Quiz Date: 7th July 2020
Q1. Because of pandemic, the price of cars decreases by $12 \%$ and its production also decreases by $4 \%$. What is the total effect on revenue?
(a) Loss of $16 \%$
(b) Gain of $15 \%$
(c) Loss of $15.52 \%$
(d) Gain of $15.48 \%$
(e) Gain of $16 \%$

Q2. A merchant commences with a certain capital and gains annually at the rate of 25 per cent. At the end of 3 years he has worth Rs 10,000 . What was the original capital?
(a) Rs 5120
(b) Rs 5220
(c) Rs 5210
(d) Rs 5130
(e) None of these

Q3. Annual incomes of $A$ and $B$ are in the ratio $5: 4$ and their annual expenses are in the ratio $4: 3$. If each of them saves Rs. 700 at the end of the month, what is the monthly income of $A$ ?
(a) Rs. 3500
(b) Rs. 2400
(c) Rs. 4200
(d) Rs. 8400
(e) Rs. 9400

Q4. A water pipe is cut into two pieces. The longer piece is $70 \%$ of the length of the original pipe. By how much percentage is the longer piece longer than the shorter piece?
(a) $140 \%$
(b) $400 / 3 \%$
(c) $40 \%$
(d) $200 / 3 \%$
(e) $45 \%$

Q5. If a number x is $10 \%$ less than another number y and y is $10 \%$ more than 125 , then x is equal
(a) 150
(b) 143
(c) 140.55
(d) 123.75
(e) 127.35

Q6. Annually income of Sameer is 8.4 lakh Rs. he spend $14 \frac{2}{7} \%$ on Rent, ${ }^{16 \frac{2}{3} \%}$ of remaining on Food and 11/20 of remaining spend on Cloth and travel together monthly. then find the
difference between total saving and amount spend on travel annually, if given ratio between amount spend on Cloth to travel is $17: 8$ ?
(a) 164400 Rs.
(b) 165400 Rs.
(c) 160400 Rs .
(d) 175400 Rs.
(e) 150400 Rs.

Q7. The ratio of roses and lilies in a garden is $3: 2$ respectively. The average number of roses and lilies is 180 . What is the number of lilies in the garden?
(a) 144
(b) 182
(c) 216
(d) 360
(e) 108


Q8. Neeraj's income is $30 \%$ more than Veer's income which is Rs. 6000 more than Satish's income. If ratio between Neeraj's income to Satish's income is $39: 20$, then find Veer's income
(a) Rs. 9,000
(b) Rs. 12,000
(c) Rs. 18,000
(d) Rs. 15,000
(e) Rs. 21,000

Q9. Three friends $P, Q$ and $R$ have amount in the ratio of $5: 6: 8$. If $R$ gives $37 \frac{1}{2} \%$ of his amount to $P$ then the difference of the amount left with $R$ and the average of the amount of $P$ and $Q$ is Rs 560. Find the ratio of their initial amount after Rs 1000 is added to each of them.
(a) $60: 66: 83$
(b) $67: 72: 81$
(c) $60: 67: 81$
(d) $60: 69: 81$
(e) $65: 71: 83$

Q10. A natural number when increased by $50 \%$ it gives a natural number. However, when the value of the number is reduced by $75 \%$, the number is still natural. If on reducing the number by $66 \frac{2}{3} \%$, number is still natural than least number that could be -
(a) 6
(b) 18
(c) 12
(d) 24
(e) 30

Q11. In an infinite G.P. (geometric progression), common ratio is $6.25 \%$ of the first term and 5th term is $50 \%$ less than the $4^{\text {th }}$ term then find the sum of given G.P.?
(a) 12
(b) $\frac{32}{3}$
(c) $\frac{34}{3}$
(d) 16
(e) Can't be determined

Q12. A sum of Rs. 54.60 is comprised of 153 coins that are either 20 paise or 50 paise. Find the number of 20 paise coins
(a) 80
(b) 43
(c) 27
(d) 63
(e) None of these

