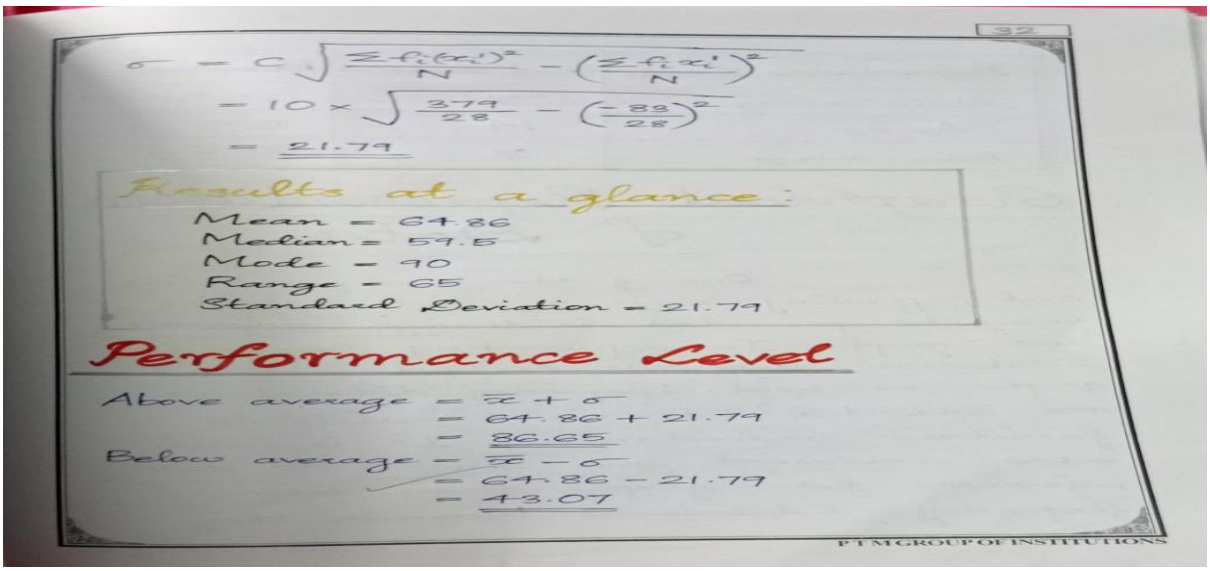
of a good measure of dispersion. It is calculated by using the formula;

$$\sigma = C \times \sqrt{\frac{\Sigma f_i (x_i')^2}{N} - \left(\frac{\Sigma f_i x_i'}{N}\right)^2} \; ;$$

where, $N \rightarrow$ number of observations
$f_i \rightarrow$ frequency of i^{th} class
$C \rightarrow$ size of class interval
$x_i' \rightarrow \frac{x_i - AM}{C}$; deviation.

Calculation of standard deviation :

Class Interval	Exact Limits	f_i	x_i	x_i'	$(x_i')^2$	$f_i x_i'$	$f_i (x_i')^2$
90-99	89.5 - 99.5	7	94.5	0	0	0	0
80-89	79.5 - 89.5	3	84.5	-1	1	-3	3
70-79	69.5 - 79.5	0	74.5	-2	4	0	0
60-69	59.5 - 69.5	4	64.5	-3	9	-12	36
50-59	49.5 - 59.5	6	54.5	-4	16	-24	96
40-49	39.5 - 49.5	4	44.5	-5	25	-20	100
30-39	29.5 - 39.5	4	34.5	-6	36	-24	144
TOTAL		$N = 28$				$\Sigma f_i x_i' = -83$	$\Sigma f_i (x_i')^2 = 379$



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$$\sigma = C\sqrt{\frac{\sum f_i(x_i')^2}{N} - \left(\frac{\sum f_i x_i'}{N}\right)^2}$$

$$= 10 \times \sqrt{\frac{379}{28} - \left(\frac{-88}{28}\right)^2}$$

$$= 21.79$$

Results at a glance :

Mean = 64.86
Median = 59.5
Mode = 90
Range = 65
Standard Deviation = 21.79

Performance Level

Above average $= \bar{x} + \sigma$
$= 64.86 + 21.79$
$= 86.65$

Below average $= \bar{x} - \sigma$
$= 64.86 - 21.79$
$= 43.07$

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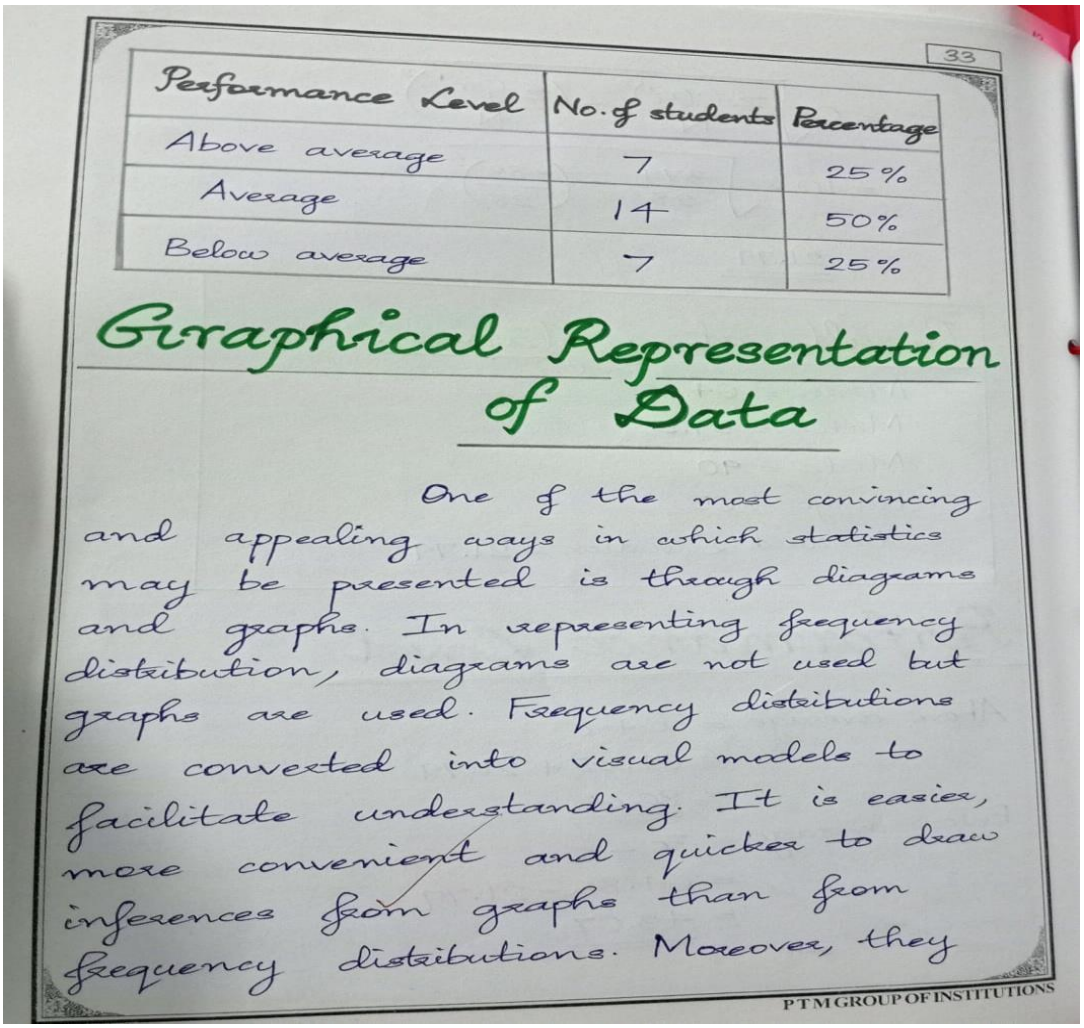

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Performance Level	No. of students	Percentage
Above average	7	25%
Average	14	50%
Below average	7	25%

Graphical Representation of Data

One of the most convincing and appealing ways in which statistics may be presented is through diagrams and graphs. In representing frequency distribution, diagrams are not used but graphs are used. Frequency distributions are converted into visual models to facilitate understanding. It is easier, more convenient and quicker to draw inferences from graphs than from frequency distributions. Moreover, they

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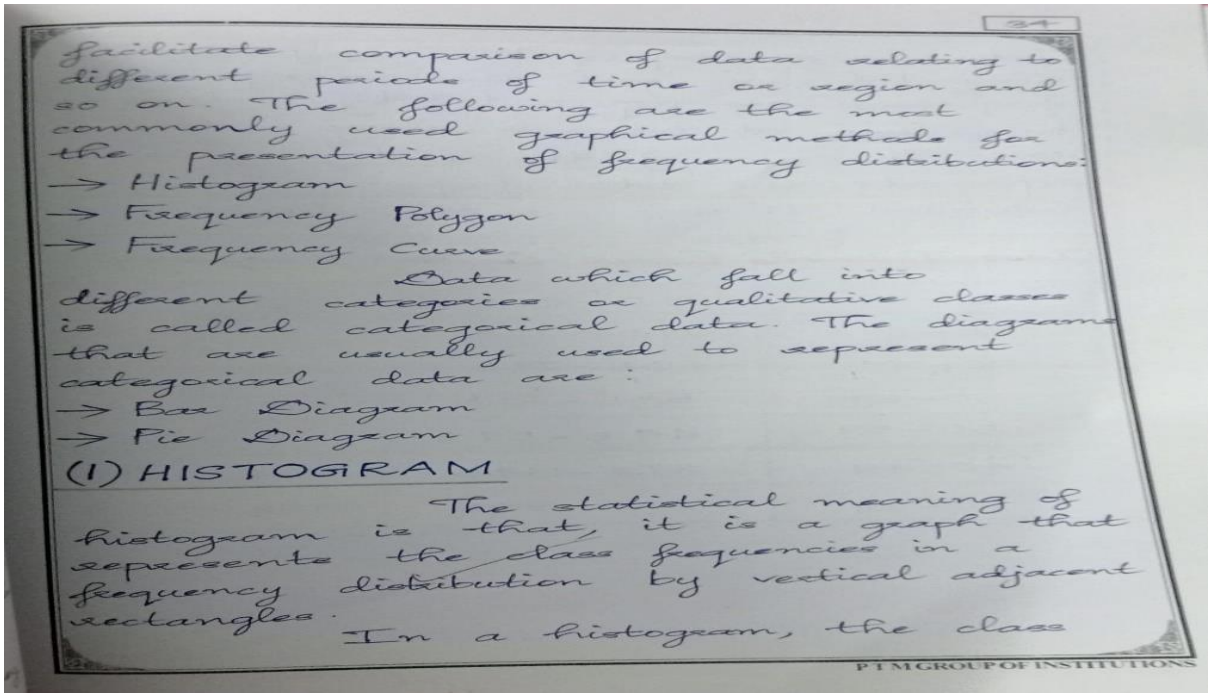

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facilitate comparison of data relating to different periods of time or region and so on. The following are the most commonly used graphical methods for the presentation of frequency distributions:

→ Histogram
→ Frequency Polygon
→ Frequency Curve

Data which fall into different categories or qualitative classes is called categorical data. The diagrams that are usually used to represent categorical data are:

→ Bar Diagram
→ Pie Diagram

(1) HISTOGRAM

The statistical meaning of histogram is that, it is a graph that represents the class frequencies in a frequency distribution by vertical adjacent rectangles.

