



Odisha Sub-ordinate Staff Selection Commission
(OSSSC), Govt. of Odisha

OSSSC CRE 2025

Section Compilation · Mathematics

English Version

All 72 Shifts · Official Answer Key

About

All **Mathematics** questions from every shift of the **OSSSC CRE 2025** Preliminary examination (Advt 3219), **English** version, with the correct option highlighted. 1440 questions across 72 shifts.

✓ Correct option (highlighted green)



Toppers' Choice, Blackbook of English Vocabulary, Now available in App format : DOWNLOAD NOW

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Paper Set 1 · 22 May 2026 · 12:30 PM - 2:00 PM · Mathematics (English)

Quant

Q1 Quant

If the perimeter of a square is 10 cm, then find the length of the side of the square.

- A. 1 cm
- B. 1.5 cm
- C. 2 cm
- D. 2.5 cm



Q2 Quant

The price of a product is first increased by 40%, then decreased by 25% and finally increased again by 30%. What is the overall percentage change in the price?

- A. 36.5%, Increase
- B. 36.5%, Decrease
- C. 45%, Increase
- D. 45%, Decrease



Q3 Quant

A tap can fill a tank in 6 hours. After two-thirds of the tank is filled, one more similar tap is opened in the tank. Find the total time (in hours) taken to fill the tank completely.

- A. 8
- B. 3
- C. 4
- D. 5



Q4 Quant

Ravi and Suresh start a business by investing ₹60,000 and ₹90,000, respectively. If the total profit at the end of the year is ₹50,000, find Ravi's share of the profit.

- A. ₹18,000
- B. ₹20,000
- C. ₹22,000
- D. ₹24,000



Q5 Quant

Find the value of

$$(1.25)^3 + (1.75)^3 + (9 \times 1.25 \times 1.75) - 7$$

- A. 0
- B. 1
- C. 20
- D. 27



Q6 Quant

The ratio of the present ages of Swati and Varun is 2:5. After 8 years from now, their ages will be in the ratio of 1:2, then the present age of Varun (in years) is

- A. 40 years
- B. 32 years
- C. 46 years
- D. 16 years



Q7 Quant

Two trains are moving in the same direction at 86 km/h and 50 km/h. What is their relative speed (in m/s)?

- A. 8
- B. 10
- C. 12
- D. 15



Q8 Quant

In a class, the average marks of 15 boys is 72 and the average marks of 10 girls is 80. Find the combined average marks of all the students.

- A. 75.2
- B. 77.2
- C. 78.2
- D. 80.2



Q9 Quant

A man covers two-fifth of the distance at 60 km/h, one-fourth of the distance at 48 km/h, and the remaining distance at 6 km/h. If the total distance covered is 300 km, then what is his average speed (in km/h) for the whole trip? (Round off the answer to two decimal places.)

A. 10.62 km/h

B. 12.25 km/h

C. 14.24 km/h



D. 14.85 km/h

Q10 Quant

The HCF of two numbers is 12, and their LCM is 180. If one number is 60, find the other number.

A. 36



B. 30

C. 45

D. 42

Q11 Quant

Three numbers are in the ratio 2: 7: 11 and the sum of these numbers is 1840. Find the difference between the largest and smallest numbers.

A. 828



B. 834

C. 845

D. 900

Q12 Quant

A shirt costs ₹475. Raghav purchases shirts under a "Buy 2, Get 2 Free" scheme and pays a total of ₹3,800. How many shirts did he receive?

A. 18 shirts

B. 16 shirts



C. 20 shirts

D. 14 shirts

Q13 Quant

The mean of 8 observations is 37.5. If the observation 45 is replaced by 65, find the difference between the new mean and the original mean.

A. 2

B. 1.5

C. 2.5



D. 3

Q14 Quant

What will be the amount after 1 year, if ₹7300 is invested at 20% compound interest per annum, compounded half-yearly?

A. ₹8833



B. ₹8301

C. ₹9271

D. ₹8129

Q15 Quant

A walking track is formed between two concentric circles. The circumference of the inner circle is 352 m, and the width of the track is 4 m. Find the area of the track, in square meters, round off your answer to the nearest ten. (Use $\pi = \frac{22}{7}$)

A. 1800

B. 1570

C. 1980

D. 1460

**Q16 Quant**

By how much is 65% of 50 greater than $\frac{4}{5}$ of 30?

A. 4.5



B. 1.5

C. 3.5

D. 2.5



Q17 Quant

A can complete a piece of work in the same time as B and C together. A and B together can complete the work in 2 days, and C alone can complete it in 10 days. In how many days can B alone complete the work?

- A. 5 ✓
- B. 10
- C. 15
- D. 8

Q18 Quant

$1.777\ldots + 1.777\ldots$ in fraction form is:

- A. $\frac{32}{9}$ ✓
- B. $\frac{31}{8}$
- C. $\frac{24}{17}$
- D. $\frac{35}{11}$

Q19 Quant

A refrigerator has a list price of ₹75000. A retailer purchases it after receiving two successive discounts of 5% and 30%, and this becomes his cost price. He wants to earn a profit of 16% on his cost price. If he allows a discount of 20% on his marked price to customers, at what price should he mark the refrigerator?

- A. ₹72318.75 ✓
- B. ₹74378.45
- C. ₹73305.15
- D. ₹72890.25

Q20 Quant

MN is the diameter of a circle dividing the circle into two semicircles. KL is a chord in one semicircle, such that KL is parallel to MN. P is a point on the circumference of the circle in the other semicircle and $\angle NPK = 72^\circ$, what is the measure of $\angle NKL$?

- A. 36°
- B. 68°
- C. 18° ✓
- D. 24°

Paper Set 2 · 22 May 2026 · 4:00 PM - 5:30 PM · Mathematics (English)
Quant
Q1 Quant

If α and β are roots of $x^2 - 7x + 12 = 0$, then the value of $(\alpha + \beta)^2(\alpha^2 + \beta^2)$ is:

- A. 1,125
- B. 1,175
- C. 1,225 ✓
- D. 1,275

Q2 Quant

If a person travelling at a speed of 30 m/s took 40.25 minutes to cover the distance of $9x$ km, then find the value of x .

- A. 10.05
- B. 8.05 ✓
- C. 9.25
- D. 7.75

Q3 Quant

A bag contains ₹20, ₹10 and ₹5 coins in the ratio of 7:8:5, amounting to ₹4,900. Find the number of ₹5 coins in the bag.

- A. 60
- B. 75
- C. 95
- D. 100 ✓

Q4 Quant

A pipe can fill a tank in 20 minutes. Due to leakage in the bottom of the tank, it takes 25 minutes to fill the tank. If the tank is full, how long will the leak take to empty the tank?

- A. 50 minutes
- B. 60 minutes
- C. 80 minutes
- D. 100 minutes ✓



Q5 Quant

If b is the mean proportional of a and c , then $(a - b)^2 : (b - c)^2$ equals to

A. $a:c$



B. $c:a$

C. $c:b$

D. $b:c$

Q6 Quant

A car driver covers a distance of 150 km at 50 km/h and returns at 30 km/hr. His average speed (in km/hr) for the whole journey is:

A. 37.5



B. 40

C. 42.5

D. 45

Q7 Quant

Find the length of the altitude on the largest side of a triangle whose sides are in the ratio 6 : 9 : 10 and whose perimeter is 250 cm.

(Use $\sqrt{455} = 21.3$)

A. 44.56 cm

B. 49.78 cm

C. 53.25 cm



D. 57.18 cm

Q8 Quant

A refrigerator is marked at ₹52,500. Find the price after successive discounts of 22% and 12%.

A. ₹38,036

B. ₹36,036



C. ₹36,336

D. ₹38,636

Q9 Quant

Find the value of x in the 4-digit number $2x41$ if the number is divisible by 3 and x is a prime number greater than 2.

A. 3

B. 5



C. 7

D. 9

Q10 Quant

The savings of three friends A, B, and C are in the ratio 3:5:7. B invests 20% of his savings and C invests 10% of his savings in a business, so that part is no longer in their savings. A adds ₹15,000 to his savings. After these changes, the ratio of savings of A and B becomes 9:10. What is the difference between the final savings of A and C?

A. ₹52,500

B. ₹60,000

C. ₹67,500



D. ₹72,000

Q11 Quant

If the median of a dataset is $4x$ and the mode is $3x$ (where $x > 0$), then the mean of the dataset, is:

A. $4.5x$



B. $2.5x$

C. $1.5x$

D. $4x$

Q12 Quant

The ratio of milk to water in a 30-litre mixture is 3 : 2. Find the quantity of water (in litres) to be added to the mixture in order to make this ratio 1 : 1.

A. 6



B. 2

C. 7

D. 9

Q13 Quant

A woman loses 20% of her money. She then spends 25% of what remains. If she is left with ₹525, what was the original amount?

A. ₹875



B. ₹700

C. ₹750

D. ₹825



Q14 Quant

A shopkeeper fixes the marked price of an item at 35% above its cost price. What percentage of discount on the marked price should be allowed to gain 8%?

A. 20%



B. 18%

C. 17%

D. 19%

Q15 Quant

Line $l \parallel m$ and a transversal t cuts them. If $\angle 1 = 65^\circ$, find $\angle 2$.

A. 115° B. 65° C. 105° D. 90° **Q16 Quant**

ABCD is a quadrilateral. ABC and ACD are equilateral triangles, each with side 4 units. What is the difference in the lengths of the diagonals (in units) of the quadrilateral?

A. $2(\sqrt{2} - 1)$ B. $4(\sqrt{2} - 1)$ C. $4(\sqrt{3} - 1)$ D. $2(\sqrt{3} - 1)$ **Q17 Quant**

The strength of a college increases and decreases every alternate year by 20%. If it started with an increase in the year 2017, then its strength in 2021 as compared to that in 2017 was:

A. increased by 7.84%

B. decreased by 7.84%



C. increased by 8.78%

D. decreased by 8.78%

Q18 Quant

A can complete a piece of work in the same time as B and C together. A and B together can complete the work in 3 days, and C alone can complete it in 6 days. In how many days can B alone complete the work?

A. 12



B. 14

C. 16

D. 18

Q19 Quant

The amount received is ₹2,00,000 after 2 years at 3% per annum, compounded annually. What is the principal (in ₹) invested? (Rounded off to two decimal places)

A. 188509.17

B. 188519.18



C. 188512.23

D. 188526.11

Q20 Quant

Simplify: $\sqrt{620} + \sqrt{8} + \sqrt{278} + \sqrt{114} + \dots$

A. 25



B. 26

C. 21

D. 27



Q1 Quant

A trader bought 25 mangoes for ₹750 and sold them at ₹35 each. Find his profit percentage.

A. $15\frac{1}{3}\%$

B. $15\frac{2}{3}\%$

C. $16\frac{2}{3}\%$ ✓

D. $18\frac{1}{3}\%$

Q2 Quant

Arman starts a business with ₹56,000. After 5 months, Raman joined him with ₹64,000. At the end of the year, what will the profit share of Raman be, out of the annual profit of ₹24,500?

A. D. ₹9,100

B. C. ₹9,300

C. A. ₹9,700

D. B. ₹9,800 ✓

Q3 Quant

Two trains, A and B, are travelling towards each other. Train A is travelling at a speed of 'x' km/hr, and train B is traveling at a speed of $(x + 20)$ km/hr. They start from points 300 km apart and meet after 2 hours. What is the speed of the two trains, A and B, respectively?

A. A. 25 km/hr and 45 km/hr

B. C. 40 km/hr and 60 km/hr

C. D. 65 km/hr and 85 km/hr ✓

D. B. 60 km/hr and 80 km/hr

Q4 Quant

A and B can do a piece of work in 20 days and 15 days, respectively. With the help of C, they finish the work in 5 days. How long will C alone take to finish the work?

A. D. 8 days

B. C. 10 days

C. A. 12 days ✓

D. B. 18 days

Q5 Quant

A and B invest in a business in the ratio 5:7. The total profit after one year is ₹2,400. Find B's share of the profit.

A. B. ₹1,200

B. D. ₹1,400 ✓

C. C. ₹1,500

D. A. ₹1,600

Q6 Quant

In quadrilateral PQRS, PL and RM are perpendiculars to the diagonal QS. Find the length of the perpendicular RM if $QS = 24$ cm, $PL = 6$ cm and area of quadrilateral PQRS = 272 cm^2 . (Give your answer in cm, rounded off to two decimal places.)

A. B. 12.75 cm

B. C. 13.64 cm

C. A. 15.52 cm

D. D. 16.67 cm ✓

Q7 Quant

Walking at a speed of 3 km/hr, a boy reaches his school 4 minutes late. Walking at 4 km/hr, he reaches there 1 minute early. The distance of his school from the start point is:

A. D. 0.5 km

B. B. 1 km ✓

C. A. 1.5 km

D. C. 2 km

Q8 Quant

Four friends, A, B, C, and D, are of different ages. The ratio of A's age to B's age is 2 : 3, the ratio of B's age to C's age is 4 : 5, and the ratio of C's age to D's age is 3 : 2. If the sum of ages of all four friends is 90 years, the difference between youngest and oldest friends' ages is

A. 12 years

B. 14 years ✓

C. 16 years

D. 18 years



Q9 Quant

The sum of two numbers is 24 and their difference is 12. Find the bigger number from the two.

A. C. 18



B. B. 16

C. D. 14

D. A. 12

Q13 Quant

The arithmetic mean of the numbers 10, 18, 24, $(30+a)$, and $(36-a)$, where, $a > 0$, is

A. B. 22.6

B. C. 23.6



C. D. 24.6

D. A. 25.6

Q10 Quant

A swimming pool is 24 m long, 18 m wide and 4.5 m deep. Find the cost (in ₹) of repairing its floor and walls at the rate of ₹87.50 per m^2 .

A. A. ₹70,075

B. B. ₹70,875



C. C. ₹72,205

D. D. ₹72,695

Q14 Quant

A Laptop is bought for ₹50,000 and sold for ₹62,500. Find the profit percentage.

A. 10%

B. 15%

C. 20%

D. 25%

**Q15 Quant**

One pipe can fill a tank in 12 minutes while another pipe can empty the completely filled tank in 18 minutes. If both the pipes are opened together when the tank is empty, how many minutes will it take to fill one-third of the tank?

A. C. 12



B. B. 24

C. D. 36

D. A. 48

Q11 Quant

Simplify the following expression:

$$(7+4) \times 5 + 5 \div \frac{1}{2} + 3$$

$$5 + 7 \times 4 \div 3$$

A. $\frac{65}{17}$ B. $\frac{69}{17}$

C. 5

D. 4

**Q16 Quant**

If the simple interest for 2 years is ₹78 and the compound interest for the same period is ₹81 at the same rate, what is the principal (in ₹)?

A. C. 507



B. D. 502

C. A. 500

D. B. 511

Q12 Quant

The price of a laptop is increased by 25% and then decreased by 12%. If the initial price of the laptop is ₹78,000, what is the final price of the laptop?

A. B. ₹85,400

B. C. ₹85,600

C. D. ₹85,800



D. A. ₹86,000

Q17 Quant

The ratio of the lengths of two corresponding sides of two similar triangles is 1 : 3. The ratio of the areas of these two triangles, in the order mentioned, is:

A. D. 1 : 9



B. C. 1 : 3

C. $\sqrt{2} : 3$

D. A. 9 : 1



Q18 Quant

In what time (in months) will ₹3,000 fetch an interest of ₹400 at 5% per year simple interest?

A. D. 32



B. B. 29

C. C. 30

D. A. 36

Q19 Quant

A refrigerator has a list price of ₹25,000. A retailer purchases it after receiving two successive discounts of 2% and 20%, and this becomes his cost price. He wants to earn a profit of 46% on his cost price. If he allows a discount of 30% on his marked price to customers, at what price should he mark the refrigerator?

A. C. ₹40,880



B. D. ₹40,774

C. B. ₹40,891

D. A. ₹40,819

Q20 Quant

Simplify $9 + 8 \text{ of } 8\frac{1}{8} \div \left[3\frac{1}{9} \div \left\{ 2\frac{1}{3} + \left(3\frac{1}{3} \right) \right\} \right]$

A. $\frac{1101}{14}$ B. $\frac{1103}{14}$ C. $\frac{1105}{14}$ D. $\frac{1109}{14}$ **Paper Set 4 · 23 May 2026 · 12:30 PM - 2:00 PM · Mathematics (English)****Quant****Q1 Quant**

Find out the surface area of largest possible cube inscribed in a sphere of radius 5 cm.

A. 150 cm²B. 100 cm²C. 200 cm²D. 250 cm²**Q2 Quant**

At a uniform speed, a car covers a distance in 9 hours. Had the speed been increased by 8 km/hr, the same distance could have been covered in 7 hours 30 minutes. What is the distance covered?

A. 360 km



B. 370 km

C. 380 km

D. 390 km

Q3 Quant

Kundan starts a business with ₹40,000. After 6 months, Naresh joins Kundan as his partner. At the end of the year, the profit is divided in the ratio 5 : 7. What was Naresh's contribution to the capital?

A. ₹1,12,000



B. ₹1,14,000

C. ₹1,16,000

D. ₹1,18,000

Q4 Quant

A and B enter into a partnership. A invests ₹20,000, and B invests ₹30,000. After 6 months, A invests an additional ₹10,000. If the total profit at the end of the year is ₹44,000, what is B's share of the profit?

A. ₹24,000



B. ₹26,000

C. ₹28,000

D. ₹36,000



Q5 Quant

A motorboat travels a distance of 48 kilometres downstream in a river and returns to the starting point. The river has a current speed of 4 km/hr. The boat's speed in still water is x km/hr. Determine the average speed of the boat.

A. $\frac{x^2 + 16}{x}$ km/hr

B. $\frac{x}{x^2 - 16}$ km/hr

C. $\frac{x - 16}{x}$ km/hr

D. $\frac{x^2 - 16}{x}$ km/hr ✓

Q6 Quant

Solve the following linear equations.

$x + y + z = 24$, $2x - y - z = 18$ and $x - y - 2z = 16$

A. $x = 14$, $y = 22$, $z = -12$ ✓

B. $x = 12$, $y = 14$, $z = 22$

C. $x = -12$, $y = -14$, $z = 22$

D. $x = -14$, $y = -22$, $z = 12$

Q7 Quant

A person can mow a 126 m^2 lawn in 6 minutes. How much area (in m^2) of the lawn will he mow in 4.5 hours?

A. 5670 ✓

B. 5695

C. 5760

D. 5784

Q8 Quant

Simplify $7 - [5 - \{13 - (10 - 18 - 6)\}]$.

A. 13

B. 15

C. 17 ✓

D. 19

Q9 Quant

A desktop is marked at ₹52,500. If Anil buys it for ₹45,150, what discount percentage did the dealer offer?

A. 12 %

B. 16 %

C. 17 %

D. 14 % ✓

Q10 Quant

An electrician and a plumber can finish a repair job together in 4 days. If the electrician alone takes 6 days, how many days will the plumber alone take?

A. 12 ✓

B. 6

C. 4

D. 8

Q11 Quant

If the mean of a dataset is 10 and the median is 14.5, which of the following can be the mode of the dataset?

A. 22.5

B. 23.5 ✓

C. 24.5

D. 21.5

Q12 Quant

There are 30 boys and 70 girls in a class. If the average age of boys is 10 years and the average age of girls is 12 years, then find the average age (in years) of the whole class.

A. 10.6

B. 11.4 ✓

C. 12.6

D. 13.4

Q13 Quant

One pipe can fill a tank in 8 minutes while another pipe can empty the completely filled tank in 16 minutes. If both the pipes are opened together when the tank is empty, how many minutes will it take to fill three-fourths of the tank?

A. 12 ✓

B. 24

C. 13

D. 25



Q14 Quant

The profit made on a product is 60%. What is the loss percentage incurred on the sale if the figures of both cost price and selling price are interchanged?

- A. 37.5% ☒
- B. 39.19%
- C. 36.95%
- D. 37.12%

Q15 Quant

What will be the amount after 1 year, if ₹5,600 is invested at 20% compound interest per annum, compounded half-yearly?

- A. ₹6,776 ☒
- B. ₹5,876
- C. ₹7,459
- D. ₹6,408

Q16 Quant

A solid metallic sphere of radius 14 cm is melted to form 125 small solid spheres. What is the surface area (in sq. cm) of all the new spheres? (Use $\pi = 22/7$)

- A. 12230
- B. 14350
- C. 14530
- D. 12320 ☒

Q17 Quant

A person invested ₹50,000 in a scheme. After the first year, the value of the investment increased by 12%. In the second year, the value decreased by 8%. What is the final value of the investment after 2 years?

- A. ₹53,600
- B. ₹54,600
- C. ₹51,520 ☒
- D. ₹53,620

Q18 Quant

A person's income and expenditure are in the ratio 5 : 4. If the income increases by 20% and the expenditure increases by 10%, find the final savings as a percentage of the initial income of ₹60,000.

- A. 10%
- B. 15%
- C. 28%
- D. 32% ☒

Q19 Quant

MCQ

- A. $\frac{8}{15}$ ☒
- B. $\frac{15}{17}$
- C. $\frac{12}{19}$
- D. $\frac{3}{13}$

Q20 Quant

Let AP and BQ be two towers such that A and B are the feet of the towers, respectively. Let C be the midpoint of AB. From point C, the angle of elevation of the tops P and Q of the towers are 30° and 60° , respectively. Find the ratio of the height of the tower AP to that of tower BQ.

- A. 3 : 1
- B. 1 : 2
- C. 1 : 3 ☒
- D. 2 : 1



Q1 Quant

A man can row at 13 km/hr in still water. When the river flows at 3 km/hr, it takes him 60 minutes to row to a certain place and return. How far is the place? (Round off to two decimal places)

- A. 4.12 km
- B. 5.13 km
- C. 6.15 km ✓
- D. 7.17 km

Q2 Quant

The area of an equilateral triangle ABC is $36\sqrt{3} \text{ cm}^2$, find the length of side AC (in cm).

- A. 36
- B. 16
- C. 12 ✓
- D. 9

Q3 Quant

A and B started a business by investing ₹3,500 and ₹2,000, respectively. After 7 months, B left the business and C joined the business with a sum of ₹1,500. The profit earned at the end of year is ₹508. What is the share of C in the profit?

- A. ₹50
- B. ₹60 ✓
- C. ₹70
- D. ₹80

Q4 Quant

Arjun sells an article at a loss of 24%. If the cost price of the article is ₹3800, then what is the selling price (in ₹)?

- A. 2880
- B. 2888 ✓
- C. 2850
- D. 2808

Q5 Quant

If the price of a pen is decreased by 25%, its sale increases by 20%. Find the percentage change in its revenue.

- A. Decrease of 10% ✓
- B. Increase of 10%
- C. Decrease of 5%
- D. Increase of 5%

Q6 Quant

The HCF of two numbers is 14, and their LCM is 294. If one number is 42, what is the other number?

- A. 98 ✓
- B. 92
- C. 86
- D. 104

Q7 Quant

A boat covers 48 km downstream in 2 hours and 36 km upstream in 3 hours. How much time will it take to cover 126 km in still water?

- A. 5.5 hours
- B. 6 hours
- C. 6.5 hours
- D. 7 hours ✓

Q8 Quant

A tap can fill a tank in 8 hours. Due to a leak at the bottom, it takes 10 hours to fill the tank. Find the time the leak will take to empty the completely filled tank.

- A. 24 hours
- B. 30 hours
- C. 36 hours
- D. 40 hours ✓

Q9 Quant

The mean of a data set is '3a' and the median is '2a' ($a > 0$). Using the empirical relation, the mode of the dataset is:

- A. a
- B. 2a
- C. 0 ✓
- D. 3a

Q10 Quant

A recipe uses 4 cups of flour, 3 eggs, and 2 cups of sugar to make 48 cookies?

