Quiz Date: 13th April 2020

Q1. A, B and C entered into a partnership with some investment for one year. After one-year A got 2/5 profit and B and C got equal part of remaining profit. If total profit after one year is 15% instead of 10% then A got 900 Rs. more. Find the investment of B.
(a) Rs. 12000
(b) Rs. 45000
(c) Rs. 27000
(d) Rs. 18000
(e) Rs. 13500

Q2. Average of three amounts is Rs. 460 and they are in the ratio of 6 : 8 : 9. If we increase the first by 20% and decrease the second by 10% then to get the average increased by 5% third amount will be increased by ?
(a) $\frac{12}{5}$%
(b) $\frac{25}{3}$%
(c) 7%
(d) $7\frac{1}{3}$%
(e) 8%

Q3. Shobha and Saurabh have equal amount. Shobha invested on C.I. for two years at the rate of 10% p.a. and Saurabh invested $\frac{200}{3}$% of amount at the rate of R% p.a. on simple interest and remaining amount at the rate of 6.5% p.a. on simple interest. If interest received by both at the end of two years are equal, then find the value of 'R'?
(a) 10%
(b) 12.5%
(c) 15%
(d) 12%
(e) 8%

Q4. Eighteen persons applied for three posts in a company, in which six persons did B. Sc, four persons did M. Com and eight persons did LLB. If three persons selected, find the probability that one selected person did B. Sc and two persons did LLB?
(a) $\frac{5}{68}$
(b) $\frac{7}{34}$
(c) $\frac{8}{67}$
(d) $\frac{7}{68}$
(e) $\frac{9}{68}$

Q5. Panchhi's age 8 years ago is equal to the sum of present ages of her son and her daughter. 5 years hence, the ratio between her daughter's age and her son's age will be 7 : 6

respectively. Panchhi's husband is 7 years elder than her. Her husband's present age is thrice the present age of his son. What is her daughter's present age?
(a) 23 years
(b) 24 years
(c) 28 years
(d) 25 years
(e) 18 years

Q6. The average marks of the students of four sections A, B, C and D together is 60%. The average marks of the students of A, B C and D individually are 45%, 50%, 72% and 80% respectively. If the average marks of the students of section A and B together is 48% and that of the students of B and C together is 60%. What is the ratio of number of students in sections A and D?
(a) 2 : 3
(b) 4 : 3
(c) 5 : 3
(d) 3 : 5
(e) 3 : 4

Q7. Two vessels A and B contain milk and water mixed in the ratio 9:8 and 3:4 respectively. The ratio in which these two mixtures be mixed to get a new mixture containing $47\frac{1}{17}$% milk is
(a) 7:5
(b) 5:7
(c) 8:7
(d) 8:5
(e) None of these

Q8. Two pipes A and B can fill a tank in 20 hours and 25 hours respectively and a third pipe C can empty the tank in 50 hours. All of three pipes opened together and after sometimes pipe C is closed. If total time to fill the tank from beginning is 13 hours, find after how much time pipe C was closed?
(a) 11 hrs.
(b) 9 hrs.
(c) 8.5 hrs.
(d) 7.5 hrs.

(e) 10.5 hrs.

Q9. Ravi and Raju can do a piece of work in 30 and 45 days respectively. They started working together and after 6 days from their start Raju leaves and a new person Sohan whose efficiency is $\frac{5}{4}$ of that of Raju joins Ravi. In how many days remaining work will be complete now?
(a) $\frac{120}{11}$ days
(b) $\frac{130}{11}$ days
(c) 13 days
(d) 8 days
(e) $\frac{125}{11}$ days

Q10. Two men P and Q start swimming towards each other from the deep end and shallow end respectively of a swimming pool in funicity. They start their swimming simultaneously in the length of 300 m pool. The ratio of their speeds is 1 : 2 respectively. Each swimmer rests for 6 seconds once he reaches the other end and starts swimming back. Where will they meet for the second time in the still water of swimming pool ?
(a) 30 m from the shallow end
(b) at the shallow end
(c) at the deep end
(d) can't be determined
(e) None of these

Q11. A can do a piece of work in 12 days alone, B can do the same work in 16 days alone. After A has been working for 5 days and B for 7 days, C finishes it in 14 days. In how many days will C alone be able to do the work?
(a) 86 days
(b) 94 days
(c) 96 days
(d) 98 days
(e) 92 days

Q12. Two pipes X and Y can fill an empty tank in 16 and 24 hours respectively. Ravi opens these two pipes simultaneously. After $\frac{8}{3}$ hours he comes back and sees that there was a leak in the tank. He stops the leakage and thus tank took $\frac{48}{5}$ hours to be filled completely after closing the leak. In what time leakage will empty the filled tank?
(a) 6.9 hrs
(b) 9.6 hrs
(c) 12.4 hrs
(d) 8.4 hrs
(e) 9.4 hrs