In a histogram, the class

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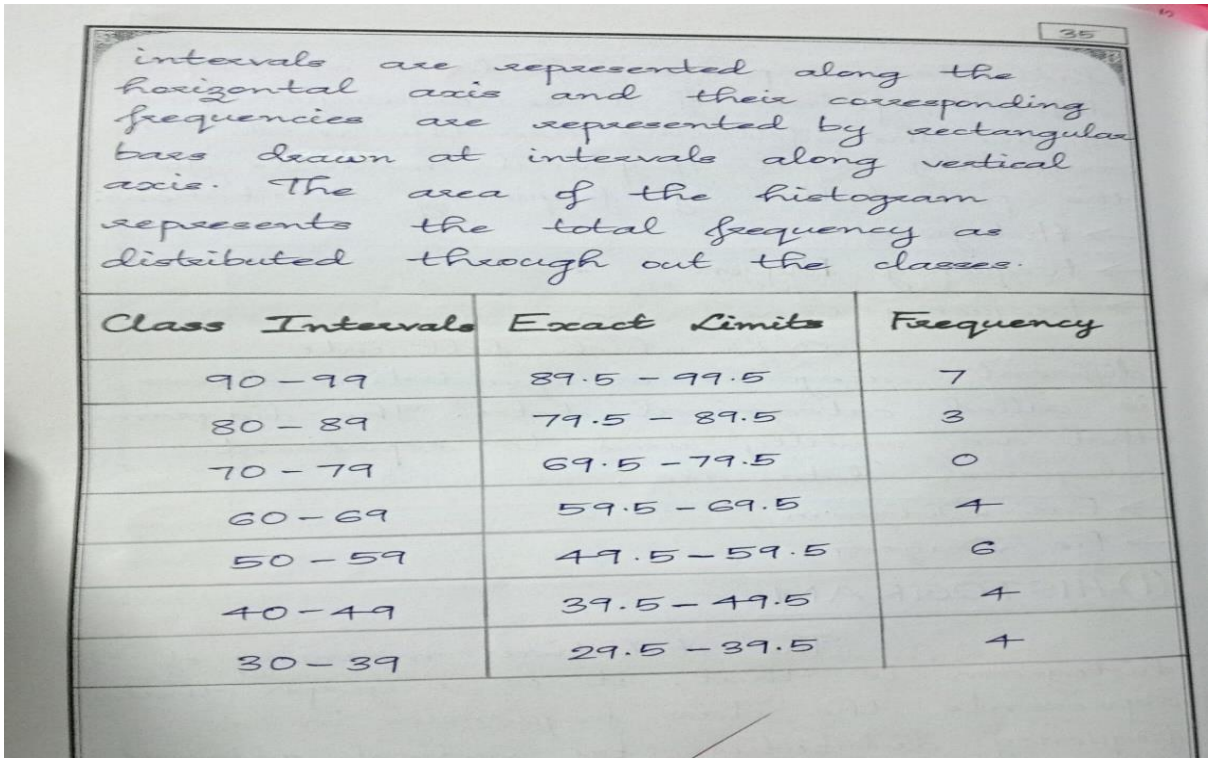

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intervals are represented along the horizontal axis and their corresponding frequencies are represented by rectangular bars drawn at intervals along vertical axis. The area of the histogram represents the total frequency as distributed through out the classes.

Class Intervals	Exact Limits	Frequency
90 – 99	89.5 – 99.5	7
80 – 89	79.5 – 89.5	3
70 – 79	69.5 – 79.5	0
60 – 69	59.5 – 69.5	4
50 – 59	49.5 – 59.5	6
40 – 49	39.5 – 49.5	4
30 – 39	29.5 – 39.5	4

Class Interval	Exact Limits	Frequency
90 – 99	89.5 – 99.5	7
80 – 89	79.5 – 89.5	3
70 – 79	69.5 – 79.5	0
60 – 69	59.5 – 69.5	4
50 – 59	49.5 – 59.5	6
40 – 49	39.5 – 49.5	4
30 – 39	29.5 – 39.5	4

(3) FREQUENCY CURVE

A smoothed frequency curve can be drawn through the various points of the frequency polygon. The curve is drawn free hand in such a manner that the area included under the curve is approximately the same as that of the polygon. The object of drawing a smoothed frequency curve is to eliminate all accidental variables that might be present in the data. The curve should begin and end at the baseline as a general rule.

Class Interval	Exact Limits	Frequency
90 – 99	89.5 – 99.5	7
80 – 89	79.5 – 89.5	3
70 – 79	69.5 – 79.5	0
60 – 69	59.5 – 69.5	4
50 – 59	49.5 – 59.5	6
40 – 49	39.5 – 49.5	4
30 – 39	29.5 – 39.5	4

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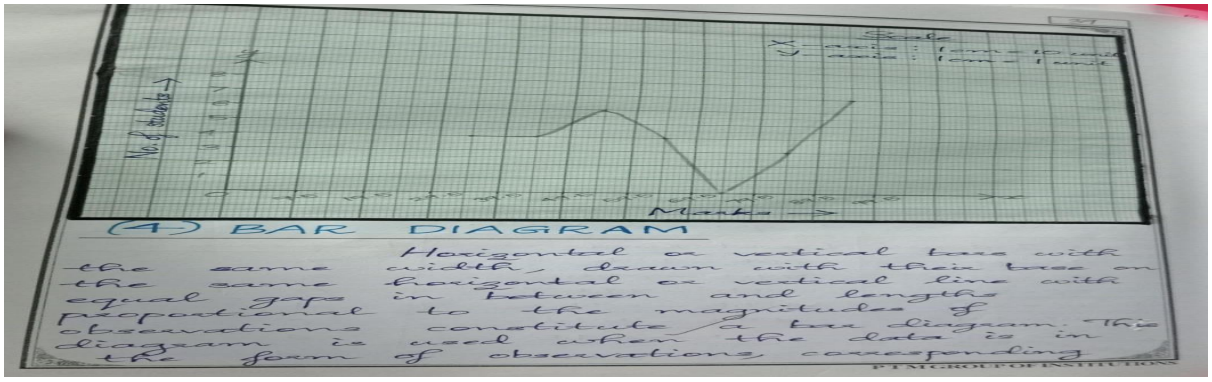
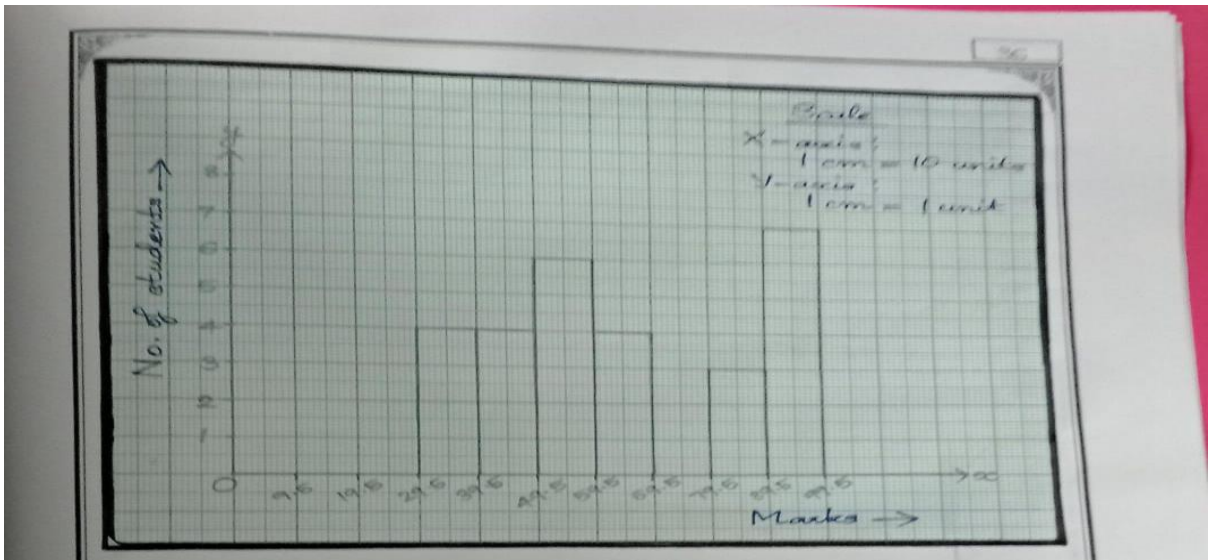


(4) BAR DIAGRAM

Horizontal or vertical bars with the same width, drawn with their bases on the same horizontal or vertical line with equal gaps in between and lengths proportional to the magnitudes of observations constitute a bar diagram. This diagram is used when the data is in the form of observations corresponding



(2) FREQUENCY POLYGON

A polygon is defined as a many sided closed figure. When a many sided figure is drawn on the basis of frequencies given in a frequency distribution, the figure is called a frequency polygon.