- A. Flour: 10 cups, Eggs: 8, Sugar: 5 cups
- B. Flour: 12 cups, Eggs: 9, Sugar: 6 cups ✓
- C. Flour: 8 cups, Eggs: 6, Sugar: 4 cups
- D. Flour: 14 cups, Eggs: 10, Sugar: 7 cups



Q11 Quant

A man loses 20% of his money. After spending 27% of the remaining amount, he has ₹511 left. What was the amount of money he originally had?

A. ₹860

B. ₹865

C. ₹870

D. ₹875

Q12 Quant

Three friends P, Q and R started a business by investing a sum of money in the ratio of 2 : 4 : 5, respectively. After 6 months Q withdraws half of his capital. If the sum invested by P is ₹43000, out of a total annual profit of ₹45000 find the share of Q in profit.

A. ₹13500

B. ₹14630

C. ₹15165

D. ₹12710

Q13 Quant

A shopkeeper fixes the marked price of an item at 55% above its cost price. What percentage of discount on the marked price should be allowed to gain 24%?

A. 20%

B. 23%

C. 18%

D. 19%

Q14 Quant

If ₹67,000 is invested at 6% per year for 2 years, what is the difference between the compound interest (compounded annually) and the simple interest?

A. ₹241.20

B. ₹237.80

C. ₹239.80

D. ₹248.20

Q15 Quant

AB is parallel to CD. A transversal PQ intersects AB and CD at E and F, respectively, and $\angle PEB = 79^\circ$. G is a point between AB and CD such that $\angle BEG = 18^\circ$ and $\angle GFE = 17^\circ$. What is the measure of $\angle EGF$?

A. 80°

B. 72°

C. 86°

D. 70°

Q16 Quant

If the heights of two cones are in the ratio 7 : 3 and their radius are in the ratio 2 : 7, what is the ratio of their volumes?

A. 4:21

B. 4:35

C. 4:11

D. 4:7

Q17 Quant

The solution of the given system of linear equations is ____.

$$x + y - z = 0$$

$$3x - y + 3z = -2$$

$$x + 2y - 3z = -1$$

A. $x = -2, y = 5, z = 3$

B. $x = 2, y = -5, z = 3$

C. $x = 2, y = 5, z = -3$

D. $x = 1, y = 5, z = -3$

Q18 Quant

In what time (in months) will ₹3,000 fetch an interest of ₹420 at 6% per year simple interest?

A. 28

B. 25

C. 26

D. 32



Q19 Quant

A, B, C alone can do a piece of work in 7 days, 5 days and 17.5 days respectively. If they all started the work together, in how many days the whole work will be completed?

A. 2.5



B. 3.5

C. 3

D. 2

Q20 Quant

Simplify: $\sqrt{553} + \sqrt{506} + \sqrt{506} + \sqrt{522} + \sqrt{49}$

A. 24



B. 22

C. 20

D. 28

Paper Set 6 · 23 May 2026 · 9:00 AM - 10:30 AM · Mathematics (English)

Quant**Q1 Quant**

The mean of the first 5 multiples of 9 is 27. If each number is increased by 2, what is the new mean?

A. 54

B. 29



C. 27

D. 58

Q2 Quant

Ravi and Varun started a business by investing ₹28,000 and ₹48,000. Find the difference between the profit share of Ravi and Varun out of the total annual profit of ₹39,558.

A. ₹10,320

B. ₹10,410



C. ₹10,540

D. ₹10,730

Q3 Quant

Ravi can do a piece of work in 5 days and Avi can do it in 8 days. How long will both take together to complete the work?

A. $2\frac{1}{12}$ days

B. $3\frac{1}{13}$ days



C. $4\frac{1}{11}$ days

D. $5\frac{1}{9}$ days

Q4 Quant

In a car race, Raman covers a distance of 2844 metres in 10 minutes in the first round. He covers the same distance in 8 minutes in the second round. Find the average speed of the car (in km/hr, rounded off to two decimal places).

A. 16.56 km/hr

B. 17.25 km/hr

C. 18.96 km/hr



D. 19.85 km/hr



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Q5 Quant

Four different mixtures of milk and water have the following ratios of milk to water:

- Mixture A - 3:2
- Mixture B - 4:3
- Mixture C - 5:4
- Mixture D - 6:5

Which mixture has the lowest concentration of milk relative to water?

A. Mixture A

B. Mixture B

C. Mixture C

D. Mixture D

Q6 Quant

In a 200 m race, Ashwani defeats Ambrish by 7 seconds. If Ashwani's speed is 9 km/hr, what is Ambrish's speed (rounded off to two decimal places)?

A. 8.07 km/hr

B. 8.28 km/hr

C. 9.12 km/hr

D. 9.35 km/hr

Q7 Quant

Simplify the following expression into a single fraction:

$$0.6 + \frac{2}{5} - 0.15$$

A. $\frac{12}{25}$

B. $\frac{12}{60}$

C. $\frac{17}{20}$

D. $\frac{21}{50}$

Q8 Quant

A bag contains coins of different denominations. The ratio of the number of ₹1 coins to that of ₹2 coins is 5 : 7, and the ratio of the number of ₹2 coins to that of ₹5 coins is 7 : 6. If the total value of the ₹1 coins is ₹15, find the total value of the ₹2 coins.

A. ₹42

B. ₹56

C. ₹48

D. ₹36

Q9 Quant

The sum of two numbers is 121. Seven times of

A. 72

B. 74

C. 76

D. 77

Q10 Quant

A wholesaler marks the price of a pen as ₹50. He offers a trade discount of 20% to retailers. Under a scheme, he gives 2 pens free in addition to the 8 pens purchased. If a retailer buys 8 pens, what is the effective price per pen?

A. ₹32

B. ₹40

C. ₹36

D. ₹30

Q11 Quant

The number 80,000 is increased by 15%, 10%, and 5% in turns. Determine the percentage increase overall.

A. $32\frac{31}{40}\%$

B. $33\frac{32}{40}\%$

C. $32\frac{33}{40}\%$

D. $33\frac{33}{40}\%$



Q12 Quant

One pipe can fill a tank in 3 minutes while another pipe can empty the completely filled tank in 6 minutes. If both the pipes are opened together when the tank is empty, how many minutes will it take to fill one-third of the tank?

A. 2



B. 4

C. 6

D. 8

Q13 Quant

Given that $39^{0.66} = x$, $39^{0.23} = y$ and $x^z = y^2$, then the value of z is close to:

A. 0.7



B. 0.12

C. 1.62

D. 0.69

Q14 Quant

The profit made on a product is 27%. What is the loss percentage (correct to two decimal places) incurred on the sale if the figures of both cost price and selling price are interchanged?

A. 21.26%



B. 22.84%

C. 18.31%

D. 22.42%

Q15 Quant

AB is parallel to CD. A transversal PQ intersects AB and CD at E and F, respectively, and $\angle PEB = 48^\circ$. G is a point between AB and CD such that $\angle BEG = 33^\circ$ and $\angle GFE = 17^\circ$. What is the measure of $\angle EGF$?

A. 64° B. 65° C. 56° D. 58° **Q16 Quant**

IJ and KL are two parallel straight lines. MN is a transversal. If $\angle MOI = 130^\circ$, $\angle MOJ = \alpha$, and $\angle LPN = 50^\circ$, then the value of α is:

A. 50° B. 40° C. 30° D. 20° **Q17 Quant**

If $\sin A - \cos A = \sqrt{2} \cos A$, then find the value of $\sin A$.

A. 1

B. $\sqrt{2} \sin A$ C. $\sqrt{2} \tan A$ D. $\sqrt{2}$ **Q18 Quant**

In what time (in months) will ₹3000 fetch an interest of ₹360 at 9% per year simple interest?

A. 16



B. 13

C. 14

D. 20

Q19 Quant

By how much is 65% of 50 greater than $\frac{4}{5}$ of 25?

A. 12.5



B. 9.5

C. 6.5

D. 10.5

Q20 Quant

What is the compound interest (rounded to the nearest rupee) on ₹12,500 in 2 years at 7.6% per annum, the interest is being compounded annually?

A. ₹1856

B. ₹1972



C. ₹2010

D. ₹2095



Quant

Q1 Quant

The quadratic equation $(k - 1)x^2 + 2x + 1 = 0$ is in a standard form. What is the condition on k for this equation to be a valid quadratic equation?

- A. $k = 1$
- B. $k \neq 1$ ✓
- C. $k \neq 2$
- D. $k \neq 0$

Q2 Quant

The area of triangle OXY, the co-ordinates of whose vertices are X(6, 0), Y(0, -5) and O origin, is:

- A. 11 sq. units
- B. 30 sq. units
- C. 15 sq. units ✓
- D. 22 sq. units

Q3 Quant

Find the fourth proportional to $(a^2 - b^2)$, $(a^2 - ab)$ and $(a^3 + b^3)$.

- A. $a(a^2 - ab + b^2)$ ✓
- B. $a(a^2 + ab + b^2)$
- C. $a^2(a - ab + b^2)$
- D. $a^2(a - ab + b)$

Q4 Quant

The average age of 30 players in a sports academy is 20 years. When the coach's age is included, the average increases to 21 years. Find the age of the coach.

- A. 45 years
- B. 48 years
- C. 51 years ✓
- D. 53 years

Q5 Quant

A car travels at 120 km at a speed of 30 km/hr, then 180 km at a speed of 45 km/hr, and finally 300 km at a speed of 60 km/hr. The average speed of the car for the entire journey is:

- A. 46.75 km/hr
- B. 46.15 km/hr ✓
- C. 46.50 km/hr
- D. 46.95 km/hr

Q6 Quant

Two trains of lengths 200 m and 300 m are moving in the same direction at speeds of 90 km/hr and 54 km/hr. Find the time taken by the faster train to completely cross the slower one.

- A. 50 seconds ✓
- B. 40 seconds
- C. 42 seconds
- D. 45 seconds

Q7 Quant

P, Q and R can complete a work in 80, 96 and 1

- A. 30 days
- B. 32 days ✓
- C. 34 days
- D. 36 days

Q8 Quant

Find the value of $2\frac{1}{5} + 3\frac{2}{5} - 4\frac{1}{2} - 3\frac{1}{5} + 4.2 -$

- A. 0.5 ✓
- B. 1
- C. 1.8
- D. 2



Q9 Quant

The median of a dataset consisting of 6 observations is 18.5. If only the largest observation is increased by x (where $x > 0$), how does the median of the dataset change?

- A. Increases by $2x$
- B. Increases by x
- C. Decreases by $2x$
- D. Remains unchanged ✓

Q10 Quant

The scale of a map is 1:50000. If the distance between two towns on the map is 8 cm, find the actual distance between the towns (in kilometre).

- A. 1 km
- B. 2 km
- C. 4 km ✓
- D. 8 km

Q11 Quant

By how much is 40% of 50 greater than 30% of 60?

- A. 2 ✓
- B. 1
- C. 3
- D. 4

Q12 Quant

A and B working together can do a piece of work in 6 days. B alone can do the same work in 12 days. How long (in days) will A alone take to do thrice the work?

- A. 36 ✓
- B. 72
- C. 108
- D. 144

Q13 Quant

Three numbers are in the ratio 3 : 13 : 2, and their LCM is 3354. Their HCF is:

- A. 43 ✓
- B. 44
- C. 33
- D. 40

Q14 Quant

₹9,733 is divided among X, Y, and Z such that if ₹29, ₹31, and ₹48 are deducted from their respective shares, the remaining amounts are in the ratio 3:20:12. Find X's share after the deduction.

- A. ₹825 ✓
- B. ₹725
- C. ₹875
- D. ₹975

Q15 Quant

A shopkeeper fixes the marked price of an item at 48% above its cost price. What percentage of discount on the marked price should be allowed to gain 11%?

- A. 25% ✓
- B. 28%
- C. 26%
- D. 22%

Q16 Quant

What will be the amount after 1 year, if ₹7,900 is invested at 20% compound interest per annum, compounded half-yearly?

- A. ₹9,559 ✓
- B. ₹9,285
- C. ₹9,967
- D. ₹10,082

Q17 Quant

A convex regular polygon has 65 diagonals. The

- A. 1800°
- B. 1980° ✓
- C. 2160°
- D. 1620°

Q18 Quant

The volume and height of a cylinder are 9900 cm^3 and 3.5 cm, respectively. Find the diameter (in cm) of the cylinder. (Use $\pi = \frac{22}{7}$)

- A. 60 ✓
- B. 58
- C. 68
- D. 61



Q19 Quant

A bookseller purchases 250 books at ₹35 each. He marks each book at ₹50 and offers a 10% discount on the marked price. Find his profit or loss percentage, rounded off to two decimal places.

A. 28.17%

B. 28.37%

C. 28.57% ✓

D. 28.67%

Q20 Quant

Rajan's monthly income is ₹50,000. He has to pay 6% tax on his annual income. How much will he pay (in ₹) as taxes annually?

A. 36,000 ✓

B. 40,000

C. 42,000

D. 48,000

Paper Set 8 · 24 May 2026 · 4:00 PM - 5:30 PM · Mathematics (English)**Quant****Q1 Quant**

A shopkeeper bought a bag for ₹1,200 and sold it for ₹1,380. Find his profit percentage.

A. 10%

B. 12%

C. 15% ✓

D. 18%

Q2 Quant

The speed of an electric train is 25% more than that of a steam engine train. The steam engine train takes 6 hours 40 minutes to cover a certain distance. Find the time (in hours) taken by the electric train to cover the same distance.

A. $4\frac{2}{3}$

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

C. $5\frac{1}{3}$ ✓

D. $5\frac{2}{3}$

Q3 Quant

The length and breadth of a school ground is 140 meters and 60 meters, respectively. Whereas the length and breadth of a mela ground is 280 meters and b meters. If they are in proportion, what is the value of b?

A. 120 ✓

B. 121

C. 122

D. 118

Q4 Quant

The number 88,56,740 is divisible by:

A. 2 and 3

B. 3 and 4

C. 4 and 5 ✓

D. 5 and 6



Q5 Quant

If $A:B = 3:4$, $B:C = 5:6$, $C:D = 7:8$ and $D:E = 3:4$, then find the value of $A:C:E$.

A. 105:168:256



B. 256:168:105

C. 165:88:246

D. 25:41:64

Q6 Quant

A boat travels 24 km downstream in 3 hours and the same distance upstream in 6 hours. What is the speed of the stream?

A. 2 km/hr



B. 3 km/hr

C. 4 km/hr

D. 5 km/hr

Q7 Quant

A solid cuboid of dimensions $36\text{ cm} \times 24\text{ cm} \times 18\text{ cm}$ is melted and recast into solid cubes, each having an edge length of 6 cm. During the melting and recasting process, 10% of the material is wasted. Determine the total number of complete cubes that can be formed from the remaining material.

A. 65

B. 64



C. 66

D. 63

Q8 Quant

Aman can complete a project in 7.5 days, and Ravi can complete the same project in 15 days. How many days will it take to finish the task if they work together?

A. 5



B. 7

C. 10

D. 20

Q9 Quant

The mean of 5 numbers is $2x$ ($x > 0$). If one number is removed, the mean becomes $1.5x$. The removed number, is:

A. x

B. $2x$

C. $4x$



D. $3x$

Q10 Quant

A, B and C started a business investing amounts of ₹710, ₹930, and ₹1,640, respectively. If B's share in the profit earned by them is ₹1,006, what is the difference in the profit (in ₹) earned by A and C?

A. ₹1,006



B. ₹1,009

C. ₹1,004

D. ₹1,003

Q11 Quant

One pipe can fill a tank in 9 minutes while another pipe can empty the completely filled tank in 12 minutes. If both the pipes are opened together when the tank is empty, how many minutes will it take to fill three-fourths of the tank?

A. 27



B. 54

C. 28

D. 55

Q12 Quant

The profit made on a product is 63%. What is the loss percentage (correct to two decimal place) incurred on the sale if the figures of both cost price and selling price are interchanged?

A. 38.65%



B. 37.08%

C. 41.04%

D. 35.80%

Q13 Quant

The difference between the compound interest (compounded annually) and the simple interest if ₹47500 is deposited at 5% rate of interest per annum for 2 years is:

A. ₹118.75



B. ₹120.50

C. ₹111.50

D. ₹109.75

Q14 Quant

Two circles of radii 25 cm and 24 cm have the same centre. A chord of the larger circle is a tangent of the smaller one. The length of the chord is:

A. 7 cm

B. 14 cm



C. 48 cm

D. 50 cm



Q15 Quant

The volume of a sphere is $\frac{8\sqrt{2}}{3}\pi$ cu. cm. Its surface area (in sq. cm) is.

A. 4π

B. 8π ✓

C. $\frac{4\pi}{3}$

D. $\frac{8\pi}{3}$

Q16 Quant

In what time (in months) will ₹3000 fetch an interest of ₹400 at 10% per year simple interest?

A. 16 ✓

B. 13

C. 14

D. 20

Q17 Quant

Which option gives the maximum value?

A. $16 \div 4 + 18 \times 5 - 3 + 2$ ✓

B. $18 + 12 \div 4 + 2 \times (9 \div 3 - 2)$

C. $18 + 4 - 3 \times \{3 + 2 \times (8 \div 4 - 1)\}$

D. $16 + 2 \times [3 + 2 \times \{3 - 4 + 2 \times (27 \div 3 - 6)\}]$

Q18 Quant

The product of two consecutive positive integers is 812. If the smaller of these two integers is represented by x, which of the options below will correspond to the equation for finding out the value of x?

A. $x^2 + x - 812 = 0$ ✓

B. $x^2 + x + 812 = 0$

C. $x^2 - x - 812 = 0$

D. $x^2 - x + 812 = 0$

Q19 Quant

The ratio of income and expenditure of a person is 7 : 6. If he saves ₹25,000 per month, find his monthly income.

A. ₹75,000

B. ₹1,00,000

C. ₹1,75,000 ✓

D. ₹1,50,000

Q20 Quant

A value M is first increased by 25% and then is decreased by 20% and became ₹5,000. The value of M is:

A. ₹5,000 ✓

B. ₹6,250

C. ₹6,000

D. ₹5,825



Q1 Quant

Aditya and Jitya each invested ₹40,000 in a company. After 3 months, Aditya invested an additional ₹20,000 while Jitya withdrew ₹10,000. If the total profit after 12 months is ₹36,000, what is Jitya's share of the profit (profit is same for each month)?

- A. ₹11,500
- B. ₹13,371.43
- C. ₹12,500
- D. ₹10,567.67

Q2 Quant

Which of the following ratios is the greatest among them?

13:20, 7:10, 19:30, 11:15

- A. 7:10
- B. 11:15
- C. 19:30
- D. 13:20

Q3 Quant

A motor cyclist rides for 2 hours at 30 km/h and then for 2 hours at 50 km/h. What is his average speed for the entire trip?

- A. 40 km/h
- B. 45 km/h
- C. 48 km/h
- D. 35 km/h

Q4 Quant

What is the solution of the following system of equations?

$$\begin{aligned} x + y + z &= 6, \\ 2x - y + 3z &= 9, \\ x + 2y - z &= 2. \end{aligned}$$

- A. $x = -1, y = 2, z = -3$
- B. $x = 1, y = -2, z = 3$
- C. $x = -1, y = -2, z = -3$
- D. $x = 1, y = 2, z = 3$

Q5 Quant

The average of 6 numbers is 45. If five of them are 40, 48, 42, 50, and 47, find the sixth number.

- A. 40
- B. 43
- C. 45
- D. 48

Q6 Quant

Two cyclists start from the same point and travel in the same direction. Cyclist A rides at 20 km/hr, while cyclist B rides at 30 km/hr. After 2 hours, cyclist B realises he forgot his water bottle and immediately turns back to the starting point at 40 km/hr. Upon reaching the start, he picks up the bottle and then starts chasing cyclist A at 50 km/hr. Now, find the total time taken for cyclist B to catch up with cyclist A after picking up the bottle.

- A. 2 hours, 20 minutes
- B. 2 hours, 40 minutes
- C. 2 hours, 30 minutes
- D. 2 hours, 45 minutes

Q7 Quant

A shopkeeper sells an article at a loss of 15% on its cost price of ₹2,000. He then uses the selling price of this article as the cost price of another article and sells it at a profit of 20%. What is the selling price of the second article?

- A. ₹2,040
- B. ₹2,050
- C. ₹2,100
- D. ₹2,150

Q8 Quant

When a number is divided by 36, the remainder

- A. 3
- B. 4
- C. 5
- D. 6



Q9 Quant

A water tank is filled by three pipes in 2, 3, and 6 hours, respectively. Determine the total time required to fill the tank if all three pipes are opened simultaneously.

A. 0.5 hours

B. 1 hour

C. 2 hours

D. 3 hours

Q10 Quant

The median of a dataset is x and the mode is $2x$ (where $x > 0$). If the mean of the dataset is 5, then the value of x is:

A. 5

B. 7

C. 2

D. 10

Q11 Quant

One pipe can fill a tank in 8 minutes while another pipe can empty the completely filled tank in 11 minutes. If both the pipes are opened together when the tank is empty, how many minutes will it take to fill three-fourths of the tank?

A. 22

B. 44

C. 23

D. 45

Q12 Quant

₹2017 is divided among Mansi, Suresh, and Jay such that, if ₹12, ₹40, and ₹41 are deducted from their respective shares, the remaining amounts are in the ratio 4 : 19 : 14. Find Jay's original share.

A. ₹769

B. ₹878

C. ₹828

D. ₹778

Q13 Quant

The diagonals PR and QS of the rectangle PQRS intersect at O. If $OQ = 4x + 5$ and $OR = 2x + 11$, then what is the value of the product of PR and QS?

A. 1156

B. 289

C. 484

D. 1024

Q14 Quant

A tangent is drawn to a circle of diameter 14 cm from a point at a distance of 25 cm from the centre of the circle. The length of the tangent is:

A. 24 cm

B. 20 cm

C. 23 cm

D. 22 cm

Q15 Quant

Three solid cubes of sides 3 cm, 6 cm and 9 cm are melted to form a new solid cube. Find the total surface area of the cube so formed. (Rounded off to the nearest integer)

A. 439 cm²

B. 589 cm²

C. 659 cm²

D. 489 cm²

Q16 Quant

A scored 25% more marks than B, while C scored 20% more marks than B. If C scored 72 marks out of 100, find the marks obtained by A.

A. 50

B. 60

C. 75

D. 48

Q17 Quant

By how much is 65% of 60 greater than $\frac{3}{5}$ of 2.

A. 24

B. 21

C. 18

D. 22



Q18 Quant

Ram invested ₹10,000 at compound interest, compounded annually, with the following interest rates: 6% for the first year, 9% for the second year, and 12% for the third year. How much more or less did he earn compared to if he had invested the same sum at 8% compound compounded annually for 3 years?

A. ₹343.36 more ☒

B. ₹343.36 less

C. ₹353.36 more

D. ₹353.36 less

Q19 Quant

A television set has a marked price of ₹99,100. A retailer purchases it after receiving two successive discounts of 30% and 20%. The retailer then fixes his own marked price for the television. He allows a discount of 44% on this marked price to the customer and still wants to earn a profit of 50% on his cost price. At what price (in ₹) should the retailer mark the television set?

A. ₹1,48,650 ☒

B. ₹1,48,689

C. ₹1,48,576

D. ₹1,48,542

Q20 Quant

Simplify the expression: $\frac{2}{3} \times \frac{3}{4} + \frac{1}{2} \div \frac{3}{4} - \frac{1}{6}$.

