Q.1 In a company with 600 employees, the average age of the male employees is 42 years and that of the female employees is 41 years. If the average age of all the employees in the company is 41 years 9 months, then the number of female employees is:

Ans
1. 350 ✗
2. 150 ✓
3. 250 ✗
4. 450 ✗

Question ID : **424429762**
Status : **Not Answered**
Chosen Option : **--**

Q.2 A person invested a total of ₹9,000 in three parts at 3%, 4% and 6% per annum on simple interest. At the end of a year, he received equal interest in all the three cases. The amount invested at 6% is:

Ans
1. ₹3,000 ✗
2. ₹5,000 ✗
3. ₹2,000 ✓
4. ₹4,000 ✗

Question ID : **424429767**
Status : **Not Answered**
Chosen Option : **--**

Q.3 The proportion among three numbers is 3 : 4 : 5 and their LCM is 1800. The second number is:

Ans
1. 90 ✗
2. 120 ✓
3. 30 ✗
4. 150 ✗

Question ID : **424429766**
Status : **Answered**
Chosen Option : **2**

Q.4 If the diameter of a circle bisects each of the two chords of the circle, then both the chords:

Ans
1. are parallel to each other ✓
2. intersect at 30^0 ✗
3. intersect at 60^0 ✗
4. intersect at 90^0 ✗

Question ID : **424429768**
Status : **Answered**
Chosen Option : **1**

Q.5 A shopkeeper allows a discount of 20% on an article and still makes a profit of 25%. What does he pay for an article whose marked price is ₹800?

Ans

✗ 1. ₹492

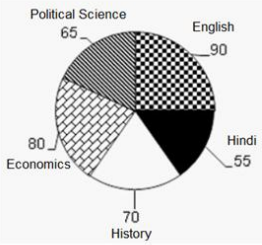
✗ 2. ₹800

✓ 3. ₹512

✗ 4. ₹640

Question ID : **424429763**
Status : **Answered**
Chosen Option : **2**

Q.6 The following chart shows the marks (in degrees) scored by a student in different subjects — English, Hindi, History, Economics and Political Science — in an examination. Total marks obtained in the examination are 600. Observe the chart and answer the question.



What is the difference between marks scored in History and marks scored in Hindi?

Ans

✓ 1. 25

✗ 2. 15

✗ 3. 40

✗ 4. 30

Question ID : **424429783**
Status : **Answered**
Chosen Option : **2**

Q.7 If $x + \frac{1}{x} = 4$, then the value of $x^4 + \left(\frac{1}{x}\right)^4$ is:

Ans

✗ 1. 16

✗ 2. 196

✓ 3. 194

✗ 4. 14

Question ID : **424429774**
Status : **Answered**
Chosen Option : **3**

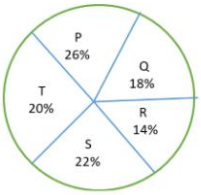
Q.8 If $cosec\ \theta = \frac{(x^2+y^2)}{(x^2-y^2)}$, then what will be the value of tan θ?

Ans

1. $\frac{2xy}{(x^2-y^2)}$
2. $\frac{(x^2-y^2)}{2xy}$
3. $\frac{(x^2+y^2)}{2xy}$
4. $\frac{(x^2-y^2)}{(x^2+y^2)}$

Question ID : **424429778**
Status : **Answered**
Chosen Option : **2**

Q.9 The following pie-chart shows the percentage-wise distribution of the number of students in five different schools P, Q, R, S and T. Total number of students in all five schools together is 8400.



The number of students in school T is what percentage of the total number of students in schools Q and S together.

Ans

1. 55%
2. 45%
3. 50%
4. 40%

Question ID : **424429780**
Status : **Answered**
Chosen Option : **3**

Q.10 If 'a' is a natural number, then $(7a^2 + 7a)$ is always divisible by:

Ans

1. 7 only
2. 14 only
3. 7 and 14 both
4. 21 only

Question ID : **424429775**
Status : **Answered**
Chosen Option : **1**

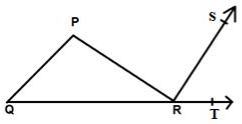
Q.11 If a and b are two positive real numbers such that $4a^2 + b^2 = 20$ and $ab = 4$, then the value of $2a + b$ is :

Ans

1. 80 ✗
2. 8 ✗
3. 6 ✓
4. 5 ✗

Question ID : **424429773**
Status : **Answered**
Chosen Option : **3**

Q.12



In the given figure, PQR is a triangle in which angle P : angle Q : angle R = 3 : 2 : 1, and PR is perpendicular to RS.
What will be the measure of angle TRS?

Ans

1. 30° ✗
2. 45° ✗
3. 60° ✓
4. 50° ✗

Question ID : **424429770**
Status : **Answered**
Chosen Option : **3**

Q.13 Raju can finish a piece of work in 20 days. He worked at it for 5 days and then Jakob alone finished the remaining work in 15 days. In how many days can both finish it together?

