

Q.2 If $2\cos^2\theta - 5\cos\theta + 2 = 0$, $0^\circ < \theta < 90^\circ$, then the value of $\frac{1}{(\csc\theta + \cot\theta)}$ is:

Ans

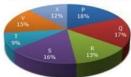
- **X** 1. √3
- \times 2. $\frac{1}{3}$
- **X** 3. 2√3
- \checkmark 4. $\frac{\sqrt{3}}{3}$

Question ID: 8161614785 Status: Answered Chosen Option: 4

Q.3 The following pie charts represent the distribution of candidates who were enrolled for an entrance examination and the candidates (out of those enrolled) who passed the examination in different institutes (P, Q, R, S, T, V, X).
Study the charts and answer the question that follows.



Candidates who Passed the Exam = 5700



The number of candidates who passed from institutes P and Q together exceeds the number of candidates who enrolled from institutes T and R together by:

Ans

- X 1. 445
- X 2. 580
- **3**. 456
- X 4. 484

Question ID : 8161614788 Status : Not Answered

Chosen Option : --

Q.4 Eight years ago, the ratio of the ages of A and B was 9: 10. The ratio of their ages 4 years from now will be 12: 13. If the age of C is 4 years less than the present age of A, then what is the present age (in years) of C?

Ans

- X 1. 52
- **2**. 44
- X 3. 48
- **4**. 40

Question ID : 8161614773 Status : Answered

Chosen Option: 4

Q.5 Two persons A and B can complete a task in 10 days and 15 days, respectively. They work together and A leaves 5 days before the task is completed. After that, B alone completes the remaining task. The number of days taken to complete the whole task is:

Ans

- 49		
-	1	
•	н.	
•		-

X 2. 10

X 3. 12

X 4. 8

Question ID: 8161614777 Status: Answered Chosen Option: 1

Q.6 The given pie chart shows the percentage distribution of the expenditure incurred in publishing a book. Study the chart and answer the question that follows.

Various Expenditure (in percentage) Incurred in



If 2500 copies are published and the printing cost for them amounts to $\sqrt[3]{160,000}$, then what should be the selling price of a book such that the publisher can earn a profit of 25%?

Ans

× 2. ₹370

X 3. ₹350

X 4. ₹420

Question ID: 8161614787 Status: Not Answered

Chosen Option: --

Q.7 Two employees A and B are paid a total of ₹13,455 per week by their employer. If A is paid 125% of the sum paid to B, how much is B paid per week?

Ans

× 2. ₹11,000

X 3. ₹10,000

X 4. ₹7,500

Question ID : **8161614770**Status : **Answered**Chosen Option : **1**

Q.8 A sports store offers a 10% discount on its goods. The store offers a further discount of 5% on the reduced price to those customers who pay by credit cards. If a customer wants to purchase a ball for ₹100 and pays through a credit card, the amount (in ₹) to be paid by the customer is:

Ans

- X 1. 95
- X 2. 92.50
- X 3. 82.50
- **4**. 85.50

Question ID: 8161614768 Status: Answered Chosen Option: 4

Q.9 The given bar graph shows the number of tourists to various states. Study the graph and answer the question that follows.



The number of tourists to which of the following states is less than 10% of the total number of tourists?

Ans

- 🗸 1. Karnataka, Rajasthan and Haryana
- × 2. Karnataka and Rajasthan
- 🔀 3. Only Rajasthan
- X 4. Karnataka, Rajasthan, Haryana and Assam

Question ID : **8161614786**Status : **Not Answered**

Chosen Option: --

Q.10 In \triangle ABC, AD is the bisector of \angle A and intersects BC at D. If BC = a, AC = b and AB = c, then BD is equal to:

Ans

$$\times$$
 1. $\frac{a(c-b)}{c+b}$

$$\checkmark$$
 2. $\frac{ac}{b+c}$

$$\times$$
 3. $\frac{a(c+b)}{c-b}$

$$\times$$
 4. $\frac{ab}{b+c}$

Question ID: 8161614784
Status: Answered
Chosen Option: 2

Q.11 A person invested a sum of ₹25,000 partly at 10% per annum simple interest and the rest at 12% per annum simple interest. At the end of 2 years, the total interest received was ₹5,640. The difference (in ₹) between the two parts of the sum is:

Ans

- X 1. 10,000
- × 2. 8,000
- **3**. 7,000
- X 4. 9,000

Question ID : 8161614775
Status : Not Answered

Chosen Option : --

Q.12 A 540 m long train, running at a uniform speed, crosses a platform in 55 seconds and crosses a man standing on the platform in 36 seconds. What is the length (in m) of the platform?