Class Interval	Exact Limits	Frequency
90 – 99	89.5 – 99.5	7
80 – 89	79.5 – 89.5	3
70 – 79	69.5 – 79.5	0
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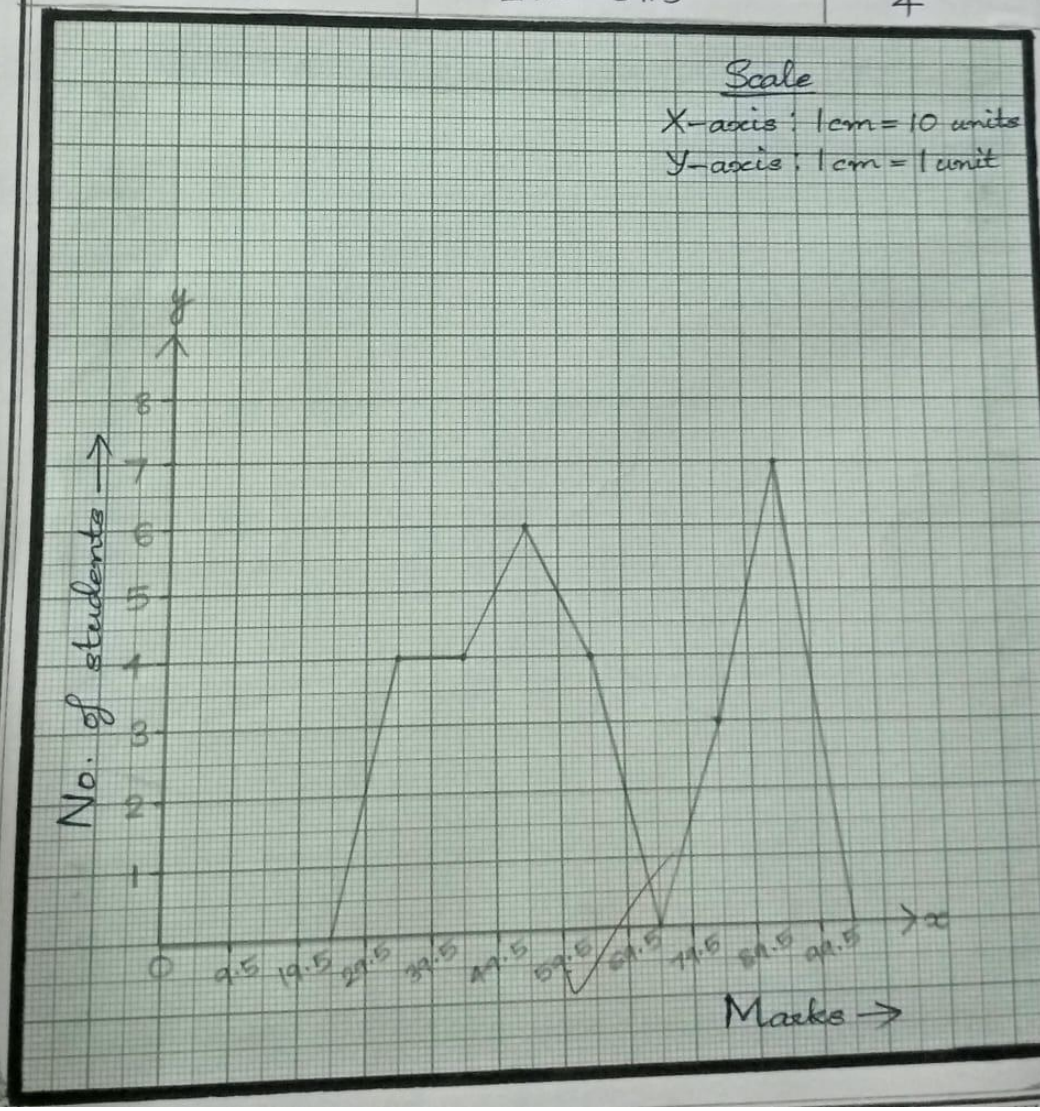

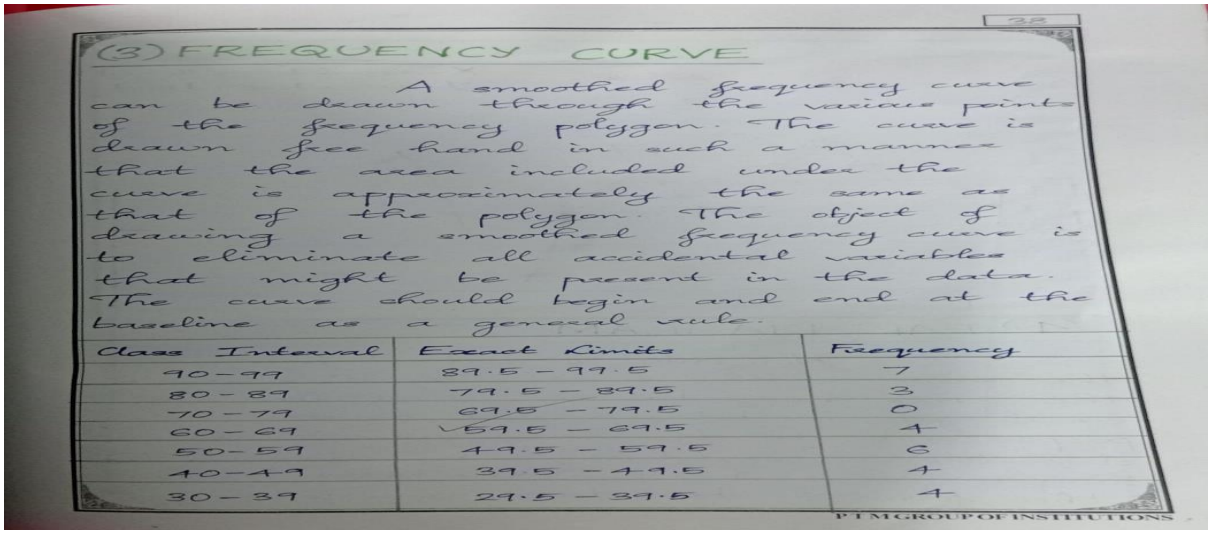

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Class Interval	Exact Limits	Frequency
90 – 99	89.5 – 99.5	7
80 – 89	79.5 – 89.5	3
70 – 79	69.5 – 79.5	0
60 – 69	59.5 – 69.5	1
50 – 59	49.5 – 59.5	6
40 – 49	39.5 – 49.5	1
30 – 39	29.5 – 39.5	1

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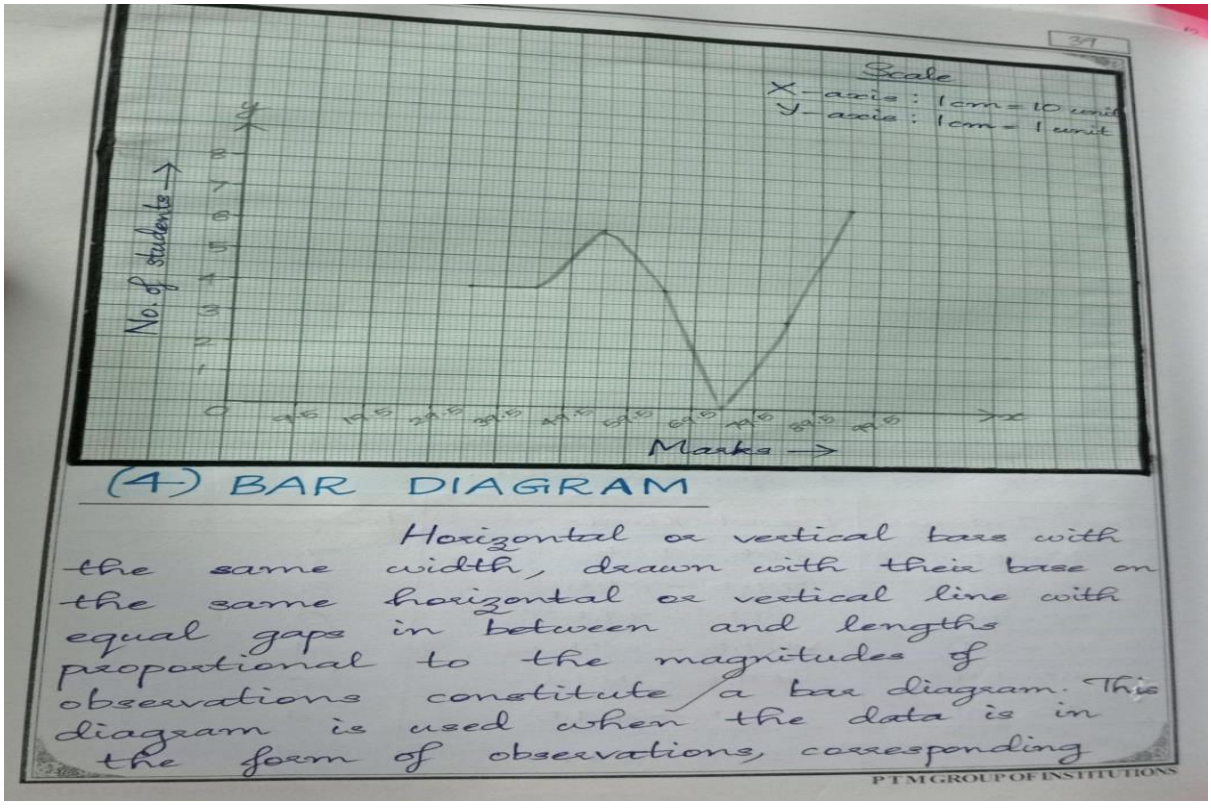

