

## Assignment Number 01

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Roll Number : 19P-0007

Section : BS(CS)-4A

Q: 01

(a) Frequency Table:

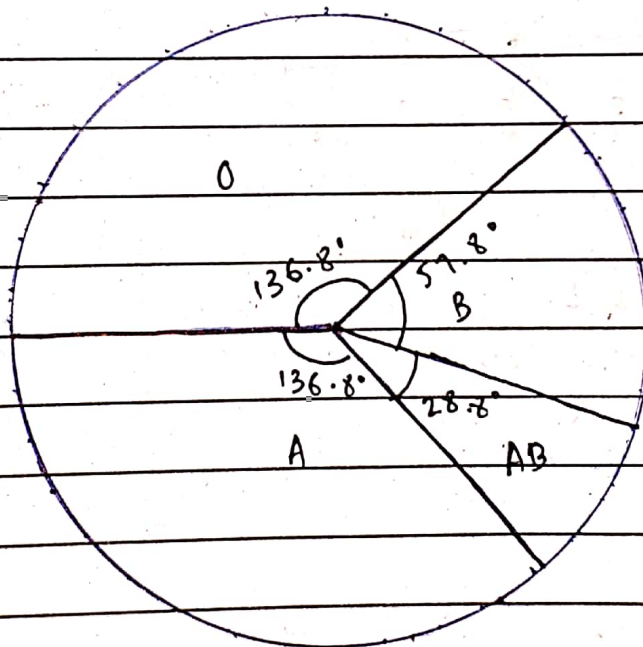
Blood Type	frequency
O	19
A	19
B	8
AB	4

(b) Relative frequency table:

Blood Type	frequency
O	$19/50 = 0.38$
A	$19/50 = 0.38$
B	$8/50 = 0.16$
AB	$4/50 = 0.08$

(c) Pie chart:

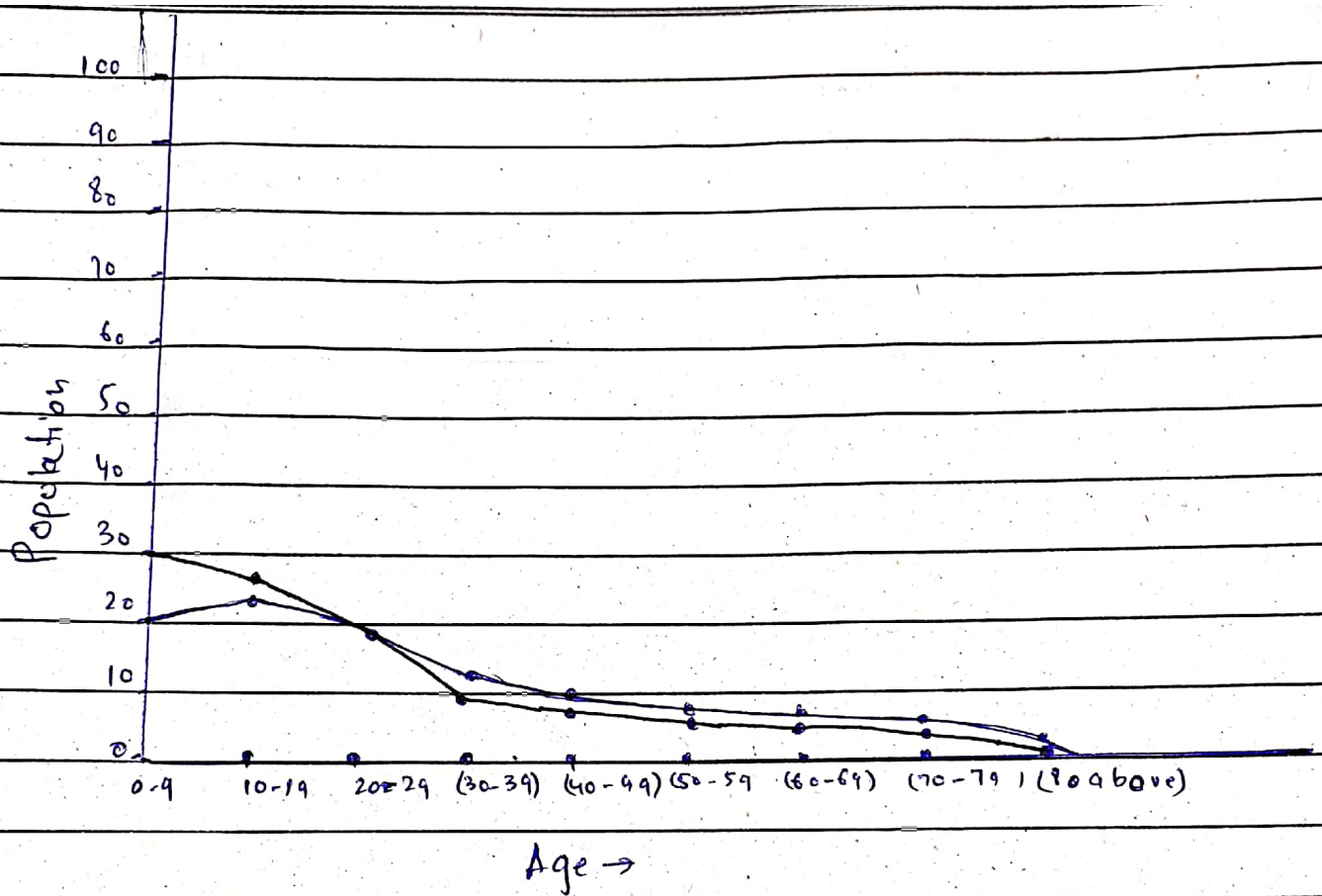
Blood Type	Frequency	Angle
O	19	$0.38 \times 360 = 136.8^\circ$
A	19	$0.38 \times 360 = 136.8^\circ$
B	8	$0.16 \times 360 = 57.8^\circ$
AB	4	$0.08 \times 360 = 28.8^\circ$
Total	50	$360^\circ$



