RBI PHASE 1 RECAP

4\textsuperscript{th} August ’18

QUANT – DATA INTERPRETATION (PIE CHART)
I.) These questions are based on the following pie charts, which gives the sales of RPG Ltd for 1998-99 and the sales of Audio and Video CDs in India for the same period.
Q.1) Next Year, RPG wants to capture half of the Audio and Video CDs market. How much profit (in absolute value) would be increased if it gets 11.7% as profit on the entire sale in both the years? (total market of audio and video CD’s sales increased by 20%)

[a] 7 crores  
[b] 10.5 crore  
[c] 3.5 crore  
[d] none of these

Solution (a)
Market of audio and video sales in 1999-2000 is 150(1.2) = 180 crore  
Sales of RPG in 1998-99 = 20% x 150 = 30 crore  
Sales of RPG has to increase from 30 to 90 (half of the market in 1999-2000)  
Profit in 1998-99 = 11.7x30 / 100 = 3.5 crore  
Profit in 1999-2000 = 11.7 x 90 / 100 = 10.5 crore  
Increased profit = 10.5 – 3.5 = 7 crore
I.) These questions are based on the following pie charts, which gives the sales of RPG Ltd for 1998-99 and the sales of Audio and Video CDs in India for the same period.
Q.2) It was found that the Cables also counted 10% of sales of super market chain (this was done due to a sub-contracting agreement). If this double counting is removed, what will be the share of the supermarket chain?

[a] 10.0%
[b] 6.4%
[c] 11.1%
[d] 9.9%

Solution (a)
10% of sales of super market chain
= 10% of 11% = 1.1%
If this double counting is removed, its new share will be
= (11%-1.1%) / (100-1.1) x 100 = 9.9/98.9 x 100 = 10.01%
I.) These questions are based on the following pie charts, which gives the sales of RPG Ltd for 1998-99 and the sales of Audio and Video CDs in India for the same period.
Q.3) If Sony shows a 20% improvement in sales of audio and video CDs and RPG, a 25% improvement in 1999-2000 over 1998-99, then by how many percentage points would the market share of RPG be more than that of Sony?

[a] 7%
[b] 15%
[c] 10%
[d] data insufficient

Solution (d)
As we do not know that total sales in 1999-2000, we cannot find the percentage of sales of Sony and RPG. We can only find absolute increase in sales of sony and RPG. Difference in percentage points also cannot be found.
I.) These questions are based on the following pie charts, which gives the sales of RPG Ltd for 1998-99 and the sales of Audio and Video CDs in India for the same period.
Q.4) If RPG’s sales turnover transfers from ‘Others’ to ‘Magma sound’ in sales of audio and video CDs, then the angle made by ‘Magma Sound’ group in ‘Audio and video CDs sales is (total sale of RPG Ltd is 100 crore)?
[a] 37.8 degree
[b] 32.4 degree
[c] 28.8 degree
[d] cannot be determined

Solution (c)
RPG sales turnover from others = 3% of 100 crore or 3 Crore
Sales of Audio and Video CDs = 150 crore
As% 3 crore makes 3/150 x 100 = 2% of Audio and Video sales
Initial Sale of Magma Sounds = 6%
After combined sales from ‘others’ = 6 + 2 = 8%
So, angle = 8 x 360 / 100 = 28.8 degree
I.) These questions are based on the following pie charts, which gives the sales of RPG Ltd for 1998-99 and the sales of Audio and Video CDs in India for the same period.
Q.5) If the sale doubles and the sale percentage remain constant of RPG group in the total sale of Audio and Video CDs in India, then which of the following is true?
[a] sale of other groups decreases  
[b] total sale decreases  
[c] total sale also doubles  
[d] cannot be determined

Solution (c)
As sale doubles and sale % remain constant, it means that the total sale of Audio and Video CDs in India also doubles.