(4) BAR DIAGRAM

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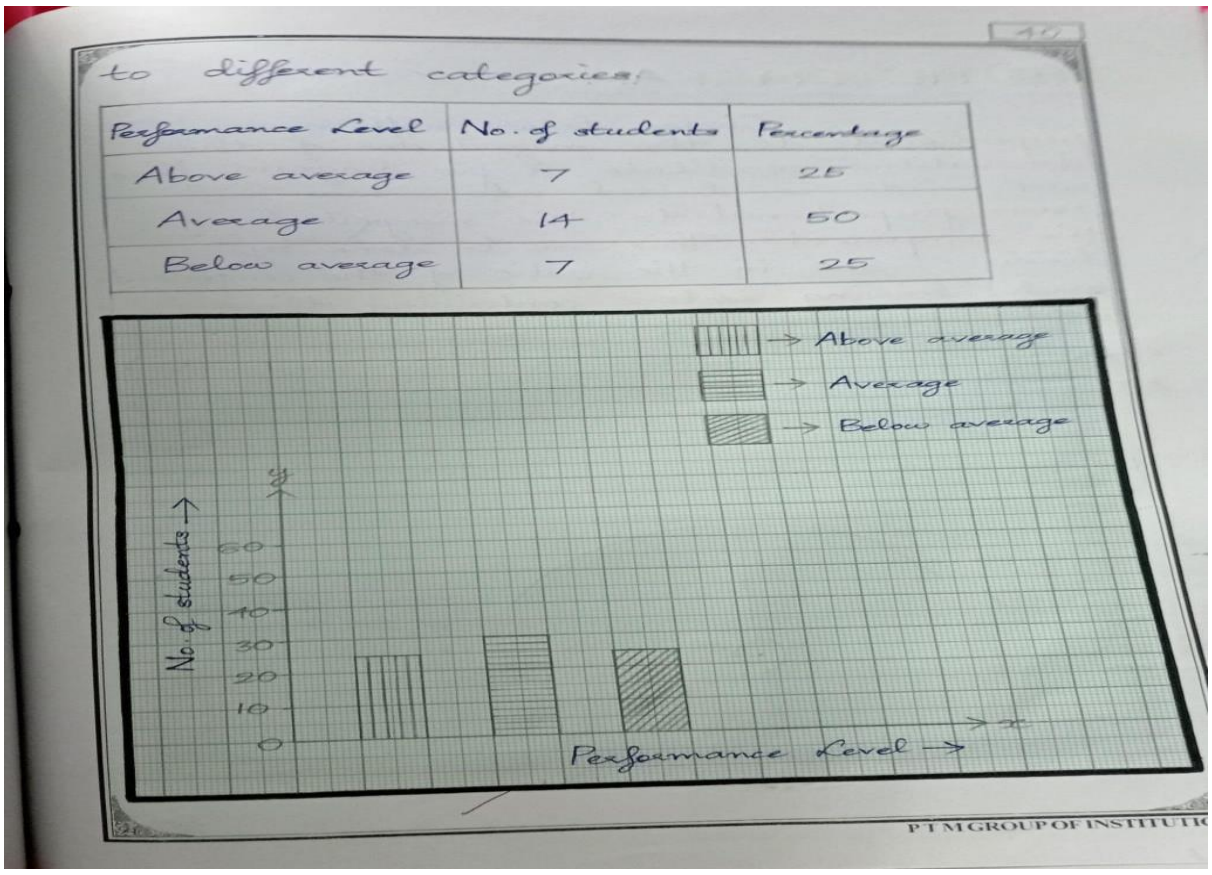
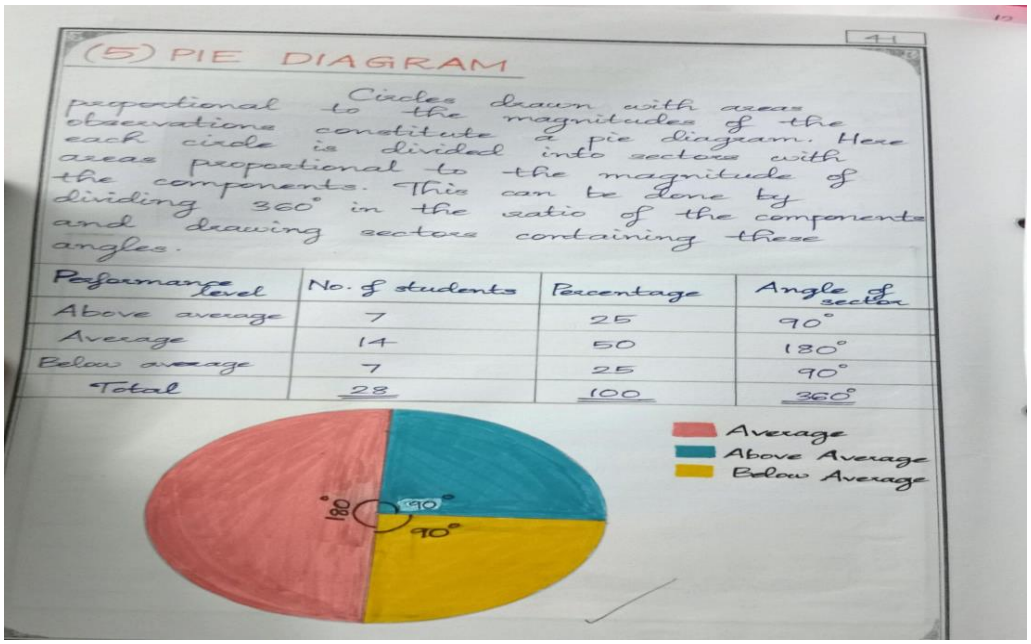


to different categories:

Performance Level	No. of students	Percentage
Above average	7	25
Average	14	50
Below average	7	25



(5) PIE DIAGRAM

Circles drawn with areas proportional to the magnitudes of the observations constitute a pie diagram. Here each circle is divided into sectors with areas proportional to the magnitude of the components. This can be done by dividing 360° in the ratio of the components and drawing sectors containing these angles.

Performance level	No. of students	Percentage	Angle of sector
Above average	7	25	90°
Average	14	50	180°
Below average	7	25	90°
Total	28	100	360°

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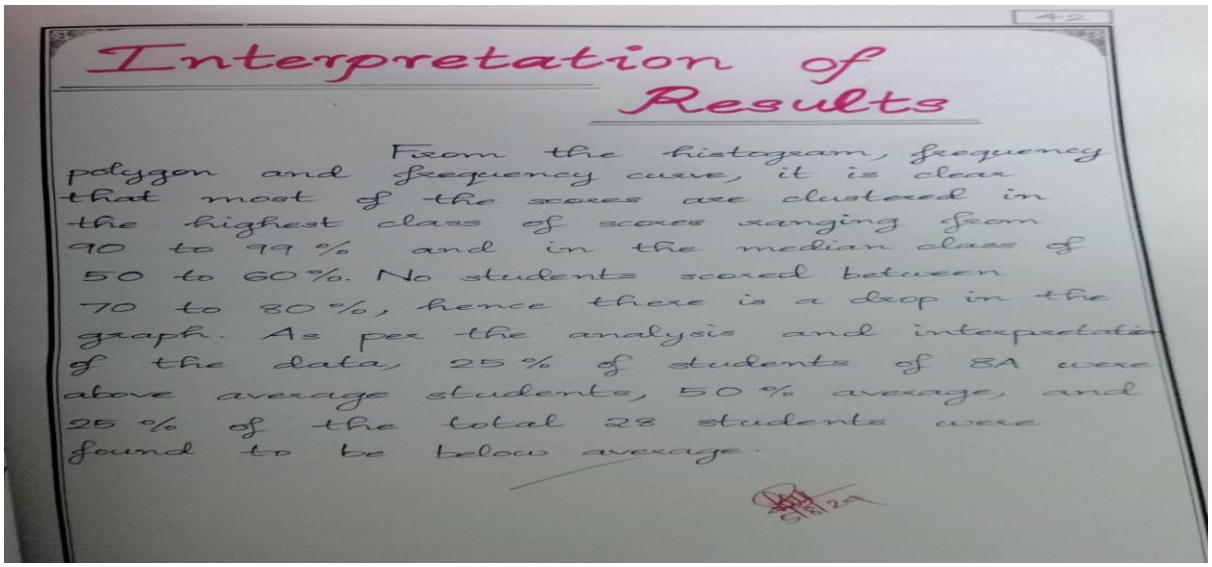
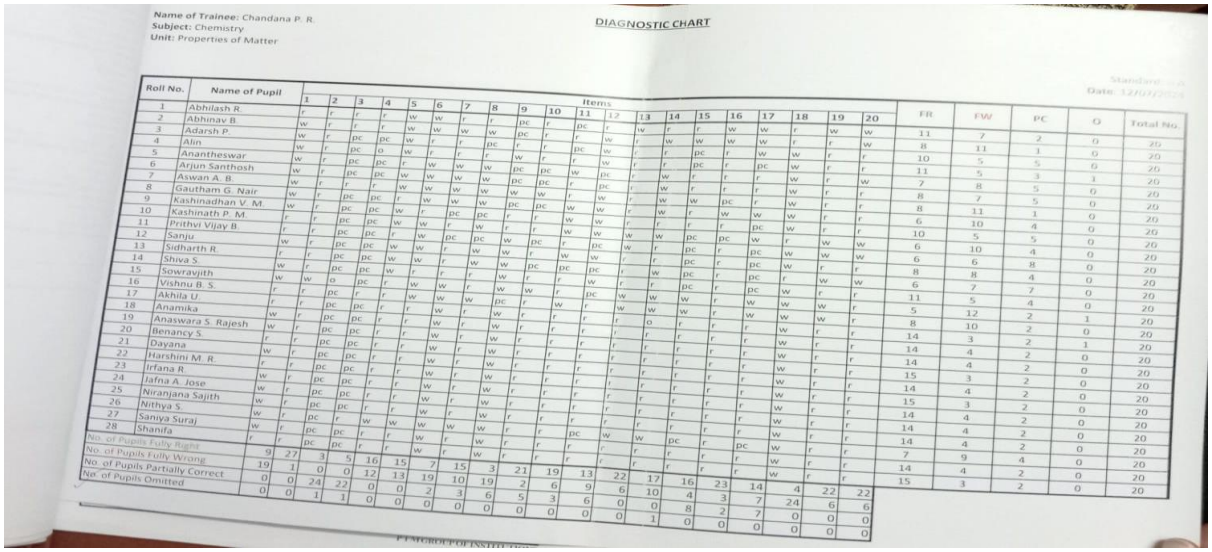