Ans

- **1** 285
- X 2. 325
- X 3. 450
- X 4. 400

Question ID : 8161614778 Status : Answered

Chosen Option: 1

Q.13 In $\triangle ABC$, BD \perp AC at D. E is a point on BC such that $\triangle BEA = x^{\circ}$. If $\triangle EAC = 36^{\circ}$ and $\triangle EBD = 40^{\circ}$, then the value of x is:

Ans

- X 1. 72°
- X 2. 68°
- √ 3. 86°
- X 4. 78°

Question ID : 8161614783

Status : Answered

Chosen Option: 3

Q.14 If $x^4 - 3x^2 - 1 = 0$, then the value of $\left(x^6 - 3x^2 + \frac{3}{x^2} - \frac{1}{x^6} + 1\right)$ is:

Ans

- X 1. 26
- X 2. 54
- X 3. 51
- **4**. 28

Question ID : 8161614781 Status : Answered

Chosen Option: 4

Q.15 If the value of $(a+b-3)^2+(b+c-2)^2+(c+a-5)^2=0$, then the value of $\sqrt{(b+c)^a+(c+a)^b}$ is: Ans Question ID: 8161614782 Status: Answered Chosen Option: 4 Q.16 X and Y together can finish a task in 12 days. If Y alone can finish the same task in 15 days, then how many days will X alone take to finish the task? Ans X 1. 30 X 2. 45 **3**. 60 X 4. 50 Question ID: 8161614776 Status : Answered Chosen Option: 3 Q.17 If the 6-digit number 479xyz is exactly divisible by 7, 11 and 13, then the product of the digits x, y and z will be: Ans X 1. 794 **2**. 252 X 3. 479 X 4. 1001 Question ID: 8161614765 Status: Not Answered Chosen Option: --Q.18 When x is added to each of 10, 23, 15 and 33, the sums obtained in this order are in proportion. The value of (x + 5) is: Ans Question ID: 8161614774 Status: Not Answered Chosen Option: --

Q.19	9 If decreasing 70 by x% yields the same result as increasing 60 by x%, then x% of 91 is:		
Ans	s × 1. 6		
	√ 2. 7		
	× 3. 8		
	★ 4. 5		
		0 1: 10 0111170	
		Question ID : 8161614769 Status : Answered	
		Chosen Option : 2	
Q.20	The average of n observations is 40. If two observations of 50 and 60 are added, then the average of all the observations will be 41. What is the value of n?		
Ans	X 1. 32		
	× 2. 42		
	√ 3. 28		
	★ 4. 40	~9	
		Question ID : 8161614766	
		Status : Answered	
		Chosen Option : 3	
Q.21	Q.21 A car travels for 11 hours. For the first 100 km, the car travels with a certain speed, and then it increases its speed by 15		
Ans	km/h to cover the remaining 280 km. The time (in hours) it takes to travel the 100 km part is:		
Allo	* " "		
	★ 2. 11★ 3. 7		
	X 4. 10		
		Question ID : 8161614779 Status : Not Answered	
		Chosen Option :	
Q.22	A circle circumscribes a rectangle whose sides are in the ratio of 4:3. If the area of the rectangle is 192 cm ² , then the		
Ans	perimeter (in cm) of the circle is:		
Alla	Χ 1. 15 π		
	× 2. 10 π × 3. 12 π		
		Question ID : 8161614780	
		Status : Answered Chosen Option : 4	
		Choch option: 4	

Q.23 On selling a television at a 6% profit and a fridge at a 9% profit, a shopkeeper gains ₹5,100. However, if the shopkeeper sells the television at a 9% profit and the fridge at a 6% loss, he gains ₹1,800 on the whole transaction. The cost price (in ₹) of the fridge is: Ans X 1. 40,000 2. 30,000 X 3. 37,500 X 4. 35,000 Question ID: 8161614772 Status: Not Answered Chosen Option: --Q.24 A person sold an article at a loss of 8%. Had he sold it at a gain of 10.5%, he would have received ₹74 more. What is the cost price (in ₹) of the article? Ans X 1. 500 X 2. 300 X 3. 100 4. 400 Question ID: 8161614771 Status: Answered Chosen Option: 4 Q.25 In a class of 88 students, the number of girls is 20% more than the number of boys. The average height of the boys is 164 cm, and the average height of the girls is 4 cm less than the average height of all the boys and girls in the class. What is the average height (in cm) of all the students in the class? Ans X 1. 150 X 2. 163.2 X 3. 155.2 4. 159.2 Question ID: 8161614767 Status: Not Answered Chosen Option: --