

Q.1 If x and y are two numbers having opposite signs, and $x^2:y^2 = 16:81$, then what is the value of $\frac{3x+4y}{2x-3y}$?

- Ans
- 1. $\frac{12}{25}$
 - 2. $-\frac{27}{40}$
 - 3. $-\frac{24}{35}$
 - 4. $\frac{48}{35}$

Question ID : 65497817381
Chosen Option : 3

Q.2 The value of $1\frac{4}{11} + \left\{ \left[\frac{11}{80} \div \frac{3}{4} \left(\frac{1}{4} - \frac{1}{3} \times \frac{1}{5} \right) \div 1\frac{5}{6} \right] + \frac{9}{11} \right\}$ is :

- Ans
- 1. 1
 - 2. 5
 - 3. 4
 - 4. 10

Question ID : 65497815775
Chosen Option : 1

Q.3 In a ΔABC , $\angle BAC = 90^\circ$, AD is drawn perpendicular from A on BC . Which among the following is the mean proportional between BD and BC ?

- Ans
- 1. AD
 - 2. AB
 - 3. CD
 - 4. AC

Question ID : 65497817380
Chosen Option : 2

Q.4 Two containers have mixtures of milk and water, respectively, in the ratios 3 : 2 and 6 : 5. In what ratio should the contents be mixed so that the ratio of milk to water in the final mixture is 4 : 3?

- Ans
- 1. 6 : 13
 - 2. 9 : 14
 - 3. 10 : 11
 - 4. 5 : 8

Question ID : 65497817382
Chosen Option : 3



Q.5 The area of a square is S , and that of the square formed by joining the mid-points of the given square is A . The value of

$\frac{A}{S}$ is equal to:

- Ans**
- 1. 0.25
 - 2. 0.5
 - 3. 0.125
 - 4. 1.25

Question ID : 65497817386

Chosen Option : 2

Q.6 What is the median of the distribution: 34, 22, 13, 11, 27, 19, 25, 16?

- Ans**
- 1. 20.5
 - 2. 21.5
 - 3. 19
 - 4. 22

Question ID : 65497817385

Chosen Option : 1

Q.7 The speed of wind during a storm is 10^5 mm per sec. How long (in seconds) will it take a dust particle suspended in air to travel 1 km?

- Ans**
- 1. 1
 - 2. 0.1
 - 3. 10
 - 4. 0.01

Question ID : 65497817372

Chosen Option : 3

Q.8 Two friends, one of whom is thrice as efficient as the other, working together, can complete a work in 6 days. In how many days will the less efficient among the two be able to complete twice the quantum of work?

- Ans**
- 1. 24
 - 2. 36
 - 3. 48
 - 4. 12

Question ID : 65497817370

Chosen Option : 3



Q.9 Due to some crisis, some people from State *A* migrated to State *B*, and thereby the population of the second State increased by 19.96%. However, at a later stage, all of them returned to State *A*. Then by what percentage (correct up to two decimal places) did the population of State *B* decrease?

- Ans**
- 1. 19.96
 - 2. 16.64
 - 3. 18.24
 - 4. 17.54

Question ID : 65497817377
Chosen Option : 2

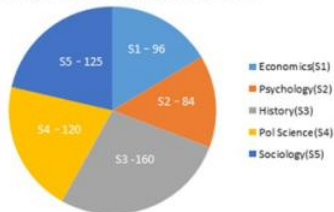
Q.10 A retailer opens her outlet on all seven days of the week. It is observed that her average sales for Saturdays and Sundays combined is ₹300, and ₹200 for the remaining five days combined. For a month starting on a Saturday, it was found that the total sales were ₹7,000. Which among the following months it could be?

- Ans**
- 1. March
 - 2. April
 - 3. January
 - 4. February

Question ID : 65497817375
Chosen Option : 2

Q.11 The number of students taking admission in First Year of a Degree Course at a college in areas of Social Sciences in 2012 were as follows: Economics (S1) - 96, Psychology (S2) - 84, History (S3) - 160, Political Science (S4) - 120, Sociology (S5) - 125. The break-up of students in different subjects has been presented through the given pie chart. Study the pie chart and answer the question that follows.

The number of students taking admission in the First Year of Degree Course at a college in areas of Social Sciences in 2012



In 2013, 20% of the Sociology students, 25% of the Political Science students and one-sixth of the Economics students shifted to another college, and the number of History students got increased by 10% due to students shifting from other colleges. Over and above this, 10% of the remaining Sociology students and one-seventh of the Psychology students got transferred to Economics. What will be the central angle (to the nearest degree) of the sector corresponding to History in the pie chart, representing the break-up in 2013?

- Ans**
- 1. 112
 - 2. 120
 - 3. 102
 - 4. 126

Question ID : 65497817394
Chosen Option : 2

Q.12 The marked price of an article is ₹400. A shopkeeper sells it by giving two successive discounts of 12% and 20% on its marked price. If he earns a profit of 10%, then the cost price of the article is:

- Ans**
- 1. ₹250
 - 2. ₹260
 - 3. ₹256
 - 4. ₹268

Question ID : 65497817376
Chosen Option : 3

Q.13 Consider ten consecutive odd numbers starting from 5. Multiply each of them, except the first and the second, with three. What will be the average of the ten numbers so formed?

