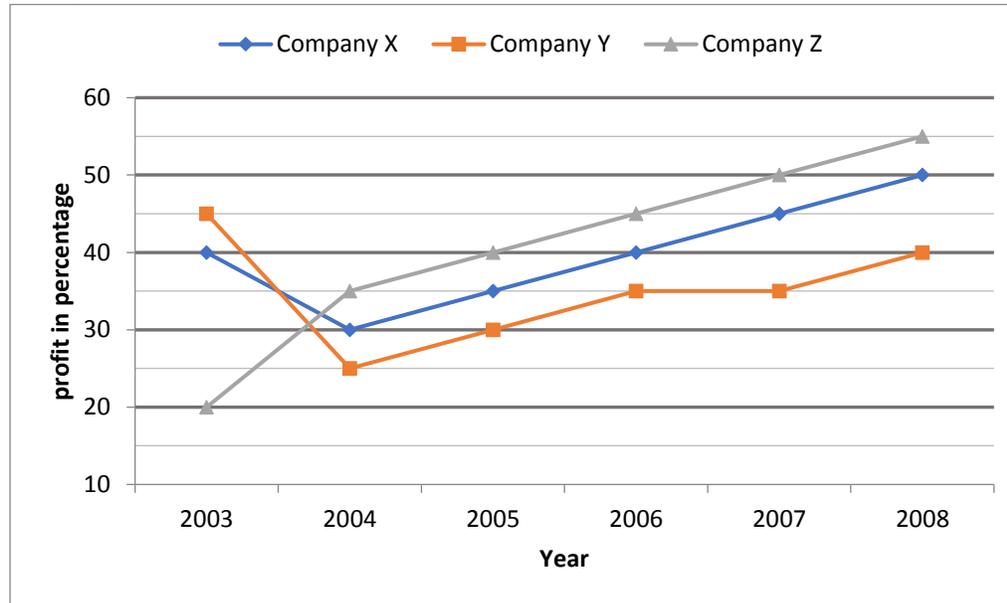


Quiz Date: 22<sup>nd</sup> July 2020

Directions (1-5): **Study the graph carefully to answer the questions that follow:**

**PERCENT INCREASE IN PROFIT OF THREE COMPANIES OVER THE YEARS**



Q1. What was the approximate per cent increase in profit of company Y in the year 2008 from the previous year?

- (a) 2
- (b) 10
- (c) 20
- (d) 14
- (e) 24

Q2. What was the approximate percent increase in the profit percent of company Z in the year 2005 from the previous year?

- (a) 14
- (b) 21
- (c) 8
- (d) 26
- (e) 19

Q3. If the profit earned by company X in the year 2004 was Rs. 2,65,000 and expenditure is same for each year, what was its profit in the year 2006?

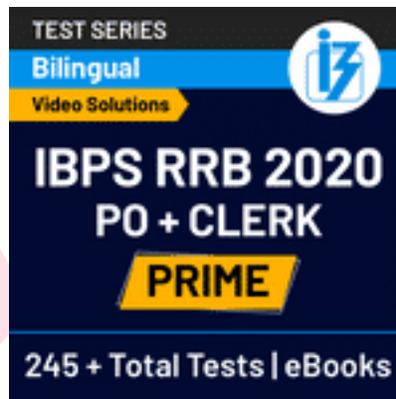
- (a) Rs. 6,21,560
- (b) Rs 4,68,290
- (c) Rs 7,05,211
- (d) Rs 5,00,850
- (e) None of these

Q4. What is the average per cent increase in profit of company Z over the years?

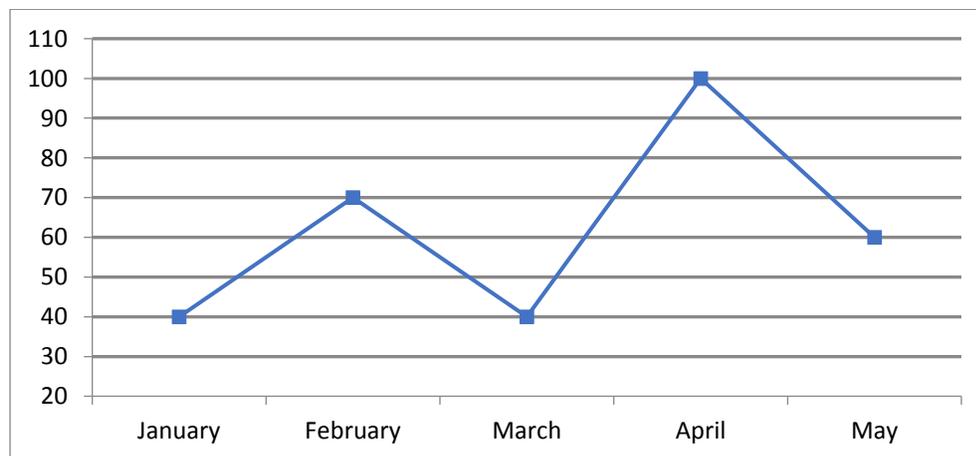
- (a)  $40\frac{5}{6}$   
 (b)  $41\frac{2}{3}$   
 (c)  $28\frac{1}{6}$   
 (d)  $23\frac{1}{3}$   
 (e) 25

Q5. Which of the following statements is TRUE with respect to the graph?