Interpretation of Results

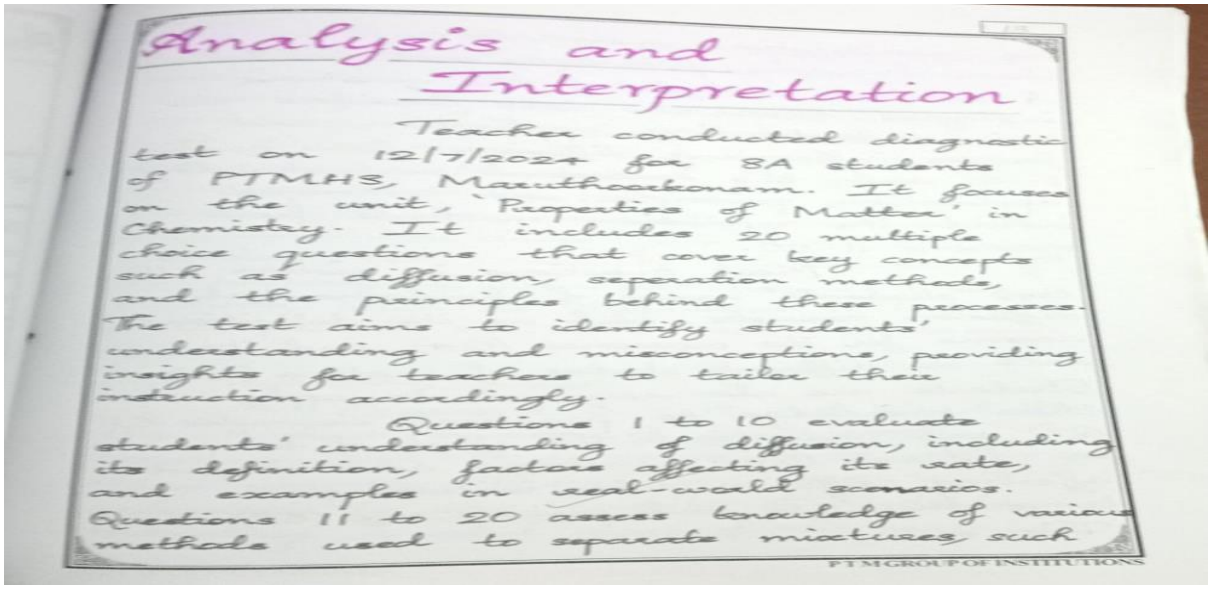
From the histogram, frequency polygon and frequency curve, it is clear that most of the scores are clustered in the highest class of scores ranging from 90 to 99 % and in the median class of 50 to 60 %. No students scored between 70 to 80 %, hence there is a drop in the graph. As per the analysis and interpretation of the data, 25 % of students of 8A were above average students, 50 % average, and 25 % of the total 28 students were found to be below average.



Name of Trainee: Chandana P. R.
Subject: Chemistry
Unit: Properties of Matter

DIAGNOSTIC CHART

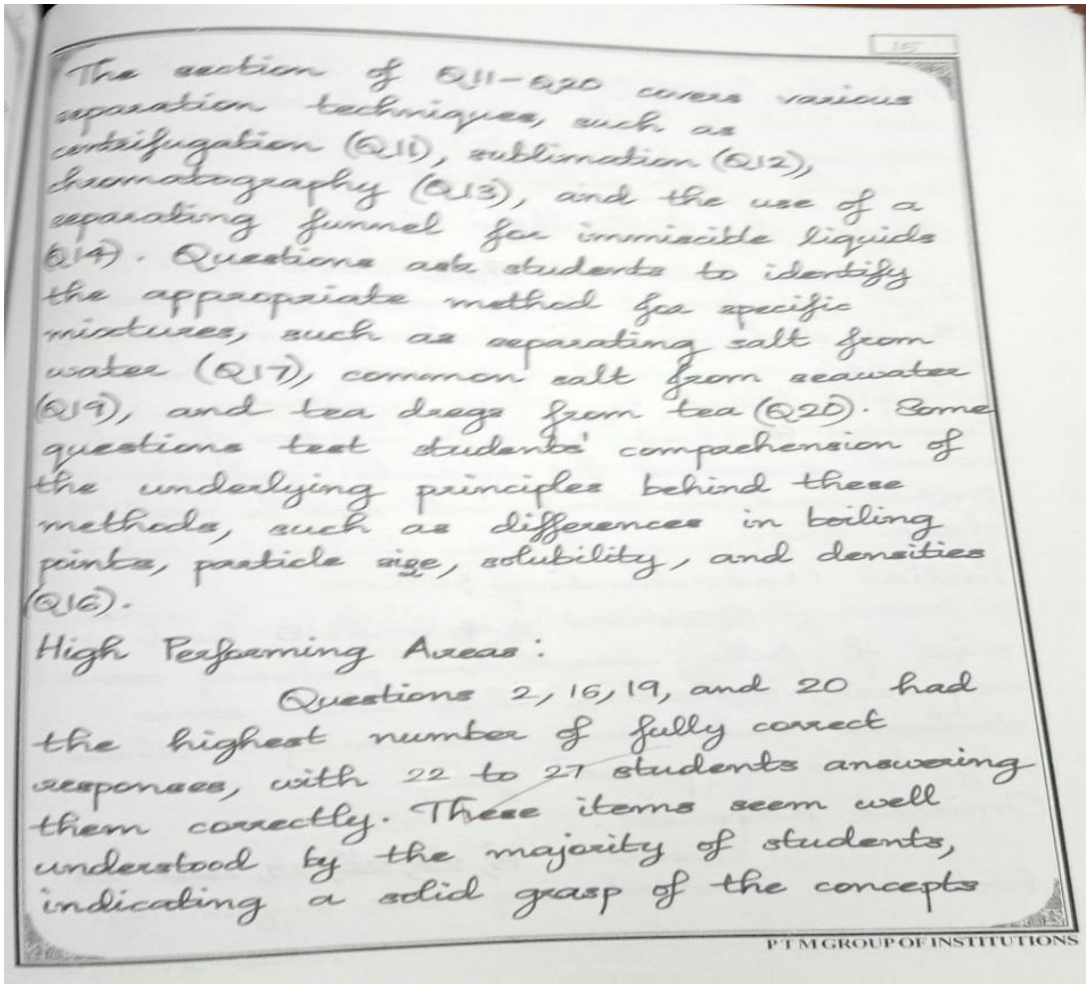
Roll No.	Name of Pupil	Items 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	FR	FW	PC	O	Total No.
1	Abhilash R.	w	r	r	r	w	w	r	r	pc	r	pc	r	w	r	r	w	w	r	w	w	11	7	2	0	20
2	Abhinav B.	w	r	pc	pc	w	r	r	pc	r	r	pc	w	r	w	w	w	w	r	r	w	8	11	1	0	20
3	Adarsh P.	w	r	r	r	w	w	w	w	pc	r	r	w	r	w	r	w	w	r	w	w	10	5	5	0	20
4	Alin	w	r	pc	pc	w	r	r	pc	r	r	pc	w	r	r	pc	r	pc	w	r	r	11	5	3	1	20
5	Anantheswar	w	r	pc	pc	r	w	w	w	pc	pc	w	pc	r	w	r	r	r	w	r	w	7	8	5	0	20
6	Arjun Santhosh	w	r	pc	pc	w	w	w	w	pc	pc	r	pc	r	w	r	r	r	w	r	r	8	7	5	0	20
7	Aswan A. B.	w	r	r	r	w	w	w	w	pc	pc	r	pc	r	w	r	r	r	w	r	w	8	11	1	0	20
8	Gautham G. Nair	w	r	pc	pc	r	w	w	w	w	r	w	w	r	w	r	w	w	w	r	r	6	10	4	0	20
9	Kashinadhan V. M.	w	r	pc	pc	r	w	w	w	pc	pc	w	w	r	w	pc	r	w	r	r	r	10	5	5	0	20
10	Kashinath P. M.	r	r	pc	pc	w	r	pc	pc	r	r	w	w	r	r	r	w	pc	w	r	w	6	10	4	0	20
11	Prithvi Vijay B.	r	r	pc	pc	w	w	r	w	r	r	w	w	r	r	r	pc	w	r	r	w	6	6	8	0	20
12	Sanju	w	r	pc	pc	r	w	pc	pc	w	pc	r	pc	w	r	pc	r	pc	w	r	r	8	8	4	0	20
13	Sidharth R.	r	r	pc	pc	w	r	w	w	r	w	w	w	r	pc	r	pc	w	r	w	w	6	7	7	0	20
14	Shiva S.	w	r	pc	pc	w	r	r	w	w	pc	pc	pc	r	w	pc	r	pc	w	r	r	11	5	4	0	20
15	Sowravjith	w	w	o	pc	r	w	w	r	r	w	r	r	w	r	pc	r	pc	r	w	w	5	12	2	1	20
16	Vishnu B. S.	r	r	pc	r	r	w	w	w	pc	r	w	w	r	r	pc	r	pc	w	r	r	8	10	2	0	20
17	Akhila U.	r	r	pc	r	r	w	w	w	pc	r	w	r	w	w	w	r	w	w	w	r	14	3	2	1	20
18	Anamika	w	r	pc	pc	r	r	w	r	w	r	r	r	r	r	r	r	r	w	r	r	14	4	2	0	20
19	Anaswara S. Rajesh	w	r	pc	pc	r	r	w	r	w	r	r	r	r	r	r	r	r	w	r	r	14	4	2	0	20
20	Benancy S.	r	r	pc	pc	r	r	w	r	w	r	r	r	r	r	r	r	r	w	r	r	15	3	2	0	20
21	Dayana	w	r	pc	pc	r	r	w	r	w	r	r	r	r	r	r	r	r	w	r	r	14	4	2	0	20
22	Harshini M. R.	r	r	pc	pc	r	r	w	r	w	r	r	r	r	r	r	r	r	w	r	r	15	3	2	0	20
23	Irfana R.	w	r	pc	pc	r	r	w	r	w	r	r	r	r	r	r	r	r	w	r	r	14	4	2	0	20
24	Jafna A. Jose	w	r	pc	pc	r	r	w	r	w	r	r	r	r	r	r	r	r	w	r	r	15	3	2	0	20
25	Niranjana Sajith	w	r	pc	pc	r	r	w	r	w	r	r	r	r	r	r	r	r	w	r	r	14	4	2	0	20
26	Nithya S.	w	r	pc	pc	r	r	w	r	w	r	r	r	r	r	r	r	r	w	r	r	14	4	2	0	20
27	Sanjya Suraj	w	r	pc	r	w	w	w	w	r	r	r	r	r	r	r	r	r	w	r	r	14	4	2	0	20
28	Shanifa	r	r	pc	pc	r	r	w	r	w	r	r	r	pc	w	w	pc	r	pc	w	r	14	4	2	0	20
	No. of Pupils Fully Right	9	27	3	5	16	15	7	15	3	21	19	13	22	17	16	23	14	4	22	22	7	9	4	0	20
	No. of Pupils Fully Wrong	19	1	0	0	12	13	19	10	19	2	6	9	6	10	4	3	7	24	6	6	14	4	2	0	20
	No. of Pupils Partially Correct	0	0	24	22	0	0	2	3	6	5	3	6	0	0	8	2	7	0	0	0	15	3	2	0	20
	No. of Pupils Omitted	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0					



Analysis and Interpretation

Teacher conducted diagnostic test on 12/7/2024 for 8A students of PTMHS, Maruthoorkonam. It focuses on the unit, 'Properties of Matter' in Chemistry. It includes 20 multiple choice questions that cover key concepts such as diffusion, separation methods, and the principles behind these processes. The test aims to identify students' understanding and misconceptions, providing insights for teachers to tailor their instruction accordingly.

