RBI Assistant Mains Quant Daily Mock (Solutions)

S1. Ans.(d)

Sol. From I, R + F + M +S = 90 years

From II, R + M + S = $18\frac{1}{3} \times 3$ years

From III, M + S = $\frac{4}{7} \times 2F$

From all three statements together, the answer can be obtained.

S2. Ans.(a)

Sol. From I & II,

Let CP = x

S.P = $\frac{6x}{5}$

Now, New S.P = $\frac{6x}{5} \times \frac{90}{100} = \frac{54x}{50}$

$\Rightarrow \frac{54x}{50} - x = 1200 \Rightarrow x = 15000$

$\therefore$ SP. = 18000

& from III & I, we can obtain selling price.

& from II & III,

Let S.P. = x

When 10% discount,

S.P. = $\frac{9x}{10}$

$\therefore \frac{9x}{10} - 15000 = 1200 \Rightarrow x = 18000$

Thus, any two of the three statements are required.

S3. Ans.(b)

Sol. 12W + 8C → 24 days

⇒ 3W + 2C → 24×4 days

From A, 2M = (3W + 2C)

⇒ 2M → 24 × 4 days

⇒ 1M → 24 × 4 × 2 days

From B,

3W = 6C ⇒ W = 2C

⇒ 4W=2M

⇒ 1W → 24 × 16 days

$\therefore$ from A + B, 12M + 12W → $\left(\frac{1}{24\times8} + \frac{1}{24\times16}\right) \times 12$

$\rightarrow \frac{1}{16} + \frac{1}{32}$

$\rightarrow \frac{32}{3}$ days

From C,

Not known no. of persons.

S4. Ans.(e)

Sol. Let length of tunnel and speed of train be x m and v m/s respectively.

$\therefore$ speed $= \frac{\text{x+length of train}}{24}$

From A, Length of platform

$= \frac{7}{5} \times$ length of train

From A+B, length of train $= 18 \times v \times \frac{5}{12}$

From C, $v = 54 \times \frac{5}{18} = 15$ m/sec

All statements are required

S5. Ans.(e)

Sol. Let M.P of TV = Rs 100x

From A, SP of TV = Rs 85x

From B, CP of table $= 85x \times \frac{100}{120} \times \frac{60}{100}$

From C, $85x \times \frac{100}{120} \times \frac{60}{100} \times \frac{110}{100} = 560$

From all three statements together, the answer can be obtained.

Solutions (6-10)

Total students appeared in 2016 = 8000

Total students appeared in 2013 = 5800

Total students appeared in exam B is 2011 & 2013 = 6200

Total students appeared in exam B in 2011 $= \frac{6200}{31} \times 18 = 3600$

Total students appeared in exam B in 2013 $= \frac{6200}{31} \times 13 = 2600$

Total students appeared in exam A in 2013 = 5800 – 2600 = 3200

Total students appeared 2011 $= \frac{8000}{125} \times 100 = 6400$

Total students appeared in exam A in 2011 = 6400 – 3600 = 2800

Total students appeared in 2014 $= \frac{8000}{16} \times 13 = 6500$

Students appeared in exam B in 2011 = Students appeared in exam A in 2015 = 3600

Students appeared in exam B in 2015 $= \frac{3600}{4} \times 3 = 2700$

Students appear in exam A in 2016 $= \left[1 + \frac{1700}{2700}\right] \times 2700 = 4400$

Students appear in exam B in 2016 = 8000 – 4400 = 3600

Let, student appeared in exam A in 2014 = x

student appeared in exam A in 2012 = x + 700

$\Rightarrow$ x + x + 700 + 2800 + 3200 + 3600 + 4400 = 21,100

2x = 6400 $\Rightarrow$x = 3200

Students appeared in exam A in 2014 = 3200

Students appeared in exam A in 2012 = 3200 + 700 = 3900

Students appeared in exam B in 2014 = 6500 – 3200 = 3300

Students appeared in exam B in 2012 = 3300 + 1200 = 4500

	A	B	Total
2011	2800	3600	6400
2012	3900	4500	8400
2013	3200	2600	5800
2014	3200	3300	6500
2015	3600	2700	6300
2016	4400	3600	8000
Total	21,100	20,300	

S6. Ans.(b)
Sol. According to table its in 2014.

S7. Ans.(d)
Sol. Required ratio $= \frac{2800+3200+3900}{2600+3300+3600}$
$= \frac{9900}{9500} = \frac{99}{95}$

S8. Ans.(b)
Sol. Average students appeared in exam A in starting four years
$= \frac{2800+3900+3200+3200}{4}$
$= 3275$
Average students appeared in exam B in starting four years
$= \frac{3600+4500+2600+3300}{4}$
$= 3500$
Required difference = 225.

S9. Ans.(e)
Sol. Required difference = 4500 – 3200 = 1300

S10. Ans.(c)
Sol. Required %$= \frac{8400-6400}{6400} \times 100$
$= \frac{2000}{6400} \times 100$
$= 31.25\%$

S11. Ans.(c)
Sol. $? = \frac{3}{5} \times \frac{4}{7} \times \frac{5}{9} \times \frac{21}{24} \times 504 = 84$

S12. Ans.(c)
Sol. $63 \times (27)^{?} = 296 - 107$
$? = \frac{1}{3}$

S13. Ans.(b)

Sol. $\frac{35}{36} \times ? = \frac{30}{9} - \frac{5}{2}$

$? = \frac{6}{7}$

S14. Ans.(b)

Sol. $\frac{3}{11} + \frac{39}{44} + \frac{5}{22} = ?$

$= \frac{12+39+10}{44}$

$?= \frac{61}{44}$

S15. Ans.(c)

Sol. $529 + 2304 - 1521 = ? + 1147$

$?= 165$

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