#### Q.1 Study the following table and answer the question:

Number of cars sold by dealers A, B, C, D & E during first six months of 2018.

Month		W-12-14-14-14			1735	
Dealer	January	February	March	April	May	June
A	620	640	628	635	430	625
В	600	642	635	580	450	620
C	640	635	640	540	625	740
D	520	645	722	740	600	780
E	548	638	720	740	650	800

The ratio of the total number of cars sold by dealer B in January, April and June to the total number of cars sold by dealers A and D in March is:

Ans

X 1. 8:9

X 2. 7:5

√ 3. 4:3

X 4. 10:9

Question ID: 81616114192

Status: Answered

Chosen Option: 3

Q.2 To do a certain work, A and B work on alternate days with B beginning the work on the first day. A alone can complete the same work in 24 days. If the work gets completed in  $11\frac{1}{2}$  days, then B alone can complete  $\frac{7}{6}$  th part of the original

Ans

 $\times$  1.  $4\frac{1}{2}$  days

× 2. 4 days

 $\times$  3.  $5\frac{1}{2}$  days

Question ID: 81616113977

Status: Not Answered

Chosen Option: --

The value of  $20 \div 5$  of  $8 \times [9 \div 6 \times (6 - 3)] - (10 \div 2$  of 20) is:

Ans X 1. 0

**2**. 2

X 3. 1

X 4. 6

Question ID: 81616113869

Status: Answered

Q.4 X, Y are two points in a river. Points P and Q divide the straight line XY into three equal parts. The river flows along XY and the time taken by a boat to row from X to Q and from Y to Q are in the ratio 4:5. The ratio of the speed of the boat downstream to that of the river current is equal to:

Ans

X 1 3:4

X 2. 4:3

√ 3. 10:3

X 4. 3:10

Question ID: 81616113069

Status: Not Answered

Chosen Option: --

Q.5 What is the compound interest (in ₹) on a sum of ₹8192 for 1 ½ years at 15% per annum, if interest is compounded 5-monthly?

Ans

X 1. 1740

X 2. 1640

X 3. 1735

4. 1634

Question ID : 81616113976 Status : Answered

Chosen Option: 4

Q.6 A chord 21 cm long is drawn in a circle of diameter 25 cm. The perpendicular distance of the chord from the centre is:

Ans

√ 1. √46

× 2. √56

× 3. √23

 $\times$  4.  $\sqrt{41}$ 

Question ID: 81616113377

Status : Answered

#### Q.7 Study the table and answer the question.

Table shows District-wise data of the number of primary school teachers posted in schools of a city.

District	Male teachers	Female teachers
East	1650	2375
North	1075	2651
West	1280	1520
South	1170	1085
Central	690	859

What is the ratio of the number of male teachers to the number of female teachers in the city?

Ans X 1. 78:113

× 2. 195: 283

X 3. 586:849

√ 4. 391 : 566

Question ID: 81616112677

Status: Answered

Chosen Option: 4

Q.8 If 
$$\frac{\cos^2 \theta}{\cot^2 \theta + \sin^2 \theta - 1} = 3$$
,  $0^\circ < \theta < 90^\circ$ , then the value of  $(\tan \theta + \csc \theta)$  is:

Ans

$$\times$$
 1.  $\frac{4\sqrt{3}}{3}$ 

$$\times$$
 2.  $2\sqrt{3}$ 

$$\checkmark$$
 4.  $\frac{5\sqrt{3}}{3}$ 

Question ID: 81616113987

Status: Answered

Chosen Option: 4

**Q.9** When x is subtracted from each of 19, 28, 55 and 91, the numbers so obtained in this order are in proportion. What is the value of x?

Ans

Question ID: 81616113066

Status : Answered

Q.10 A shopkeeper earns a profit of 21% after selling a book at 21% discount on the printed price. The ratio of the cost price and selling price of the book is:

Ans X 1. 121:100

× 2. 79:100

× 3. 100 : 79

√ 4. 100 : 121

Question ID : 81616113063 Status : Answered

Chosen Option : 4

**Q.11** If  $8(x+y)^3 - 27(x-y)^3 = (5y-x)(Ax^2 + By^2 + Cxy)$ , then what is the value of (A+B-C)?

Ans X 1. -26

X 2. -16

X 3. 16

**√** 4. 36

Question ID: 81616113072

Status : Answered

Chosen Option : 4

Q.12 Study the table and answer the question.

In the table, production and sale (in 1000 tonnes) of a certain product of a company over 5 years is given.

years	Production (in 1000 tonnes)	Sale (in 1000 tonnes)
2015	1250	1000
2016	1400	1290
2017	1450	1100
2018	1500	1450
2019	1600	1390

In which year(s) sale is more than 90% of the production?

Ans X 1. 2015, 2017, 2019

X 2. 2016, 2017

X 3. 2017, 2018

4. 2016, 2018

Question ID : 81616112679

Status: Answered

Q.13 If  $x + \frac{1}{x} = 4$ , then the value of  $x^5 + \frac{1}{x^5}$  is:

Ans X 1. 736

X 2. 776

X 3. 684

**4** 724

Question ID: 81616113982 Status: Answered

Chosen Option : 4

**Q.14**  $\triangle$  *ABC*  $\sim$   $\triangle$  *PQR*. The areas of  $\triangle$  *ABC* and  $\triangle$  *PQR* are 64  $cm^2$  and 81  $cm^2$ , respectively and *AD* and *PT* are the medians of  $\triangle$  *ABC* and  $\triangle$  *PQR*, respectively. If  $PT = 10.8 \ cm$ , then AD = ?