A. 1 ☒B. $\frac{13}{12}$ C. $\frac{17}{12}$ D. $\frac{19}{12}$

Paper Set 10 · 25 May 2026 · 12:30 PM - 2:00 PM · Mathematics (English)

Quant**Q1 Quant**

Find the surface area of a sphere (in cm^2) whose diameter is 29.4 cm. (Use $\pi = \frac{22}{7}$)

A. C. 1,987.28

B. A. 2,704.81

C. D. 1,896.56

D. B. 2,716.56 ☒**Q2 Quant**

If the ratio of $A : B = 4 : 5$ and $B : C = 5 : 6$, find $A : C$.

A. B. 4:5

B. D. 2:3 ☒

C. A. 4:7

D. C. 1:2

Q3 Quant

Which ratio is the smallest among 4:5, 7:8, 9:11 and 11:14?

A. C. 4:5

B. D. 7:8

C. A. 9:11

D. B. 11:14 ☒**Q4 Quant**

A car manufacturer sold 15 cars of the same type in a month to a car dealer and gained a profit of ₹9,00,000. If the car dealer sold each car for ₹5,00,000 with a total profit of ₹6,00,000 for all cars sold, then what was the cost price (in ₹) of each car for the car manufacturer?

A. D. 4,50,000

B. A. 5,00,000

C. B. 4,00,000 ☒

D. C. 5,20,000



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Q5 Quant

A car covers half of the journey at a speed of 55 km/hr and the remaining half at a speed of 45 km/hr. Find the average speed (in km/hr) of the car during the journey.

A. D. 49

B. C. 49.5 ☒

C. B. 50

D. A. 50.5

Q6 Quant

The price of a washing machine is ₹19800. It increases by 7% in the 1st year and decreases by 5% in the 2nd year. What is the price of the washing machine at the end of 2 years?

A. D. ₹20126.70 ☒

B. A. ₹20216.70

C. B. ₹20436.50

D. C. ₹20346.60

Q7 Quant

Which of the following will completely divide $5^{81} + 5^{82} + 5^{83}$?

A. C. 150

B. D. 155 ☒

C. A. 158

D. B. 165

Q8 Quant

A pipe fills a tank in 24 hours. After 9 hours, it is closed. What fraction of the tank is still empty?

A. $\frac{3}{4}$ B. $\frac{4}{5}$ C. $\frac{5}{8}$ ☒D. $\frac{6}{7}$ **Q9 Quant**

The median of 8 numbers is 12.5. If all these numbers are decreased by 3, the value of the new median is:

A. C. 12.5

B. B. 15.5

C. A. 9.5 ☒

D. D. 4.5

Q10 Quant

By how much is 30% of 65 greater than 20% of 30?

A. B. 13.5 ☒

B. D. 8.5

C. C. 10.5

D. A. 15.5

Q11 Quant

One pipe can fill a tank in 7 minutes while another pipe can empty the completely filled tank in 28 minutes. If both the pipes are opened together when the tank is empty, how many minutes will it take to fill three-fourths of the tank?

A. B. 7 ☒

B. A. 14

C. D. 8

D. C. 15

Q12 Quant

₹1,929 is divided among Arjun, Nisha, and Gaurav such that if ₹9, ₹27, and ₹23 are deducted from their respective shares, the remaining amounts are in the ratio 11:4:7. Find Gaurav's share after deduction.

A. A. ₹595 ☒

B. C. ₹545

C. B. ₹495

D. D. ₹645

Q13 Quant

If ₹51,800 is invested at 3% per year for 2 years, what is the difference between the compound interest (compounded annually) and the simple interest?

A. D. ₹46.62 ☒

B. A. ₹48.22

C. C. ₹47.72

D. B. ₹37.62



Q14 Quant

In $\triangle ABC$, $\angle A = 70^\circ$, CB is extended to BD and $\angle ABD = 1850^\circ$. Find $\angle C$.

A. A. 70°

B. B. 80° ✓

C. D. 75°

D. C. 85°

Q15 Quant

What is the volume of a cylinder with height 35 cm and radius 13 cm? (Use $\pi = 22/7$)

A. 18590 cm³ ✓

B. 18492 cm³

C. 18642 cm³

D. 18517 cm³

Q16 Quant

In what time (in months) will ₹3,000 fetch an interest of ₹420 at 8% per year simple interest?

A. D. 21 ✓

B. C. 18

C. B. 19

D. A. 25

Q17 Quant

A manufacturer sells a product to a wholesaler at a profit of 20%. The wholesaler, in turn, sells it to a retailer at a profit of 25%, and the retailer sells it to a customer at a profit of 20%. If the customer pays ₹765, what is the cost price (in ₹) of the product for the manufacturer?

A. B. 425 ✓

B. A. 422

C. D. 427

D. C. 426

Q18 Quant

Simplify: $\left(\frac{27}{18}\right) \div \left(\frac{5}{9} \times \frac{18}{15} + \frac{3}{9}\right) + \frac{3}{9} \div \frac{27}{11}$ of

A. $\frac{2}{9}$ ✓

B. $\frac{4}{19}$

C. $\frac{8}{11}$

D. $\frac{1}{17}$

Q19 Quant

The product of $(x - 11)$ and $(x + 5)$ is:

A. B. $x^2 - 6x - 55$ ✓

B. D. $x^2 + 7x - 55$

C. C. $x^2 - 5x + 55$

D. A. $x^2 + 6x + 55$

Q20 Quant

From a taxi stand, two cabs start at an interval of 43 minutes, both travelling in the same direction at a speed of 45 km/hr. A biker, coming from the opposite direction toward the taxi stand, meets the two cabs at a time interval of 25 minutes. Find the speed (in km/hr) of the biker.

A. A. 32.4 ✓

B. B. 43.5

C. D. 41.9

D. C. 39.4



Q1 Quant

Three friends, X, Y, and Z, contribute ₹60,000, ₹90,000, and ₹1,50,000, respectively, to start a café. After one year, the business earns a total profit of ₹1,20,000. How much more profit does Z receive than that received by Y?

A. ₹24,000



B. ₹36,000

C. ₹38,000

D. ₹40,000

Q2 Quant

If $x:y = 4:5$, find the value of $(5x + 4y):(5x + 6y)$.

A. 2 : 3

B. 3 : 4

C. 4 : 5



D. 5 : 6

Q3 Quant

What is the value of x that satisfies the system of following linear equations?

$$2x - y + 3z = 8$$

$$x + y + 2z = 10$$

$$x + y + z = 6$$

A. $-\frac{2}{3}$ B. $-\frac{4}{5}$ C. $\frac{1}{2}$ D. $\frac{3}{5}$

Q4 Quant

A shopkeeper offers 200 grams of sugar free with the purchase of 1,000 grams of sugar. Find the discount per cent offered by him.

A. 12.5%

B. 15%

C. $16\frac{2}{3}\%$ 

D. 20%

Q5 Quant

Rahul takes 20 min longer to travel 120 km when he drives 5 km/hr slower than his usual speed. Determine the time he will need to cover 80 km if he reduces his speed by 10 km/hr from his usual speed (rounded off to two decimal places).

A. 1.21 hr

B. 1.99 hr

C. 2.29 hr



D. 3.45 hr

Q6 Quant

Two trains of lengths 120 m and 180 m are moving in opposite directions at speeds of 72 km/hr and 108 km/hr. Find the time taken to cross each other.

A. 6 seconds



B. 5 seconds

C. 4 seconds

D. 3 seconds

Q7 Quant

Simplify: $\left(\frac{3}{4} + 1.25\right) \div 0.5$

A. 2

B. 1

C. 4



D. 8

Q8 Quant

A wall is to be constructed with dimensions 20 m long, 8 m high, and 30 cm thick. Bricks measuring 15 cm $\times$ 12 cm $\times$ 5 cm are to be used, and 10% of the wall volume is filled with mortar. Calculate the number of bricks required to construct the wall.

A. 48,000



B. 48,200

C. 48,400

D. 48,600



Q9 Quant

A water pump can fill a tank completely in 7 hours. Due to a leak, the water pump takes 8 hours 45 minutes to fill the same tank completely. In how much time can the leak empty a completely filled tank?

- A. 28 hours
- B. 28 hours 15 minutes
- C. 35 hours
- D. 35 hours 20 minutes

Q10 Quant

If the median of the dataset 2, 3, 6, $2x$, 10, 12, 16 is 6 (data already arranged in ascending order), then the value of $4x + 3$ is:

- A. 9
- B. 19
- C. 15
- D. 12

Q11 Quant

By how much is 30% of 65 greater than 20% of 45?

- A. 10.5
- B. 5.5
- C. 7.5
- D. 12.5

Q12 Quant

One pipe can fill a tank in 6 minutes while another pipe can empty the completely filled tank in 24 minutes. If both the pipes are opened together when the tank is empty, how many minutes will it take to fill three-fourths of the tank?

- A. 6
- B. 12
- C. 7
- D. 13

Q13 Quant

Three numbers are in the ratio 6 : 19 : 13, and their LCM is 5928. Their HCF is:

- A. 4
- B. 26
- C. 5
- D. 2

Q14 Quant

₹8,216 is divided among X, Y, and Z such that if ₹70, ₹58, and ₹28 are deducted from their respective shares, the remaining amounts are in the ratio 7:15:9. Find X's share after the deduction.

- A. ₹1,820
- B. ₹1,870
- C. ₹1,970
- D. ₹1,720

Q15 Quant

What will be the amount after 1 year, if ₹6,200 is invested at 20% compound interest per annum, compounded half-yearly?

- A. ₹7,502
- B. ₹7,484
- C. ₹7,680
- D. ₹7,016

Q16 Quant

An equilateral triangle has an inradius of 7 cm. Find the length (in cm) of each median of the triangle.

- A. 18
- B. 21
- C. 24
- D. 27



Q17 Quant

Two solid right circular cones, each having a base radius of 7 cm, are joined together at their bases as shown in the figure.



The cone with vertex C has a slant height of 25 cm, and the cone with vertex B has a height of 12 cm. Find the total volume (in cm^3) of the composite solid. (Use $\pi = 22/7$)

A. 1848



B. 1844

C. 4818

D. 4188

Q18 Quant

In what time (in months) will ₹3,000 fetch an interest of ₹480 at 6% per year simple interest?

A. 32



B. 29

C. 30

D. 36

Q19 Quant

By how much is 65% of 60 greater than $\frac{4}{5}$ of 2?

A. 19



B. 16

C. 13

D. 17

Q20 Quant

A manufacturer sells a product to a wholesaler at a profit of 44%. The wholesaler, in turn, sells it to a retailer at a profit of 35%, and the retailer sells it to a customer at a profit of 25%. If the customer pays ₹729, what is the cost price (in ₹) of the product for the manufacturer?

A. 300



B. 301

C. 295

D. 297



Q1 Quant

A rectangular cuboid has dimensions $18\text{ cm} \times 5\text{ cm} \times 30\text{ cm}$. What is the total surface area (in cm^2) of the cuboid?

- A. C. 780
- B. D. 1250
- C. B. 1480
- D. A. 1560



Q2 Quant

Three persons, A, B and C, started a business. A invested $\frac{2}{3}$ part, B invested $\frac{1}{3}$ part, and the rest. At the end of the year, they earned a profit of ₹72,000. Find A's share.

- A. B. ₹36,000
- B. A. ₹24,000
- C. C. ₹12,000
- D. D. ₹18,000



Q3 Quant

A, B and C start a business. A invests ₹12,000 for 6 months, B invests ₹18,000 for 3 months, and C invests ₹9,000 for 12 months. If total profit is ₹13,000, then C's share is:

- A. C. ₹4,000
- B. B. ₹5,000
- C. D. ₹6,000
- D. A. ₹6,500



Q4 Quant

The HCF of two numbers is 12, and their LCM is 360. If one of the numbers is 60, find the other number.

- A. D. 48
- B. A. 72
- C. C. 84
- D. B. 96



Q5 Quant

Raju can complete a task in 6 days and Mohan can complete the same task in 9 days. If both work together, how long will it take them to finish the task?

- A. 2.5 days
- B. $\frac{16}{7}$ days
- C. $\frac{18}{5}$ days
- D. 4.5 days



Q6 Quant

A train runs at 90 km/h. How much time will it take to cover 270 km?

- A. 2 hours
- B. 3 hours
- C. 4 hours
- D. 5 hours



Q7 Quant

A truck travels from City A to City D, a total distance of 360 km, in three stages. From A to B, it travels 120 km at 40 km/hr. From B to C, it covers the next 120 km at 60 km/hr. From C to D, it covers the remaining 120 km at 90 km/hr. However, due to road repairs, the truck waits for 30 minutes at City B and 15 minutes at City C. Find the average speed of the truck for the entire journey, including stoppages.

- A. $50 \frac{14}{17}$ km/hr
- B. $49 \frac{8}{11}$ km/hr
- C. $52 \frac{2}{9}$ km/hr
- D. $48 \frac{5}{6}$ km/hr



Q8 Quant

A car consumes fuel that varies inversely with the square of its speed. At 40 km/h, it uses 4 litres of fuel to travel 100 km. How many litres of fuel will the car consume to travel 150 km at 80 km/h?

- A. C. 2 litres
- B. D. 2.5 litres
- C. B. 1.5 litres
- D. A. 3 litres



Q9 Quant

A trader marks his goods 30% above the cost price and allows a discount of 15%. If the cost price is ₹1,200, find the selling price.

- A. ₹1,326 ✓
- B. ₹1,350
- C. ₹1,380
- D. ₹1,400

Q10 Quant

The double of a number added to thrice of another number is 47. The sum of the first and the second number is 29. Find the first number.

- A. A. 40 ✓
- B. C. 41
- C. B. 42
- D. D. 43

Q11 Quant

In a dataset arranged in ascending or descending order, the median is most affected by changes in which of the following?

- A. B. Frequency only
- B. C. Last or end observation
- C. A. First observation
- D. D. Middle observation/s ✓

Q12 Quant

By how much is 30% of 60 greater than 40% of 45?

- A. A. 0 ✓
- B. D. 1
- C. B. 0.5
- D. C. 2

Q13 Quant

What smallest natural number should be added to 77677 so that the sum is completely divisible by 71?

- A. B. 68 ✓
- B. A. 72
- C. D. 66
- D. C. 73

Q14 Quant

If the compound interest on a sum of ₹y at 4% per year for 2 years, compounded annually, is ₹816, what will be the amount after 2 years?

- A. B. ₹10,816 ✓
- B. C. ₹10,887
- C. D. ₹10,353
- D. A. ₹10,458

Q15 Quant

What is the volume of a cylinder with height 21 cm and radius 10 cm? (Use $\pi = 22/7$)

- A. D. 6600 cm³ ✓
- B. B. 6582 cm³
- C. A. 6628 cm³
- D. C. 6521 cm³

Q16 Quant

In what time (in months) will ₹3,000 fetch an interest of ₹440 at 8% per year simple interest?

- A. A. 22 ✓
- B. C. 19
- C. D. 20
- D. B. 26

Q17 Quant

By how much is 65% of 60 greater than $\frac{3}{5}$ of 4.

- A. D. 12 ✓
- B. B. 9
- C. C. 6
- D. A. 10

Q18 Quant

A and B can complete a piece of work in 12 days and 6 days respectively. They both work for 2 days, after which A leaves. How long (in days) will B take to complete the remaining work?

- A. B. 3 ✓
- B. C. 4
- C. D. 2
- D. A. 5



Q19 Quant

A home theatre has a list price of ₹15,900. A retailer purchases it after receiving two successive discounts of 20% and 15%. The retailer then fixes his own list price for the home theatre. He allows a discount of 28% on this list price to the customer and still wants to earn a profit of 50% on his cost price. At what price (in ₹) should the retailer list the home theatre?

A. D. ₹22,525



B. C. ₹22,456

C. A. ₹22,605

D. B. ₹22,348

Q20 Quant

Points A, B, C, D and E lie on the circumference of a circle in the given order, with AC as the diameter of the circle. If AB is equal to AD and $\angle AED = 130^\circ$, what is the measure of $\angle BAD$?

A. 50°

B. 70°

C. 80°



D. 60°

Paper Set 13 · 26 May 2026 · 12:30 PM - 2:00 PM · Mathematics (English)**Quant****Q1 Quant**

Ravi covered a distance of 28 km with an average speed of 4.8 km/hr and another 28 km with an average speed of 5.2 km/hr. Find the average speed (approx.) of Ravi for the whole journey.

A. D. 4.8 km/hr

B. B. 4.6 km/hr

C. C. 5.0 km/hr



D. A. 5.8 km/hr

Q3 Quant

A and B can do a piece of work in 12 days and B and C can do the same work in 15 days. If A is twice as good a worker as C, find the time that C alone will take to do the work.

A. B. 27 days

B. D. 33 days

C. A. 45 days

D. C. 60 days

**Q2 Quant**

A and B invest ₹40,000 and ₹60,000, respectively, in a business. At the end of the year, the total profit is ₹1,00,000. The share of A in the profit is:

A. A. ₹40,000



B. D. ₹50,000

C. B. ₹60,000

D. C. ₹70,000

Q4 Quant

The sum of the ages of three friends, Amit, Sumit, and Rani, is 48 years. Amit is twice as old as Sumit. Rani is 4 years older than Sumit. Find their ages.

A. D. Amit = 22 years, Sumit = 11 years, and Rani = 15 years



B. A. Amit = 20 years, Sumit = 10 years, and Rani = 15 years

C. B. Amit = 30 years, Sumit = 15 years, and Rani = 19 years

D. C. Amit = 40 years, Sumit = 20 years, and Rani = 24 years



Q5 Quant

The average age of 10 students in a class is 11.5 years. A new student joins the class, and the average age becomes 12 years. What is the age of the new student in years?

A. D. 19

B. C. 17

C. B. 15

D. A. 13

Q6 Quant

A and B invest in a business in the ratio 3 : 5. After 6 months, A withdraws his capital, but B continues for 12 months. If the total profit at the end of the year is ₹3,900, find A's share of the profit.

A. B. ₹900

B. A. ₹1,000

C. C. ₹2,200

D. D. ₹3,000

Q7 Quant

A tech company lists a smartwatch at ₹4,000 and offers a 25% discount during a festive sale. What is the selling price of the watch?

A. A. ₹2,500

B. D. ₹2,800

C. B. ₹3,000

D. C. ₹3,200

Q8 Quant

Find the smallest whole number by which 252 must be multiplied in order to obtain a perfect square.

A. A. 2

B. D. 3

C. C. 4

D. B. 7

Q9 Quant

The dataset consists of the values 2, 3, 3, 5, 6, 7, x, 2x, and 5, where $x < 0$. Find the mode(s) of the dataset.

A. A. 3

B. D. 5

C. C. 3 and 5

D. B. 2x

Q10 Quant

If the volume of a cube is 117649 m^3 , then find the lateral surface area (in m^2) of the cube.

A. B. 9604

B. D. 9595

C. C. 9611

D. A. 14406

Q11 Quant

By how much is 30% of 65 greater than 20% of 40?

A. D. 11.5

B. B. 6.5

C. C. 8.5

D. A. 13.5

Q12 Quant

A and B working together can do a piece of work in 5 days. B alone can do the same work in 80 days. How long (in days) will A alone take to do thrice the work?

A. C. 16

B. D. 32

C. A. 48

D. B. 64

Q13 Quant

₹4,305 is divided among X, Y, and Z such that if ₹64, ₹56, and ₹81 are deducted from their respective shares, the remaining amounts are in the ratio 3:19:14. Find X's share after the deduction.

A. D. ₹342

B. A. ₹492

C. C. ₹192

D. B. ₹242

Q14 Quant

The profit made on a product is 86%. What is the loss percentage (correct to two decimal place) incurred on the sale if the figures of both cost price and selling price are interchanged?

A. D. 46.24%

B. B. 48.07%

C. C. 45.83%

D. A. 45.28%



Q15 Quant

If ₹63,500 is invested at 10% per year for 2 years, what is the difference between the compound interest (compounded annually) and the simple interest?

- A. ₹635 ✓
- B. ₹644.70
- C. ₹615
- D. ₹638.40

Q16 Quant

If $\tan(A - B) = \frac{\tan A - \tan B}{1 + \tan A \tan B}$, then $\frac{\tan 15^\circ}{2}$ is equal to:

- A. $2 + \sqrt{3}$
- B. $\frac{2 - \sqrt{3}}{2}$ ✓
- C. C. 2
- D. $\sqrt{3}$

Q17 Quant

The curved surface area of a right circular cone having a base radius of 21 cm is 2310 cm^2 . Find the volume (in cm^3) of the cone. (Use $\pi = 22/7$)

- A. C. 12186
- B. D. 12846
- C. A. 12936 ✓
- D. B. 12456

Q18 Quant

By how much is 65% of 60 greater than $\frac{4}{5}$ of 1.

- A. B. 27 ✓
- B. C. 24
- C. D. 21
- D. A. 25

Q19 Quant

Roshan runs from point A to point B at 24 km/h and comes back from B to A at 32 km/h. Find his average speed for the whole trip. (Rounded to two decimal places)

- A. D. 27.83 km/h
- B. B. 27.43 km/h ✓
- C. C. 26.73 km/h
- D. A. 28.17 km/h

Q20 Quant

Find the value of $3\frac{1}{4} + 5\frac{1}{3} - 5\frac{2}{3} + 4\frac{1}{4} - \frac{1}{9} +$

- A. $\frac{23}{18}$
- B. $\frac{27}{23}$
- C. $\frac{34}{31}$
- D. $\frac{47}{36}$ ✓



Q1 Quant

The price of a product first increased by 10% and then by 20%. Find the net percentage increase in the price.

A. 30%

B. 31%

C. 32% ☒

D. 34%

Q2 Quant

A and B started a business by investing ₹35,000 and ₹20,000, respectively. After 5 months, B left the business and C joined the business with a sum of ₹15,000. The profit earned at the end of the year was ₹5,125. What is C's share of the profit?

A. ₹840

B. ₹852

C. ₹861 ☒

D. ₹875

Q3 Quant

If the perimeter of a semicircle is 108 cm, then find its radius (in cm). (Use $\pi = \frac{22}{7}$)

A. 24

B. 21 ☒

C. 32

D. 28

Q4 Quant

Find the value of x that satisfies the equation: $2(3x^2 - 7) - 3(2x^2 + 6x - 9) = 19$

A. $-\frac{1}{3}$ ☒B. $-\frac{5}{3}$ C. $\frac{8}{3}$ D. $\frac{7}{3}$

Q5 Quant

A tank has an inlet pipe that can fill it in 10 hours and an outlet pipe that can empty it in 15 hours. If both pipes are opened together, how long will it take to fill the tank?

A. 10 hours

B. 25 hours

C. 30 hours ☒

D. 35 hours

Q6 Quant

Two trains of lengths 240 meters and 360 meters start moving on parallel tracks. When they move in opposite directions, they cross each other in 20 seconds. When they move in the same direction, the faster one takes 48 seconds to completely pass the slower. Find the speed of the faster train (in km/h).

A. 31.5 km/h

B. 52.5 km/h

C. 60.5 km/h

D. 76.5 km/h ☒

Q7 Quant

A right circular cone has a height of 24 cm and a radius of 18 cm. A smaller cone with the same vertex angle is cut out from the top such that its height is 10 cm. What is the volume of the remaining frustum?

[Use $\pi = \frac{22}{7}$]

A. $7,157 \text{ cm}^3$ B. $7,357 \text{ cm}^3$ C. $7,557 \text{ cm}^3$ ☒D. $7,757 \text{ cm}^3$

Q8 Quant

The following are the recorded values from an experiment (raw data): 197, 194, 221, 174, 231, 226, 203, 236, 185. What is the median of these values?

A. 197

B. 203 ☒

C. 221

D. 206



Q9 Quant

Find the value of x for which the average of the numbers 13, 14, 21, 18, 17, x , 12 is 15.