- (a) Company X incurred a loss in the year 2004  
 (b) The amount of profit earned by company Y in the years 2006 and 2007 is the same  
 (c) Company Z earned the highest profit in the year 2008 as compared to the other years  
 (d) Profit earned by company X in the year 2004 is lesser than the profit earned by company Z in that year  
 (e) None of these



**Directions (6-10):** Line graph shows the percentage of females participating in the Yoga event out of total participant in five different months.



Total participant = Male Participant + female participant

Q6. Male participant in January is 20% more than that in February. Female participant in February is what percent of that in January.

- (a)  $291\frac{2}{3}\%$
- (b)  $191\frac{2}{3}\%$
- (c) 290%
- (d) 190%
- (e)  $295\frac{2}{3}\%$

Q7. Male and female child participant in March is in ratio 2 : 1. If adult male to adult female ratio is 4 : 3 then find the percentage of adult male participant in same month.

- (a) 30%
- (b) 50%
- (c) 35%
- (d) 40%
- (e) 44%

Q8. Ratio of adult and child participant in May is 3 : 4 and male participant in May is 280. Find the number of child participants.

- (a) 300
- (b) 350
- (c) 280
- (d) 250
- (e) 400

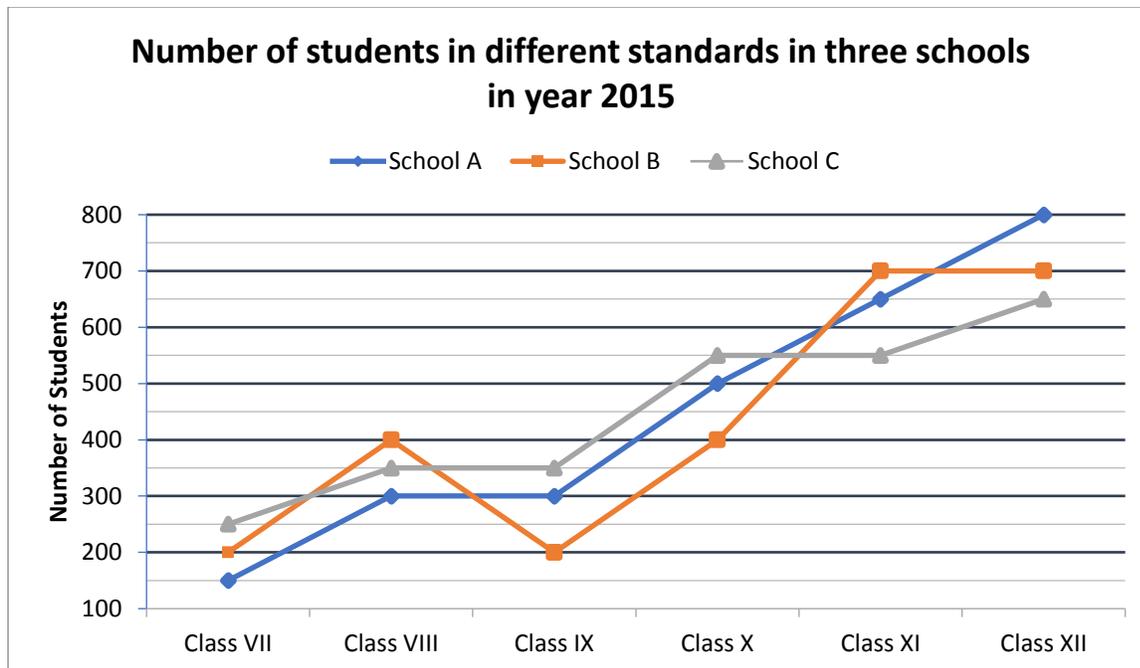
Q9. No. of participant increase in April by 20% from previous month. Find the percentage increase in female participant.

- (a) 300%
- (b) 200%
- (c) 100%
- (d) 250%
- (e) 400%

Q10. If number of participant in every month is 500 .Then find average number of male participant in all five months.

- (a) 250
- (b) 300
- (c) 190
- (d) 200
- (e) 180

Directions (11-15): Study the following graph carefully to answer the questions given below.



Q11. In year 2016 the number of students of class XII in three schools A, B and C increase by 5%, 10% and 20% respectively with comparison to the last year in same class. Find the ratio of students in class XII of all schools in 2016 ?

- (a) 84:78:77
- (b) 84:77:78
- (c) 88:77:78
- (d) 8:7:9
- (e) None of these

Q12. By what percent the number of students in class IX in school C is less than total students in class XII in all the three schools together (find approximate value)?

