

keyboard costs 4 times a mouse. The cost of a Q1. In an examination, there are three papers and a mouse is Rs. 1000. candidate has to get 35% of the total to pass. In one paper, he gets 62 out of 150 and in the second 35 out of 150. How much must he get, out of 180, in the third paper to just qualify for a pass? Q6. What will be the total cost of 1 table and 2 chairs (a) 60.5 together? (b) 68 (c) 70 (a) Rs. 23,200 (d) 71 (e) None of these (b) Rs. 28,800 Q2. At what percent above the cost price must a (c) Rs. 29,700 shopkeeper mark his goods so that he gains 20% even after giving a discount of 10% on the marked price? (d) Rs. 24,700 (a) 25% (b) 30% (e) Rs. 21,300 (c) 33 1/3% (d) 37 1/2% (e) None of these Q7. What is the ratio of the cost of a CPU to the total cost Q3. 125, 127, 130, 135, 142, 153, 165 of a mouse and a keyboard together? (a) 130 (b) 142 (a) 3:2 (c) 153 (d) 165 (b) 4:1 (e) None of these (c) 3:1 Q4. Gold is 19 times as heavy as water and copper is 9 times as heavy as water. In what ratio must these metals (d) 5:1 be mixed so that the mixture may be 12 times as heavy as water? (e) 5:3 (a) 2:3 (b) 3:7 (c) 1:3 (d) 7:3 Q8. If the cost of a keyboard and a mouse increases by (e) None of these 20% and 15% respectively, what will be the total cost of a Q5. Rajan got married 8 years ago. His present age is 6/5 desktop (given that the cost of a CPU and a monitor is the times his age at the time of his marriage. Rajan's sister same)? was 10 years younger to him at the time of his marriage. The age of Rajan's sister is: (a) Rs. 36,930 (a) 32 years (b) 36 years (b) Rs. 32,640 (c) 38 years (d) 40 years (c) Rs. 34,753 (e) None of these (d) Rs. 30,670 (6-10)(e) Rs. 35,425 Sidhartha has decided to start a new company 'Sidhartha Travels'. He wants to buy some furniture

'Sidhartha Travels'. He wants to buy some furniture – table, chair, air conditioners. He also wants to buy a few desktops which will include monitor, CPU, Keyboard and mouse. The cost of each table is 13.5 times the cost of a mouse and the cost of a chair is 3/5 of the cost of a table. The cost of an air conditioner is 5 times the cost of a chair. The cost of a monitor is 20% more than the cost of a chair, A CPU costs Rs. 1500 more than a table and the

Q9. Sidhartha bought 1 table, 1 chair and 1 desktop for himself. What was the total cost incurred to him?

(a) Rs. 53,400

- (b) Rs. 51,460
- (c) Rs. 50,640

(d) Rs. 55,440



(e) Rs. 51,320

Q10. It was initially decided that 4 air conditioners will be installed but later only 3 air conditioners and a fan were installed. If the cost of a fan is 1/10 of the cost of an air conditioner, what was the total cost incurred?

- (a) Rs. 1,29,400
- (b) Rs. 1,24,500
- (c) Rs. 1,25,550
- (d) Rs. 1,24,350
- (e) Rs. 1,25,600

(1) Textile

(2) Cement

(3) Soda

(4)Others(5) Cannot be determined

12. Which of the following statements is correct about the company?

(1) The company is putting less focus on the 'other' segment.

(2) Cement segment has registered more percentage growth than the textile segment.

(3) The soda segment has registered a 7% growth per annum during the above two year period.

(4)Both(2)and(3)(5) None of these



(1) 134%

Directions for 11 to 15: The percentage of revenue that come from the four different product segments for a diversified manufacturing company are shown in the following pie-chart Figures pertaining to the year 2008 and 2010 are given on the right hand side. The total sales in the year 2008 were Rs. 120 crores. It was Rs. 195 crores in 2010.



