
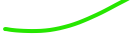
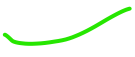



<Basic Mathematics>: <22103>: <BMS>: <Statistics>: <UO5.2>: <Assessments>: <Formative>


<Mrs.M.R.Abhang>

**Assessment Type: Formative Assessments: Embedded questions in video**

Set 1: Question No 1	Set 1: Question No 2	Set 1: Question No 3
Mean deviation about mean for raw data is?	Mean deviation about mean for ungrouped data is?	For grouped data M. D. = $\frac{\sum f_i  d_i }{N}$ , where $ d_i $ is
Recall/ Remembering	Understanding	Application
a) $\frac{\sum  d_i }{N}$	a) $\sqrt{\frac{\sum d_i^2}{N}}$	a) $ \bar{x} - x_i $
b) $\frac{\sum f_i  d_i }{N}$	b) $\frac{\sum  d_i }{N}$	b) $ x_i - \bar{x} $
c) $\sqrt{\frac{\sum d_i^2}{N}}$	c) $\frac{\sum f_i  d_i }{N}$	c) $(x_i - \bar{x})^2$
d) $\sqrt{\frac{\sum f_i d_i^2}{N}}$	d) $\sqrt{\frac{\sum f_i d_i^2}{N}}$	d) $(\bar{x} - x_i)^2$
Ans: <a> 	Ans: <c> 	Ans: <b>

Set 2: Question No 1	Set 2: Question No 2	Set 2: Question No 3
Standard deviation for raw data is?	Standard deviation for ungrouped data is?	For grouped data, S.D.=
Recall/ Remembering	Understanding	Application
a) $\sqrt{\frac{\sum f_i d_i^2}{N}}$	a) $\frac{\sum f_i  d_i }{N}$	a) $\sqrt{\frac{\sum f_i d_i^2}{N}}$
b) $\sqrt{\frac{\sum d_i^2}{N}}$	b) $\frac{\sum  d_i }{N}$	b) $\frac{\sum  d_i }{N}$
c) $\frac{\sum f_i  d_i }{N}$	c) $\sqrt{\frac{\sum d_i^2}{N}}$	c) $\frac{\sum f_i  d_i }{N}$
d) $\frac{\sum  d_i }{N}$	d) $\sqrt{\frac{\sum f_i d_i^2}{N}}$	d) $\sqrt{\frac{\sum d_i^2}{N}}$
Ans: <b> 	Ans: <d> 	Ans: <a>

**Assessment Type: Summative: End of CO: in LMS**

Summative: Q 1	Summative: Q 2	Summative: Q 3	Summative: Q 4	Summative: Q 5																																																		
<p>Calculate the mean deviation of the following data: 3, 6, 5, 7, 10, 12, 15, 18</p>	<p>Calculate the mean deviation about the mean of the following distribution:</p> <table><tr><td><math>x_i</math></td><td><math>f_i</math></td></tr><tr><td>10</td><td>3</td></tr><tr><td>11</td><td>12</td></tr><tr><td>12</td><td>18</td></tr><tr><td>13</td><td>12</td></tr><tr><td>14</td><td>3</td></tr></table>	$x_i$	$f_i$	10	3	11	12	12	18	13	12	14	3	<p>Find M.D. for the following:</p> <table><tr><td>Marks</td><td>No. of Students</td></tr><tr><td>0-10</td><td>5</td></tr><tr><td>10-20</td><td>8</td></tr><tr><td>20-30</td><td>15</td></tr><tr><td>30-40</td><td>16</td></tr><tr><td>40-50</td><td>6</td></tr></table>	Marks	No. of Students	0-10	5	10-20	8	20-30	15	30-40	16	40-50	6	<p>Find the standard deviation of the following data:</p> <table><tr><td>C.I.</td><td><math>f_i</math></td></tr><tr><td>0-10</td><td>3</td></tr><tr><td>10-20</td><td>5</td></tr><tr><td>20-30</td><td>8</td></tr><tr><td>30-40</td><td>3</td></tr><tr><td>40-50</td><td>1</td></tr></table>	C.I.	$f_i$	0-10	3	10-20	5	20-30	8	30-40	3	40-50	1	<p>Find S.D. for the following data:</p> <table><tr><td>Age in years</td><td>No. of voters</td></tr><tr><td>20-29</td><td>10</td></tr><tr><td>30-39</td><td>15</td></tr><tr><td>40-49</td><td>30</td></tr><tr><td>50-59</td><td>20</td></tr><tr><td>60-69</td><td>15</td></tr><tr><td>70-79</td><td>10</td></tr></table>	Age in years	No. of voters	20-29	10	30-39	15	40-49	30	50-59	20	60-69	15	70-79	10
$x_i$	$f_i$																																																					
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Recall/ Remembering	Understanding	Application	Understanding	Application																																																		
a)4.25	a)0.70	a)10	a)10.54	a)10.5																																																		
b)7	b)0.25	b)9.44	b)22	b)14.309																																																		
c)5.4	c)0.5	c)9.0	c)47.91	c)10.54																																																		
d)5.0	d)0.75	d)27	d)10.2	d)12.5																																																		
Ans: 	Ans: <d>	Ans: <b>	Ans: <a>	Ans:<b>																																																		

**Assessment Type: Practice Worksheets: End of CO: in LMS/ downloadable PDF**

- A.** Find the mean deviation of the following:  
17, 20, 9, 13, 22, 15, 18, 17, 13

- B.** Calculate M.D. about mean for:

Marks	No. of students
3	4
4	9
5	10
6	8
7	6
8	3

- A.** Answer Space

- B.** Answer Space

- C.** Find mean deviation from mean of the following:

Weight in gms	No. of items
10-15	7
15-20	12
20-25	16
25-30	25
30-35	19
35-40	15
40-45	6

- D.** Find the standard deviation of the following:  
1, 2, 3, 4, 5, 6, 7, 8, 9

**C.** Answer Space

**D.** Answer Space

**E.** Find the standard deviation of the following data:

Marks	No. of students
0-10	14
10-20	23
20-30	27
30-40	21
40-50	15

**F.** Calculate the standard deviation of the following:

Class	Frequency
0-20	20
20-40	130
40-60	220
60-80	70
80-100	60

E. Answer Space

F. Answer Space

**G.** The following table shows the chest measurement of 100 students. Calculate the mean and standard deviation.

Chest in cm	No. Of Students
68-74	5
75-81	31
82-88	40
89-95	20
96-102	3
103-109	1

**H.** Calculate the standard deviation of the following frequency distribution:

Weekly Expenditure below Rs.	No. of students
5	6
10	16
15	28
20	38
25	46

G. Answer Space

H. Answer Space