

Data Interpretation

$$\% \text{ change} = \left[\frac{\text{change}}{IV} \right] \times 100$$

Final $\rightarrow$ final value

IV $\rightarrow$ initial value

if $\% \text{ change} \rightarrow +ve \rightarrow FV > IV \rightarrow \% \uparrow \rightarrow$ growth rate

$\rightarrow -ve \rightarrow FV < IV \rightarrow \% \downarrow \rightarrow$ decline rate

Ex (a) $40 \rightarrow 20 \Rightarrow \frac{-20}{40} = \left(-\frac{1}{2} \right) \times 100 \approx -50\% \downarrow$

(b) $40 \rightarrow 50 \rightarrow \frac{10}{40} = \frac{1}{4} \approx 25\% \uparrow$

(c) $40 \rightarrow 55 \rightarrow \frac{15}{40} = \frac{3}{8} \approx 37.5\% \uparrow$

$\% \text{ change maxm.} \rightarrow | \text{change} |$

$\% \uparrow$ is maxm. $\rightarrow +ve$ value in account.

$\% \downarrow$ is maxm. $\rightarrow -ve$ value in account.

Ex :-

2015	2016	2017
50	60	72

$$-\frac{10}{50} = -\frac{1}{5} \approx 20\% \uparrow \checkmark$$

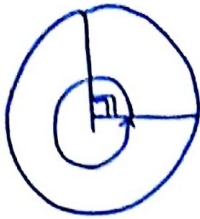
$$50 \times 1.2 = 60 \times 1.2 = 72$$

$$50 \quad 40 \quad \underline{12}$$

$$50 \times 0.8 = 40 \times 0.8 = \underline{32} \checkmark$$

Ans
(a) in

Rs 10,000



$$\frac{90^\circ}{360^\circ} = \frac{1}{4} \rightarrow 25\% \\ = \frac{1}{4} \text{ of } 10,000 = 2500$$

1,00,00,000

$$100\% \rightarrow 360^\circ$$

$$1\% \Rightarrow \frac{360}{100} = 3.6^\circ$$

$$\frac{360^\circ \rightarrow 100\%}{1^\circ \rightarrow \frac{100}{360}\%}$$

$$1^\circ \rightarrow \frac{5}{18}\%$$

Pg 58

CH # 13

Q2

$$\left[\frac{63^\circ - 36^\circ}{36^\circ} \right] = \frac{27}{36} = \frac{3}{4} \approx 75\%$$

Q3

c

h

$$81^\circ + 63^\circ = 144^\circ$$

$$\frac{144^\circ}{360^\circ} = \frac{2}{5} \text{ of Total} \\ = \frac{2}{5} \text{ of } (2 \text{ cr}) \\ = 80 \text{ Lakh}$$

$$144 \times \frac{5}{18}\%$$

40% of the Total

other method

1 method

↓
40% of T ✓

Q6

$$0.04 \text{ of } \text{TCP} = 15730$$

$$\text{TCP} = 393250 \\ \text{of } 5500$$

cost

$$\text{Total Selling Price (TSP) of } 5500 = \frac{393250 \times 1.3}{5500} = 92.95$$

copy

1% $\approx$ 4 Thousand

4% TCP $\approx$ 16 Th

TCP = 4 lakh

TSP = $4 \times 1.3 = \frac{5.242}{5.500}$
lwp
9

(10) ✓

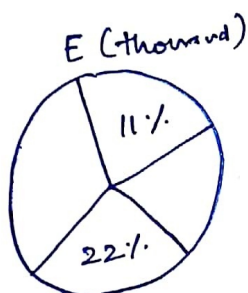
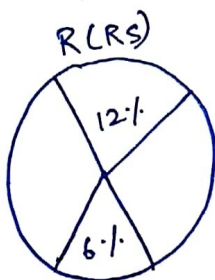
(11) ✓