- Ans**
- 1. 39.6
 - 2. 39
 - 3. 42
 - 4. 38.4

Question ID : 65497817374
Chosen Option : 1

Q.14 A container in the shape of a right circular cone, whose radius and depth are equal, gets completely filled by 128000 spherical droplets, each of diameter 2 mm. What is the radius (in cm) of the container?

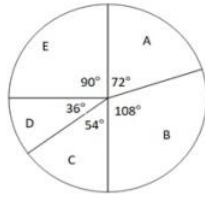
- Ans**
- 1. 6
 - 2. 4
 - 3. 8
 - 4. 2

Question ID : 65497817388
Chosen Option : 3



Q.15 Study the given pie chart and answer the question that follows.

The pie chart shows the distribution (degree-wise) of the number of players who play five sports A, B, C, D, and E (assuming each player plays only one sport).



If the number of players who play sport C is 162, then the difference between the total number of players who play sports A and E is:

- Ans**
- 1. 72
 - 2. 36
 - 3. 90
 - 4. 54

Question ID : 65497817392
Chosen Option : 4

Q.16 If I gain 124% by selling an item for ₹1,232, then what would be my gain or loss percentage if I sell it for ₹572?

- Ans**
- 1. 6% gain
 - 2. 6% loss
 - 3. 4% gain
 - 4. 4% loss

Question ID : 65497817378
Chosen Option : 3

Q.17 Two men A and B, each working alone by working 12 hours per day, can complete a work in 20 days. For execution of the work, it was decided that A and B would be working for 8 and 6 hours per day, respectively, on alternate days starting with A. If it takes x days and y hours to complete the work then (x, y) is:

- Ans**
- 1. (34, 2)
 - 2. (33, 2)
 - 3. (34, 4)
 - 4. (33, 4)

Question ID : 65497817371
Chosen Option : 3

Q.18

Simplify $\frac{\left(3 + \frac{3}{2} \div 6\frac{1}{2} \times \frac{1}{3}\right) \text{ of } 4\frac{1}{3}}{\left(-\frac{8}{3} \div 2\right)}$

- Ans
- 1. 10
 - 2. $-\frac{30}{13}$
 - 3. -10
 - 4. $\frac{40}{3}$

Question ID : 65497817996
Chosen Option : 3

Q.19 How much time (in seconds) does the earth take to rotate through an angle of 135 degrees about its axis?

- Ans
- 1. 21600
 - 2. 28800
 - 3. 32400
 - 4. 33600

Question ID : 65497817373
Chosen Option : 3

Q.20 A fruit vendor brings 1092 apples and 3432 oranges to a market. He arranges them in heaps of equal number of oranges as well as apples such that every heap consists of the maximum possible number of the fruits. What is this number?

- Ans
- 1. 78
 - 2. 156
 - 3. 312
 - 4. 39

Question ID : 65497817389
Chosen Option : 2

Q.21 A salesperson, with a view to promote sales of an item, applies the principle of simple interest. He declares that 300 pieces of the item can be obtained immediately against cash payment, but a customer will get only 200 pieces of the item if he defers the payment for a year. What is the rate percentage of interest on the whole?

- Ans
- 1. 30
 - 2. 25
 - 3. 50
 - 4. 40

Question ID : 65497817384
Chosen Option : 3

Q.22 A sum of ₹6,400 invested on the basis of yearly compounding of interest, grows to ₹7,056 in two years. What is the percentage rate of interest?

- Ans**
- 1. 6.25
 - 2. 4
 - 3. 7.5
 - 4. 5

Question ID : 65497817383
Chosen Option : 4

Q.23 The total surface area of a solid right circular cylinder is 1617 cm^2 . If the diameter of its base is 21 cm, then what is its volume (in cm^3)? (Take $\pi = \frac{22}{7}$)

- Ans**
- 1. 5324
 - 2. 3971
 - 3. 4851
 - 4. 5228

Question ID : 65497817387
Chosen Option : 3

Q.24 The cost of manufacturing an item was ₹24,000, and 20% of it was spent on packaging and its shipment to a retailer. The manufacturer made a profit of 50%, while the retailer incurred a loss of 20% in selling it to a customer. At what price (in ₹) was the item sold by the retailer?

- Ans**
- 1. 32,400
 - 2. 37,664
 - 3. 35,268
 - 4. 34,560

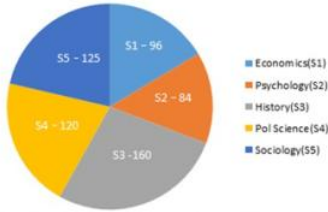
Question ID : 65497817379
Chosen Option : 4



Q.25 The number of students taking admission in the First Year of Degree Course at a college in areas of Social Sciences in 2012 were as follows: Economics (S1) - 96, Psychology (S2) - 84, History (S3) - 160, Political Science (S4) - 120, Sociology (S5) - 125. The break-up of students in different subjects has been presented through the given pie chart.

Study the pie chart and answer the question that follows.

The number of students taking admission in the First Year of Degree Course at a college in areas of Social Sciences in 2012



The total number of students in Economics and Psychology is what percentage of the total number of students in History, Political Science and Sociology (correct to two decimal places)?

- Ans**
- 1. 33.33
 - 2. 46.48
 - 3. 44.44
 - 4. 22.28

Question ID : **65497817393**
Chosen Option : **3**