Questions 1 to 10 evaluate students' understanding of diffusion, including its definition, factors affecting its rate, and examples in real-world scenarios. Questions 11 to 20 assess knowledge of various methods used to separate mixtures, such



The section of Q11-Q20 covers various separation techniques, such as centrifugation (Q11), sublimation (Q12), chromatography (Q13), and the use of a separating funnel for immiscible liquids (Q14). Questions ask students to identify the appropriate method for specific mixtures, such as separating salt from water (Q17), common salt from seawater (Q19), and tea dregs from tea (Q20). Some questions test students' comprehension of the underlying principles behind these methods, such as differences in boiling points, particle size, solubility, and densities (Q16).

High Performing Areas:

Questions 2, 16, 19, and 20 had the highest number of fully correct responses, with 22 to 27 students answering them correctly. These items seem well understood by the majority of students, indicating a solid grasp of the concepts

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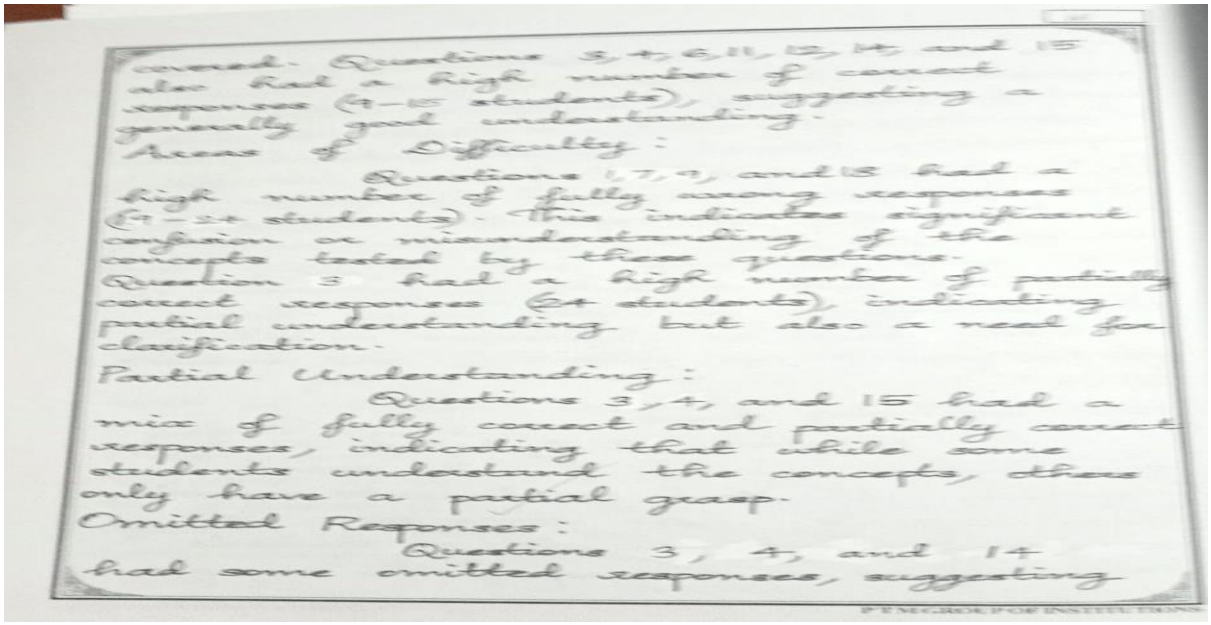


overall. Questions 5, 6, 11, 13, 14, and 15 also had a high number of correct responses (9-15 students), suggesting a generally good understanding.

Areas of Difficulty:

Questions 1, 7, 9, and 18 had a high number of fully wrong responses (9 - 14 students). This indicates significant confusion or misunderstanding of the concepts tested by these questions.

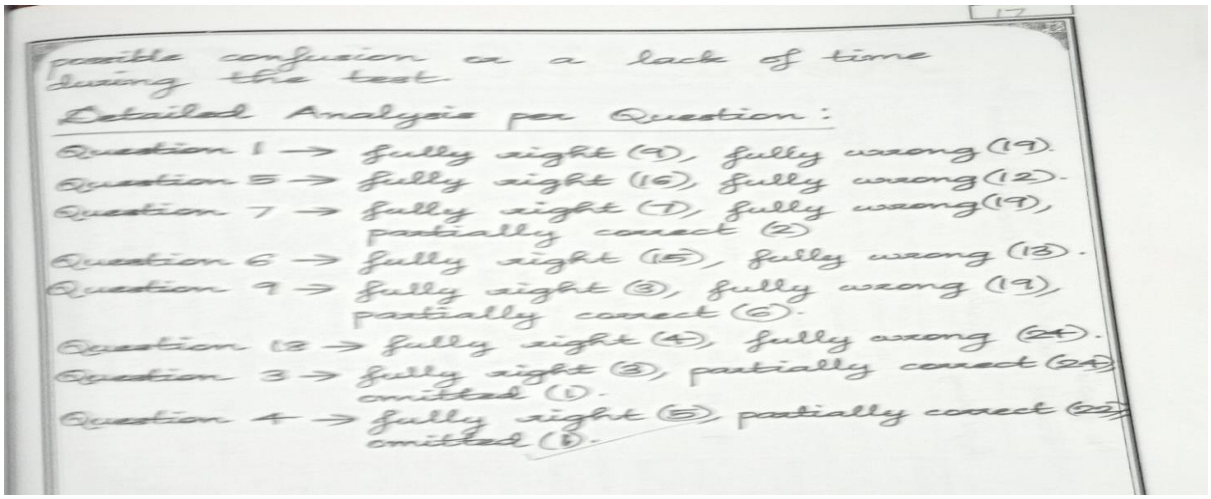
Question 3 had a high number of partially correct responses (8 students), indicating partial understanding but also a need for clarification.

Partial Understanding:

Questions 3, 4, and 15 had a mix of fully correct and partially correct responses, indicating that while some students understand the concepts, others only have a partial grasp.

Omitted Responses:

Questions 3, 4, and 14 had some omitted responses, suggesting



possible confusion or a lack of time during the test.

Detailed Analysis per Question:

Question 1 → fully right (9), fully wrong (19).
Question 5 → fully right (16), fully wrong (12).
Question 7 → fully right (7), fully wrong (19), partially correct (2)
Question 6 → fully right (15), fully wrong (13).
Question 9 → fully right (3), fully wrong (19), partially correct (6).
Question 12 → fully right (4), fully wrong (24).
Question 3 → fully right (3), partially correct (8), omitted (1).
Question 4 → fully right (5), partially correct (8), omitted (6).

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Remedial Teaching

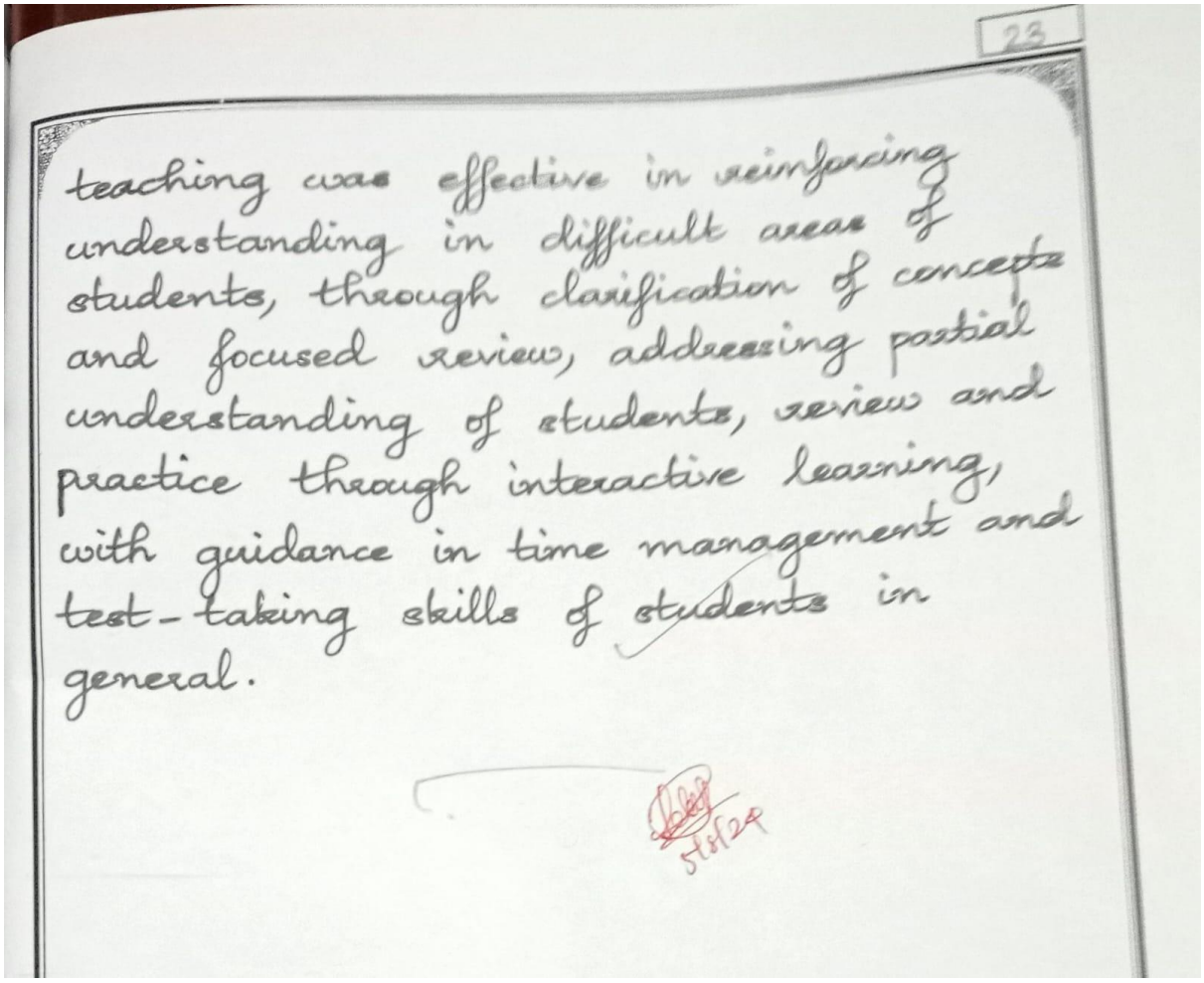
Sl. No.	Questions	No. of pupils answered		Nature of Difficulty	Remedial Measures
		Right	Wrong		
1.	Which of the following is an example of diffusion? (a) A drop of ink spreading in water (b) Water boiling and turning into steam (c) A balloon inflated with air. (d) Ice melting into water.	9	19	Pupils were unfamiliar with more examples of diffusion. They have confusion with the concepts of diffusion and change of state when associated together.	The concept of diffusion is made clear by alternative teaching strategy through inquiry training model. Each of the options of the question is correctly explained and withdrawn the difficulty in comprehension due to language barrier.
5.	Which of the following statements about diffusion is true? (a) Diffusion only occurs in liquids	16	12	The relation of diffusion with various factors like temperature and concentration gradient is not clear to	The relation of diffusion with the concentration gradient, temperature, and different states of matter is properly