Direction (13-15): Read the data carefully and answer the questions.
Total 846 people watching movie in a multiplex ' P '. Number of adult male who watching movie is $70 \%$ more than number of male child, while number of adult female are 60 more than number of male child. Number of female child is $33 \frac{1}{3} \%$ less than that of male child.
Q13. Total adult male who watching movie is what percent more than adult female who watching movie in multiplex 'P'?
(a) $29.5 \%$
(b) $27.5 \%$
(c) $25.5 \%$
(d) $24.5 \%$
(e) $32.5 \%$

Q14. Find average of male child \& female child who watching movie in multiplex 'P'?
(a) 130
(b) 110
(c) 150
(d) 160
(e) 180

Q15. If another multiplex ' $Q$ ' number of adult female who watching movie is $40 \%$ more than male child who watching movie in multiplex ' P ' and number of adult female who watching movie in multiplex ' $Q$ ' is $36 \%$ of total people watching movie in that multiplex. Find total people watching movie in multiplex ' P ' is how much more than total people watching movie in multiplex ' Q '?
(a) 126
(b) 116
(c) 106
(d) 146
(e) 176

## Solutions

S1. Ans.(c)
Sol.
Net effect $=\left\lceil-12-4+\frac{(-12)(-4)}{100}\right\rceil \%$
$=(-16+0.48) \%=-15.52 \%$

S2. Ans.(a)
Sol.
Let the original capital $=x$
Now, A/q,
$x \times \frac{125}{100} \times \frac{125}{100} \times \frac{125}{100}=10000$
$\Rightarrow x=\frac{10000 \times 4 \times 4 \times 4}{5 \times 5 \times 5}$
= Rs. 5120


S3. Ans.(a)
Sol. Let annual income of A and B be 5 x and 4 x respectively and their annual expenses be 4 y and $3 y$ respectively.

$$
\begin{equation*}
\therefore 5 x-4 y=700 \tag{ii}
\end{equation*}
$$

And $4 x-3 y=700$ $\qquad$
Solving eq. (i) and (ii) we get
$x=y=700$
$\therefore$ Monthly income of A
$=$ Rs. $700 \times 5=$ Rs. 3500

S4. Ans.(b)
Sol.

Let Length of whole pipe is 100 unit.
$\therefore$ Length of longer piece $=70$ unit
Length of shorter piece $=30$ unit
$\therefore$ Required percentage $=\frac{70-30}{30} \times 100$
$=\frac{400}{3} \%$

S5. Ans.(d)
Sol.
$y=\frac{110}{100} \times 125$
$=137.5$
$\therefore \mathrm{x}=137.5 \times \frac{90}{100}$
$=123.75$

S6. Ans.(a)
Sol.
Monthly income of Sameer
$=\frac{8.4}{12}$ lakh
$=70000 \mathrm{Rs}$.
Spend on Rent $=70000 \times \frac{1}{7}$
$=10000$
Spend on Food $=(70000-10000) \times \frac{1}{6}$
$=10000$
Spend on (Coth + travel)
$=(70000-20000) \times \frac{11}{20}$
$=27500$ Rs.
Saving $=22500$ Rs.
Expend on travel $=27500 \times \frac{8}{25}$
$=8800$
Required difference $=(22500 \times 12-8800 \times 12)$ Rs.
$=(270000-105600)$ Rs.
$=164400$ Rs.

S7. Ans.(a)
Sol.

