



A1 Kareena is sitting exact opposite of Kiona.

A2 4 (four) people sit between Anuska and ~~Katrina~~ ~~Katrina~~ Kareena.

A3 Anisha sits on the immediate right of Kareena.

A4 No one sits in between of Kiona and Katrina as they are neighbours.

A5 Kiona sits third to the right of Anisha.

Name	Brand	Colour	conditions	Condition
Laxman	Oppo	white	x Brown x Black	Intex → motorola →
Mittal	Nokia	Grey	x Apple	Apple → x black
Nehal	Apple Samsung	Brown Black		
Om	Samsung	Black		
Pinky	Intex Oneplus	Blue	x Apple	Nokia *
Falgun	Oppo	Red	x Nokia x Apple	Samsung *
Rashmikant	Motorola	Yellow	x Blue x Apple	Apple *
				Intex *
				Oppo *
				Oneplus *
				Motorola *

A6 Laxman owns an Oppo mobile phone.

A7 Nehal has Apple and it has cover of Brown colour.

A8 Rashmikant owns a yellow color phone cover.

A9 Samsung has back cover of color Black.

A10 Mittal is having Nokia.

A11 80% of 500 sarees sold

$$= 500 \times \frac{80}{100} = 400 \text{ sarees.}$$

Then sold 50% of remaining sarees



$$= 100 \times \frac{1}{2} = 50$$

$$\begin{aligned}\text{Total sarees sold} &= 400 + \cancel{100} 50 \\ &= 450\end{aligned}$$

$$60\% = 450$$

$$100\% = x$$

$$\frac{x \times 60}{100} = \frac{450 \times 100}{100}$$

$$x = \frac{15}{450} \times 100$$

$$x = \frac{150}{450}$$

$$x = 750$$

∴ He had total stock of 750 sarees.

A12 let Cost price of stock = ₹ 100

$$\therefore \text{Marked price} = ₹ 100 + 20\% \\ = ₹ 100 + 20 \\ = ₹ 120$$

$$\text{MP of } \frac{1}{2} \text{ stock} = ₹ 60$$

$$\text{MP of } \frac{1}{4} \text{ stock} = ₹ 30$$

∴ Total selling price

$$= 60 + (80\% \text{ of } 30) + (60\% \text{ of } 30)$$

$$= 60 + \frac{80}{100} \times 30 + \frac{60}{100} \times 30$$

$$= 60 + 24 + 18 = ₹ 102$$

Hence, profit gain = $\frac{(102 - 100)}{100} \times 100\% = 2\%$

A13

Total people = 20

Total salary of 20 people = 16000

old manager's salary = 950

Total monthly salary of 19 person = $16000 - 950 = 15050$

After hiring new manager, salary average = 770

\therefore Total salary = $770 \times 20 = 15400$.

Total salary of 17 workers + 2 old managers
= 15050

\therefore New manager's salary = $15400 - 15050 = \underline{\underline{350 \text{ Rs.}}}$, Ans

A14

CP = ₹ 8000

Selling at 20% profit = $8000 \times \frac{2}{100} + 8000 = 9600 \text{ ₹}$

B sells car to A at 10% loss

$$= 9600 - 9600 \times \frac{10}{100} = 8640 \text{ ₹}$$

• profit of A = $9600 - 8640$
 $= 960 \text{ ₹}$

$\therefore \text{gain \%} = \frac{\frac{12}{960}}{\frac{8640}{100}} \times 100 = \underline{\underline{12\%}}$ Ans

A15 The first number to get divisible by 6 between 23 & 100 is 24, and last number is 96.

$$a = 24, d = 6, A_n = 96$$

$$a + (n-1)d = 96$$

$$24 + (n-1)6 = 96$$

$$(n-1)6 = 96 - 24$$

$$(n-1) = \frac{96 - 24}{6}$$

$$n = \left(\frac{96 - 24}{6} \right) + 1$$

$$n = 12 + 1 = \underline{\underline{13}}$$

\therefore There are 13 numbers ~~are~~ in between 23 to 100 which are divisible by 6.

A16 let x be upstream & y be downstream

$$\frac{30}{x} + \frac{44}{y} = 10 \quad \text{--- } ①$$

$$\frac{40}{x} + \frac{55}{y} = 13 \quad \text{--- } ②$$

multiplying eqⁿ ① by 4 & ② by 3

$$\frac{120}{x} + \frac{156}{y} = 40$$

$$\frac{120}{x} + \frac{165}{y} = 39$$

$$\frac{11}{y} = 1$$

$$y = 11$$

$$\therefore \frac{30}{x} + \frac{44}{11} = 10$$

$$\frac{30}{x} = 6$$

$$x = \frac{30}{6} = 5$$

$$(x = 5)$$

$$\text{Speed of current} = \frac{1}{2}(11 - 5) \\ = \frac{6}{2} = \underline{\underline{3 \text{ km/h}}}$$

A17

let investment in A be ₹ x.

and investment in B be ₹ (13900 - x)

$$SI = \frac{PRT}{100}$$

$$\therefore R = 14\%, T = 2 \text{ years}$$

$$SI = \frac{x \times 14 \times 2}{100} = \frac{28x}{100} \quad \text{--- ①}$$

$$SI \text{ for } ₹ (13900 - x) \text{ at } 11\% \\ = \frac{(13900 - x) \times 11 \times 2}{100} \\ = \frac{22(13900 - x)}{100} \quad \text{--- ②}$$

$$\text{Total interest} = 3508 \text{ ₹}$$

$$\therefore \frac{28x}{100} + \frac{22(13900 - x)}{100} = 3508$$

$$\therefore 28x + 22(13900 - x) = 350800$$

$$28x + \cancel{305800} - 22x = 350800$$

$$6x = 350800 - 305800$$

$$x = \frac{45000}{6}$$

$$x = 7500$$

$$\therefore \text{Investment in B} = (13900 - 7500) \text{ £} \\ = \underline{\underline{\text{£ 6400}}} \quad \text{Ans}$$

(18) Let third number be 10

$$\therefore \frac{1st}{2nd} \text{ number} = \frac{12}{15} = A$$

$$2nd \text{ number} = 15 = B$$

$$\therefore \frac{A}{B} = \frac{12}{15} = \frac{4}{5}$$

$$\frac{A}{B} = \frac{4}{5}$$

$$\therefore \boxed{A:B = 4:5}$$

A 19 \therefore Interest on £ 4624 for 1 year = $4913 - 4624$
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$$= \underline{\underline{\text{£ 289}}}$$

$$\text{Interest rate} = \frac{100 \times 289}{4624 \times 1} = \frac{25}{4}$$

Let sum be x .

$$\therefore x + \left(1 + \frac{25}{4 \times 100}\right)^2 = 4624$$

$$x = \frac{4624 \times 16 \times 16}{17 \times 17}$$

$$x = \underline{\underline{24096}}$$

Ans

A 20

Let ~~the~~ no. of candidates applied for exam.

5% were ineligible

$\therefore 100 - 5 = 95\%$ were eligible

$$\therefore \text{Total eligible} = \frac{95}{100} x$$

~~Now as given, 85% of general category were eligible~~

Now as given, 85% of ~~were~~ eligible were of general category



$$\therefore \text{Now } (100 - 85)\% = 15\%$$

$\therefore 15\%$ were of other category

Total candidates of other category

$$= \frac{95x}{100} \times \frac{15}{100} = 42.75$$

$$\therefore \text{No.} = \frac{42.75 \times 20 \times 100}{2 \times 95} = 15 \times 20 \times 100$$

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$$\therefore x = 30,000$$

- o Total of 30000 candidates applied for the exam.

X

X