

**All Victoria University  
of Bangladesh  
Mid Term Assessment  
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**Program : BBA**

**Batch : 46th**

**COURSE CODE : STA 321**

**COURSE TITLE : Statistical Decision  
Making**

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course title: Statistical Decision making  
course code: STA 321

### Ans: to the Q.N ①

① A branch of mathematics dealing with the collection, analysis, interpretation, and presentation of masses of numerical data. A collection of quantitative data. Statistics can be used to predict the future, determine the probability that a specific event will happen, or help answer questions about a survey. Statistics is used in many different fields such as business, medicine, biology, psychology.

P.T.O

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Ans: the a.v (2)

(2)

Frequency Distribution of Stress on job

Stress on job	Tally	Frequency (y)
Very	      	13
Somewhat	           	18
None	 	9
	Sum =	40

p.t.o

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Relative frequency and percentage  
Distributions of stress on Job

Stress on job	Relative frequency	percentage
Very	$13/40 = .325$	$.325(100) = 32.5$
Some what	$18/40 = .45$	$.45(100) = 45$
None	$9/40 = .225$	$.225(100) = 22.5$

Sum = 1.000

Sum = 100

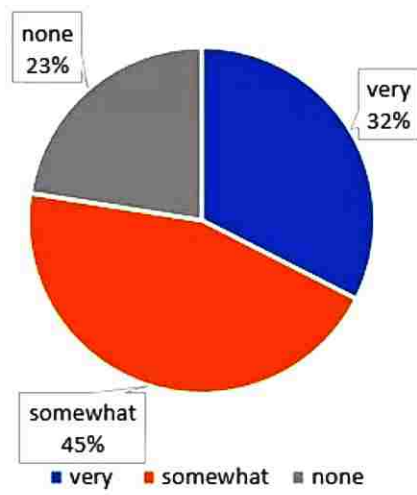
P. f. o

## Angle size for the pie chart

Stress on job	Relative frequency	Angle, Size
Very	.325	$360(.325) = 117$
Somewhat	.45	$360(.45) = 162$
None	.225	$360(.225) = 81$

Stress on job	Angle size
very	117
somewhat	162
none	81

Angle size



Ans: to the Q.N. (3)

This variable by  $x$ , then 6 values  
of  $x$  are

where, Represent-2021 sales  
(Billions tk)

$$x_1 = 20 \quad (\text{Labaid pharmaceutical}) = 20$$

$$x_2 = 33 \quad (\text{Csquare pharmaceutical}) = 33$$

$$x_3 = 38 \quad (\text{Beacon pharmaceutical}) = 38$$

$$x_4 = 15 \quad (\text{Beximeo pharmaceutical}) = 15$$

$$x_5 = 42 \quad (\text{Popular pharmaceutical}) = 42$$

$$x_6 = 24 \quad (\text{Achme Laboratories}) = 24$$

$$\Sigma x = x_1 + x_2 + x_3 + x_4 + x_5 + x_6$$

$$= 20 + 33 + 38 + 15 + 42 + 24$$

$$= 172$$

$$\text{Mean } \bar{x} = \frac{\Sigma x}{n} = \frac{172}{6} = 28.667 \text{ Billions}$$

That is, the mean 2021 sales of these six  
company was 28.667 billions tk.