

Pre-Content/content Post-Content	Learning outcomes/Objectives	
	General	Specific
<u>Pre-Content</u> Knowledge about mean ,median and mode	Students will be able to recall the terms related to statistics	Students will be able to • recall and define the terms which they have already learnt in the previous class
<u>Content</u> Mean of Grouped data	calculate the mean of grouped data	• calculate mean of grouped data by three different methods
Median of grouped data	calculate the median of grouped data	• define median class and calculate median of grouped data
Mode of grouped data	calculate the mode of grouped data	• define modal class and calculate mode of grouped data
Cumulative frequency curve or Ogive	calculate median graphically	• plot the points and draw ogive and analyse the same to find median
<u>Post-Content</u> To work out extra practice questions	apply the knowledge gained to solve problems	• apply the knowledge gained and solve various problems

Home Work /Assignments

NCERT exercise is given as home task.

Assignment sheet/Extended learning from Learning Series

Practice Questions taken from Exemplar.

Teacher's Activity	Student's Activity	Teacher's observation and Remedial
Teacher will help students recall their previous knowledge and initiate thought process by asking few questions explain all the three method to calculate mean and give them related problems to solve explain the method to find out median class and to put the values in the formula explain the method to find out median class and to put the values in the formula ask the students to represent the given data on the graph and find out the median give them certain problems to solve based on the topic and instruct them for the activity to assimilate the concept (Annexure 14)	Students will answer the questions as per their previous knowledge solve the problems given in the exercise and apply the appropriate method required for each of the questions solve the questions given in the exercise solve the questions given in the exercise plot the points accordingly and will make less than ogive and find out mean solve the questions as per the knowledge gained and perform the activity as instructed(Annexure 14)	Teacher will write his/her observations after the completion of the topic.

Teaching Aids: Smart board, Text book, Graph paper, Worksheets, Internet

Methodology/Innovative methods: Digital technology, Interactive, Lecturing, Note giving, Questioning, Discussion

Interdisciplinary Links: Budget, Financial statistics, Stock exchange

Relation with Art: Pictorial representation of data in Census, Stock market, weather forecast, Sports etc...

HOD

Coordinator

Vice- Principal

Principal

ACTIVITY NO - 14

Subject	Mathematics
Class	X
Chapter/Unit	Statistics
Topic	Measures of Central tendency
Time	40 minutes
Nature of Activity	Individual

What will I learn (Learning Outcome)?

Finding the numbers when the Mean, Median and Mode are given.

Skills: Applying, Analyzing and Creating

What I have to do?

To find the set of numbers when the Mean, Median and Mode are given.

(say Mean = 4, Median = 3, Mode = 3 for a group of 5 positive integers with Range = 10)

What do I require?

Notebook and pencil box

What do I need to know?

Mean, Median and Mode

➤ Teacher's Activity

Teacher will ask the students to:

- 1) define Mean, Median and Mode
- 2) Is there any relation between the Mean, Median and Mode?
- 3) As there are 5 positive integers to be found out and mode is 3, so there will be two numbers as 3 atleast. (True/ False)
- 4) Also for Median to be equal to 3, the third number should be 3. (True/ False)
- 5) Since the Mean is 4 therefore the sum of the numbers should be _____.
- 6) As the range is 10, the difference between the highest and lowest number should be _____.

How will I proceed?

➤ **Student's Activity**

Students will:

- 1) Write the possible numbers satisfying all the conditions explained by the teacher.
- 2) There will be only one set of numbers which will qualify all the conditions.

What have I observed?

The only set which satisfies all the conditions given is: 1, 2, 3, 3, 11.

What have I learnt?

A unique set of positive numbers can be found out when the Mean, Median, Mode and the range are given.

What am I curious to learn?

Repeat the above activity with Mean = 31, Median = 33, Mode = 34 for a group of 5 positive integers with Range = 8.

Let me evaluate myself

- 1) Mean of 100 items is 49. It was discovered that three items which should have been 60, 70, 80 were wrongly read as 40, 20, 50 respectively. Find the correct mean.

- 2) The median of a set of 9 distinct observations is 20.5. If each of the largest 4 observations of set is increased by 2, then find the median of new set of observations.
