<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. = $\frac{\sum f_i \lvert d_i \rvert}{N}$, where $\lvert d_i \rvert$ is
Recall/ Remembering	Understanding	Application
a) $\frac{\Sigma \lvert d_i \rvert}{N}$	a) $\sqrt{\frac{\Sigma d^2_i}{N}}$	a) $\lvert \bar{x} - x_i \rvert$
b) $\frac{\sum f_i \lvert d_i \rvert}{N}$	b) $\frac{\Sigma \lvert d_i \rvert}{N}$	b) $\lvert x_i - \bar{x} \rvert$
c) $\sqrt{\frac{\sum d^2_i}{N}}$	c) $\frac{\sum f_i \lvert d_i \rvert}{N}$	c) $\left(x_i - \bar{x}\right)^2$
d) $\sqrt{\frac{\Sigma f_i d_i^2}{N}}$	d) $\sqrt{\frac{\Sigma f_i d_i^2}{N}}$	d) $\left(\bar{x} - x_i\right)^2$
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) $\sqrt{\frac{\Sigma f_i d_i^2}{N}}$	a) $\frac{\Sigma f_i \lvert d_i \rvert}{N}$	a) $\sqrt{\frac{\Sigma f_i d_i^2}{N}}$
b) $\sqrt{\frac{\Sigma d^2_i}{N}}$	b) $\frac{\Sigma \lvert d_i \rvert}{N}$	b) $\frac{\Sigma \lvert d_i \rvert}{N}$
c) $\frac{\Sigma f_i \lvert d_i \rvert}{N}$	c) $\sqrt{\frac{\Sigma d^2_i}{N}}$	c) $\frac{\Sigma f_i \lvert d_i \rvert}{N}$
d) $\frac{\Sigma \lvert d_i \rvert}{N}$	d) $\sqrt{\frac{\Sigma f_i d_i^2}{N}}$	d) $\sqrt{\frac{\Sigma d^2_i}{N}}$
Ans: <b>	Ans: <d>	Ans: <a>

Assessment Type: Summative: End of CO: in LMS

<table>
<tr><th>Summative: Q 1</th><th>Summative: Q 2</th><th>Summative: Q 3</th><th>Summative: Q 4</th><th>Summative: Q 5</th></tr>
<tr>
<td>Calculate the mean deviation of the following data:
3, 6, 5, 7, 10, 12, 15, 18</td>
<td>Calculate the mean deviation about the mean of the following distribution:
<table>
<tr><th>x_i</th><th>f_i</th></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>
</td>
<td>Find M.D. for the following:
<table>
<tr><th>Marks</th><th>No. of Students</th></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>
</td>
<td>Find the standard deviation of the following data:
<table>
<tr><th>C.I.</th><th>f_i</th></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>
</td>
<td>Find S.D. for the following data:
<table>
<tr><th>Age in years</th><th>No. of voters</th></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>
</td>
</tr>
<tr><td>Recall/ Remembering</td><td>Understanding</td><td>Application</td><td>Understanding</td><td>Application</td></tr>
<tr><td>a)4.25</td><td>a)0.70</td><td>a)10</td><td>a)10.54</td><td>a)10.5</td></tr>
<tr><td>b)7</td><td>b)0.25</td><td>b)9.44</td><td>b)22</td><td>b)14.309</td></tr>
<tr><td>c)5.4</td><td>c)0.5</td><td>c)9.0</td><td>c)47.91</td><td>c)10.54</td></tr>
<tr><td>d)5.0</td><td>d)0.75</td><td>d)27</td><td>d)10.2</td><td>d)12.5</td></tr>
<tr><td>Ans:</td><td>Ans: <d></td><td>Ans: <b></td><td>Ans: <a></td><td>Ans:<b></td></tr>
</table>

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