Q: NO : 02

(a)  $32.5 + 24 + 14.5 = 71\%$

(b)  $17.5 + 20 + 14.5 = 52\%$



— U.S.  
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Q: NO: 03

(9) 4 stem

stem	:	leaf
11	:	1, 4, 5, 6, 8, 8, 9, 9, 9
12	:	2, 2, 2, 2, 4, 5, 5, 6, 7, 7, 7, 8, 9
13	:	0, 2, 2, 3, 4, 5, 5, 7, 9
14	:	1, 1, 4, 6, 7

(b) 8 stem

Stem	:	leaf
11	:	1, 4
11	:	5, 6, 8, 8, 9, 9, 9
12	:	2, 2, 2, 2, 4
12	:	5, 5, 6, 7, 7, 7, 8, 9
13	:	0, 2, 2, 3, 4
13	:	5, 5, 7, 9
14	:	1, 1, 4
14	:	6, 7

Q: NO: 4:

Value	:	frequency
3	:	1
4	:	2
5	:	3
6	:	2

$$\text{mean} = \frac{38}{8} = 4.75$$

$x_i$	3	4	4	5	5	5	6	6
$\bar{x}$	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75
$(x_i - \bar{x})$	-1.75	-0.75	-0.75	0.25	0.25	0.25	1.25	1.25
$(x_i - \bar{x})^2$	3.06	0.56	0.56	0.06	0.06	0.06	1.56	1.56
$\frac{(x_i - \bar{x})^2}{(x_i - \bar{x})}$	1.02	0.18	0.18	0.09	0.02	0.02	0.52	0.52



$$\text{Var} = \frac{3.06 + 0.56 + 0.56 + 0.06 + 0.06 + 0.06 + 1.56 + 1.56}{7}$$

$$= \frac{7.98}{7}$$

$$= \sqrt{1.069}$$

$$= 1.034$$