	(b) Diffusion is faster at higher temperatures. (c) Diffusion only occurs in gases. (d) Diffusion does not depend on the concentration gradient.			the students.	conveyed to the students through demonstrations.
6.	What happens to the rate of diffusion if the temperature increases? (a) It decreases. (b) It stays the same. (c) It increases. (d) It stops completely.	15	13	Students were unclear about the relationship between temperature and diffusion.	Through re-teaching the concept through inquiry training model the influence of temperature on diffusion is made to be grasped by the learners.
7.	In which scenario would diffusion not occur? (a) A perfume bottle being opened in a room.	7	19	The concept of diffusion is not clearly understood by students with	The concept of change of state and applications of diffusion are made clear to students.

18. Which of the following is not a method used for separating components of a mixture? (a) Sublimation (b) Crystallization (c) Diffusion (d) Centrifugation	4	24	Pupils had difficulty in distinguishing between various methods of separation of components from a mixture and the process of diffusion.	Diffusion as a concept of mixing of components is retaught in the model of training inquiry by students so that students would be able to grasp the concept with self-autonomy and scientific attitude. Other methods of separation of components from a mixture is redefined to students in a further simplified approach.

Conclusion

In this diagnostic test the difficult areas of the students were identified and remedial teaching was given. The difficult areas identified were understanding of the concept diffusion and lack of clarity in some methods of separation. Students generally suffered difficulty in comprehension of questions as a language barrier. Apart from this constraint, they showed difficulty in relating different concepts acquired individually from the unit. Hence the remedial teaching was focussed on strengthening the foundation of the concept, correcting the specific difficulties diagnosed and making better clarity in their understanding. For this, strategies that ensure students' direct and active participation, such as role-play, inquiry-based training, along with the help of ICT and audio-visual aids were used. The remedial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teaching was effective in reinforcing understanding in difficult areas of students, through clarification of concepts and focused review, addressing partial understanding of students, review and practice through interactive learning, with guidance in time management and test-taking skills of students in general.
5/8/24

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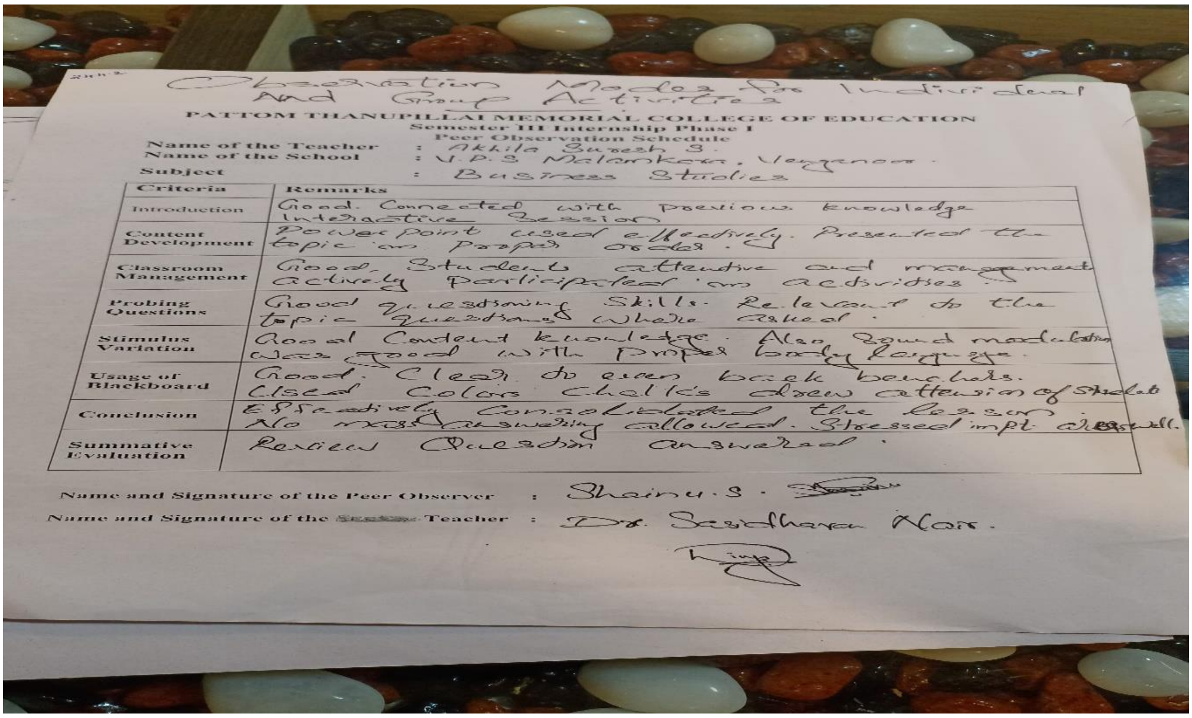


Observation Modes for Individual And Group Activities

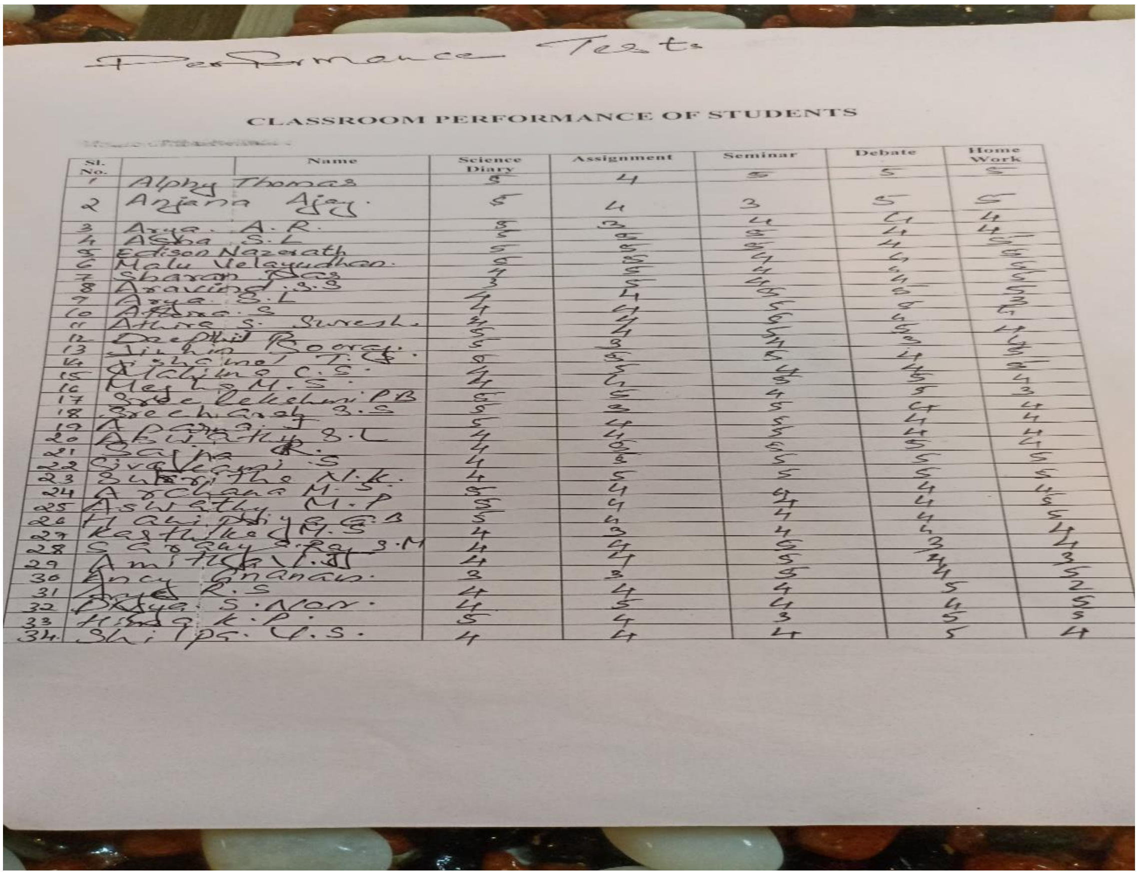
PATTOM THANUPILLAI MEMORIAL COLLEGE OF EDUCATION
Semester III Internship Phase I
Peer Observation Schedule

Name of the Teacher : Akhila Suresh S.
Name of the School : V.P.S Malankara, Venganoor.
Subject : Business Studies

Criteria	Remarks
Introduction	Good. Connected with previous knowledge Interactive session
Content Development	Power point used effectively. Presented the topic in proper order.
Classroom Management	Good, Student attentive and management actively participated in activities.
Probing Questions	Good questioning skills. Relevant to the topic questions where asked.
Stimulus Variation	Good Content knowledge. Also sound modulation was good with proper body language.
Usage of Blackboard	Good. Clear to even back benchers. Used Colors Chalk's drew attention of students
Conclusion	Effectively consolidated the lesson. No mass answering allowed. Stressed impt. areas well.
Summative Evaluation	Review Question answered.