Ratio of roses and lilies $=3: 2$
Number of roses $=3 \mathrm{x}$
And number of lilies $=2 \mathrm{x}$
Average number of flowers
$=\frac{3 x+2 x}{2}=180$
$5 x=360$ or, $x=72$
$\therefore$ Number of lilies $=2 \mathrm{x}=72 \times 2=144$


S8. Ans.(c)
Sol.
Let Satish's income = Rs. $x$
Then Veer's income $=$ Rs. $(x+6000)$
And Neeraj's income $=$ Rs. $(1.3 x+7800)$
ATQ,
$\frac{1.3 x+7800}{x}=\frac{39}{20}$
$\Rightarrow 26 x+1,56,000=39 x$
$\Rightarrow x=\frac{1,56,000}{13}=$ Rs 12,000
Veer's income $=$ Rs. $12,000+6000=$ Rs. 18,000

S9. Ans (c)
Sol. Let $\mathrm{P}, \mathrm{Q}$ and R have Rs $5 \mathrm{x}, 6 \mathrm{x}$ and 8 x selectively
$P=5 x+8 x \times \frac{3}{8}=8 x$
$\mathrm{Q}=6 \mathrm{x}$
$\mathrm{R}=5 \mathrm{x}$
ATQ,
$7 \mathrm{x}-5 \mathrm{x}=560$
$\Rightarrow x=280$
Required ratio $=(5 \times 280+1000):(6 \times 280+1000):(8 \times 280+1000)$
= 2400 : 2680 : 3240
= $60: 67: 81$
S10. Ans.(c)

Sol.
Let number is N
So,
ATQ
$\frac{3}{2} N=$ Natural $\ldots$ (i)
$\Rightarrow \frac{N}{4}=$ Natural
$\Rightarrow \frac{1}{3} N=$ Natural
From these three equation we can conclude that the least number contain $3 \times 4$ Least number $=12$

S11. Ans.(d)
Sol.
Let first term = 16x = a
So common ratio $=\frac{16 \mathrm{x} \times 6.25}{100}=\mathrm{x}=\mathrm{r}$
So,
$4^{\text {th }}$ term $\rightarrow 16 \mathrm{x} \times \mathrm{x}^{3}=16 \mathrm{x}^{4}$
and $5^{\text {th }}$ term $\rightarrow 16 \mathrm{x}^{5}$
ATQ,
$\frac{16 x^{5}}{16 x^{4}} \times 100=50$
$\mathrm{x}=\frac{1}{2}$


S12. Ans.(e)
Sol.
Let number of 20 paise coins $=x$
And number of 50 paise coins $=y$
Now,
$x+y=153$
$20 x+50 y=5460 \ldots$...(ii)
Solving (i) and (ii)
$x=73$ and $y=80$
S(13-15):
Sol.
Let number of male child who watching movie $=100 \mathrm{x}$
So, number of adult male who watching movie $=100 \mathrm{x} \times \frac{170}{100}=170 \mathrm{x}$
Number of adult female $=100 \mathrm{x}+60$
Number of female child $=100 x \times \frac{2}{3}=\frac{200 x}{3}$
$100 \mathrm{x}+170 \mathrm{x}+100 \mathrm{x}+60+\frac{200 x}{3}=846$
$1310 x+180=2538$
$1310 x=2358$
$\mathrm{x}=1.8$

| Male child | Adult male | Female child | Adult female |
| :--- | :--- | :--- | :--- |
| $100 \times 1.8=180$ | $170 \times 1.8=306$ | $180 \times \frac{2}{3}=120$ | $180+60=240$ |

S13. Ans(b)
Sol.
Required percentage $=\frac{306-240}{240} \times 100$

$$
\begin{aligned}
& =\frac{66}{240} \times 100 \\
& =27.5 \%
\end{aligned}
$$

S14. Ans(c)
Sol.
Required average $=\frac{180+120}{2}$

$$
=150
$$

S15. Ans(d)
Sol.
Adult female who watching movie multiplex ' $Q$ ' $=180 \times \frac{140}{100}=252$
Total people watching movie in multiplex ' $Q$ ' $=\frac{252}{36} \times 100=700$
Required difference $=846-700=146$


For any Banking/Insurance exam Assistance, Give a Missed call @ 01141183264