- (a) 84%
- (b) 68%
- (c) 75%
- (d) 80%
- (e) 58%

Q13. What is average number of students in school A in all grades taken together?

- (a) 456
- (b) 465
- (c) 450
- (d) 460
- (e) 470

Q14. What is respective ratio of the total students in all the standards in all three schools A, B and C ?

- (a) 27 : 26 : 27

- (b) 23 : 13 : 9  
 (c) 9 : 13 : 26  
 (d) 3 : 13 : 11  
 (e) 9 : 26 : 9

Q15. The number of students in class VIII of the school B is what percent of total students in same school in all the standards ?

- (a) 15.4%  
 (b) 16.8%  
 (c) 18.2%  
 (d) 20%  
 (e) 12.5%



### Solutions

S1. Ans.(d)

$$\begin{aligned} & \text{\% increase in profit of company Y in 2008} \\ &= \frac{40 - 35}{35} \times 100 \\ &= \frac{5}{35} \times 100 \\ &\simeq 14\% \end{aligned}$$

Sol.

S2. Ans.(a)

$$\begin{aligned} & \text{\% increase in profit of company Z in 2005} \\ &= \frac{40 - 35}{35} \times 100 \\ &= 14.14 \\ &\simeq 14\% \end{aligned}$$

Sol.

S3. Ans.(d)

$$\begin{aligned} & \text{Required profit} \\ &= \text{Rs.} \left( 2,65,000 \times \frac{135}{100} \times \frac{140}{100} \right) = \text{Rs. } 500850 \end{aligned}$$

Sol.

S4. Ans.(a)

Average % increase in profit of Z over the years

$$= \frac{1}{6} \times (20 + 35 + 40 + 45 + 50 + 55)$$

$$= \frac{1}{6} \times 245$$

$$= \frac{245}{6}$$

$$= 40\frac{5}{6}$$

Sol.

S5. Ans.(c)

Sol.

Company Z earned the highest profit in 2008 as compared to other years.

S6. Ans.(a)

Sol.

Let male participant in February =  $100x$

So male participant in January =  $120x$

Female participant in January =  $\frac{120x}{60} \times 40 = 80x$

Female participant in February =  $\frac{100x}{30} \times 70 = \frac{700}{3}x$

Required % =  $\frac{700x}{3 \times 80x} \times 100$

$$= 291\frac{2}{3}\%$$

S7. Ans.(d)

Sol.

Let, male child and female child participant in march is  $2x$  and  $x$  respectively

And,

Adult male and adult female is  $4y$  and  $3y$  respectively

$$\text{now, } (2x + 4y) \frac{100}{60} = \frac{(x + 3y)}{40} \times 100$$

Solving  $\Rightarrow x = y$

$$\text{percentage of adult male participant} = \frac{4}{(2+4+1+3)} \times 100 = 40\%$$

S8. Ans.(e)

Sol.

Male participant = 280

$$\text{Total participant} = \frac{280}{40} \times 100 = 700$$

$$\text{Child participant} = 700 \times \frac{4}{7} = 400$$

S9. Ans.(b)

**Sol.**Let, total participant in March =  $100x$ Participant in April =  $\frac{100x \times 120}{100} = 120x$ Female participant in March =  $40x$ Female participant in April =  $120x$ 

$$\text{Required \%} = \frac{(120x - 40x)}{40x} \times 100$$

$$= 200\%$$
**S10. Ans.(c)****Sol.**

$$\text{Required Average} = \frac{1}{5} \left\{ \frac{60 \times 500}{100} + \frac{30 \times 500}{100} + \frac{60 \times 500}{100} + \frac{0 \times 500}{100} + \frac{40 \times 500}{100} \right\}$$

$$= \frac{1}{5} \times \{300 + 150 + 300 + 0 + 200\}$$

$$= 190$$
**S11. Ans.(b)**

In 2016, number of students in class XII of

School A =  $\frac{105}{100} \times 800 = 840$ School B =  $\frac{110}{100} \times 700 = 770$ School C =  $\frac{120}{100} \times 650 = 780$ So, required ratio =  $840:770:780 = 84:77:78$ **Sol.****S12. Ans.(a)**

Required percentage

$$= \frac{2150 - 350}{2150} \times 100 \approx 84\%$$
**Sol.****S13. Ans.(c)**

Required average

$$= \frac{1}{6} (150 + 300 + 300 + 500 + 650 + 800)$$

$$= \frac{1}{6} \times 2700 = 450$$
**Sol.****S14. Ans.(a)**

Students in school A = 2700

Students in school B = 2600

Students in school C = 2700

So, ratio =  $27:26:27$ **Sol.****S15. Ans.(a)**

Required percentage

Sol.  $= \frac{400}{2600} \times 100 \approx 15.4\%$

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