Q13. An electronics company sold 12 desktops at a profit of 20% and 8 desktops at a profit of 10%. If it had sold all the 20 desktops at a profit of 15%, then its profit would have been reduced by Rs. 36000. What is the cost price of each desktop?
(a) 1,85,000
(b) 1,82,000
(c) 1,80,000
(d) 1,90,000
(e) 2,00,000

Q14. Four examiners can examine a certain number of answer papers in 10 days by working for 5 hours a day. For how many hours in a day would 2 examiners have to work in order to examine twice the number of answer papers in 20 days?
(a) 10 hours
(b) $10\frac{1}{2}$ hours
(c) 8 hours
(d) 9 hours
(e) 6 hours

Q15. Seema, Shayasha and Shikha have to read a document of seventy- eight pages and make a presentation next day. They realize that the article is difficult to understand, and they would require team work to finish the assignment. Seema can read a page in 2 min, Shayasha in 3 min, and Shikha in 4 min then find the number of pages that Shayasha should read is ?
(a) 24 pages
(b) 25 pages
(c) 26 pages
(d) 27 pages
(e) 28 pages

RBI ASSISTANT
COMPELTE
E-KIT
English | Quant | Reasoning
DI | Puzzle | Computer | Banking
English Medium

Solutions

S1. Ans.(e)
Sol.
A got 40% of profit
B & C got 30% each
So, investment ratio of A, B and C is 4 : 3 : 3
Now,

They earn 10% profit

$\Rightarrow \frac{10x \times 10}{100} = x$

If they earn 15% profit

$= \frac{10x \times 15}{100} = \frac{3}{2}x$

A got 900 Rs. more

$\Rightarrow \frac{3}{2}x \times \frac{4}{10} - \frac{x \times 4}{10} = 900$

$\Rightarrow x = 4500$

Total investment = 45000

B's investment $= \frac{45000 \times 3}{10}$

$= Rs.\ 13500$

S2. Ans.(b)

Sol.

Let first, second and third amount be Rs.6x, Rs.8x and Rs.9x respectively.

ATQ,

$\frac{6x + 8x + 9x}{3} = 460$

$x = 60$

First → 360, Second → 480, Third → 540

ATQ,

$\frac{360 \times 120}{100} + \frac{480 \times 90}{100} + \frac{540 \times (100+z)}{100} = 3 \times \frac{460 \times 105}{100}$

$Z = \frac{25}{3}$

Required % increment $= \frac{25}{3}\%$

S3. Ans.(b)

Sol.

Let Shobha and Saurabh have Rs. $100x$

Equivalent CI for two years at the rate of 10%

$= 10 + 10 + \frac{10 \times 10}{100}$

$= 21\%$

ATQ—

$100x \times \frac{21}{100} = 100x \times \frac{2}{3} \times \frac{R \times 2}{100} + 100x \times \frac{1}{3} \times \frac{6.5 \times 2}{100}$

$21x = \frac{4x \times R}{3} + \frac{13x}{3}$

$63x = 4x \times R + 13x$

$4x \times R = 50x$

$R = \dfrac{50x}{4x}$

R = 12.5%

S4. Ans(b)

Sol. Total number of applications= 18

No. of ways that one selected person did B. Sc = $^6C_1$

No. of ways that two selected persons did LLB = $^8C_2$

Required probability $= \dfrac{^6C_1 \times {}^8C_2}{^{18}C_3} = \dfrac{7}{34}$

S5. Ans.(a)
Sol. Let P = Panchhi's present age
S = Son's present age
D = Daughter's present age
ATQ,
P – 8 = S + D …(i)
& P + 7 = 3S
⇒ P = 3S – 7
⇒ 2S – D = 15 …(ii)
now, $\dfrac{D+5}{S+5} = \dfrac{7}{6}$
⇒ 7S – 6D = – 5 …(iii)
Solving equations (ii) & (iii) we get,
D = 23 years.

S6. Ans.(b)
Sol.

A   B
45   50

48

2   3
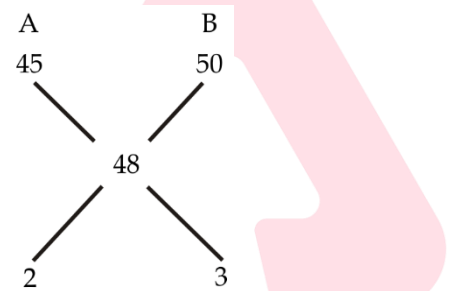
2: 3 = Ratio of student in A and B

B   C
50   72

60
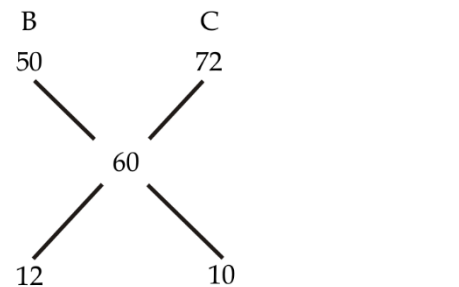
12   10

Ratio of student in B and C = 12: 10 = 6: 5
Ratio of students in A, B, C and D = 4: 6: 5: x
ATQ,
0.6(15 +x) = 0.45(4) + 0.5(6) + 0.72(5) +0.8x
9 + 0.6x = 8.4 + 0.8x
x = 3
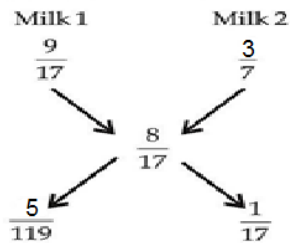Required ratio = 4: 3

S7. Ans.(b)

Sol.