Ans X 1. 8.4 cm

X 2. 12 cm

X 3. 9 cm

✓ 4. 9.6 cm

Question ID : 81616113884

Status : Answered

Chosen Option: 4

Q.15 The average of 28 numbers is 77. The average of first 14 numbers is 74 and the average of last 15 numbers is 84. If the 14<sup>th</sup> number is excluded, then what is the average of remaining numbers? (correct to one decimal places)

Ans X 1. 73.1

√ 2. 74.7

**X** 3. 77

X 4. 76.9

Question ID : 81616113365

Status: Answered

Chosen Option: 2

Q.16 Let 
$$\triangle$$
 ABC  $\sim$   $\triangle$  PQR and  $\frac{ar(\triangle ABC)}{ar(\triangle QPR)} = \frac{144}{49}$ . If AB = 12 cm, BC = 7 cm and AC = 9 cm, then PR (in cm) is equal to:

Δns

$$\times$$
 1.  $\frac{108}{7}$ 

$$\times$$
 4.  $\frac{49}{12}$ 

Question ID: 81616113380

Status : Answered

Q.17 Study the following table and answer the question:

Number of cars sold by dealers A, B, C, D & E during first six months of 2018.

Month		-		.8.4		-
Dealer \	January	February	March	April	May	June
A	620	640	628	635	430	625
В	600	642	635	580	450	620
C	640	635	640	540	625	740
D	520	645	722	740	600	780
E	548	638	720	740	650	800

In July 2018, if the sales of cars by the dealer D increases by the same percentage as in June 2018 over its previous month, then what is the number of cars sold by D in July 2018?

Ans

Question ID: 81616114194
Status: Answered
Chosen Option: 1

Q.18 Some fruits are bought at 15 for ₹140 and an equal number of fruits at 10 for ₹120. If all the fruits are sold at ₹132 per dozen, then what is the profit percent in the entire transaction?

Ans

$$\times$$
 3.  $2\frac{1}{4}$ 

$$\times$$
 4.  $4\frac{1}{2}$ 

Question ID: 81616113873 Status: Answered Chosen Option: 2

**Q.19** Sides AB and DC of a cyclic quadrilateral ABCD are produced to meet at E and sides AD and BC are produced to meet at F. If  $\angle ADC = 78^{\circ}$  and  $\angle BEC = 52^{\circ}$ , then the measure of  $\angle AFB$  is:

Ans

Question ID : 81616113984 Status : Answered

If x + y = 4 and  $\frac{1}{x} + \frac{1}{y} = \frac{16}{15}$ , then what is the value of  $(x^3 + y^3)$ ?

Ans X 1. 18

X 2. 16

X 3. 21

4. 19

Question ID: 81616113879

Status: Answered

Chosen Option: 4

 $\frac{\csc\theta}{\csc\theta-1} + \frac{\csc\theta}{\csc\theta+1} - \tan^2\theta$ ,  $0^{\circ} < \theta < 90^{\circ}$ , Q.21

is equal to:

Ans  $\checkmark$  1.  $\sec^2 \theta + 1$ 

 $\times$  2.  $\sec^2 \theta$ 

× 3. 2sec<sup>2</sup> θ

 $\times$  4. 1 –  $\tan^2 \theta$ 

Question ID: 81616114090

Status: Answered

Chosen Option: 3

Q.22 Length of each side of a rhombus is 13 cm and one of the diagonal is 24 cm. What is the area (in cm<sup>2</sup>) of the rhombus?

Ans X 1. 300

X 2. 240

X 3. 60

4. 120

Question ID: 81616113373

Status: Answered

Chosen Option: 4

Q.23 The income of A is 45% more than the income of B and the income of C is 60% less than the sum of the incomes of A and B. The income of D is 20% more than that of C. If the difference between the incomes of B and D is ₹13200, then the income (in ₹) of C is:

Ans X 1. 75000

2. 73500

X 3. 72000

X 4. 72500

Question ID: 81616113973

Status: Answered

Q.24	Find the value of cot 25° cot 35° cot 45° cot 65°.						
Ans	$\times$ 1. $\frac{1}{\sqrt{3}}$						
	$\times$ 2. $\sqrt{3}$						
	<b>√</b> 3. 1						
	$\times$ 4. $\frac{\sqrt{3}}{2}$						
		Question ID : <b>81616112777</b>					
		Status : Answered					
		Chosen Option : 3					
	<b>Q.25</b> If the 5-digit number $676xy$ is divisible by 3, 7 and 11, then what is the value of $(3x - 5y)$ ?						
Ans							
	X 2. 10						
	<b>★</b> 3. 7 <b>★</b> 4. 9						
	<b>*</b> *. 9						
		Question ID : 81616113969 Status : Not Answered					
		Chosen Option :					