Ans

1. 20 days ✗
2. 12 days ✗
3. 10 days ✓
4. 16 days ✗

Question ID : **424429759**
Status : **Answered**
Chosen Option : **3**

Q.14 If $\cos(A+B) = 0$ and $\sin(A-B) = \frac{1}{2}$, then the value of B is:

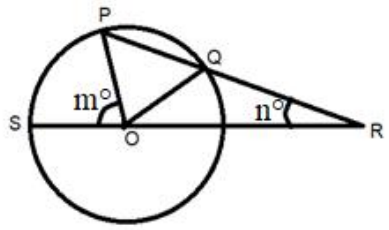
(Given $0° < A, B < 90°$)

Ans

1. 90° ✗
2. 60° ✗
3. 45° ✗
4. 30° ✓

Question ID : **424429777**
Status : **Answered**
Chosen Option : **4**

Q.15



In the given figure, if OQ = QR, then the value of m is:

Ans
1. $3n°$ ✔
2. $n°$ ✘
3. $4n°$ ✘
4. $2n°$ ✘

Question ID : **424429769**
Status : **Answered**
Chosen Option : **4**

Q.16 A train, 150 m long, is running at 90 km/h. How long (in seconds) will it take to clear a platform that is 300 m long?

Ans
1. 6 ✘
2. 12 ✘
3. 50 ✘
4. 18 ✔

Question ID : **424429760**
Status : **Answered**
Chosen Option : **4**

Q.17 If the gain is one-fifth of the selling price, then the gain percentage is:

Ans
1. 16% ✘
2. 20% ✘
3. 80% ✘
4. 25% ✔

Question ID : **424429765**
Status : **Answered**
Chosen Option : **4**

Q.18 If $cos^2\theta + cos^4\theta = 1$, then the value of $sin\ \theta + sin^2\theta$ is:

Ans
1. $\frac{1}{2}$ ✘
2. 2 ✘
3. 1 ✔
4. 0 ✘

Question ID : **424429779**
Status : **Answered**
Chosen Option : **3**

Q.19 The value of a motorcycle depreciates every year by 4%. What will be its value after 2 years, if its present value is ₹75,000?

Ans

✔ 1. ₹69,120

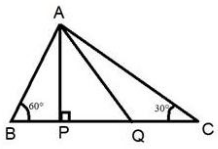
✘ 2. ₹72,000

✘ 3. ₹70,120

✘ 4. ₹69,000

Question ID : **424429764**
Status : **Answered**
Chosen Option : **1**

Q.20



In the given figure, AP is perpendicular to BC, and AQ is the bisector of angle PAC. What will be the measure of angle PAQ?

Ans

✘ 1. 50°

✘ 2. 45°

✘ 3. 60°

✔ 4. 30°

Question ID : **424429771**
Status : **Answered**
Chosen Option : **2**

Q.21 If $a + b = 8$ and $ab = 12$, then the value of $a^3 + b^3$ is:

Ans

✘ 1. 512

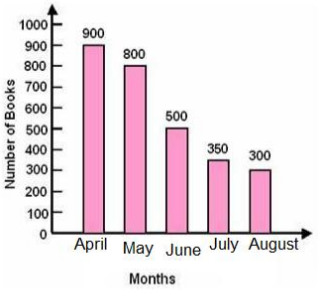
✔ 2. 224

✘ 3. 288

✘ 4. 96

Question ID : **424429772**
Status : **Answered**
Chosen Option : **2**

Q.22 The following graph shows the number of books sold by a book-seller during five months of 2019, April, May, June, July and August. Study the graph and answer the question.

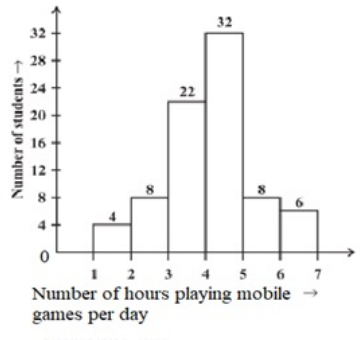


The total number of books sold during these five months is:

Ans
1. 2950
2. 2800
3. 2850
4. 2900

Question ID : **424429782**
Status : **Answered**
Chosen Option : **3**

Q.23 Study the graph and answer the following question.



How many students spend 5 hours or more than 5 hours in playing mobile games per day?

Ans
1. 14
2. 46
3. 6
4. 8

Question ID : **424429781**
Status : **Answered**
Chosen Option : **1**

Q.24 The value of $72-3\,(2 + 24 \div 4 \times 3-2 \times 2) + 8$ is:

Ans
1. 72
2. 36
3. 32
4. 24

Question ID : **424429776**
Status : **Answered**
Chosen Option : **3**

Q.25 The area of a square field is 7200 m^2. What is the length of its diagonal?

Ans
1. 1800 m
2. 180 m
3. 120 m
4. 60 m

Question ID : **424429761**
Status : **Marked For Review**
Chosen Option : **3**