(2) 34%

(3) 52.9%

(4)67% (5) None of these



Solutions:

S1. Ans.(d) Sol. Let the marks required be x. Then, (62 + 35 + x) = 35% of (150 + 150 + 180)

 $\Leftrightarrow 97 + x = 35/100 \times 480 \Leftrightarrow x = 168-97 = 71.$

Set Ape (CP. = Rs, 100. Then, S.P. = Rs. 120. Let marked price be Rs. x. Then, 90% of x = $120 \Rightarrow x=((120 \times 100)/90)=133$ 1/3

∴ Marked price =33 1/3% above C.P. S3. Ans.(d)

Sol. Prime numbers 2, 3, 5, 7, 11, 13 are to be added successively. So 165 is wrong.

S4.

S . Ans.(b) Sol. Suppose gold and copper are taken in the ratio x and y, then $\frac{19x + 9y}{x + y} = 12$ $\Rightarrow 19x + 9y = 12x + 12y$ $\Rightarrow 7x = 3y \text{ or } x : y = 3 : 7.$

S5.

S . Ans.(c) Sol. Let Rajan's present age be x years. Then, his age at the time of marriage = (x - 8) years. $\therefore x = \frac{6}{5}(x - 8) \Rightarrow 5x = 6x - 48 \Rightarrow x = 48$. Since difference of the ages remains constant, thus, age of Rajan's sister will be 48 - 10 = 38 years.

(6-10) Cost of Table – 13500 Cost of Chair – 8100

Cost of Chair – 8100 Cost of AC – 40500 Cost of Monitor – 9720 Cost of CPU – 15000 Cost of Keyboard – 4000 Cost of Mouse – 1000

S6. Ans.(c) Sol. Total Cost = 13500 + (2 * 8100) = 29700

S7. Ans.(c) Sol. Required ratio

S8. Ans.(d)

 $= \frac{\text{Cost of a CPU}}{\frac{\text{Cost of a (Mouse + Keyboard)}}{\frac{15000}{1000 + 4000}} = \frac{15000}{5000} = 3:1$

S11.

S9. Ans.(e)

S10. Ans.(c)

= Rs. 125550

(2) Visual question Cement has increased from 25% to 36% which is the maximum even if we don't take the increase in sales into account.

Sol. Total cost = 13500 + 8100 + 1000 + 4000 + 9720 + 15000 = Rs. 51320

Sol. Cost of a fan = $40500 \times \frac{1}{10} = 4050$

Now, cost of 3 air conditioners + 1 fan

= 3 × 40500 + 4050 = 121500 + 4050

S12.

. (4) Checking statement (2) is clearly true as cement increases from 25% to 36% Growth in Soda

segment. = $\frac{\frac{25}{100} \times 195 - \frac{31}{100} \times 120}{\frac{31}{100} \times 120} \times 100 = 31\%$ for 2 years = 15.5% per annum

S.13

(2) Revenue of others in 2008 $\frac{16}{100} \times 120 = 19.2$ Revenue of others in 2010 $= \frac{8}{100} \times 195 = 15.6$ Percent Growth= $\frac{15.6 - 19.2}{19.2} \times 100 = -18.75\%$ Annual percentage growth = $\frac{-18.75}{2} = -9.375\%$

S.14

. (4) Growth in Textile from 2008 to 2010

$$= \frac{\frac{31}{100} \times 195 - \frac{28}{100} \times 120}{\frac{28}{100} \times 120} \times 100 = 80\% \text{ For 2 years}$$
Revenue in 2010 = $\frac{31}{100} \times 195 = 60.45$
 \therefore Revenue in 2012 = 60.45 (1 + $\frac{80}{100}$) = 108.81
= 109 crore.

S.15

Sol. Cost of a keyboard = $4000 \times \frac{120}{100}$ = Rs. 4800 Cost of a mouse = $1000 \times \frac{115}{100}$ = Rs. 1150 \therefore Cost of a desktop = Cost of (Monitor + CPU + Keyboard + = 9720 + 15000 + 4800 + 1150 = Rs. 30670

.(4) Percent growth in cement from 2008 to 2010 $= \frac{\frac{36}{100} \times 195 - \frac{25}{100} \times 120}{\frac{25}{100} \times 120} \times 100 = 134\% \text{ for 2 years}$ So, 67% per annum.