(12) ✓

(15) Total quantity = 5 lakh tonnes
Total Revenues = 250 Crore

Ratio of Revenue $\frac{1/Kg}{4/Kg}$

(16) SIR



$$I_1 = \frac{2 \times 12\% \text{ of } R}{14\% \text{ of } E}$$

$$I_4 = \frac{1 \times 8\% \text{ of } R}{22\% \text{ of } E} = \frac{4}{1}$$

Pg 77

Q 75

200 units

SIR

15 of TCP = 4.5 lakh

✓ TCP = 30 lakh
2012

✓ Profit 2012 = 10 lakh

T.S.P. 2012 = 40 lakh

S.P./per unit = $\frac{40 \times 10^5}{200} = 20,000$

Pg no. 60

Q 18

$\frac{M_{2008}}{F_{2008}} = 2.5$ ✓

assume $F_{2008} = 100$ ✓
and $M_{2008} = 250$ ✓ (Bec. ratio is fixed)

$\frac{M_{2009}}{F_{2009}} = \frac{600}{200}$ (3) ✓
(Bec. ratio is fixed)

Final value of male

$\frac{600 - 250}{250}$ initial value of male
 $= \frac{35}{25} = \frac{7}{5} = 1.4 \times 100 = 140\%$

(19) 2012-2013 $\rightarrow$ GDP $\uparrow$ 7%

2012-2013 $\rightarrow$ 50 to 60 USD

SIR Q19	GDP before 2012-2013	GDP in (₹)	1 US \$	GDP in 1 US \$
		100 ₹	50 ₹ ✓	$\frac{100}{50} = 2 \$$ ✓
	GDP after 2012-2013	107 ₹ ↓	60 ₹	$\frac{107}{60} = 1.78\bar{3} \$$ ✓

$$\left[\frac{2 - 1.78\bar{3}}{2} \right] \times 100 = -10.83\% \downarrow$$

$$20 \uparrow \rightarrow 16.6\% \downarrow$$

↳ production purchase ↓
power

$$\frac{7}{x} \quad \text{---} \quad \frac{-16.66\%}{y} + \frac{xy}{100}$$

Q20

Type III	Type II	Type I	Type V
$\frac{46}{114}$	$\frac{40}{144}$	$\frac{40}{75}$	$\frac{40}{108}$

Pg 84
Q123

	(cm)	(kwh)
M	20	12
N	45	25
O	75	45
P	100	57

$$20 \text{ cm} \rightarrow 12 \text{ kwh}$$

$$1 \text{ km} = \frac{12}{20}$$

$$0.6$$

$$45 \rightarrow 25$$

$$1 \text{ km} = \frac{25}{45} \quad 0.5 \checkmark$$

$$1 \rightarrow \frac{57}{100}$$

$$0.57$$

$$75 \rightarrow 45$$

$$1 \text{ km} \rightarrow \frac{45}{75} \quad 0.6$$

SIR

M

N

O

P

(km) (kwh)

20 ← 12

25 ← 13

30 ← 20

25 ← 12

$$\left(\frac{13}{36}\right) \left(\frac{13}{25} \uparrow\right)$$

(116) (87)

same

Pg 78 Q87 →

21x2 = 42

15x3 = 45

23x2 = 46

(15)

42 + 45 + 46

3

SIR

21x2 = 42

15x3 = 45

23x2 = 46

133

(C)

(C)

Students Corrected Class + W + NA = students

80 + 5 + 15 = 100

10 + 70 + 20 = 100

Q. ESE 2017

apna Qn	M	F	T
5 L -	1 (38, 38)	5 (34, 40)	6
5 - 10 L	1 (32, 32)	8 (35, 53)	9
10 - 15 L	8 (21, 65)	3 (37, 13)	11
15 +	2 (32, 33)	2 (27, 40)	4
Total	12	18	30

this needed

(i) The percentage of the people older than 35 years can be almost

Sol 8

Extend the Table

M	F	T
1	4	5
0	7	7
7	3	10
0	1	1
		23

23/30 x 100 = 76.6%

(ii) Then the min % of people age less than 40 years

M	F	T
1	1	2
1	1	2
1	1	2
2	1	3

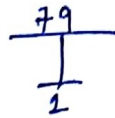
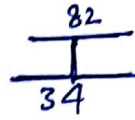
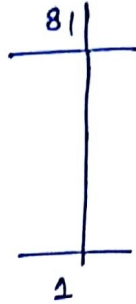
Q 10 samples

P Q

(70) (57) 82 84 98 (66) (34) 87 (79) (71)

This shows the % of milk in each sample. If any two samples are mixed & form a new sample then on maxm., how many distant pairs of samples will never give a composition of more than 80% milk.

Sol



$6C_2$

$$\frac{6!}{2!4!}$$

3RS

15

Q —.