A. 5

B. 8

C. 10



D. 15

Q10 Quant

The product of two numbers is 43200 and their HCF is 15. If the ratio of their LCM to HCF, in the simplest form, is $a:b$, then find the value of $\sqrt{a+b+3}$.

A. 14



B. 12

C. 16

D. 10

Q11 Quant

A shopkeeper offers a scheme "Buy 4 notebooks, get 1 notebook free." If the price of each notebook is ₹40, what is the effective discount percent under the scheme?

A. 25%

B. 20%



C. 40%

D. 10%

Q12 Quant

The successive discounts of 10%, 12%, and 15% is equivalent to a single discount of ____.

A. 32.68%



B. 36.28%

C. 38.26%

D. 28.36%

Q13 Quant

If 24 is the mean proportion of 36 and p . What will be the value of p ?

A. 14

B. 15

C. 16



D. 12

Q14 Quant

In an isosceles triangle ABC, $AB = 65$ cm, $BC = 112$ cm, and $CA = 65$ cm. $AD \perp BC$. Find the area (in cm^2) of $\triangle ABD$.

A. 908

B. 912

C. 920

D. 924

**Q15 Quant**

One pipe can fill a tank in 9 minutes while another pipe can empty the completely filled tank in 36 minutes. If both the pipes are opened together when the tank is empty, how many minutes will it take to fill three-fourths of the tank?

A. 9



B. 18

C. 10

D. 19

Q16 Quant

Three numbers are in the ratio $5 : 3 : 2$, and their LCM is 3870. Their HCF is:

A. 129



B. 170

C. 160

D. 137

Q17 Quant

₹11,478 is divided among X, Y, and Z such that if ₹49, ₹3, and ₹58 are deducted from their respective shares, the remaining amounts are in the ratio $9:2:17$. Find X's share after the deduction.

A. ₹3,654



B. ₹3,804

C. ₹3,604

D. ₹3,554

Q18 Quant

What will be the amount after 1 year, if ₹9,600 is invested at 20% compound interest per annum, compounded half-yearly?

A. ₹11,616



B. ₹11,472

C. ₹11,159

D. ₹11,035



Q19 Quant

A cyclist travels from point A to point B at 25 km/h and returns from point B to point A at 35 km/h. Calculate his average speed for the entire trip. (Rounded off to two decimal places)

A. 29.17 km/h



B. 29.87 km/h

C. 28.47 km/h

D. 29.53 km/h

Q20 Quant

Himesh bought some quantity of barley for ₹6280. Half of it is sold at a profit of 18%. If Himesh wishes to make a profit of 9% on the whole, find the selling price (in ₹) of the remaining barley.

A. 3140



B. 2340

C. 2891

D. 2835

Paper Set 15 · 26 May 2026 · 9:00 AM - 10:30 AM · Mathematics (English)**Quant****Q1 Quant**

A person planned his trip to a destination in the following way: 168 km by taxi at an average speed of 14 km/hr, 152 km by bus at an average speed of 19 km/hr, and the remaining 184 km by train at an average speed of 23 km/hr. What was his average speed for the entire journey?

A. A. 16.4 km/hr

B. B. 18 km/hr



C. D. 18.5 km/hr

D. C. 20 km/hr

Q3 Quant

A person travels from City A to City B at a speed of 48 km/hr. On the return journey, from City B to City A, the speed reduces to 32 km/hr due to some traffic. The average speed for his entire trip is:

A. A. 38.4 km/hr



B. C. 38.1 km/hr

C. B. 39.2 km/hr

D. D. 39.8 km/hr

Q4 Quant

A grocer bought sugar worth ₹9,000. He sold one-third of it at a gain of 10%. At what gain percentage must the remaining be sold to have a gain of 12% on the whole?

A. D. 13%



B. C. 12%

C. B. 14%

D. A. 15%

Q2 Quant

A can complete a work in 26 days, and B can do the same work in 39 days. They work together for 13 days; what fraction of the work is left?

A. $\frac{1}{3}$

B. $\frac{1}{6}$



C. $\frac{1}{4}$

D. $\frac{1}{5}$



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Q5 Quant

Find the least number which is exactly divisible by 3, 5, 10 and 15.

A. D. 15

B. B. 60

C. A. 30



D. C. 90

Q6 Quant

If $p : (q + r) = 2 : 5$ and $r : (p + q) = 1 : 3$, then find $q : (p + r)$.

A. C. 8 : 13

B. A. 7 : 13

C. D. 13 : 15



D. B. 13 : 3

Q7 Quant

For any given dataset, which statement about mode is correct?

A. C. It is always equal to median

B. B. Mode may not exist or may not be unique



C. D. Mode always exists

D. A. The Mode will always be zero

Q8 Quant

The ratio of the ages of two friends is 5 : 6. If the sum of their ages is 44 years, find the difference of their ages.

A. A. 2 years

B. D. 4 years



C. B. 5 years

D. C. 7 years

Q9 Quant

By how much is 30% of 65 greater than 20% of 35?

A. A. 12.5



B. D. 7.5

C. B. 9.5

D. C. 14.5

Q10 Quant

A and B working together can do a piece of work in 6 days. B alone can do the same work in 7 days. How long (in days) will A alone take to do thrice the work?

A. A. 126



B. C. 252

C. B. 378

D. D. 504

Q11 Quant

₹8,913 is divided among X, Y, and Z such that if ₹28, ₹76, and ₹20 are deducted from their respective shares, the remaining amounts are in the ratio 9:2:6. Find X's share after the deduction.

A. D. ₹4,653



B. B. ₹4,603

C. A. ₹4,753

D. C. ₹4,803

Q12 Quant

What smallest natural number should be added to 47105 so that the sum is completely divisible by 27?

A. D. 10



B. B. 15

C. A. 12

D. C. 8

Q13 Quant

A shopkeeper fixes the marked price of an item at 40% above its cost price. What percentage of discount on the marked price should be allowed to gain 19%?

A. A. 15%



B. B. 18%

C. D. 13%

D. C. 14%

Q14 Quant

If the compound interest (compounded annually) on a sum of ₹y at 8% per year for 2 years is ₹832, what will be the amount after 2 years?

A. ₹5,832



B. ₹6,327

C. ₹5,519

D. ₹6,140



Q15 Quant

AB is the diameter of a circle with center O. Point D lies on the circle such that OD is perpendicular to AB. Find the angle $\angle BAD$.

A. C. 45°



B. B. 30°

C. D. 60°

D. A. 75°

Q16 Quant

AB is parallel to CD. A transversal PQ intersects AB and CD at E and F, respectively, and $\angle PEB = 53^\circ$. G is a point between AB and CD such that $\angle BEG = 22^\circ$ and $\angle GFE = 50^\circ$. What is the measure of $\angle EGF$?

A. D. 25°



B. C. 19°

C. A. 17°

D. B. 38°

Q17 Quant

A trapezium ABCD has an area of 24 cm^2 . The sides BC and AD are parallel, and AB is perpendicular to AD. If BC = 5 cm and AD = 7 cm, find the length of CD.

A. $2\sqrt{5} \text{ cm}$



B. $4\sqrt{2} \text{ cm}$

C. $3\sqrt{5} \text{ cm}$

D. $3\sqrt{2} \text{ cm}$

Q18 Quant

In what time (in months) will ₹3,000 fetch an interest of ₹480 at 8% per year simple interest?

A. C. 24



B. A. 21

C. D. 22

D. B. 28

Q19 Quant

By how much is 65% of 60 greater than $\frac{3}{5}$ of 50?

A. C. 6



B. B. 3

C. A. 2

D. D. 4

Q20 Quant

MCQ

A. -2

B. -1

C. $-1 - \sqrt{3}i$



D. $1 - \sqrt{3}i$

Paper Set 16 · 28 May 2026 · 12:30 PM - 2:00 PM · Mathematics (English)



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Q1 Quant

A boat can travel at a speed of 30 km/hr in still water. If the boat is moving at its maximum speed between points A and B and then back, the difference in time taken to travel from A to B and from B to A is between points A and B is 30 km. If the speed of current is ' v km/hr', then find the value of $v^2 + 1$.

A. 300

B. 600

C. 900

D. 500

Q2 Quant

Find the final selling price of the table which is marked at ₹7,000 and sold at successive discounts of 5% and 2%.

A. ₹6,215

B. ₹6,325

C. ₹6,517

D. ₹6,425

Q3 Quant

$(a+b)^2 = 3136$ and $a = 50$. If $b > 0$, find the value of ab .

A. 600

B. 540

C. 450

D. 300

Q4 Quant

A cylindrical pillar has a diameter of 56 cm and a height of 1 m. The cost of painting its curved surface area is ₹12.50 per m^2 . Find the total cost of painting its curved surface area.

[Use $\pi = \frac{22}{7}$]

A. ₹20

B. ₹21

C. ₹22

D. ₹23

Q5 Quant

Pipe A can fill a reservoir completely in 15 hours and Pipe B can fill it completely in 20 hours. If both pipes are opened together, how long will it take to fill the reservoir? Round off to the nearest minute?

A. 165 minutes

B. 171 minutes

C. 157 minutes

D. 179 minutes

Q6 Quant

A train of length 1.16 km is running at a speed of 34 km/h. Another train of length 1.24 km is running in the same direction at a speed of 22 km/h, and its rear is 124 km ahead of the front of the first train. In how much time will the first train completely cross the second train?

A. 10 hours 12 minutes

B. 10 hours 20 minutes

C. 10 hours 30 minutes

D. 10 hours 32 minutes

Q7 Quant

The following data gives the weight (in kg) of 15 workers in a factory:

Weight (in kg)	65	60	75	80	84
No. of workers	3	1	3	3	5

Find the arithmetic mean of the weight of the workers (in kg) using the Direct method.

A. 71

B. 75

C. 76

D. 78

Q8 Quant

A starts a business with ₹9,49,984 and after 5 months, B joins with A as his partner. After a year, the profit is divided in the ratio 4 : 5. What is B's contribution in the capital?

A. ₹20,35,680

B. ₹16,28,544

C. ₹22,53,784

D. ₹18,68,350



Q9 Quant

By how much is 30% of 65 greater than 30% of 30?

A. 10.5



B. 5.5

C. 7.5

D. 12.5

Q10 Quant

₹9,728 is divided among X, Y, and Z such that if ₹60, ₹91, and ₹36 are deducted from their respective shares, the remaining amounts are in the ratio 15:13:19. Find X's share after the deduction.

A. ₹3045



B. ₹2895

C. ₹3095

D. ₹2945

Q11 Quant

If the compound interest on a sum of ₹y at 4% per year for 2 years, compounded annually, is ₹663, what will be the amount after 2 years?

A. ₹8788



B. ₹8750

C. ₹9245

D. ₹8396

Q12 Quant

Simplify: $\sqrt{196} + \sqrt{0.0144} - \sqrt{4.84}$

A. 11.92



B. 6.58

C. 8.48

D. 9.22

Q13 Quant

Sachin Tendulkar scored the following centuries between 2008 and 2010 in matches versus Australia.

154, 153, 109, 175 and 214

What was his average century score during this period against Australia?

A. 161



B. 162

C. 163

D. 165

Q14 Quant

Two chords AB and CD intersect each other at point P within the circle. If AB = 25 cm, PB = 9 cm, CP = 6 cm, then find the measure of the DP.

A. 10 cm

B. 16 cm

C. 20 cm

D. 24 cm

**Q15 Quant**

In the given figure, AB || CD. What is the measure of $\angle AXC$?



A. 53°

B. 72°

C. 127°



D. 108°

Q16 Quant

₹5,628 is divided among A, B and C, so that A may receive half as much as B and C together receive, and B receives one-fourth of what A and C together receive. By how much is A's share more than B's share?

A. ₹750.40



B. ₹758.40

C. ₹742.40

D. ₹735.40

Q17 Quant

By how much is 65% of 75 greater than $\frac{1}{5}$ of 50?

A. 37.75



B. 34.75

C. 31.75

D. 35.75

Q18 Quant

A shopkeeper sells 75% of 472 flower pots at a profit of ₹ 30 each. He sells the rest of the pots for ₹5192. If he makes an overall profit of 25%, what is the cost price of each pot?

A. 45

B. 52

C. 62

D. 67



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Q19 Quant

Pipe A can fill a tank in 3 hours, pipe B can fill the same tank in 32 hours and pipe C can fill the same tank in 96 hours. The time taken (in hours) by them to fill three-fourth of the same tank if all three pipes operate together is:

A. 2



B. 3

C. 4

D. 5

Q20 Quant

The roots of the quadratic equation $2x^2 + 16x - 18 = 0$ are:

A. 1, -9



B. -1, -9

C. 1, 9

D. -1, 9

Paper Set 17 · 28 May 2026 · 4:00 PM - 5:30 PM · Mathematics (English)**Quant****Q1 Quant**

A balloon is tied to the ground with a string. The length of the string is 80 m and it makes an angle of 60° with the level ground. How high is the balloon from the ground?

A. 40 m

B. $80\sqrt{3}$ m

C. $\frac{80}{\sqrt{3}}$ m

D. $40\sqrt{3}$ m

**Q2 Quant**

Varun, Rohan and Hem each invested ₹20,000 in their business. After 3 months, each of them withdrew ₹10,000. The total profit over 24 months was ₹81,000, with each month's profit being equal. Find their profit for the first six months.

A. ₹20,250



B. ₹18,750

C. ₹15,500

D. ₹19,000

Q3 Quant

If 5 pens cost ₹50, what is the cost of 8 pens?

A. ₹70

B. ₹75

C. ₹80



D. ₹85

Q4 Quant

Find the value of the following expression.

$$\frac{[(52 \times 52 \times 52) - (43 \times 43 \times 43)]}{[(52 \times 52) + (52 \times 43) + (43 \times 43)]}$$

A. 19

B. 22

C. 18

D. 9



Q5 Quant

A cyclist travels a distance of 52 km at two different speeds. He rides at 13 km/hr for half the distance. What is his average speed for the entire journey?

A. $16\frac{1}{2}$ km/hr

B. $17\frac{1}{3}$ km/hr ✓

C. $18\frac{1}{6}$ km/hr

D. $18\frac{1}{4}$ km/hr

Q6 Quant

A shopkeeper sets the marked price of an item at 8% above cost. Due to heavy demand, he further increases this price by 12%. Later, to clear stock, he gives a 20% discount on the last price. What is the net percentage change in the final selling price compared to the original cost price?

A. decrease of 1.232%

B. increase of 1.232%

C. decrease of 3.232% ✓

D. increase of 3.232%

Q7 Quant

Simplified form of $(5^2 \times 2^4) \div (125 \times 2^2)$ is:

A. 0.8 ✓

B. 0.7

C. 0.6

D. 0.9

Q8 Quant

What is the average of all prime numbers between 35 and 54?

A. 43.2

B. 44

C. 44.2 ✓

D. 45

Q9 Quant

A shopkeeper marks a box of chocolates at ₹800. If he offers a discount so that the final selling price becomes ₹624, what is the percentage discount offered?

A. 20%

B. 21%

C. 22% ✓

D. 24%

Q10 Quant

Pipe P can fill a reservoir alone in 3 hours. When Pipe P and Pipe Q are opened together, the reservoir is filled in 1 hour. Determine the time required for Pipe Q to fill the reservoir alone.

A. 1 hour

B. 1.5 hours ✓

C. 2 hours

D. 2.5 hours

Q11 Quant

The mean of the observations 10, 20, 10, 40, and x is 20. Find the value of 3x.

A. 30

B. 60 ✓

C. 45

D. 75

Q12 Quant

What is the volume of a cube whose diagonal measures $5\sqrt{3}$ cm?

A. 25 cm^3

B. 27 cm^3

C. 125 cm^3 ✓

D. 127 cm^3

Q13 Quant

The price of a laptop is ₹40,000. It undergoes a series of successive changes: first, a 20% increase; then, a 15% decrease; and finally, a 10% increase. What is the overall percentage change in the price?

A. 12.2% increase ✓

B. 13.6% decrease

C. 13.2% increase

D. 14.7% decrease



Q14 Quant

Three friends P, Q and R started a business by investing a sum of money in the ratio of 4 : 3 : 5. After 6 months Q withdraws half of his capital. If the sum invested by P is ₹29,000, out of a total annual profit of ₹81,000 find the share of Q in profit.

A. ₹16,200 ✓

B. ₹17,535

C. ₹17,110

D. ₹15,285

Q15 Quant

If ₹27,800 is invested at 5% per year for 2 years, what is the difference between the compound interest (compounded annually) and the simple interest?

A. ₹69.50 ✓

B. ₹61.50

C. ₹74.50

D. ₹68.50

Q16 Quant

AB is parallel to CD. A transversal PQ intersects AB and CD at E and F, respectively, and $\angle PEB = 41^\circ$. G is a point between AB and CD such that $\angle BEG = 23^\circ$ and $\angle GFE = 26^\circ$. What is the measure of $\angle EGF$?

A. 38° ✓B. 42° C. 33° D. 30° **Q17 Quant**

A can lay railway track between two given stations in 6 days, and B can do the same job in 24 days. With the help of C, they complete the job in 3 days only. In how many days can C alone complete the work?

A. 8 ✓

B. 9

C. 10

D. 11

Q18 Quant

By selling an article at $\frac{4}{15}$ of its original list price

If he sells it at 68% of its original list price, what

A. 83.6% ✓

B. 82.6%

C. 86.9%

D. 83.2%

Q19 Quant

Simplify $37 - [43 - 51 \div 3 - (15 - 27 \div (12\frac{3}{5}) \times 356 \div 4 \times \frac{20}{89} -$

A. $-\frac{3}{29}$ ✓B. $\frac{15}{29}$ C. $\frac{13}{25}$ D. $-\frac{14}{27}$ **Q20 Quant**

A car moving at the speed of 56 km/h covers a distance in 9 hours 15 minutes. If it travels the same distance at the speed of 74 km/h, how long will it take to cover the distance?

A. 4 hours

B. 8 hours

C. 6 hours

D. 7 hours ✓



Q1 Quant

The edge of a cube is 5 cm less than the height of a cuboid. If the total surface area of the cube is 294 cm^2 , then the height of the cuboid is:

- A. 7 cm
- B. 9 cm
- C. 12 cm ✓
- D. 15 cm

Q2 Quant

A, B, and C invest ₹50,000, ₹75,000, and ₹1,25,000, respectively, in a business. After one year, the total profit is ₹1,00,000. How much more profit does C receive than the profit received by B?

- A. ₹15,000
- B. ₹20,000 ✓
- C. ₹30,000
- D. ₹35,000

Q3 Quant

Which of the following ratios is the greatest: 7:35, 12:29, 7:29, and 6:27?

- A. 12:29 ✓
- B. 7:35
- C. 6:27
- D. 7:29

Q4 Quant

Two cars start from the same point and travel in opposite directions. If one car travels at 43 km/hr and the other at 87 km/hr, how far apart will they be after 6 hours?

- A. 720 km
- B. 780 km ✓
- C. 750 km
- D. 760 km

Q5 Quant

A shopkeeper mixes two types of rice priced at ₹60/kg and ₹90/kg in the ratio 2 : 1. Find the price of the mixture per kg.

- A. ₹70 ✓
- B. ₹80
- C. ₹74
- D. ₹77

Q6 Quant

If 40% of a number is equal to two-thirds of another number, what is the ratio of the first number to the second number?

- A. 3:5
- B. 5:9
- C. 9:5
- D. 5:3 ✓

Q7 Quant

If the price of a laptop is increased by 12% and then further increased by 18%, what is the overall percentage increase from the original price?

- A. 32.16% ✓
- B. 30%
- C. 28.25%
- D. 31%

Q8 Quant

Which number nearest to 90516 is divisible by 9?

- A. 90509
- B. 90513 ✓
- C. 90518
- D. 90521

Q9 Quant

A shirt has a marked price of ₹1,200. A shopkeeper allows a 15% discount on it. What price does the customer pay?

- A. ₹1,000
- B. ₹1,020 ✓
- C. ₹1,050
- D. ₹1,080

Q10 Quant

Pipe M can fill a tank in 12 hours, and Pipe N can fill the same tank in 24 hours. If both pipes are opened simultaneously, how long will they take to fill the tank?

- A. 6 hours
- B. 8 hours ✓
- C. 9 hours
- D. 12 hours



Q11 Quant

The sum of deviations of all observations from their arithmetic mean is always _____.

- A. Depends on data
- B. Zero ✓
- C. Positive
- D. Non-zero constant

Q12 Quant

A boat travels 40 km upstream in 8 hours. The speed of the boat in still water is 8 km/h. What is the speed of the water current?

- A. 2 km/h
- B. 3 km/h ✓
- C. 4 km/h
- D. 1 km/h

Q13 Quant

One pipe can fill a tank in 12 minutes while another pipe can empty the completely filled tank in 24 minutes. If both the pipes are opened together when the tank is empty, how many minutes will it take to fill one-third of the tank?

- A. 8 ✓
- B. 16
- C. 24
- D. 32

Q14 Quant

What smallest natural number should be added to 59036 so that the sum is completely divisible by 58?

- A. 8 ✓
- B. 5
- C. 3
- D. 12

Q15 Quant

If the simple interest for 2 years is ₹76 and the compound interest for the same period is ₹80 at the same rate, what is the principal (in ₹)?

- A. 361 ✓
- B. 356
- C. 354
- D. 365

Q16 Quant

Two circles with radii 'p' and 'q', respectively, touch each other externally. Let 'r' be the radius of a circle that touches these two circles as well as a common tangent to the circles. The relation between p, q and r is:

A. $\frac{1}{\sqrt{p}} + \frac{1}{\sqrt{q}} = \frac{1}{\sqrt{r}}$ ✓

B. $\frac{1}{\sqrt{p}} - \frac{1}{\sqrt{q}} = \frac{1}{\sqrt{r}}$

C. $\frac{1}{\sqrt{p}} - \frac{1}{\sqrt{q}} = -\frac{1}{\sqrt{r}}$

D. $-\frac{1}{\sqrt{p}} + \frac{1}{\sqrt{q}} = \frac{1}{\sqrt{r}}$

Q17 Quant

A quadrilateral ABCD circumscribes a circle and AB = 6 cm, CD = 5 cm, and AD = 7 cm. The length of side BC is:

- A. 2 cm
- B. 6 cm
- C. 4 cm ✓
- D. 7 cm

Q18 Quant

By how much is 40% of 50 greater than 30% of 55?

- A. 3.5 ✓
- B. 2.5
- C. 4.5
- D. 1.5



Q19 Quant

A refrigerator has a list price of ₹75000. A retailer purchases it after receiving two successive discounts of 10% and 32%, and this becomes his cost price. He wants to earn a profit of 37% on his cost price. If he allows a discount of 49% on his marked price to customers, at what price should he mark the refrigerator?

A. ₹123300



B. ₹123289

C. ₹123464

D. ₹123294

Q20 Quant

The product of two consecutive positive integers is 870. If the smaller of these two integers is represented by x , which of the options below will correspond to the equation for finding out the value of x ?

A. $x^2 + x - 870 = 0$



B. $x^2 + x + 870 = 0$

C. $x^2 - x - 870 = 0$

D. $x^2 - x + 870 = 0$

Paper Set 19 · 29 May 2026 · 12:30 PM - 2:00 PM · Mathematics (English)**Quant****Q1 Quant**

Under an offer at a shop selling T-shirts, customers get five T-shirts free on the purchase of five T-shirts. Find the discount percentage available to the customer.

A. B. 30%

B. C. 40%

C. A. 50%



D. D. 60%

Q2 Quant

A and B invest in a business in the ratio 7 : 3. Total profit is ₹25,000. Find A's share.

