




<Basic Mathematics>: <22103> : <BMS> : <Statistics> : <UO\_5.3> : <Assessments> : <Formative>

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

Set 1: Question No 1	Set 1: Question No 2	Set 1: Question No 3
If S.D.= 7.01 then Variance=?	Coefficient of variation of a distribution is 75% and standard deviation is 24.What is its mean?	$v_1$ and $v_2$ are coefficients of variations for Set I and Set II. $v_1=10.25$ and $v_2=12.5$ , which set is more consistent?
Recall/ Remembering	Understanding	Application
a) 49.1401	a) 3.125	a)Set I
a) 50.5	b) 0.32	b) Set II
b) 64.12	c) 32	c) Both I and II
c) 36.04	d) 32.5	d) None
Ans: <a> 	Ans: <c> 	Ans: <a> 

Set 2: Question No 1	Set 2: Question No 2	Set 2: Question No 3									
If mean is 82.5 and S.D.= 7.2, then coefficient of variance is?	Coefficient of variation of a certain distribution is 5 and mean is 60.Find S.D.	<p>The data of runs scored by two batsman A and B in five one day matches is given below:</p> <table border="1"> <thead> <tr> <th>Batsman</th><th>Average runs scored</th><th>S.D.</th></tr> </thead> <tbody> <tr> <td>A</td><td>44</td><td>5.1</td></tr> <tr> <td>B</td><td>54</td><td>6.31</td></tr> </tbody> </table> <p>State which batsman is more consistent?</p>	Batsman	Average runs scored	S.D.	A	44	5.1	B	54	6.31
Batsman	Average runs scored	S.D.									
A	44	5.1									
B	54	6.31									
Recall/ Remembering	Understanding	Application									
a)0.087	a) 5.9	a) A									
b) 11.46	b) 8.33	b) B									
c) 8.727	c) 0.3	c)Both A and B									
d) 10.5	d) 3	d)None									
Ans: <c>	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																																										
Find variance and coefficient of variance of the following data: 49, 63, 46, 59, 65, 52, 60, 54	Find variance of the following data: <table><tr><td><math>x</math></td><td><math>f</math></td></tr><tr><td>10</td><td>12</td></tr><tr><td>20</td><td>15</td></tr><tr><td>30</td><td>17</td></tr><tr><td>40</td><td>11</td></tr><tr><td>50</td><td>9</td></tr></table>	$x$	$f$	10	12	20	15	30	17	40	11	50	9	In the two factories A and B engaged in the same industry, the average weekly wages and S.D. are as follows: <table><tr><td>Fact ory</td><td>A</td><td>B</td></tr><tr><td>Avg.</td><td>34.5</td><td>28.5</td></tr><tr><td>S.D.</td><td>5.0</td><td>4.5</td></tr></table> Which factory is more consistent?	Fact ory	A	B	Avg.	34.5	28.5	S.D.	5.0	4.5	Find variance of the following : <table><tr><td>C.I.</td><td>frequency</td></tr><tr><td>0-10</td><td>14</td></tr><tr><td>10-20</td><td>23</td></tr><tr><td>20-30</td><td>27</td></tr><tr><td>30-40</td><td>21</td></tr><tr><td>40-50</td><td>15</td></tr></table>	C.I.	frequency	0-10	14	10-20	23	20-30	27	30-40	21	40-50	15	The mean and standard deviation of two sets are given below: <table><tr><td></td><td>Set I</td><td>Set II</td></tr><tr><td><math>\bar{x}</math></td><td>60</td><td>65</td></tr><tr><td><math>\sigma</math></td><td>5</td><td>6</td></tr></table> Which set is more consistent?		Set I	Set II	$\bar{x}$	60	65	$\sigma$	5	6
$x$	$f$																																													
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$\bar{x}$	60	65																																												
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Recall/ Remembering	Understanding	Application	Understanding	Application																																										
a) 6.363, 40.488	a)64	a) A	a)12.649	a)set I																																										
b) 40.487, 11.362	b) 28.437	b)B	b)25	b)set II																																										
c) 56, 3136	c) 13.016	c)Both A and B	c)159.997	c)Both I and II																																										
d) 8.805, 77.52	d)169.416	d)None	d)2500	d)None																																										
Ans: <b>	Ans: <d>	Ans: <a>	Ans: <c>	Ans:<a>																																										

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

A. If the mean of the data is 12 and coefficient of variation is 45%, then find the standard deviation.

B. Find variance of the following:  
1, 2, 3, 4, 5, 6, 7

A. Answer Space

B. Answer Space

C. Find variance:

$x$	$f$
10	17
15	22
20	19
25	16

D. Calculate the variance and coefficient of variance of the following data:

Class interval	Frequency
0-30	12
30-60	16
60-90	25
90-120	22
120-150	10

C. Answer Space

D. Answer Space

E. Find variance and coefficient of variance:

C.I.	Frequency
68-74	5
75-81	31
82-88	40
89-95	20
96-102	3
103-109	1

F. The mean and standard deviation of two sets are:

	A	B
Mean	82.5	48.75
S.D.	7.3	8.35

Which set is less consistent?

E. Answer Space

F. Answer Space

G. From the following data investigate which set is more consistent:

Set	mean	S.D.
I	83.4	5.9
II	51.857	7.45

H. An analysis of monthly wages paid to the workers in two firms A and B belonging to the industry gives the following results:

	Firm A	Firm B
Avg. wages	186	175
Variance	81	100

Which firm has greater variability?

G. Answer Space

H. Answer Space