Name and Signature of the Peer Observer : Shainu. S. [signature]

Name and Signature of the Teacher : Dr. Sasidharan Nair. [signature]



Performance Tests

CLASSROOM PERFORMANCE OF STUDENTS

Sl. No.	Name	Science Diary	Assignment	Seminar	Debate	Home Work
1	Alphy Thomas	5	4	5	5	5
2	Anjana Ajay.	5	4	3	5	5
3	Arya. A.R.	5	3	4	4	4
4	Asha S.L	5	5	5	4	4
5	Edison Nazerath	5	5	5	4	5
6	Malu Velayudhan.	5	5	4	4	5
7	Sharan Das	4	5	4	4	5
8	Aravind S.S	3	5	4	5	5
9	Arya S.L	4	4	5	5	5
10	Athira S	4	4	5	5	3
11	Athira S. Suresh.	4	4	5	4	4
12	Deepthi R	5	4	5	5	4
13	Jithin Sooraj.	5	3	4	3	4
14	Jishamol T.G.	5	5	5	4	5
15	Malini C.S.	4	5	4	4	5
16	Megha M.S.	4	4	5	5	4
17	Sreelekshmi P.B	5	5	4	5	3
18	Sreechand S.S	5	3	5	4	4
19	Aparna J	5	4	5	4	4
20	Aswathy S.L	4	4	5	4	4
21	Sajna R.	4	5	5	5	4
22	Sivakami S	4	5	5	5	5
23	Sukirtha N.K.	4	5	5	5	5
24	Archana M.S.	5	4	4	4	4
25	Aswathy M.P	5	4	4	4	5
26	Haripriya G.B	5	4	4	4	5
27	Karthika M.S	4	3	4	4	4
28	S Gregory Raj S.M	4	4	5	3	4
29	Amitha V.J	4	4	5	4	3
30	Ancy Gnanam.	3	3	5	4	5
31	Arya R.S	4	4	4	5	2
32	Divya S. Nair.	4	5	4	4	5
33	Hima K.P.	5	4	3	5	5
34	Shilpa U.S.	4	4	4	5	4

RATING SCALE

ANALYSIS OF RATING SCALE DEVELOPED AS PART OF MINOR PROJECT

4.4 ATTITUDES OF PROSPECTIVE TEACHERS TOWARDS TEACHING PRACTICE

To study this objective, the following procedure was adopted. The mean and standard deviation of the whole group on the scores pertaining to the attitudes of prospective teachers towards teaching practice have been computed. The calculated values of mean (M) and standard deviation (SD) are 54.52 and 3.83, respectively. Based on these values, the total sample of 50 students was further classified into above average (M+SD), average (between M-SD and M+SD), and below

average (M-SD) levels of attitudes. The data pertaining to these categories along with their verbal descriptions are presented in Table 4.1.

Table 4.1: Level of Attitude of Prospective Teachers towards Teaching Practice

Mean	SD	Level of Attitude	No. of teachers	Percentage
54.52	3.83	Above Average	37	74%
		Average	8	16%
		Below Average	5	10%

The table shows that 74% of the prospective teachers have a positive attitude towards teaching practice, 16% have a neutral attitude, and 10% have a negative attitude. From the above results, it can be concluded that the majority of the prospective teachers have a positive attitude towards teaching practice.

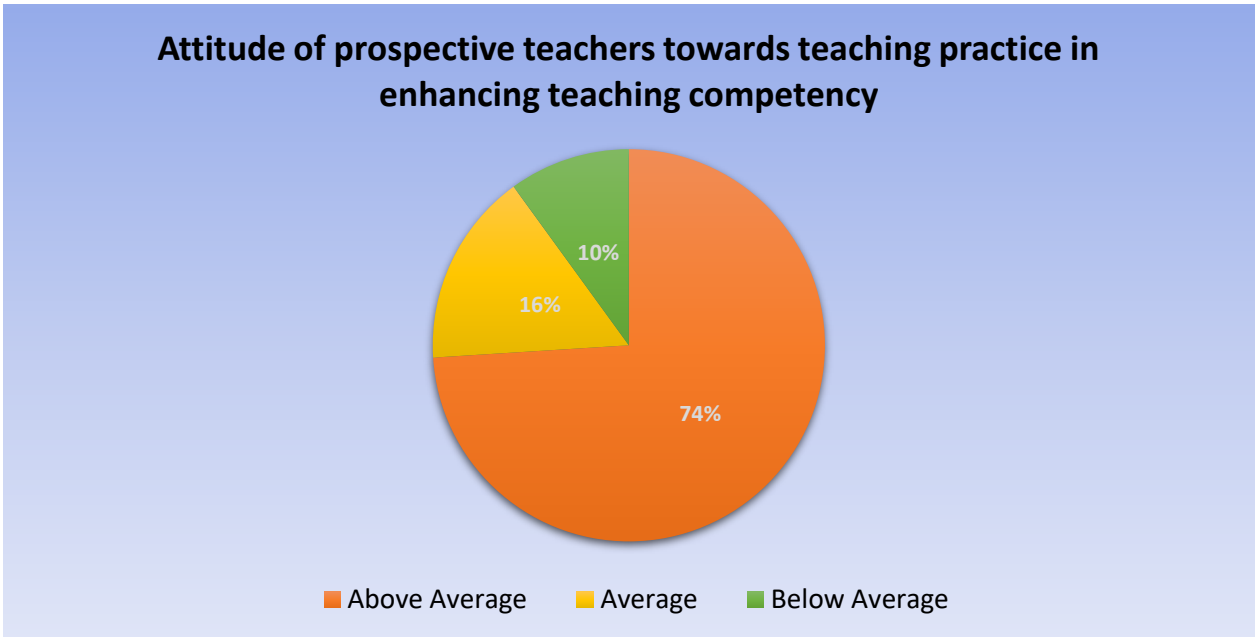


Fig 4.1 : Percentage analysis scores of the attitude of prospective teachers towards teaching practice in enhancing teaching competency

Result of Testing Hypothesis 1

By analyzing the data, it is clear that the majority of prospective teachers have a positive attitude towards teaching practice. Hence, Hypothesis 1 is accepted.

4.5 Attitudes of Prospective Teachers towards Teaching Practice with Respect to Arts and Science Students

Table 4.2. Attitudes towards Teaching Practice between Arts and Science Students

Mean	Standard Deviation	Group	Number of teachers Interested	Percentage

54.54	4.57	Arts	22	44%
54.50	3.62	Science	28	56%

By analyzing the above table, it can be identified that there is a notable difference in the attitudes towards teaching practice between arts and science students. The data indicates that 44% of arts students have a positive attitude towards teaching practice, while 56% of science students show the same level of interest. This significant gap in attitudes suggests potential variations in factors influencing their engagement with teaching practice.

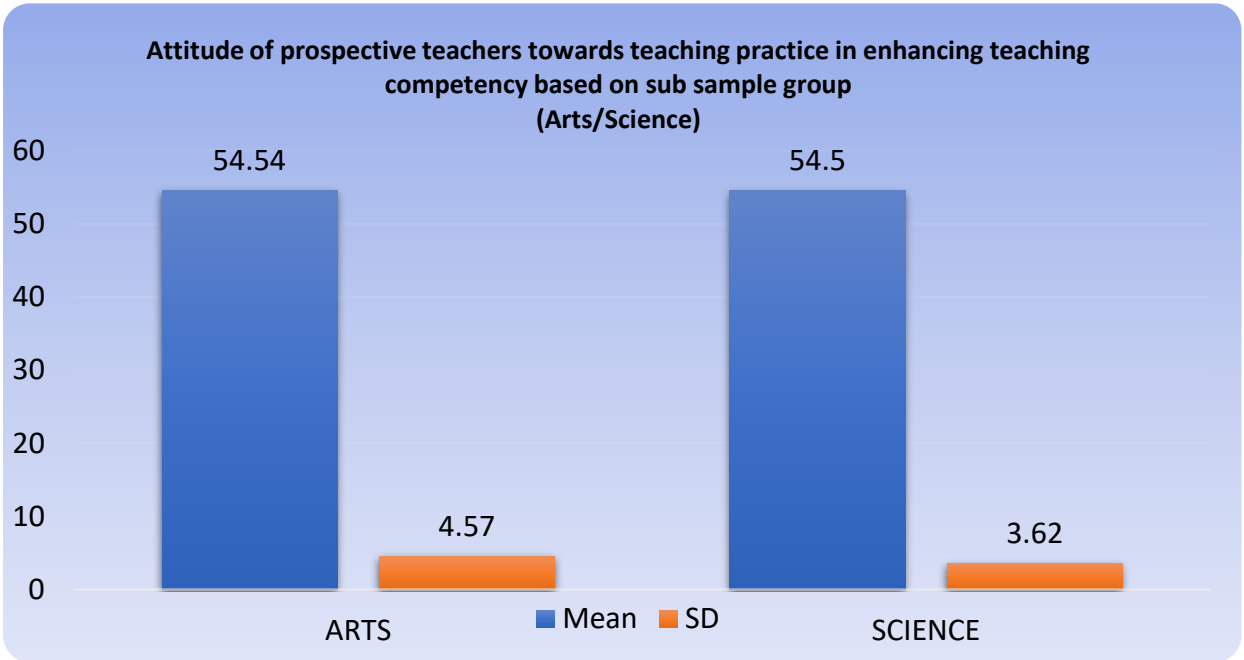


Fig 4.2: Attitude of prospective teachers towards teaching practice in enhancing teaching competency based on sub sample (Arts/ Science)

By analyzing the responses of the prospective teachers using the rating scale, it is evident that there is no significant difference in the attitude towards teaching practice between arts and science students. Hence, Hypothesis 2 is rejected.

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