A. D. ₹17,500



B. A. ₹17,700

C. B. ₹15,500

D. C. ₹15,800

Q3 Quant

A solid cone of height 35 cm and base radius 12 cm is melted and recast into smaller cones, each of height 8 cm and base radius 6 cm. How many smaller cones are completely formed?

A. C. 13

B. D. 14

C. B. 17



D. A. 18

Q4 Quant

Quenie travels from home to office at a speed of 42 km/hr and arrives 10 minutes late. If she had travelled at a speed of 48 km/hr, she would have arrived 5 minutes early. What is the distance between her home and office?

A. C. 78 km

B. B. 80 km

C. A. 84 km



D. D. 88 km



Q5 Quant

How many seconds will a train of length 100 m travelling at 36 km/hr take to cross a telegraph post?

A. C. 10 seconds



B. B. 12 seconds

C. D. 14 seconds

D. A. 16 seconds

Q6 Quant

From the 2 sets of the given data, if the sum of the medians is L and their product is M, then find the value of $\sqrt{\frac{2M}{L}} - 2$.

Set 1: 1,2,3,17,2,49,79,69,69,7,11,13,4

Set 2: 1,1,1,2,2,10,11,12,111,111,123,798,1111

A. B. 1

B. A. 3



C. D. 5

D. C. 7

Q7 Quant

A tank that is normally filled in 10 hours by a pipe takes 15 hours to fill when a leak is there. Calculate the time taken by the leak to empty the completely filled tank.

A. B. 20 hours

B. D. 25 hours

C. C. 30 hours



D. A. 35 hours

Q8 Quant

Two ropes measure 16 meters and 24 meters. What is the maximum possible length of equal pieces into which both ropes can be cut without any leftover?

A. D. 4 meters

B. C. 6 meters

C. A. 8 meters



D. B. 10 meters

Q9 Quant

The number 12 is divided in two one-digit positive integers such that one integer is a multiple of another. The numbers are not equal. Which of the following can be the difference between these numbers?

A. 2

B. 3

C. 4



D. 5

Q10 Quant

What is the fourth proportion to 4, 16 and 25?

A. A. 64

B. B. 81

C. D. 100



D. C. 121

Q11 Quant

By how much is 30% of 65 greater than 30% of 40?

A. 7.5



B. 2.5

C. 4.5

D. 9.5

Q12 Quant

A sum of ₹2,030 is divided into three parts such that half of the first part, one-fourth of the second part, and one-eighth of the third part are equal. What is the positive difference (in ₹) between the first and the second parts?

A. C. 290



B. B. 340

C. D. 240

D. A. 390

Q13 Quant

If the simple interest for 2 years is ₹78 and the compound interest for the same period is ₹79 at the same rate, what is the principal (in ₹)?

A. A. 1521



B. B. 1516

C. D. 1514

D. C. 1525



Q14 Quant

The larger of two supplementary angles is 60° more than the smaller. The smaller angle (in degrees) is:

A. D. 60



B. C. 57

C. B. 64

D. A. 53

Q15 Quant

In the figure given below, ABC is a triangle. AC is parallel to BE. If $AC = BC$, then what is the value of angle CBE?



A. B. 50°

B. C. 60°



C. D. 70°

D. A. 80°

Q16 Quant

The average height of 7 players in a team is 175 cm. If the average height of the first 3 players is 169 cm and the average height of the last 3 players is 182 cm, find the height of the middle player.

A. C. 172 cm



B. B. 176 cm

C. A. 179 cm

D. D. 175 cm

Q17 Quant

By how much is 40% of 45 greater than 30% of 55?

A. A. 1.5



B. B. 2.5

C. D. 3.5

D. C. 0.5

Q18 Quant

Two taps can fill a tank in 2 hours and 59 hours respectively. A third tap can empty it in 59 hours. How long (in hours) will it take to fill the empty tank if all the taps are opened together?

A. B. 2



B. A. 3

C. D. 4

D. C. 5

Q19 Quant

MCQ

A. $\frac{4}{11}$



B. $\frac{3}{13}$

C. $\frac{10}{1}$

D. $\frac{2}{9}$

Q20 Quant

A washing machine has a list price of ₹41,000. A retailer purchases it after receiving two successive discounts of 12% and 30%, and this becomes his cost price. He wants to earn a profit of 25% on his cost price. If he allows a discount of 50% on his marked price to customers, at what price should he mark the washing machine?

A. A. ₹63,140



B. D. ₹63,076

C. C. ₹62,956

D. B. ₹62,967



Q1 Quant

A sphere is inscribed in a cube with a side length of 21 cm. What is the surface area of the sphere?

A. $1,386 \text{ cm}^2$ ✓

B. $1,848 \text{ cm}^2$

C. $2,310 \text{ cm}^2$

D. $3,234 \text{ cm}^2$

Q2 Quant

Akash is moving at 2 m/s inside the train, in the same direction as the train's motion. Aditya is running outside the train in its direction at 5m/s and if the speed of the train is 7.2 km/hr, find the speed of Akash with respect to Aditya.

A. 1 m/s backward ✓

B. 9 m/s backward

C. 6 m/s backward

D. 4 m/s backward

Q3 Quant

After a flat discount of ₹135, a shirt is sold for ₹540. What is the marked price of the shirt?

A. ₹575

B. ₹600

C. ₹675 ✓

D. ₹700

Q4 Quant

A man travels 2 hours at a speed of 20 km/h, then 3 hours at a speed of 25 km/h, and finally 1 hour at a speed of 30 km/h. He then continues his journey at the same average speed as that of the entire trip so far. How much time will he take to cover 290 km at this average speed?

A. 10 hours

B. 11 hours

C. 12 hours ✓

D. 13 hours

Q5 Quant

The ratio of two numbers is 7 : 9, and their difference is 24. Find the two numbers.

A. 56 and 72

B. 63 and 87

C. 48 and 72

D. 84 and 108 ✓

Q6 Quant

Find the largest number that divides 80 and 111, leaving remainders 2 and 7, respectively.

A. 18

B. 26 ✓

C. 32

D. 38

Q7 Quant

A number whose sixth part increased by 18 is equals to its fourth part diminished by 12. Find the number.

A. 320

B. 340

C. 360 ✓

D. 380

Q8 Quant

A class project requires 60 hours of work. If 5 students work together and finish it in 3 days, how many hours per day did each student work?

A. 4 ✓

B. 3

C. 5

D. 6

Q9 Quant

If all weights in a weighted mean are equal, then the weighted mean equals:

A. harmonic mean

B. unity

C. zero

D. arithmetic mean ✓



Q10 Quant

By how much is 30% of 65 greater than 30% of 45?

- A. 6 ✓
- B. 1
- C. 3
- D. 8

Q11 Quant

A and B working together can do a piece of work in 4 days. B alone can do the same work in 20 days. How long (in days) will A alone take to do thrice the work?

- A. 15 ✓
- B. 30
- C. 45
- D. 60

Q12 Quant

If the ratio of two numbers is 6 : 7, and their HCF is 46, then their LCM is:

- A. 1932 ✓
- B. 1954
- C. 1935
- D. 1982

Q13 Quant

A sum of ₹4,697 is divided into three parts such that half of the first part, one-fourth of the second part, and one-eighth of the third part are equal. What is the positive difference (in ₹) between the first and the second parts?

- A. 671 ✓
- B. 521
- C. 821
- D. 721

Q14 Quant

The difference between the simple interest and the compound interest, compounded annually, on a certain sum of money for 2 years at 16% per annum is ₹750. Find the sum. (Round off your answer to the nearest rupee)

- A. ₹29,297 ✓
- B. ₹29,288
- C. ₹29,293
- D. ₹29,277

Q15 Quant

From an external point A, AB and AC are two tangents to a circle with center O.

The line AO intersects the chord BC at E. If BE = 45, then AC is equal to

- A. 45
- B. 90
- C. 60 ✓
- D. 120

Q16 Quant

A sum of money is to be distributed among A, B, C, and D in the ratio of 6 : 3 : 5 : 4. If A gets ₹2,000 more than D, then the share of C is:

- A. ₹5,000 ✓
- B. ₹4,800
- C. ₹4,500
- D. ₹5,400

Q17 Quant

In how much time (in months) will ₹3200 fetch an interest of ₹360 at 9% per year simple interest?

- A. 15 ✓
- B. 12
- C. 13
- D. 19

Q18 Quant

A number when increased by 60%, gives 3380. The number is:

- A. 2112.5 ✓
- B. 2225.2
- C. 1056.7
- D. 1337.8



Q19 Quant

An article is sold at a profit of 20%. If the cost of production goes up by 10%, and the selling price is raised by 5%, what is the new profit percentage? (Rounded to one decimal place)

A. 13.7%

B. 14.5% ✓

C. 15.6%

D. 16.2%

Q20 Quant

Suppose triangles ABC and DEF are similar. If the area of $\triangle ABC = 36 \text{ cm}^2$, area of $\triangle DEF = 81 \text{ cm}^2$ and $BC = 4.5 \text{ cm}$, find EF.

A. 3 cm

B. 4.15 cm

C. 5.5 cm

D. 6.75 cm ✓

Paper Set 21 · 29 May 2026 · 9:00 AM - 10:30 AM · Mathematics (English)**Quant****Q1 Quant**

In a right-angled triangle, the length of the base is $(2x^2 + 3) \text{ m}$ and the length of the perpendicular is $(2x - 5) \text{ m}$. Find the area of the triangle.

A. C. $(2x^3 - 5x^2 + 3x - 7.5) \text{ m}^2$ ✓

B. A. $(2x^3 + 5x^2 - 3x - 7.5) \text{ m}^2$

C. B. $(3x^3 - 5x^2 + 2x - 7.5) \text{ m}^2$

D. D. $(3x^3 + 5x^2 - 3x - 7.5) \text{ m}^2$

Q2 Quant

Kavita starts from city A towards city B at 8:00 a.m. at a speed of 60 km/hr. Two hours later, Priya starts from city B towards city A at a speed of 75 km/hr. The distance between the two cities is 390 km. At what time will they meet?

A. C. 12:00 p.m. ✓

B. A. 1:00 p.m.

C. D. 12:30 p.m.

D. B. 1:30 p.m.

Q3 Quant

The cost price of an article A is ₹200 more than that of article B. Article A is sold at a loss of 25% and article B is sold at a profit of 50%. If the overall transaction yields a profit of 5%, then find the cost price of article B.

A. B. ₹400 ✓

B. D. ₹410

C. C. ₹420

D. A. ₹430

Q4 Quant

P travels for 10 hours at the rate of 31 km/hr and for 8 hours at the rate of 30 km/hr. The average speed (rounded off to two decimal places) of the journey in km/hr is:

A. A. 39.67

B. B. 30.56 ✓

C. C. 34.33

D. D. 31.56



Q5 Quant

The sum of two prime numbers is 85. What is the product of these two prime numbers?

A. A. 85

B. D. 166 ☒

C. C. 169

D. B. 172

Q6 Quant

The following data gives the daily earnings (in ₹) of 11 workers in a factory:

Daily earnings (in ₹)	275	319	330	385
No. of workers	2	3	3	3

Calculate the average daily earnings (in ₹) using the Direct method.

A. D. 295

B. B. 318

C. C. 332 ☒

D. A. 340

Q7 Quant

A, B and C started a business investing amounts of ₹2,150, ₹1,940, and ₹1,180, respectively. If B's share in the profit earned by them is ₹604. what is the difference in the profit (in ₹) earned by A and C?

A. B. ₹302 ☒

B. C. ₹299

C. D. ₹304

D. A. ₹301

Q8 Quant

A tank is filled in 2 hours with pipe A and can be filled in 4 hours with pipe B. How long (in hours) will it take to fill the tank completely if both the pipes are opened together?

A. $\frac{4}{3}$ ☒B. $\frac{1}{4}$ C. $\frac{1}{6}$ D. $\frac{1}{7}$ **Q9 Quant**

By how much is 30% of 65 greater than 30% of 35?

A. A. 9 ☒

B. B. 4

C. C. 6

D. D. 11

Q10 Quant

A sum of ₹5,859 is divided into three parts such that half of the first part, one-fourth of the second part, and one-eighth of the third part are equal. What is the positive difference (in ₹) between the first and the second parts?

A. A. 837 ☒

B. C. 687

C. B. 787

D. D. 737

Q11 Quant

The profit made on a product is 65%. What is the loss percentage (correct to two decimal place) incurred on the sale if the figures of both cost price and selling price are interchanged?

A. C. 39.39% ☒

B. B. 41.84%

C. D. 40.48%

D. A. 42.07%

Q12 Quant

Ashish has ₹1300 with him. He divided it amongst his sons Arun and Mahesh and asked them to invest it at 8% rate of interest compounded annually. It was seen that Arun and Mahesh got same amount after 11 and 12 years, respectively. How much money (in ₹) did Ashish give to Mahesh?

A. B. 625 ☒

B. D. 675

C. C. 475

D. A. 775

Q13 Quant

Let C_1 and C_2 be two circles with centres P and Q and radii 8 cm and 4 cm, respectively. Let XY be a transverse common tangent to C_1 and C_2 such that XY intersects PQ at a point T. Find the ratio PT to QT.

A. D. 1 : 1

B. B. 3 : 1

C. A. 1 : 4

D. C. 2 : 1 ☒

Q14 Quant

In $\triangle ABC$, a , b and c are the lengths of the sides of $\triangle ABC$ with semi-perimeter ' s '. If $a : b : c = 2 : 3 : 4$ and $s = 27$ inches, then find the length (in inches) of side AC .

A. C. 18



B. A. 20

C. B. 16

D. D. 21

Q15 Quant

The area of a square is 55 square units. The perimeter of the square is equal to the circumference of a circle. Find the area of the circle. (Use $\pi = 22/7$)

A. 70 square units

B. $\frac{55}{\pi}$ unitsC. 55π square unitsD. 70π units**Q16 Quant**

In what time (in months) will ₹3200 fetch an interest of ₹320 at 6% per year simple interest?

A. A. 20



B. B. 17

C. C. 18

D. D. 24

Q17 Quant

By how much is 65% of 75 greater than $\frac{1}{5}$ of 45?

A. A. 39.75



B. B. 36.75

C. D. 33.75

D. C. 37.75

Q18 Quant

Pipe A can fill a tank in 5 hours, pipe B can fill the same tank in 25 hours and pipe C can fill the same tank in 100 hours. The time taken (in hours) by them to fill one-fourth of the same tank if all three pipes operate together is:

A. B. 1



B. A. 2

C. C. 3

D. D. 4

Q19 Quant

$2.333... + 2.333...$ in fraction form is:

A. $\frac{14}{3}$ B. $\frac{15}{2}$ C. $\frac{16}{7}$ D. $\frac{11}{12}$ **Q20 Quant**

Saumya invests ₹27,000 for 6 months, and Bhavya invests ₹28,000 for 4 months. If the total profit is ₹2,41,942, then calculate Bhavya's share.

A. C. ₹98,056

B. A. ₹97,056

C. D. ₹98,789

D. B. ₹98,896



Q1 Quant

A bus travels a distance of 330 km in 5.5 hours. If the bus reduces its speed by 20 km/hr of the original speed for the first two hours and then increases this speed by 20 km/hr of the original speed for the remaining distance, how much time will it take to cover the entire distance? (Rounded up to two decimal places.)

A. 6.17 h

B. 5.13 h ✓

C. 4.65 h

D. 3.98 h

Q2 Quant

Factorise the following expression.

$$(p + 5)^2 - (q - 3)^2$$

A. $(p + q + 2)(p - q + 8)$ ✓B. $(p - q + 2)(p - q + 8)$ C. $(p + q + 2)(p + q + 8)$ D. $(p + q + 2)(p - q - 8)$

Q3 Quant

A car travels at a speed of 60 km/h for 2 hours and then at 80 km/h for 3 hours. What is the total distance covered?

A. 300 km

B. 320 km

C. 340 km

D. 360 km ✓

Q4 Quant

An article was first sold by Mr. Sharma to Mr. Verma at a 20% profit. Later, Mr. Verma sold the same article to Mr. Gupta for ₹7,200, earning a 25% profit on his own cost price. What was the original price that Mr. Sharma paid for the article?

A. ₹4,000

B. ₹4,600

C. ₹4,800 ✓

D. ₹5,000

Q5 Quant

In the first 10 overs of a cricket match, the run rate was only 2.5. What should be the run rate in the remaining 40 overs to reach the target of 285 runs?

A. 6.5 ✓

B. 5.5

C. 4.5

D. 7.5

Q6 Quant

The weighted mean of the dataset 2.5, 4, 6.5 with corresponding weights 1, 2.5, 3, is (round off to the nearest integer):

A. 4

B. 5 ✓

C. 3

D. 2

Q7 Quant

Simplify and convert the expression $0.26 + \frac{3}{5}$ to $\frac{\quad}{0.25}$

A. $3\frac{11}{25}$ ✓B. $3\frac{11}{50}$ C. $4\frac{11}{50}$ D. $4\frac{11}{25}$

Q8 Quant

Harsha started an organic vegetable business and he invested ₹30,000. After some months, Pranav came to join him and invested ₹20,000. At the end of the year, the total profit was divided among them in the ratio of 34 : 17. Find after how many months did Pranav join?

A. 3 months ✓

B. 4 months

C. 2 months

D. 5 months



Q9 Quant

A cylindrical well is 14 m deep and has a diameter of 6 m. There is a circular ring on the top of the well that forms a 0.7 m wide embankment. The inside of this well and its embankment are to be plastered.

What is the total plastering cost at the rate of ₹180/m² (Take π = 7)?

A. ₹55,876.50

B. ₹53,272.60

C. ₹50,173.20

D. ₹49,155.80

Q10 Quant

Two pipes, A and B, can fill a tank in 20 and 24 hours, respectively. If both the pipes are opened simultaneously, how much time will be taken to fill the tank?

A. $10\frac{11}{10}$ hours

B. $10\frac{10}{11}$ hours

C. $11\frac{10}{11}$ hours

D. $11\frac{11}{10}$ hours

Q11 Quant

Which of the following ratios is the greatest?

A. 5:18

B. 9:16

C. 6:18

D. 4:15

Q12 Quant

If 20% of a number is added to 24, then the result is the same number. 65% of the same number is:

A. 19.5

B. 10.5

C. 49.5

D. 39.5

Q13 Quant

A and B working together can do a piece of work in 10 days. B alone can do the same work in 10 days. How long (in days) will A alone take to do the work?

A. 20

B. 40

C. 60

D. 80

Q14 Quant

₹1,298 is divided among Arjun, Nisha, and Gaurav in such that if ₹29, ₹41, and ₹38 are deducted from their respective shares, the remaining amounts are in the ratio 12:6:16. Find Gaurav's share after deduction.

A. ₹560

B. ₹410

C. ₹710

D. ₹510

Q15 Quant

In a division sum, the divisor is 16 times the quotient and 8 times the remainder. If the remainder is 44, what is the dividend?

A. 7788

B. 7786

C. 7787

D. 7791

Q16 Quant

If at the same rate of interest, in 2 years, the simple interest is ₹44 and compound interest is ₹66, then what is the principal (in ₹)?

A. 22

B. 17

C. 15

D. 26



Q17 Quant

Two concentric circles have their centre at O, and radii 26 cm and 14 cm. PQ is a chord of the outer circle which intersects the inner circle at points M and N (M closer to P and N closer to Q). If the distance of the chord PQ from the centre is 6 cm, then what is the length (in cm) of the line segment PN?

A. $12\sqrt{10}$ ✓

B. $10\sqrt{10}$

C. $8\sqrt{10}$

D. $14\sqrt{10}$

Q18 Quant

In $\triangle XYZ$, N is the midpoint of XZ and R is the midpoint of YZ. If the length of XY is 12 cm, find the length of NR.

A. 6 cm ✓

B. 5.5 cm

C. 6.5 cm

D. 5 cm

Q19 Quant

A number when increased by 60%, gives 3370. The number is:

A. 2106.25 ✓

B. 4212.51

C. 1053.12

D. 6318.75

Q20 Quant

A trader gains 50% by selling an article after two successive discounts of 68% and 25% on its marked price. If the cost price of the article is increased by 46%, then what single discount should he now give on the same marked price to get the same profit percentage as earlier?

A. 64.96% ✓

B. 61.22%

C. 68.42%

D. 66.98%

Paper Set 23 · 30 May 2026 · 4:00 PM - 5:30 PM · Mathematics (English)



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Q1 Quant

Simplify the following and express as a fraction:

$$\frac{(1.25 \times \frac{4}{5}) + 0.6}{2.5 - (\frac{3}{10} + 0.2)}$$

A. $\frac{2}{5}$

B. $\frac{3}{4}$

C. $\frac{4}{5}$ ✓

D. $\frac{3}{5}$

Q2 Quant

Find the sum of the roots of the equation: $3x^4 - 6x^3 + 4x^2 - 7x + 4 = 0$.

A. 2 ✓

B. 3

C. -3

D. -6

Q3 Quant

The numbers 40, 60, 32, 70 and 26 have weights 1, 2, 3, 4, and 5 respectively. Find the weighted mean.

A. 44.2

B. 44.8

C. 44.6

D. 44.4 ✓

Q4 Quant

If 8 pencils cost ₹24, find the cost of 14 pencils.

A. ₹39

B. ₹42 ✓

C. ₹45

D. ₹48

Q5 Quant

P and Q start a business. P invests ₹25,000, and Q invests ₹40,000. After 3 months, P invests an additional ₹15,000. If the total profit at the end of the year is ₹1,22,000, what is Q's share of the profit?

A. ₹64,000 ✓

B. ₹60,000

C. ₹68,000

D. ₹58,000

Q6 Quant

A trader sells a product at a 15% loss. If the selling price is ₹850, find the cost price.

A. ₹1,000 ✓

B. ₹1,200

C. ₹1,500

D. ₹2,000

Pipes A and B can fill an empty tank in 24 minutes. Pipe A takes 40 minutes to fill the tank on its own. Find the time taken (in minutes) by pipe B to fill the tank on its own.

A. 50

B. 54

C. 56

D. 60 ✓

Q8 Quant

An investor holds 40 shares of stock A priced at ₹ 20 each and 60 shares of stock B priced at ₹ 40 each. What is the average price per share in the investor's portfolio?

A. ₹ 32 ✓

B. ₹ 34

C. ₹ 30

D. ₹ 40

Q9 Quant

Simplify: $(2^2 \times 3^2)^2 \div (2 \times 3)^{-1}$

A. 288

B. 7776 ✓

C. 1152

D. 2304



Q10 Quant

The price of a shirt is increased by 20% and then decreased by 10%. What is the net percentage change in the price?

- A. 10% increase
- B. 2% decrease
- C. 8% increase ☒
- D. No change

Q11 Quant

The numbers 6, 9, 12, and x are in proportion. If $(x + 2)$, $(x + 12)$, 18 and k are also in proportion, calculate the value of k .

- A. 20
- B. 24
- C. 27 ☒
- D. 36

Q12 Quant

If the volume of a cube is 27000 m^3 , then find the lateral surface area (in m^2) of the cube.

- A. 3600 ☒
- B. 3590
- C. 3605
- D. 5400

Q13 Quant

The present salary of an officer is ₹14,500. It was increased by 10% in the first year, decreased by 20% in the second year, and increased by 34% in the third year. What was his salary at the end of the third year?

- A. ₹17,068.40
- B. ₹17,078.40
- C. ₹17,088.40
- D. ₹17,098.40 ☒

Q14 Quant

A shopkeeper fixes the marked price of an item at 50% above its cost price. What percentage of discount on the marked price should be allowed to gain 5%?

- A. 30% ☒
- B. 33%
- C. 31%
- D. 29%

Q15 Quant

The area of the sector of a circle having central angle of 36° is $32.4 \pi \text{ cm}^2$. What is the diameter (in cm) of the circle?

