DI Info Chart Questions for IBPS Clerk Mains, SBI Clerk Mains, IBPS PO Pre and SBI PO Pre Exams.

DI Info Chart No 37

Directions: Study the following information carefully and answer the questions given beside.

In the year 2017, India produces 125000 tons of Apples and exports it to five countries named China, US, Italy, Chile and France in the ratio 45 : 35 : 30 : 24 : 16. In the next year India increased its export quantity by 20% thereby increasing the export share to 80% from 60% while the remaining Apples were kept by India. India ranked these 5 countries according to the Quantity of Apples they imported (Rank 1 – Maximum, Rank – 5 Minimum). In 2018 the sum of percentage share of top 4 countries was 88. These percentage shares were in consecutive prime numbers. Later on, France declined its share and it was distributed equally among remaining four countries. Also, there was no upset in ranking of the countries in both the years.

1.   Find the percentage increase in final Quantity of Apple in Chile from 2017 to 2018.

A. 50%   B. 27.5%   C. 35%   D. 32.5%   E. None of these

2.   What was the additional Quantity of Apples(in tons) imported to Italy when France declined its share in 2018.

A. 2000   B. 2700   C. 3000   D. 2250   E. None of these

3.   What was the percent Change in the production of Apples in 2018?

A. 10%   B. 11.11%   C. 21%   D. 12.5%   E. None of these

4.   Which of these can be the percentage share of China in 2018?

A. 32%   B. 26%   C. 22%   D. 20%   E. Can't be determined

5.   Profit earned by Indian in exporting Apples to China, US, Italy Chile and France is 180, 176, 224, 92 and 98 rupees/tonne respectively. Find the total profit earned by India in 2017?

A. 12378×10^3 B. 13287×10^3 C. 13286×10^3 D. 14478×10^3 E. None of these

Correct Answers:

1	2	3	4	5
A	B	A	A	A

Common explanation :

Export in 2017 = 60% of 125000 = 75000

Production in 2018 = $\frac{5}{4}$ × 90000

= 112500 (80% i.e. 90000 is exported)

	2017	2018
Produced	125000	112500
Exported	75000	90000
Consumed	50000	22500

Export in 2017

Rank	Country	Quantity
1	China	22500
2	U.S	17500
3	Italy	15000
4	Chile	12000
5	France	8000

In 2018 there was no upset in rank i.e the rank was same as 2017

Export share of top four country is 88% and it is a sum of 4 consecutive prime number.

$\frac{88}{2}$ = 22

Therefore one of the prime number should be close to 22.23 is closest prime number.
4 numbers can be 23, 29, 31 and 37 or 19, 23, 29 and 31 or 17, 19, 23 and 29
17, 19, 23 and 29 sums up to 88.Therfore this is the export share in 2018

Export 2018

Rank	Country	Export %	Initial Quantity	Additional	Final Quantity
1	China	29	26100	2700	28800
2	U.S	23	20700	2700	23400
3	Italy	19	17100	2700	19800
4	Chile	17	15300	2700	18000
5	France	12	10800	− 10800	0

Initially France was to get 12% but as it declined the order, its share was additionally distributed among four countries

Thus final Quantity of France was zero tons.

Answers :

1. Following the common explanation, we get

Export in 2017 = 12000

Export in 2018 = 18000

% increase = $\dfrac{6000}{12000} \times 100 = 50\%$

Hence, option A is correct.

2. Following the common explanation, we get

Additional Quantity of apple imported to Italy is 2700

Hence, option B is correct.

3. Following the common explanation, we get

Production of apple on 2017 = 125000

Production of apple in 2018 = 112500

% change = $\dfrac{12500}{1250000} \times 100 = 10\%$

Hence, option A is correct.

4. Following the common explanation, we get

Initial share of apple in china in 2018 = 29%

Final share = $29 + \dfrac{12}{4} = 32\%$

Hence, option A is correct.

5. Following the common explanation, we get

Profit from CHINA = 180 × 22500 = 4050000

Profit from U.S = 176 × 17500 = 3080000

Profit from Italy = 224^{15000} = 3360000

Profit from Chile = 92 ×12000 = 1104000

Profit from France = 98 × 8000 = 784000

Hence, option A is correct.