RBI PHASE 1 RECAP

6th August ’18

QUANT – DATA INTERPRETATION (MIXED)
I.) These questions are based on the pie chart and the bar graph given below:
Sale of Life Insurance in various countries in 2002 (in Million dollars)
Q.1) The split up of sales of Life Insurance by distribution channels for India in 2003 is the same as that of Spain. If the Insurance agents in India are paid a commission of 0.5 of their sales, then what is the amount of commission earned by them?(given that the sale increased by 18% in 2003).

[a] $ 12.39 million 
[b] $ 10.5 million 
[c] $ 4956 million 
[d] none of these

Solution [a]
Sale in 2003 = 118 x 15000 /100 = 17,700
Value of Insurance sold in India by Agents in 2003 = 17,700 x 14 / 100 = $2478 million
Commission paid to agents on the value of Insurance sold = 2478 x 0.5 / 100 = $12.39 million
I.) These questions are based on the pie chart and the bar graph given below:
Sale of Life Insurance in various countries in 2002 (in Million dollars)
Q.2) In 2002 if the post offices in Italy earned 1.25% of their total revenue from the sale of life Insurance, then what is the total revenue earned by post office in Italy in 2002, given that the commission earned by post offices in selling Life Insurance is 1.5% of the value sold?
[a] $ 2.625 million  
[b] $ 21 million  
[c] $ 2.10 million  
[d] $ 210 million

Solution (d)  
Value of Life Insurance sold through post offices in Italy in 2002 = 2500 x 7 /100 = $ 175 million  
Commission earned by the post offices on this sale = 175 x 1.5 / 100 = % 2.625 million  
$ 2.625 million is 1.25% of the revenue earned by post offices in Italy in 2002  
Total revenue of post offices in Italy = 2.625 x 100 / 1.25 = $ 210 million
I.) These questions are based on the pie chart and the bar graph given below:
Sale of Life Insurance in various countries in 2002 (in Million dollars)
Q.3) If the value of life insurance sold in India has consistently increased by 10% every year from the year 1998 to 2002, then what is the value of Life Insurance sold in India in 1998 as a percentage of the Life Insurance sold by China in 2002?

[a] 92.86 %
[b] 102.45 %
[c] 2.45 %
[d] 75.68 %

Solution (b)
Let's assume that life Insurance sold in India in 1998 = X
So Life Insurance sold in India in 2002 = X (1.1)^4
X(1.1)^4 = 15000
X = 15000 / (1.1)^4
= 15000/1.4641
= 10245 million
Life insurance sold in India in 1998 as a percentage of that sold in china in 2002
= 10245 / 10000 x 100
= 102.45%
I.) These questions are based on the pie chart and the bar graph given below:
Sale of Life Insurance in various countries in 2002 (in Million dollars)
Q.4) It is known that 12.5% of the total Life Insurance sold in the countries is listed for term Insurance and rest is for non-term insurance. In the first quarter of the year 2002, 15% of non-term insurance is sold. Find the approximate value of non-term insurance, which is sold in the rest three quarters of the year.

[a] $59,840 million  
[b] $ 58,362 million  
[c] $ 68,425 million  
[d] none of these

Solution (a)
Total life Insurance sold in all the countries listed in the graph = $80500 million
Non-term insurance is 87.5 % of this value  
(87.5 % can be written as 7/8)  
= (80500 x 7) / 8 = 70400 (approx)
In the first quarter 15 % of 70400 is sold
So, in the rest three quarters, 85% of 70400 would be sold
= 85% of 70400 = (85 x 70400) / 100  
=$ 59,840 million
1.) These questions are based on the pie chart and the bar graph given below:
Sale of Life Insurance in various countries in 2002 (in Million dollars)
Q.5) By what amount is the life insurance sold in Italy through Agents more/less than the life Insurance sold in Spain through Brokers and Agents?
[a] less by $ 10 million
[b] more by $ 30 million
[c] less by $30 million
[d] more by $20 million

Solution (c)
Value of Life Insurance sold through Agents in Italy
= 2500 x 14 / 100 = $ 350 million
life Insurance sold through Agents and Brokers in Spain in 2002= 19%
value of Life Insurance sold through Agents and brokers in Spain in 2002= 2000 x 19 / 100
= $ 380 million
so, the value of Insurance sold in Italy is less than that of Spain by $ 30 million.