- A. 18
- B. 28
- C. 36 ☒
- D. 42

Q16 Quant

Determine the type of triangle formed by the points A(1, 3), B(4, 7), and C(6, 9).

- A. Equilateral Triangle
- B. Scalene Triangle ☒
- C. Isosceles Triangle
- D. Right Triangle

Q17 Quant

Rajat travels from point A to point B at 28 km/hr and returns from point B to point A at 44 km/hr. Find the average speed for the entire trip (approximately up to two decimal places).

- A. 34.22 km/hr ☒
- B. 34.76 km/hr
- C. 34.92 km/hr
- D. 34.06 km/hr

Q18 Quant

Pipe A can fill a tank in 5 hours, pipe B in 30 hours, and pipe C in 60 hours. If all three pipes operate together, how many hours will they take to fill half of the tank?

- A. 2 ☒
- B. 3
- C. 4
- D. 5



Q19 Quant

Raju invested ₹8,000 at 24% per annum, compounded annually and ₹10,000 at 24% per annum simple interest for 2 years. If he instead invests ₹10,000 at 24% per annum, compounded annually and ₹8,000 at 24% per annum simple interest for the same period, how much additional money would he gain by changing his investment strategy?

A. ₹115.20



B. ₹112.20

C. ₹125.20

D. ₹113.20

Q20 Quant

From a taxi stand, two cabs start at a speed of 54 km/hr at an interval of 34 minutes, both cabs travelling in the same direction. A man coming in the opposite direction towards the taxi stand meets the cabs at an interval of 30 minutes. Find the speed (in km/hr) of the man.

A. 7.2



B. 17.1

C. 6.6

D. 5.4

Paper Set 24 · 30 May 2026 · 9:00 AM - 10:30 AM · Mathematics (English)**Quant****Q1 Quant**

A bus travels 30 km at 30 km/hr, another 60 km at 60 km/hr, and next 90 km at 90 km/hr. What is the average speed of the bus?

A. 70 km/hr

B. 72 km/hr

C. 80 km/hr

D. 60 km/hr

**Q2 Quant**

A shopkeeper offers a 12% discount on the marked price and another 2% cash discount. If the marked price is ₹12,000, find the selling price if paid in cash.

A. ₹10,348.80



B. ₹10,204.50

C. ₹1,10,204

D. ₹1,07,548

Q3 Quant

A can do a piece of work in 18 days. B is 50% more efficient than A. How many days does B alone take to complete the same piece of work?

A. 16

B. 12



C. 14

D. 10

Q4 Quant

If ₹1066 is divided among A, B, C and D such that $A : B = 3 : 4$, $B : C = 5 : 6$ and $C : D = 7 : 5$, then who will get the minimum?

A. A



B. D

C. C

D. B



Q5 Quant

A shopkeeper uses the following expression to calculate his daily profit. What is his profit in ₹?

$$₹[15 \times 8 - 24 \div 6 + 12]$$

A. ₹120

B. ₹128

C. ₹132

D. ₹140

Q6 Quant

What is the simplified value of $(19a + 15b)^2 - (19a - 15b)^2$?

A. 1,120ab

B. 1,140ab

C. 1,160ab

D. 1,180ab

Q7 Quant

The weighted mean of a dataset is 37.5. If each weight is doubled and each observation is also doubled, the value of the new weighted mean is:

A. 37.5

B. 75

C. 150

D. 300

Q8 Quant

A car travels 60 km at a speed of 30 km/hr and then 90 km at a speed of 45 km/hr. What is the total time taken for the journey?

A. 3.5 hours

B. 4 hours

C. 5 hours

D. 2 hours

Q9 Quant

The diameter of a roller is 84 cm and its length is 200 cm. It takes 400 complete revolutions to move once over to level a playground. Find the area of the playground.

(Use $\pi = \frac{22}{7}$)

A. 2264 m²

B. 2112 m²

C. 2024 m²

D. 2464 m²

Q10 Quant

If the ratio of A to B is 4 : 5 and the ratio of B to C is 6 : 7, then what is the ratio of A to C?

A. 20 : 21

B. 24 : 35

C. 5 : 6

D. 6 : 7

Q11 Quant

If 20% of a number is added to 24, then the result is the same number. 60% of the same number is:

A. 18

B. 12

C. 48

D. 38

Q12 Quant

A sum of ₹5,180 is divided into three parts such that half of the first part, one-fourth of the second part, and one-eighth of the third part are equal. What is the positive difference (in ₹) between the first and the second parts?

A. 740

B. 890

C. 590

D. 640

Q13 Quant

In a division sum, the divisor is 15 times the quotient and 6 times the remainder. If the remainder is 45, what is the dividend?

A. 4905

B. 4904

C. 4909

D. 4910

Q14 Quant

The profit made on a product is 7%. What is the loss percentage (correct to two decimal places) incurred on the sale if the figures of both cost price and selling price are interchanged?

A. 6.54%

B. 7.31%

C. 10.16%

D. 4.53%



Q15 Quant

If the compound interest (compounded annually) on a sum of ₹y at 10% per year for 2 years is ₹819, what will be the amount after 2 years?

A. ₹4719



B. ₹5074

C. ₹5050

D. ₹4983

Q16 Quant

Given two circles of diameters 14 cm and 10 cm, respectively. If the distance between the centres of the circles is 18 cm, then the length of the common chord is

A. $5\sqrt{7}$ cm

B. $6\sqrt{7}$ cm

C. $6\sqrt{5}$ cm



D. $8\sqrt{5}$ cm

Q17 Quant

AB is parallel to CD. A transversal PQ intersects AB and CD at E and F, respectively, and $\angle PEB = 61^\circ$. G is a point between AB and CD such that $\angle BEG = 50^\circ$ and $\angle GFE = 21^\circ$. What is the measure of $\angle EGF$?

A. 90°



B. 79°

C. 102°

D. 80°

Q18 Quant

In how much time (in months) will ₹3200 fetch an interest of ₹360 at 5% per year simple interest?

A. 27



B. 24

C. 25

D. 31

Q19 Quant

By how much is 61% of 71 greater than $\frac{2}{5}$ of 141?

A. 42.75



B. 39.75

C. 36.75

D. 40.75

Q20 Quant

Pipe A can fill a tank in 5 hours, pipe B in 28 hours, and pipe C in 70 hours. If all three pipes operate together, how many hours will they take to fill half of the tank?

A. 2



B. 3

C. 4

D. 5



Q1 Quant

The height of a triangle is equal to the side of a square whose perimeter is 24 cm. The base of the triangle is 9 cm more than its height. What is the area of the triangle?

- A. 18 cm^2
 B. 27 cm^2
 C. 36 cm^2
 D. 45 cm^2



Q2 Quant

Find the smallest 3-digit number which when divided by 8, 10, 12, and 16, leaves a remainder of 2 in each case.

- A. 122
 B. 222
 C. 242
 D. 102



Q3 Quant

A tap can fill a swimming pool in 6 hours. Another tap can empty the pool in 12 hours. If both pipes are open, how long will it take to fill the pool?

- A. 8 hours
 B. 10 hours
 C. 12 hours
 D. 18 hours



Q4 Quant

Two numbers are in the ratio 5 : 6, and another pair of numbers is in the ratio 10 : 13. If the difference between these two ratios is written in the form $A : B$, then what is the sum of the digits of $(A + B + 2AB)$?

- A. 13
 B. 15
 C. 17
 D. 19



Q5 Quant

Rohit and Karan start from two towns 240 km apart and move towards each other. Rohit starts from Town A at 7:00 a.m. with a speed of 40 km/hr. Karan starts from Town B at 9:00 a.m. with a speed of 60 km/hr. At what time will they meet?

- A. 10:36 a.m.
 B. 10:30 a.m.
 C. 11:00 a.m.
 D. 10:50 a.m.



Q6 Quant

The cost price of article A is ₹400 more than the cost price of article B. Article A is sold at a loss of 20%, while article B is sold at a profit of 50%. On the whole, the dealer makes a profit of 10%. What is the selling price (in ₹) of article A?

- A. 1,280
 B. 1,300
 C. 1,310
 D. 1,350



Q7 Quant

If $p = 7$ and $q = -5$, what is the value of $(p + q)^2 - 2pq$?

- A. 84
 B. 74
 C. 66
 D. 78



Q8 Quant

R goes to office from his home in 30 minutes and returns from office to home in 40 minutes. What is his average speed from home to office and back to home?

- A. $13\frac{1}{3}$
 B. $13\frac{2}{3}$
 C. $16\frac{1}{3}$
 D. $16\frac{2}{3}$



Q9 Quant

The median of given set of numbers 31, 38, 17, 21, 23, 15, 13, 19, 25 is X. If 31 is replaced by 14, then new median is Y. Find the sum of X and Y.

A. 38

B. 40

C. 41

D. 44

Q10 Quant

A and B start a business with a capital of ₹15,000 and ₹25,000, respectively. If the total profit is ₹8,000, what is A's share?

A. ₹2,800

B. ₹3,100

C. ₹3,000

D. ₹2,900

Q11 Quant

If 20% of a number is added to 24, then the result is the same number. 75% of the same number is:

A. 22.5

B. 7.5

C. 52.5

D. 42.5

Q12 Quant

A sum of ₹2,898 is divided into three parts such that half of the first part, one-fourth of the second part, and one-eighth of the third part are equal. What is the positive difference (in ₹) between the first and the second parts?

A. 414

B. 314

C. 464

D. 514

Q13 Quant

Akshay has ₹1300 with him. He divided it between his sons Arjun and Kartik and asked them to invest it at 8% rate of interest compounded annually. It was seen that Arjun and Kartik got the same amount after 14 and 15 years, respectively. How much money (in ₹) did Akshay give to Kartik?

A. 625

B. 675

C. 475

D. 775

Q14 Quant

Simplify: $81 - \{ (-7) \times (-5 - 8 - 11) \} \div [1 \times (7 + (-5) \times (-4))]$

A. $\frac{673}{9}$ B. $\frac{2014}{27}$ C. $\frac{2026}{27}$ D. $\frac{2029}{27}$ **Q15 Quant**

PS is a tangent line to the circle with centre C and PQR is the secant line. If PQ = 8 cm and QR = 10 cm, then find PS.

A. 8 cm

B. 12 cm

C. 18 cm

D. 9 cm

Q16 Quant

What is the radius of a circular disc whose circumference is 308 cm? (Use $\pi = 22/7$)

A. 7 cm

B. 49 cm

C. 22 cm

D. 11 cm

Q17 Quant

In what time (in months) will ₹3200 fetch an interest of ₹480 at 5% per year simple interest?

A. 36

B. 33

C. 34

D. 40

Q18 Quant

A number when increased by 60%, gives 3440. The number is:

A. 2150

B. 2300

C. 1075

D. 1450



Q19 Quant

P and Q together can completely fill an empty cistern with water in 6 hours. If P alone can fill the same amount of water in 9 hours, in how many hours will Q alone fill the same amount of water?

A. 18



B. 19

C. 20

D. 17

Q20 Quant

A trader gains 20% by selling an article after two successive discounts of 54% and 40% on its marked price. If the cost price of the article is increased by 25%, then what single discount should he now give on the same marked price to get the same profit percentage as earlier?

A. 65.5%



B. 56.8%

C. 53.7%

D. 64.9%

Paper Set 26 · 31 May 2026 · 4:00 PM - 5:30 PM · Mathematics (English)**Quant****Q1 Quant**

Ramesh and Suresh can complete a task in 6 days, while Amit and Ravi can complete the same task in 18 days. How long will Ramesh, Suresh, Amit, and Ravi take to complete it together?

A. 4 days

B. 4.5 days



C. 5 days

D. 6.5 days

Q2 Quant

Arrange the following ratios in descending order.

2:5, 5:3, 1:4, 7:8

A. 5:3, 7:8, 2:5, 1:4



B. 5:3, 1:4, 7:8, 2:5,

C. 5:3, 2:5, 1:4, 7:8

D. 7:8, 5:3, 2:5, 1:4

Q3 Quant

A person goes from A to B at 12 km/h and returns via the same route at 18 km/h. If he had gone both ways at the speed of 15 km/h, he would have saved 20 minutes. Find the distance between A and B.

A. 40 km

B. 50 km

C. 60 km



D. 70 km

Q4 Quant

The costs of 10 pens, 15 pencils, 20 notebooks, and 25 erasers are in proportion.

The cost of one pen is ₹5, the cost of one pencil is ₹6, and the cost of one notebook is ₹10.

Find the total cost of 10 erasers.

A. ₹144



B. ₹140

C. ₹136

D. ₹132



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Q5 Quant

Find the median of the following set of numbers:

{27, 15, 22, 30, 18, 25, 20}

A. 22



B. 25

C. 20

D. 18

Q6 Quant

A train travels from A to B at 60 km/hr and returns at 40 km/hr. What is the average speed of the train for the round trip?

A. 45 km/hr

B. 48 km/hr



C. 50 km/hr

D. 55 km/hr

Q7 Quant

A chemist has two acid solutions, one containing 30% acid and the other containing 50% acid. How much of each solution should be mixed to obtain 20 litres of a solution containing 40% acid?

A. 1st solution = 10 liters, 2nd solution = 10 liters



B. 1st solution = 12 liters, 2nd solution = 8 liters

C. 1st solution = 8 liters, 2nd solution = 12 liters

D. 1st solution = 15 liters, 2nd solution = 5 liters

Q8 Quant

A class has two sections. Section P has 18 students with an average score of 74 marks, and Section Q has 27 students with an average score of 82 marks. What is the weighted average score of all 45 students?

A. 76.4

B. 77.6

C. 78.8



D. 79.2

Q9 Quant

Simplify: $3^5 \times 3^8 \div (3^3)^4$

A. 0

B. 3



C. 9

D. 1

Q10 Quant

A trader buys a laptop for ₹40,000, spends ₹2,000 on repairs, and then sells it to a dealer at a 10% profit on his total cost. The dealer further sells it to a customer at a 5% loss on his purchase price. What price does the customer pay?

A. ₹41,800

B. ₹46,200

C. ₹43,890



D. ₹45,000

Q11 Quant

The price of a fan is first increased by 17% and then the increased price is decreased by 20%. The resulting price of the fan is ₹2,870. Find the original price of the fan (rounded nearest to the rupee).

A. ₹2,980

B. ₹3,066



C. ₹3,145

D. ₹3,270

Q12 Quant

Arvind bought an article for ₹x. He sold it to Biru at a loss of 30%. Biru spent ₹146 on its transportation and sold it to Minu at a profit of 60%. If Minu bought it for ₹1,936, then what is the value of x?

A. 1520



B. 1484

C. 1532

D. 1504

Q13 Quant

A sum of ₹4,179 is divided into three parts such that half of the first part, one-fourth of the second part, and one-eighth of the third part are equal. What is the positive difference (in ₹) between the first and the second parts?

A. 597



B. 497

C. 747

D. 697

Q14 Quant

What will be the amount after 1 year, if ₹7,500 is invested at 12% compound interest per annum, compounded half-yearly?

A. ₹8,427



B. ₹9,399

C. ₹8,268

D. ₹8,643



Q15 Quant

Two circles of radii 6 cm and 3 cm are touching each other externally. Find the length of common tangent.

- A. 8 cm
- B. $7\sqrt{2}$ cm
- C. $6\sqrt{2}$ cm ✓
- D. 9 cm

Q16 Quant

Two secants AB and AP are drawn to a circle from an external point A. AB intersects the circle at points S and T, and AP intersects the circle at C and D. $AS < AT$ and $AC < AD$, $AS = 8$ cm, $ST = (4x + 3)$ cm, $AC = 12$ cm and $CD = (2x - 3)$. What is the length (in cm) of AD?

- A. 22
- B. 27
- C. 14 ✓
- D. 19

Q17 Quant

In a triangle, the angles are in the ratio of 1 : 2 : 1. The corresponding sides are in the ratio:

- A. $1 : \sqrt{2} : 1$ ✓
- B. $1 : 1 : \sqrt{2}$
- C. $\sqrt{2} : \sqrt{2} : 1$
- D. $\sqrt{2} : 1 : 1$

Q18 Quant

A number when increased by 60%, gives 3390. The number is:

- A. 2118.75 ✓
- B. 2237.53
- C. 1059.37
- D. 1356.25

Q19 Quant

A tap fills a tank in 11 hours. Another tap empties the full tank in 33 hours. How long (in hours) will it take to fill two-third of the tank if the tank is empty initially and both the taps are open together?

- A. 11 ✓
- B. 15
- C. 33
- D. 38

Q20 Quant

The value of $2.8888... + 1.3636... - 1.5555...$ is:

- A. $\frac{89}{33}$ ✓
- B. $\frac{93}{36}$
- C. $\frac{96}{39}$
- D. $\frac{88}{38}$



Q1 Quant

What is the area (in cm^2) of an equilateral triangle having side 200 cm?
(Use $\sqrt{3} = 1.73$)

- A. 14,100
- B. 15,200
- C. 16,800
- D. 17,300



Q2 Quant

Car M takes 7 hours to travel from point A to point B. It would have taken 8 hours if it had travelled the same distance at a speed 22.6 km/hr less than its original speed. What is the distance between points A and B?

- A. 1052.5 km
- B. 1132.5 km
- C. 1265.6 km
- D. 1376.7 km



Q3 Quant

A car covers 180 km from Pune to Ahmednagar at an average speed of 60 km/h. On the return trip, the car encounters a traffic jam and travels at the average speed of 30 km/h. The overall average speed for round trip is:

- A. 30 km/h
- B. 35 km/h
- C. 40 km/h
- D. 45 km/h



Q4 Quant

In a school, the ratio of the number of boys to the number of girls is 3:2. If there are 120 more boys than girls, find the number of boys in the school.

- A. 240
- B. 300
- C. 360
- D. 400



Q5 Quant

A cuboidal tank $2.2 \text{ m} \times 2.0 \text{ m} \times 1.5 \text{ m}$ is filled with water from a cylindrical bucket of radius 0.25 m and height 0.28 m. How many buckets of water are needed to fill the tank completely? (Use $\pi = 22/7$)

- A. 110
- B. 115
- C. 120
- D. 125



Q6 Quant

The average of 8 numbers is 42. If one more number is added and the new average becomes 40, find the number added.

- A. 24
- B. 23
- C. 22
- D. 21



Q7 Quant

Find the value of $2.\overline{07} + 3.\overline{19} + 13.\overline{08}$.

- A. $18.\overline{34}$
- B. $18.\overline{35}$
- C. $19.\overline{34}$
- D. $19.\overline{35}$



Q8 Quant

Which of the following ratios is equivalent to 4:7?

A. 28:49



B. 98:105

C. 44:73

D. 54:70

Q9 Quant

If the mode of 1, 1, 1, 5, 9, 8, 7, 9, 9, 63, 4, 5, 6, 88, 8, 4, 44, 6, 6, 6, 9, 9, 9, and 1 is "v", then find the value of $\frac{\sqrt{v}}{3}$.

A. 2

B. $\frac{1}{3}$

C. $\frac{2\sqrt{2}}{3}$

D. 1

**Q10 Quant**

The cost of 4 pens and 3 notebooks is ₹86, while 2 pens and 5 notebooks cost ₹78. What is the cost of one pen?

A. ₹12

B. ₹14



C. ₹16

D. ₹18

Q11 Quant

Manoj spends 62.5% of his monthly income and saves ₹1236 per month. What is the monthly income of Manoj?

A. ₹3196

B. ₹3216

C. ₹3236

D. ₹3296

**Q12 Quant**

A jacket has a marked price of ₹2,500. A shopkeeper offers two successive discounts of 20% and 10% on it. What is the final selling price of the jacket?

A. ₹2,000

B. ₹1,800



C. ₹1,750

D. ₹1,700

Q13 Quant

A shopkeeper marks up his goods by 30% and allows two successive discounts of 10% and 5% on the marked price. If the marked price of such an item is ₹260, find the percentage profit (rounded off to two decimal places) made by the shopkeeper.

A. 11.15%



B. 22.30%

C. 12.25%

D. 15.15%

Q14 Quant

One pipe can fill a tank in 6 minutes while another pipe can empty the completely filled tank in 9 minutes. If both the pipes are opened together when the tank is empty, how many minutes will it take to fill one-third of the tank?

A. 6



B. 12

C. 18

D. 24

Q15 Quant

A shopkeeper fixes the marked price of an item at 50% above its cost price. What percentage of discount on the marked price should be allowed to gain 14%?

A. 24%



B. 21%

C. 27%

D. 26%

Q16 Quant

Akshay has ₹1,300 with him. He divided it amongst his sons Arjun and Kartik and asked them to invest it at 8% rate of interest compounded annually. It was seen that Arjun and Kartik got the same amount after 13 and 14 years, respectively. How much money (in ₹) did Akshay give to Kartik?

A. 625



B. 675

C. 475

D. 775



Q17 Quant

Simplify: $\sqrt{817} + \sqrt{567} + \sqrt{58} + \sqrt{493} + \sqrt{1296}$

A. 29



B. 25

C. 33

D. 32

Q19 Quant

When x is added to each of 15, 10, 12 and 13, then the numbers so obtained, in this order, are in proportion. If $9x : y :: y : (2x - 7)$, and $y > 0$, then what is the value of y ?

A. 60



B. 46

C. 41

D. 65

Q18 Quant

A can lay railway track between two given stations in 20 days and B can do the same job in 16 days. With the help of C, they did the job in 2 days only. Then, C alone can do the job in:

A. $2\frac{18}{31}$ daysB. $7\frac{18}{31}$ daysC. $11\frac{18}{31}$ daysD. $9\frac{18}{31}$ days

Q20 Quant

The population of a small village is 3000. Each person in the village requires 80 litres of water per day. The village has a water tank measuring $16\text{ m} \times 10\text{ m} \times 12\text{ m}$. Once the tank is full, for how many days will the water be sufficient for the people in the village?

A. 10

B. 6

C. 12

D. 8



Paper Set 28 · 01 Jun 2026 · 12:30 PM - 2:00 PM · Mathematics (English)

Quant

Q1 Quant

Simplify $1.\overline{28} + 2.\overline{59}$.

A. $2.\overline{37}$ B. $3.\overline{87}$ C. $1.\overline{29}$ D. $4.\overline{26}$

Q3 Quant

The side of a square is 5 cm more than the radius of a circle whose circumference is 16π cm. What is the perimeter of the square?

A. 48 cm

B. 52 cm



C. 56 cm

D. 64 cm

Q2 Quant

For which value of k will the equation $x^2 + kx + 441 = 0$ have equal roots?

A. ± 21 B. ± 42 C. ± 44 D. ± 22

Q4 Quant

A shopkeeper buys an item for ₹200 and sells it for ₹250. What is the percentage profit?

A. 25%



B. 20%

C. 30%

D. 15%



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Q5 Quant

A and B can do a piece of work in 5 days, B and C can do it in 8 days, C and A can do it in 10 days. Find the time taken by B alone to complete this work.

A. $5\frac{3}{7}$ days

B. $7\frac{5}{9}$ days

C. $8\frac{8}{9}$ days ✓

D. $10\frac{5}{7}$ days

Q6 Quant

John covers two-fifth of the total distance at 9 km/hr and the remaining distance at 12 km/hr in the total duration of 6 hours 48 minutes. Find the distance covered by him at 12 km/hr.

A. 43.2 km ✓

B. 28.8 km

C. 48.2 km

D. 34.8 km

Q7 Quant

Which of the following numbers is divisible by 16?