Milk 1   Milk 2

$\frac{9}{17}$ $\frac{3}{7}$

$\frac{8}{17}$

$\frac{5}{119}$ $\frac{1}{17}$

$\therefore \frac{\text{milk 1}}{\text{milk 2}} = \frac{5/119}{1/17} = \frac{5}{7}$

S8. Ans.(c)
Sol.
Let after x hours pipe c was closed
One hour's work of all the three pipes together
$= \frac{1}{20} + \frac{1}{25} - \frac{1}{50}$
$= \frac{7}{100}$
One hour's work of A and B together
$= \frac{1}{20} + \frac{1}{25} = \frac{9}{100}$
ATQ,
$\frac{7x}{100} + \frac{9}{100}(13 - x) = 1$
$\Rightarrow -\frac{2x}{100} = 1 - \frac{117}{100}$
$\Rightarrow x = 8.5$ hours

RBI ASSISTANT MAHA PACK
Live Class, Video Course
Test Series, e-Books
Bilingual

S9. Ans.(a)
Sol. Ravi's efficiency: Raju's efficiency = 45 : 30
= 3 : 2
Let total work = 90 units
Sohan's efficiency = $2 \times \frac{5}{4} = \frac{5}{2}$
$\therefore$ Ratio of efficiency of Ravi, Raju and Sohan

$= 3 : 2 : \frac{5}{2}$

$= 6 : 4 : 5$

∴ Remaining work after 6 days $= 90 - \left(\frac{90}{45} + \frac{90}{30}\right) \times 6$

= 60 units

∴ Required time $= \frac{60}{3 + \frac{5}{2}}$

$= \frac{120}{11} = 10\frac{10}{11}\ days$

S10. Ans.(b)
Sol.
Ratio of their speeds = 1 : 2
It means deep end's man reaches at shallow end in double time as compared to shallow end's man.
When shallow ends man reaches at deep end, deep end's man reaches at centre of the required distance.
Again, when deep end's man reaches at shallow end, shallow end man also reaches at its original point in same time.
So, second time they will meet at shallow end.

S11. Ans.(c)
Sol.
Let C will take x days to finish the same work alone.
$$\therefore \frac{5}{12} + \frac{7}{16} + \frac{14}{x} = 1$$
$$\Rightarrow \frac{14}{x} = 1 - \frac{(20 + 21)}{48}$$
$$\Rightarrow \frac{14}{x} = \frac{7}{48}$$
⇒ x = 96 days

S12. Ans.(b)
Sol. Let leak can empty the tank in x hrs.
$$\therefore \frac{8}{3} \text{ hours work of two pipes and leakage} = \left(\frac{1}{16} + \frac{1}{24} - \frac{1}{x}\right) \times \frac{8}{3}$$
$$= \left(\frac{1}{6} + \frac{1}{9} - \frac{8}{3x}\right)$$
$$= \left(\frac{5}{18} - \frac{8}{3x}\right)$$
Remaining part $= 1 - \left(\frac{5}{18} - \frac{8}{3x}\right) = \left(\frac{13}{18} + \frac{8}{3x}\right)$
$$\therefore \frac{48}{5}\left(\frac{13}{18} + \frac{8}{3x}\right) = \frac{48}{5}$$
$$\Rightarrow \frac{8}{3x} = \frac{5}{18}$$

$$\Rightarrow x = \frac{48}{5}$$
$\Rightarrow$ x = 9.6 hours

S13. Ans.(c)
Sol.
Let C.P. of each desktop = Rs. 100x
Case I:
Total CP of 20 desktop = 2000x
∴ Total SP = (1200x + 240x) +(800x + 80x) = 2320x
∴ Profit = 2320x – 2000x = 320x

Case II:
Profit = 15% of 2000 = 300x
Difference of profits = 320x – 300x → Rs. 36000
∴ 100x = CP of one desktop = $\frac{36000}{20} \times 100$ = Rs. 1,80,000

S14. Ans.(a)
Sol.
$$\frac{M_1 D_1 H_1}{W_1} = \frac{M_2 D_2 H_2}{W_2}$$
$$\Rightarrow \frac{4 \times 10 \times 5}{1} = \frac{2 \times 20 \times H_2}{2}$$
$\Rightarrow H_2 = 10$ hrs

S15. Ans.(a)
Sol.
Ratio of their efficiency = 6:4:3
∴ Pages read by Shayasha = $\frac{4}{13} \times 78 = 24$ pages

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