(i) 8914266

(ii) 5282140

(iii) 4674032

(iv) 5463776

A. (ii) and (iv) only

B. (i) and (iii) only

C. (ii) and (iii) only

D. (iii) and (iv) only ✓

Q8 Quant

If $a:b=6:17$, then the value of $(a+b):(b-a)$ is:

A. 21:13

B. 11:23

C. 13:21

D. 23:11 ✓

Q9 Quant

A sample of 15 data is given as follow: 52.1, 54.7, 51.2, 55.9, 51.2, 57.4, 59.5, 55.9, 52.1, 55.9, 54.7, 52.1, 55.9, 51.2. Find the mode of the data.

A. 52.1

B. 51.2

C. 54.7

D. 55.9 ✓

Q10 Quant

X and Y started a business by investing ₹60,000 and ₹90,000, respectively. After 6 months, X adds ₹30,000 more to his investment, and Y withdraws ₹30,000. If the total profit at the end of the year is ₹1,20,000, what is Y's share?

A. ₹54,000

B. ₹60,000 ✓

C. ₹66,000

D. ₹72,000

Q11 Quant

If 20% of a number is added to 24, then the result is the same number. 80% of the same number is:

A. 24 ✓

B. 6

C. 54

D. 44

Q12 Quant

A and B working together can do a piece of work in 2 days. B alone can do the same work in 5 days. How long (in days) will A alone take to do thrice the work?

A. 10 ✓

B. 20

C. 30

D. 40

Q13 Quant

A sum of ₹1,589 is divided into three parts such that half of the first part, one-fourth of the second part, and one-eighth of the third part are equal. What is the positive difference (in ₹) between the first and the second parts?

A. 227 ✓

B. 177

C. 277

D. 77



Q14 Quant

The profit made on a product is 24%. What is the loss percentage (correct to two decimal places) incurred on the sale if the figures of both cost price and selling price are interchanged?

A. 19.35%



B. 23.01%

C. 19.33%

D. 19.54%

Q15 Quant

If the compound interest on a sum of ₹y at 5% per year for 2 years, compounded annually, is ₹287, what will be the amount after 2 years?

A. ₹3087



B. ₹2801

C. ₹3551

D. ₹2694

Q16 Quant

P, Q, R, S and T in the given order are points on a circle, such that PR is a diameter and $PQ = QR$. If $\angle STP = 124^\circ$, then what is the degree measure of $\angle SPQ$?

A. 79°



B. 34°

C. 72°

D. 45°

Q17 Quant

Two circles touch each other externally at point A. BC is a common tangent to both the circles touching the circles at point B and point C. If the radii of the circles are 8 cm and 3 cm, and length of $BC = x$ cm, find the value of x^2 .

A. 90

B. 92

C. 94

D. 96

**Q18 Quant**

In what time (in months) will ₹3300 fetch an interest of ₹440 at 5% per year simple interest?

A. 32



B. 29

C. 30

D. 36

Q19 Quant

A number when increased by 60%, gives 3490. The number is:

A. 2181.25



B. 2362.54

C. 1090.62

D. 1543.75

Q20 Quant

Two persons X and Y travel the same distance at the speeds of 14 km/hr and 15 km/hr, respectively. If X takes 28 minutes more than Y, the distance travelled by each is:

A. 84 km

B. 90 km

C. 60 km

D. 98 km



Paper Set 29 · 01 Jun 2026 · 4:00 PM - 5:30 PM · Mathematics (English)



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Q1 Quant

Monthly salaries of A, B and C are in the ratio 2 : 4 : 5. If C's monthly salary is ₹12,000 more than A's, then what is B's monthly salary is:

- A. ₹16,000 ✓
- B. ₹14,000
- C. ₹12,000
- D. ₹13,500

Q2 Quant

The price of a commodity is reduced by 20% and then increased by 15%. What is the net effect?

- A. 8% increase
- B. 8% decrease ✓
- C. 9% increase
- D. 9% decrease

Q3 Quant

Two trains, X and Y, travel on parallel tracks. When moving in the same direction, X crosses Y in 100 seconds. When moving in opposite directions, they cross each other in 20 seconds. If the length of X is twice the length of Y, then what is the ratio of the time taken by train X to the time taken by Y to cover a distance of 720 m?

- A. 2 : 3 ✓
- B. 3 : 2
- C. 5 : 11
- D. 11 : 5

Q4 Quant

A car travels from A to B at a speed of 60 km/h and returns from B to A at a speed of 40 km/h. Find the average speed of the car for the whole journey.

- A. 45 km/h
- B. 46 km/h
- C. 48 km/h ✓
- D. 50 km/h

Q5 Quant

A and B together can complete a piece of work in 8 days. A alone can complete the same work in 15 days. How long will B alone take to complete the same work?

- A. $11\frac{1}{2}$ days
- B. $13\frac{1}{5}$ days
- C. $15\frac{1}{6}$ days
- D. $17\frac{1}{7}$ days ✓

Q6 Quant

If the mean proportional of 3 and 27 is 9m (m>0), then the mean proportional of 3 and (4m-1) is:

- A. 4
- B. 2
- C. 3 ✓
- D. 5

Q7 Quant

Find the arithmetic mean of the following data.

Class interval	0-4	4-8	8-12	12-16	16-20
Frequency	5	4	6	3	2

- A. 4.2
- B. 5.8
- C. 7.2
- D. 8.6 ✓

Q8 Quant

If 20% of a number is added to 36, then the result is the same number. 65% of the same number is:

- A. 29.25 ✓
- B. 19.25
- C. 59.25
- D. 49.25

Q9 Quant

A and B working together can do a piece of work in 2 days. B alone can do the same work in 8 days. How long (in days) will A alone take to do thrice the work?

A. 8



B. 16

C. 24

D. 32

Q10 Quant

Divide ₹1190 into three parts in such a way that half of the first part, one-fourth of the second part and one-eighth of the third part are equal. What is the value of the second part (in ₹)?

A. 340



B. 390

C. 290

D. 490

Q11 Quant

Given that $81^{0.4} = x$, $81^{0.78} = y$ and $x^z = y^2$, then the value of z is:

A. 3.9



B. 2.09

C. 7

D. 4.31

Q12 Quant

If the compound interest on a sum of ₹y at 10% per year for 2 years, compounded annually, is ₹378, what will be the amount after 2 years?

A. ₹2178



B. ₹2112

C. ₹1941

D. ₹2199

Q13 Quant

A sector is cut out from a circle of diameter 28 cm. If the angle of the sector is 108° , then its area (in cm^2) is:
[Use $\pi = 22/7$]

A. 148.2

B. 184.8



C. 188.5

D. 198.7

Q14 Quant

Find the area of a sector of arc length 11 cm, which subtends an angle of 60° at the centre of the circle. (Use $\pi = 22/7$)

A. 10.5 cm^2

B. 15.75 cm^2

C. 21.5 cm^2

D. 57.75 cm^2

**Q15 Quant**

What sum of money (in ₹) will yield ₹600 as simple interest in 2 years at 8% per annum?

A. 3,750



B. 3,250

C. 3,950

D. 4,150

Q16 Quant

A number when increased by 60%, gives 3420. The number is:

A. 2137.5



B. 2275.2

C. 1068.7

D. 1412.5

Q17 Quant

How many pairs of numbers between 4 and 10 (excluding 4 and 10) are co-prime?

A. 11

B. 12

C. 10

D. 8

**Q18 Quant**

A trader gains 20% by selling an article after two successive discounts of 32% and 22% on its marked price. If the cost price of the article is increased by 26%, then what single discount should he now give on the same marked price to get the same profit percentage as earlier? (Round off your answer to two decimal places.)

A. 33.17%



B. 32.11%

C. 35.51%

D. 36.77%



Q19 Quant

The roots of the quadratic equation $5x^2 + 5x - 10 = 0$ is:

A. 1, -2



B. -1, -2

C. 1, 2

D. -1, 2

Q20 Quant

In ΔPQR , $\angle P$ is a right angle and PS is drawn perpendicular to QR . If $QR = 28$ cm and $QS = 8$ cm, find the length of PS .

A. $2\sqrt{10}$ cm

B. $3\sqrt{10}$ cm

C. $4\sqrt{10}$ cm



D. $5\sqrt{10}$ cm

Paper Set 30 · 01 Jun 2026 · 9:00 AM - 10:30 AM · Mathematics (English)

Quant**Q1 Quant**

The nature of the roots of the equation $5x^2 - 7\sqrt{3}x + 24 = 0$ is:

A. real and distinct

B. real and equal

C. imaginary



D. cannot be determined

Q2 Quant

Find the surface area of a sphere whose radius is twice the radius of another sphere with radius 0.7 cm (use $\pi = 22/7$).

A. 23.64 cm^2

B. 24.64 cm^2



C. 28.48 cm^2

D. 30 cm^2

Q3 Quant

A motorboat takes 144 minutes less to travel 90 km downstream than to travel the same distance upstream. If the speed of the boat in still water is 20 km/hr, find the speed (in km/hr) of the stream.

A. 4

B. 5



C. 6

D. 3

Q4 Quant

A partnership firm earns a total profit of ₹5,20,000. This profit is divided among three partners X, Y and Z in the ratio 2 : 3 : 5. What is difference between the shares of Y and Z? Also, by what percentage is Y's share of profit less than Z's share of profit?

A. ₹1,04,000 ; 40%



B. ₹1,08,000 ; 30%

C. ₹1,12,000 ; 40%

D. ₹1,18,000 ; 30%



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Q5 Quant

A shopkeeper bought 50 apples for ₹500. He sold each apple for ₹12. Find the profit.

A. ₹50

B. ₹75

C. ₹100 ☒

D. ₹125

Q6 Quant

The top three participants in a running event, namely A, B and C, receive cash prizes in the ratio of 3 : 4 : 5. After that, one of the sponsors gives an additional ₹11,000 to each of these three runners. As a result, the new ratio of the cash prizes of A, B and C becomes 5 : 6 : 7. Find the initial cash prize received by B.

A. ₹33,000

B. ₹27,500

C. ₹22,000 ☒

D. ₹16,500

Q7 Quant

A train 240 m long is running at a speed of 54 km/hr. In how long will it completely cross a man who is running at 18 km/hr in the direction opposite to that of the train?

A. 12 seconds ☒

B. 10 seconds

C. 14 seconds

D. 15 seconds

Q8 Quant

A right circular cone has height 24 cm and slant height 25 cm. Find the total surface area of the cone. (Use $\pi = \frac{22}{7}$)

A. 704 cm^2 ☒B. 714 cm^2 C. 724 cm^2 D. 698 cm^2 **Q9 Quant**

If the difference between the simple and the compound interests earned on a sum of money at the rate of 25% per annum for 2 years is ₹48, find the principal.

A. ₹786

B. ₹768 ☒

C. ₹724

D. ₹742

Q10 Quant

Find the greatest number that divides 35 and 75 exactly.

A. 3

B. 5 ☒

C. 7

D. 15

Q11 Quant

A farmer can plough a field in 9 hours, and his son can do it in 18 hours. If they work together for 3 hours, what fraction of the field is ploughed?

A. $\frac{1}{2}$ ☒B. $\frac{1}{3}$ C. $\frac{2}{3}$ D. $\frac{1}{4}$ **Q12 Quant**

Find the median of the following data.

Class interval	0-4	4-8	8-12	12-16	16-20
Frequency	1	2	8	4	5

A. 8.5

B. 10.5

C. 11.5 ☒

D. 12.5



Q13 Quant

Sakshi started a software business by investing ₹10,000. After six months, Rohit joined her with an amount of ₹15,000. After 3 years, they earned a profit of ₹14,040. What was Rohit's share in the profit?

A. ₹7,800



B. ₹7,500

C. ₹7,700

D. ₹7,600

Q14 Quant

Mustard oil's listed price is 25% greater than its cost. At what percentage less than the listed price should it be sold to have no loss?

A. 20%



B. $16\frac{2}{3}\%$

C. $17\frac{2}{3}\%$

D. 22%

Q15 Quant

A and B working together can complete a piece of work in 3 days. B alone can complete the same work in 30 days. How long (in days) will A alone take to complete thrice the work?

A. 10



B. 20

C. 30

D. 40

Q16 Quant

If the ratio of two numbers is 3 : 4, and their HCF is 9, then their LCM is:

A. 108



B. 106

C. 216

D. 212

Q17 Quant

The diameter of the base and the height of a right circular cone are 30 cm and 36 cm, respectively. What is 80% of the total surface area (in cm^2 , rounded off to the nearest integer) of the cone?

(Take $\pi = \frac{22}{7}$)

A. 2546

B. 3256

C. 2853

D. 2037

**Q18 Quant**

In what time (in months) will ₹3200 fetch an interest of ₹440 at 5% per year simple interest?

A. 33



B. 30

C. 31

D. 37

Q19 Quant

A number when increased by 60%, gives 3430. The number is:

A. 2143.75



B. 2287.35

C. 1071.85

D. 1431.25

Q20 Quant

A merchant buys an article for ₹1600. He first sells it at a 10% profit. This selling price becomes the cost price for the buyer. Then the buyer sells it to another person at a 20% profit on his cost price. What is the final selling price of the article?

A. ₹2200

B. ₹2112



C. ₹2127

D. ₹2412



Q1 Quant

A cuboidal tank of size $72\text{ cm} \times 54\text{ cm} \times 24\text{ cm}$ is half-filled with water. A solid cube is dropped into the tank so that the water rises to the brim. Find the edge of the cube.

- A. 27 cm
- B. 29 cm
- C. 32 cm
- D. 36 cm



Q2 Quant

X, Y and Z started a business. X's capital is 10 times that of Y and Z.

If the profit is ₹1,11,600, then find the share of Z.

- A. ₹3,500
- B. ₹3,550
- C. ₹3,600
- D. ₹3,650



Q3 Quant

A vendor bought 16 toffees for 20 rupees. How many toffees should he sell for 3 rupees for a 20% gain?

- A. 1
- B. 2
- C. 3
- D. 6



Q4 Quant

What number should be subtracted from each of the numbers 30, 39, 7.5 and 9 so that the resultant numbers are in proportion?

- A. 1
- B. 2
- C. 3
- D. 4



Q5 Quant

Which of the following numbers is the least common multiple of 12, 15, 18, and 20?

- A. 60
- B. 90
- C. 120
- D. 180



Q6 Quant

A student's final grade in a math class is based on the following components and weights:

Assignments: 20%

Quizzes: 30%

Mid-term Exam: 25%

Final Exam: 25%.

The student's scores were (out of 100):

Assignments: 90%

Quizzes: 85%

Mid-term Exam: 78%

Final Exam: 82%.

What is the student's final weighted average grade?

- A. 83.5%
- B. 81.5%
- C. 76.5%
- D. 79.5%



Q7 Quant

If a person earns ₹2500 and spends ₹1300, what is his savings as a percentage of his income?

- A. 42%
- B. 48%
- C. 52%
- D. 56%



Q8 Quant

Twice a number exceeds its two-thirds by 72. Find the number.

- A. 48
- B. 54
- C. 96
- D. 24



Q9 Quant

A person covers three equal distances at the speeds of 15 km/hr, 20 km/hr and 25 km/hr, respectively. Find the average speed of the whole journey. (Rounded off to two decimal places)

- A. 17.65 km/hr
- B. 20.48 km/hr
- C. 22.51 km/hr
- D. 19.15 km/hr



Q10 Quant

A can complete a piece of work in 8 days, B can complete the same work in 11 days. If both start work together, how much work is done in 4 days?

A. $\frac{1}{4}$

B. $\frac{7}{11}$

C. $\frac{16}{19}$

D. $\frac{19}{22}$ ✓

Q11 Quant

If the weights corresponding to all observations in a dataset are multiplied by 3, how does the weighted mean of the dataset change?

A. It becomes three times the original weighted mean

B. It remains unchanged ✓

C. It becomes one-third of the original weighted mean

D. It becomes nine times the original weighted mean

Q12 Quant

Two numbers are in the ratio 12:19. If 24 is added to each, the ratio becomes 16:23. The positive difference between the numbers is:

A. 24

B. 32

C. 42 ✓

D. 56

Q13 Quant

If 20% of a number is added to 36, then the result is the same number. 60% of the same number is:

A. 27 ✓

B. 18

C. 57

D. 47

Q14 Quant

A shopkeeper fixes the marked price of an item at 50% above its cost price. What percentage of discount on the marked price should be allowed to gain 8%?

A. 28% ✓

B. 27%

C. 30%

D. 29%

Q15 Quant

Kartik has ₹1281 with him. He divided it amongst his sons Ishan and Krish and asked them to invest it at 10% rate of interest compounded annually. It was seen that Ishan and Krish got same amount after 19 and 20 years, respectively. How much money (in ₹) did Kartik give to Krish?

A. 610 ✓

B. 671

C. 460

D. 771

Q16 Quant

The total surface area of a solid cylinder having radius 9 cm and height 18 cm is:

A. $486\pi \text{ cm}^2$ ✓

B. $396\pi \text{ cm}^2$

C. $564\pi \text{ cm}^2$

D. $424\pi \text{ cm}^2$

Q17 Quant

The ratio of the lengths of two corresponding sides of two similar triangles is 8 : 1. The ratio of the areas of these two triangles, in the order mentioned, is:

A. 64 : 1 ✓

B. 8 : 1

C. $8\sqrt{8} : 1$

D. 1 : 64



Q18 Quant

Nitin and Pravin together can paint a hall in 3 days. Nitin alone can paint it in 6 days. In how many days can Pravin alone paint 16 such halls?

A. 96



B. 95

C. 97

D. 94

Q19 Quant

Simplify: $\sqrt{764} + \sqrt{371} + \sqrt{831} + \sqrt{68} + \sqrt{1024}$

A. 28



B. 31

C. 25

D. 29

Q20 Quant

Ankita travelled a certain distance at some speed. Had she moved 6 km/hr faster, she would have taken 80 minutes less. If she had moved 4 km/hr slower, she would have taken 80 minutes more. What is the distance (in km)?

A. 40

B. 80

C. 160



D. 200

Paper Set 32 · 02 Jun 2026 · 4:00 PM - 5:30 PM · Mathematics (English)

Quant**Q1 Quant**

What does the discriminant of the equation $x^2 + 4x + 4 = 0$ reveal about the nature of its roots?

A. Real and Distinct

B. Real and Equal



C. Complex Conjugates

D. Irrational

Q2 Quant

A and B started a business with an investment of ₹2,800 and ₹5,400, respectively. After 4 months, C joined with ₹4,800. If the difference between B's share and C's share in the annual profit was ₹407, what was the total annual profit?

A. ₹1,112

B. ₹1,516

C. ₹2,109



D. ₹2,567

Q3 Quant

Vicky, to go to his native place, had to travel through A and B. He took 10 hours to travel from A to B and 7 hours to travel this route. The distances from A to B and B to N are in the ratio 3:2. What is the average speed of the journey from B to N is 41 km/hr.

A. 20

B. 15



C. 25

D. 10

Q4 Quant

An item marked at ₹6,500 is sold with successive discounts of 20% and 5%. Find the effective discount percentage and its selling price.

A. Selling Price ₹4,940, Effective Discount 28%

B. Selling Price ₹4,940, Effective Discount 24%



C. Selling Price ₹4,540, Effective Discount 24%

D. Selling Price ₹4,540, Effective Discount 28%



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Q5 Quant

Two trains, one 150-metres long and the other 250-metres long, are moving in opposite directions at speeds of 54 km/hr and 72 km/hr, respectively. How much time will they take to completely cross each other (rounded off to two decimal places)?

- A. 10.25 seconds
- B. 11.43 seconds** ✓
- C. 12.46 seconds
- D. 13.37 seconds

Q6 Quant

Two pipes, A and B, can fill a cistern in 5 hours and 7.5 hours, respectively. How long will it take to fill the cistern if both pipes are opened simultaneously?

- A. 2 hrs
- B. 2.5 hrs
- C. 3 hrs** ✓
- D. 3.5 hrs

Q7 Quant

A sphere is exactly fitted inside a cube of side $2a$ units. Find the surface area (in sq.units) of the sphere.

- A. $2\pi a^2$
- B. πa^2
- C. $8\pi a^2$
- D. $4\pi a^2$** ✓

Q8 Quant

Four prime numbers are taken in ascending order. The product of the first three prime numbers among them is 1265, and the sum of the last two prime numbers is 82. Find the product of the last two prime numbers.

- A. 1355
- B. 1356
- C. 1357** ✓
- D. 1358

Q9 Quant

The following data gives the total score (out of 250 marks) of 12 students of a class.

Total Score	126	144	148	156	168
No. of Students	2	3	3	3	1

Find the arithmetic mean of the score of these 12 students by using the Direct method.

- A. 141
- B. 147** ✓
- C. 151
- D. 153

Q10 Quant

A and B started a business by investing ₹20,000 and ₹30,000, respectively. At the end of one year, the total profit earned was ₹25,000. Find the share of A in the total profit.

- A. ₹9,000
- B. ₹10,000** ✓
- C. ₹11,000
- D. ₹12,000

Q11 Quant

If 20% of a number is added to 36, then the result is the same number. 70% of the same number is:

- A. 31.5** ✓
- B. 41.5
- C. 61.5
- D. 51.5

A sum of ₹2,905 is divided into three parts such that half of the first part, one-fourth of the second part, and one-eighth of the third part are equal. What is the positive difference (in ₹) between the first and the second parts?

- A. 415** ✓
- B. 265
- C. 515
- D. 365



Q13 Quant

A shopkeeper fixes the marked price of an item at 30% above its cost price. What percentage of discount on the marked price should be allowed to gain 17%?

A. 10%



B. 11%

C. 7%

D. 9%

Q14 Quant

Simplify: $\sqrt{256} + \sqrt{0.0121} - \sqrt{4.41}$

A. 14.01



B. 4.21

C. 6.12

D. 2.57

Q15 Quant

In a circle of diameter 28 cm, an arc subtended an angle of 60° at the centre. Find the ratio between the length of the major arc to the perimeter of the minor sector. (Use $\pi = 22/7$)

A. 121 : 31

B. 113 : 117

C. 55 : 32



D. 143 : 67

Q16 Quant

In $\triangle ABC$, P and Q are the points on the sides AB and AC, respectively, such that AP = 4cm, PB = 12 cm, AQ = 4.5 cm and QC = 13.5 cm. Find BC in terms of PQ.

A. PQ

B. 3PQ

C. 6PQ

D. 4PQ

**Q17 Quant**

What sum of money (in ₹) will yield ₹600 as simple interest in 3 years at 5% per annum?

A. 4000



B. 3500

C. 4200

D. 4400

Q18 Quant

A number when increased by 60%, gives 3530. The number is:

A. 2206.25



B. 2412.65

C. 1103.12

D. 1618.75

Q19 Quant

The pipes P and Q together can completely fill an empty cistern with water in 12 hours. If P alone can fill the cistern with water in 14 hours, in how many hours will Q alone fill one-fourth of the same cistern with water?

A. 21



B. 42

C. 22

D. 43

Q20 Quant

The difference between the simple interest and the compound interest, compounded annually, on a certain sum of money for 2 years at 16% per annum is ₹750. Find the sum. (Round off your answer to the nearest rupee.)

A. ₹29,297



B. ₹29,288

C. ₹29,293

D. ₹29,285



Q1 Quant

What is the volume (in cm^3) of the cylinder having radius 20 cm and height 60 cm?
(Use $\pi = 3.14$)

- A. 73,560
B. 74,260
C. 75,360
D. 76,350



Q5 Quant

A man can row a boat to a certain distance upstream in 4 hours and takes 3 hours to row downstream the same distance. What is the speed of the boat in still water, if the speed of the stream is 2 km/hr?

- A. 9 km/hr
B. 10 km/hr
C. 12 km/hr
D. 14 km/hr



Q2 Quant

A company finds that the profit P (in thousands of rupees) from selling x units of a product can be modeled by the quadratic polynomial:

$P(x) = x^2 - 20x + 125$. Determine the nature of the roots of the equation $P(x)=0$.

- A. Complex roots
B. Two distinct real roots
C. One real root
D. Infinite solutions



Q6 Quant

A shirt marked at ₹1,400 is sold at a discount of 20%. What is the selling price?

- A. ₹1,240
B. ₹1,180
C. ₹1,120
D. ₹1,060



Q7 Quant

Which of the following numbers is perfectly divisible by 9?

- A. 6472
B. 6427
C. 6372
D. 6355



Q8 Quant

A boat can travel 16 km downstream in 2 hours and the same distance upstream in 4 hours. Find the ratio of the speed of the boat in still water to the speed of the stream.

- A. 3:1
B. 2:1
C. 4:1
D. 5:2



Q9 Quant

In a dance competition, the points (out of 100) given to the 15 participants are 67, 39, 53, 93, 93, 38, 53, 67, 93, 53, 39, 67, 83, 67, 83. Find the mode of the given data.

- A. 93
B. 67
C. 53
D. 39



Q3 Quant

Two pipes A and B can fill a tank in 8 minutes and 15 minutes, respectively. They are opened together, but after 4 minutes, pipe A is turned off. How much more time will pipe B take to fill the remaining tank?

- A. 3.5 minutes
B. 4.8 minutes
C. 4.3 minutes
D. 5.6 minutes



Q4 Quant

₹430 is divided among A, B and C in such a way that if A gets ₹2, B gets ₹3 and if B gets ₹5, C gets ₹6. Find the share of B.

- A. ₹150
B. ₹300
C. ₹225
D. ₹400



Q10 Quant

The volume of a solid cylinder is 83776 cm^3 and its height is 34 cm. What is the total surface area of the solid cylinder?

$$\left(\text{Use } \pi = \frac{22}{7} \right)$$

A. 10912 cm^2 ✓

B. 10938 cm^2

C. 10899 cm^2

D. 10958 cm^2

Q11 Quant

Three friends A, B and C started a business with investments in the ratio of 2 : 3 : 5. If the total profit at the end of the year is ₹40,000, then find C's share in the profit.

A. ₹10,000

B. ₹15,000

C. ₹20,000 ✓

D. ₹25,000

Q12 Quant

If 20% of a number is added to 24, then the result is the same number. 70% of the same number is:

A. 21 ✓

B. 9

C. 51

D. 41

Q13 Quant

A sum of ₹1,778 is divided into three parts such that half of the first part, one-fourth of the second part, and one-eighth of the third part are equal. What is the positive difference (in ₹) between the first and the second parts?

A. 254 ✓

B. 204

C. 354

D. 154

Q14 Quant

The profit made on a product is 19%. What is the loss percentage (correct to two decimal places) incurred on the sale if the figures of both cost price and selling price are interchanged?

A. 15.97% ✓

B. 18.86%

C. 19.19%

D. 15.62%

Q15 Quant

If the compound interest on a sum of ₹y at 5% per year for 2 years, compounded annually, is ₹574, what will be the amount after 2 years?

A. ₹6174 ✓

B. ₹6229

C. ₹5995

D. ₹6508

Q16 Quant

Let P be the point of contact of a tangent drawn from an external point Q to a circle with centre O. If the length of the tangent QP is 40 cm and OQ = 41 cm, find the radius of the circle (in cm).

A. 11

B. 12

C. 9 ✓

D. 8

Q17 Quant

In how much time (in months) will ₹3200 fetch an interest of ₹400 at 5% per year simple interest?

A. 30 ✓

B. 27

C. 28

D. 34

Q18 Quant

By how much is 30% of 55 greater than 40% of 40?

A. 0.5 ✓

B. 1.5

C. 2.5

D. 3.5



Q19 Quant

A can complete a piece of work in 42 hours; B and C together can complete it in 28 hours, while A and C together can complete it in 18 hours. How long (in hours) will B alone take to complete the work?

A. 252



B. 251

C. 253

D. 254

Q20 Quant

The value of $2.3333... + 1.0909... - 1.4444...$ is:

A. $\frac{196}{99}$



B. $\frac{201}{103}$

C. $\frac{200}{100}$

D. $\frac{205}{96}$

Paper Set 34 · 04 Jun 2026 · 12:30 PM - 2:00 PM · Mathematics (English)

Quant**Q1 Quant**

A tower is 64 m high. When the sun's altitude is 45° , then what will be the length of its shadow?

A. 32 m

B. 64 m



C. 128 m

D. 21 m

Q3 Quant

A shopkeeper buys a toy for ₹200 and sells it for ₹250. What is his profit percentage?

A. 20%

B. 25%



C. 30%

D. 35%

Q2 Quant

The speed of a boat in still water is 18 km/hr. If the current flows at 2 km/hr, how long will it take the boat to cover 32 km upstream?

A. 1.5 hours

B. 2 hours



C. 2.5 hours

D. 3 hours



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Q4 Quant

The LCM of $\frac{2}{7}$, $\frac{3}{14}$, $\frac{5}{21}$, $\frac{7}{35}$, $\frac{9}{28}$ is:

A. 45

B. 90

C. $\frac{1}{9}$

D. $\frac{3}{4}$

Q5 Quant

A bus goes from Jaipur to Kota at 60 km/hr and returns at 90 km/hr. Find the average speed for the entire journey.

A. 72 km/hr

B. 75 km/hr

C. 54 km/hr

D. 60 km/hr

Q6 Quant

P and Q start a partnership with ₹60,000 and ₹40,000, respectively. After 3 months, Q withdraws half his investment. After 4.5 more months, P adds ₹30,000, and Q reinvests his withdrawn amount plus an extra ₹10,000. If the total duration is 10 months, what is the final profit-sharing ratio of P and Q, in that order?

A. 67:135

B. 135:67

C. 145:68

D. 155:67

Q7 Quant

Arun started a business with an investment of ₹12,600 and after a few months, Tarun joined the business with an investment of ₹25,200. At the end of one year, the total profit was ₹8,905 in which, Arjun's share was ₹3,562. For how many months did Tarun join the business?

A. 6

B. 8

C. 9

D. 10

Q8 Quant

Mohit can finish a piece of work in 15 days, and Rohit can finish the same work in 30 days. They work together and earn a total of ₹4,500 for the job. Based on their contributions, how much should Mohit get from the total payment?

A. ₹1,500

B. ₹2,000

C. ₹2,500

D. ₹3,000

Q9 Quant

The ratio of the number of bottles in box X and box Y is 6 : 5 respectively. If six bottles are transferred from box Y to box X, then the ratio of number of bottles in both boxes becomes 4 : 3 respectively. Find the number of bottles in box X initially.

A. 72

B. 84

C. 102

D. 126

Q10 Quant

If the mean and median of a moderately skewed distribution are 25 and 30, respectively, find the mode.

A. 35

B. 38

C. 40

D. 45

Q11 Quant

If 20% of a number is added to 42, then the result is the same number. 80% of the same number is:

A. 42

B. 52

C. 72

D. 62

Q12 Quant

What sum of money (in ₹) will amount to ₹4,800 at 5% per annum simple interest in 5 years?

A. 3,840

B. 3,790

C. 3,890

D. 19,200



Q13 Quant

Pravin has ₹1302 with him. He divided it amongst his sons Rishi and Shan and asked them to invest it at 10% rate of interest, compounded annually. It was seen that Rishi and Shan got the same amount after 13 and 14 years, respectively. How much money (in ₹) did Pravin give to Shan?

A. 620



B. 682

C. 470

D. 782

Q14 Quant

Simplify: $\sqrt{289} + \sqrt{0.0121} - \sqrt{6.25}$

A. 14.61



B. 10.11

C. 12.98

D. 10.13

Q15 Quant

Let C be a circle with centre O and PQ be a minor arc on C. Let S be a point on arc PQ and R be a point on the remaining arc of PQ on C. If chord PQ subtends an angle of 106° at O, then find $\angle PSQ$.

A. 106° B. 60° C. 127° D. 120° **Q16 Quant**

If $6\cot A = 5$, what is the value of $\tan A - \frac{12\sin A - 7\cos A}{8\sin A + 9\cos A}$?

A. $\frac{377}{475}$ B. $\frac{373}{465}$ C. $\frac{333}{546}$ D. $\frac{335}{645}$ **Q17 Quant**

A number when increased by 60%, gives 3880. The number is:

A. 2425



B. 2850

C. 1212

D. 1727

Q18 Quant

One pipe can completely fill a tank in 6 minutes, while another pipe can empty completely filled tank in 7 minutes. If both the pipes are operated together when the tank is empty, how long (in minutes) will it take to fill half of the tank?

A. 21



B. 22

C. 42

D. 43

Q19 Quant

The product of two consecutive positive integers is 506. If the smaller of these two integers is represented by x, which of the options below will correspond to the equation for finding out the value of x?

A. $x^2 + x - 506 = 0$ B. $x^2 + x + 506 = 0$ C. $x^2 - x - 506 = 0$ D. $x^2 - x + 506 = 0$ **Q20 Quant**

An article has a cost price of ₹394 and is marked at ₹1,182. If the seller offers a 50% discount on the marked price, what will be his profit percentage?

A. 50%



B. 49%

C. 48%

D. 51%



Q1 Quant

Solve the equations: $2x - 3y = -1$, $x + 2y - z = 1$, $x + y - z = 1$

A. $x = 1, y = \frac{3}{4}, z = \frac{-2}{3}$

B. $x = 2, y = \frac{3}{4}, z = \frac{-1}{3}$

C. $x = \frac{2}{5}, y = \frac{3}{4}, z = \frac{-7}{3}$

D. $x = \frac{5}{2}, y = 2, z = \frac{7}{2}$ ✓

Q2 Quant

A shopkeeper marks his goods 25% above the cost price and allows a discount of 10% on the marked price. What is his percentage profit or loss?

A. 12.5 % profit ✓

B. 12.5 % loss

C. 12.7 % profit

D. 10.5 % profit

Q3 Quant

Pooja and Meena can complete a task in 10 days, while Raj and Anil can complete the same task in 15 days. How long will Pooja, Meena, Raj, and Anil take to complete it together?

A. 6 days ✓

B. 5 days

C. 8 days

D. 4 days

Q4 Quant

A and B start a business. A invests ₹1,20,000 and B invests ₹1,60,000. After a few months, C joins with ₹1,80,000. At the end of the year, the profit is divided in the ratio 3 : 4 : 3. After how many months did C join?

A. 4 ✓

B. 6

C. 3

D. 5

Q5 Quant

The highest common factor (HCF) of the two numbers 72 and 126 is:

A. 9

B. 12

C. 16

D. 18 ✓

Q6 Quant

The telegraph poles on a roadside are 50 metres apart. How many of them will be passed by a car in 4 hours if the speed of the car is 45 km/hr, if the counting begins just before the first pole is passed?

A. 3601 ✓

B. 3600

C. 3602

D. 3605

Q7 Quant

Steve covers a certain distance at a speed of 40 km/hr. If he increases the speed to 48 km/hr, he takes 45 minutes less to cover that distance. Find the distance (in km) that Steve travels.

A. 150

B. 168

C. 174

D. 180 ✓

Q8 Quant

Four friends P, Q, R, and S start a business together. P invests ₹15,000 for 12 months, Q invests ₹20,000 for 9 months, R invests ₹25,000 for 8 months, and S invests ₹30,000 for 6 months. If the total profit is ₹56,000, what is Q's share (Rounded off to the nearest integer).

A. ₹13,682

B. ₹13,652

C. ₹13,622 ✓

D. ₹13,602

Q9 Quant

If the fourth proportional to 28, X and 42 is 105, then find the value of X.

A. 42

B. 56

C. 70 ✓

D. 84



Q10 Quant

In a moderately skewed distribution, if the mode is 12 less than the median and the mean is 42, find the median.

A. 32

B. 36

C. 37

D. 39

Q11 Quant

If 20% of a number is added to 42, then the result is the same number. 70% of the same number is:

A. 36.75

B. 46.75

C. 66.75

D. 56.75

Q12 Quant

A, B and C can together finish a piece of work in 2 days. If A alone can finish the same work in 16 days and B can also do it alone in 16 days, how many days will C take to finish thrice the same work alone?

A. 8

B. 16

C. 24

D. 9

Q13 Quant

In a division sum, the divisor is 8 times the quotient and 5 times the remainder. If the remainder is 48, what is the dividend?

A. 7248

B. 7253

C. 7243

D. 7252

Q14 Quant

What sum of money (in ₹) will amount to ₹4920 at 4% per annum simple interest in 5 years?

A. 4100

B. 4050

C. 4150

D. 24600

Q15 Quant

If the compound interest on a sum of ₹y at 4% per year for 2 years, compounded annually, is ₹255, what will be the amount after 2 years?

A. ₹3380

B. ₹3170

C. ₹2961

D. ₹3727

Q16 Quant

The bisectors of $\angle B$ and $\angle C$ of an isosceles $\triangle ABC$ with $AB = AC$, intersect each other at O. If $\angle BOC = 110^\circ$, find the measure of external angle $\angle ABD$, where D lies on the extended part of side CB.

A. 70°

B. 80°

C. 110°

D. 100°

Q17 Quant

The larger of two supplementary angles is 46° more than the smaller. The smaller angle (in degrees) is:

A. 67

B. 61

C. 60

D. 63

Q18 Quant

The side QR of a $\triangle PQR$ has been produced to where T lies in the exterior of $\triangle PQR$. $\angle TQR$

A. 75°

B. 90°

C. 110°

D. 125°



Q19 Quant

A number when increased by 60%, gives 3920. The number is:

- A. 2450 ☒
- B. 2900
- C. 1225
- D. 1350

Q20 Quant

Rina sells a toy to Reshmi at a profit of 20%. Reshmi sells the same toy to Chandra for ₹2160 and makes a profit of 20%. What is the cost price at which Rina purchased the toy?

- A. ₹1300
- B. ₹1400
- C. ₹1500 ☒
- D. ₹1600

Paper Set 36 · 04 Jun 2026 · 9:00 AM - 10:30 AM · Mathematics (English)**Quant****Q1 Quant**

P and Q together have ₹350. After taking ₹250 from P, P will have the same amount as Q had earlier. Find the ratio of amounts with P to Q initially.

- A. 3 : 2
- B. 3 : 5
- C. 5 : 2
- D. 6 : 1 ☒

Q2 Quant

A, B and C can complete a task in 20, 22 and 24 days, respectively. If they work together, how many days will it take to complete the task? (Rounded up to one decimal place.)

- A. 5.8 days
- B. 6.5 days
- C. 7.3 days ☒
- D. 8.2 days

Q3 Quant

A shopkeeper gives two successive discounts of 10% and 25% on an article marked at ₹4000. Find its selling price.

- A. ₹2700 ☒
- B. ₹2800
- C. ₹3000
- D. ₹2750

Q4 Quant

Ravi travelled a certain distance by bike at a speed of 72 km/hr and returned at a speed of 58 km/hr. If the total time for the round trip was 5 hours 25 minutes, then find the total distance covered by Ravi (in km).

- A. 343 km
- B. 344 km
- C. 347 km
- D. 348 km ☒



Q5 Quant

Ayesha travels to her office at a speed of 42 km/hr and returns at a speed of 60 km/hr. What is her average speed for the entire journey?

A. $49\frac{8}{17}$ km/hr

B. $49\frac{7}{17}$ km/hr ✓

C. $49\frac{8}{19}$ km/hr

D. $49\frac{7}{19}$ km/hr

Q6 Quant

Simplify:

$$7.2 \div 0.6 \times [(3.5 - 2.5) + (\frac{3}{4} \text{ of } 2)]$$

A. 30 ✓

B. 54

C. 32

D. 36

Q7 Quant

The mode of the numbers 2, 4, 6, 10, 6, 9, 10, 9, 10, 10, 11 and 12 is:

A. 2

B. 6

C. 10 ✓

D. 12

Q8 Quant

A, B and C invested ₹60,000, ₹80,000 and ₹1,00,000, respectively, in a business. A withdrew his entire capital after 4 months, B after 6 months, and C remained invested for the whole year. If the total profit at the end of the year is ₹1,20,000, what is B's share of the profit?

A. ₹24,000

B. ₹30,000 ✓

C. ₹36,000

D. ₹40,000

Q9 Quant

The price of an article is raised by 20% above the cost price and then two successive discounts of 10% are allowed. Ultimately, the price of article is decreased by:

A. 2.8% ✓

B. 3.8%

C. 2%

D. 3%

Q10 Quant

Two mutually perpendicular chords AB and CD
Find length AC (in cm).

A. 18

B. 20

C. 24

D. 25 ✓

Q11 Quant

One pipe can fill a tank in 5 minutes, while another pipe can empty the completely filled tank in 8 minutes. If both the pipes are opened together when the tank is empty, how many minutes will it take to fill three-fourths of the tank?

A. 10 ✓

B. 20

C. 11

D. 21

Q12 Quant

The LCM of the numbers 13, 3.9 and 0.75 is:

A. 39 ✓

B. 26

C. 52

D. 65

Q13 Quant

A sum of ₹2457 is divided into three parts in such a way that half of the first part, one-fourth of the second part and one-eighth of the third part are equal. What is the value of the third part (in ₹)?

A. 1404 ✓

B. 1304

C. 1204

D. 1104



Q14 Quant

The larger of two supplementary angles is 12° more than the smaller. The smaller angle (in degrees) is:

A. 84



B. 85

C. 93

D. 83

Q15 Quant

The area of a triangle PQR is 84 cm^2 . Triangle ABC is constructed by joining the midpoints of the sides PQ, QR and PR of the triangle PQR, and triangle DEF is constructed by joining the midpoints of the sides AB, BC and AC of the triangle ABC. Find the area of the triangle DEF.

A. 21 cm^2

B. $\frac{21}{2} \text{ cm}^2$

C. $\frac{21}{4} \text{ cm}^2$



D. 7 cm^2

Q16 Quant

What sum of money (in ₹) will yield ₹580 as simple interest in 2 years at 10% per annum?

A. 2900



B. 2400

C. 3100

D. 3300

Q17 Quant

A number when increased by 60%, gives 3480. The number is:

A. 2175



B. 2350

C. 1087

D. 1525

Q18 Quant

Suresh bought some quantity of barley for ₹1386. Half of it is sold at a profit of 38%. If Suresh wishes to make a profit of 19% on the whole, find the selling price (in ₹) of the remaining barley.

A. 693



B. 297

C. 1201

D. 1363

Q19 Quant

What is the compound interest earned on ₹8,000 at a rate of 5% per year compounded annually, for 3 years?

A. ₹1,200

B. ₹1,261



C. ₹1,300

D. ₹1,325

Q20 Quant

What is the standard form of the following quadratic equation?

$$t + \frac{13}{t} = 3$$

A. $t^2 + 3t - 13 = 0$

B. $t^2 - 3t = 13$

C. $t + 13 = 3t^2$

D. $t^2 - 3t + 13 = 0$



Q1 Quant

The quadratic equation whose roots are $5 + 4\sqrt{3}$ and $5 - 4\sqrt{3}$ is:

A. $x^2 - 10x - 23 = 0$ ✓

B. $x^2 - 11x + 23 = 0$

C. $x^2 - 12x + 23 = 0$

D. $x^2 - 13x + 23 = 0$

Q2 Quant

A tap fills a tank in 22 minutes, but due to a leak, it takes 24 minutes to fill the tank. How long will it take for the leak to empty the full tank?

A. 3 hours, 25 minutes

B. 4 hours, 24 minutes ✓

C. 5 hours, 12 minutes

D. 6 hours, 10 minutes

Q3 Quant

If $a : b = 3 : 4$ and $b : c = 5 : 6$, find $a : c$.

A. 5:8 ✓

B. 4:5

C. 7:8

D. 3:5

Q4 Quant

Two trains, A and B, are running in opposite directions on a parallel track. Train A is moving at 76 km/hr and train B is moving at 84 km/hr. If the length of train A is 180 metres and the length of train B is 220 metres, then find how long will train A take to completely cross train B?

A. 9 seconds ✓

B. 11 seconds

C. 12 seconds

D. 14 seconds

Q5 Quant

By selling a shirt for ₹864 a shopkeeper incurs a loss of 4%. For how much should he sell it to gain 4%?

A. ₹936 ✓

B. ₹935

C. ₹934

D. ₹930

Q6 Quant

The average of five numbers 4, 8, 12, 14 and 19 is:

A. 10.7

B. 11.4 ✓

C. 12.1

D. 12.8

Q7 Quant

The least common multiple of 18, 30 and 42 is ____.

A. 1260

B. 630 ✓

C. 960

D. 1890

Q8 Quant

Era spends 65% of her income and saves the remaining. If her monthly saving is ₹2,450, then what is her total income?

A. ₹7,000 ✓

B. ₹6,000

C. ₹8,000

D. ₹7,500

Q9 Quant

A solid metallic sphere is melted and recast into smaller identical solid spheres, each having one-fourth the radius of the original sphere. During the melting process, 8% of the metal is lost as wastage. Find the number of complete smaller spheres formed after recasting.

A. 57

B. 59

C. 58 ✓

D. 60



Q10 Quant

The following data gives the monthly salary of 9 managers in a company.

Monthly Salary (in ₹)	54,000	63,000	72,000
No. of workers	3	4	2

Calculate the average monthly salary (in ₹) using the Direct method.

- A. 59,000
- B. 59,800
- C. 61,000
- D. 62,000

Q11 Quant

P, Q and R started a business investing amounts of ₹2,050, ₹510, and ₹830, respectively. If Q's share in the profit earned by them is ₹510. what is the difference in the profit (in ₹) earned by P and R?

- A. ₹1,220
- B. ₹1,219
- C. ₹1,223
- D. ₹1,221

Q12 Quant

Successive discounts of 16% and 25% are equivalent to a single discount of ____.

- A. 37%
- B. 47%
- C. 27%
- D. 30%

Q13 Quant

One pipe can fill a tank in 6 minutes while another pipe can empty the completely filled tank in 7 minutes. If both the pipes are opened together when the tank is empty, how many minutes will it take to fill one-third of the tank?

- A. 14
- B. 28
- C. 42
- D. 56

Q14 Quant

Akshat and Neha together invested ₹28,800 in a business. At the end of the year, out of a total profit of ₹6,000, Akshat's share was ₹1,600. What was the investment of Akshat?

- A. ₹7,680
- B. ₹9,285
- C. ₹8,235
- D. ₹7,760

Q15 Quant

The profit made on a product is 44%. What is the loss percentage (correct to two decimal place) incurred on the sale if the figures of both cost price and selling price are interchanged?

- A. 30.56%
- B. 31.70%
- C. 29.68%
- D. 31.61%

Q16 Quant

Find the value of $\frac{(\cos^2 P - \cos^4 P) \times \sin^2 P}{(\sin^4 P - \tan^4 P)}$.

- A. $\frac{\sin^6 P}{\cos^2 P(1 + \sin^2 P)}$
- B. $\frac{-\sin^6 P}{\cos^2 P(1 + \sin^2 P)}$
- C. $\frac{-\cos^6 P}{\sin^2 P(\cos^2 P + 1)}$
- D. $\frac{\cos^6 P}{\sin^2 P(\cos^2 P + 1)}$

Q17 Quant

The perimeter of a rhombus is 60 cm and one of its diagonals is 18 cm. The area (in sq. cm) of the rhombus is:

- A. 108
- B. 100
- C. 196
- D. 216



Q18 Quant

Aditya cycles at a speed of 22 km/hr. How long will it take for him to cover a distance of 121 km?

A. 5.5 hours ✓

B. 6.5 hours

C. 6 hours

D. 5.25 hours

Q19 Quant

A certain sum amounts to ₹31,360 in 2 years at 12% per annum compound interest, compounded annually. What is the sum?

A. ₹21,000

B. ₹23,500

C. ₹25,000 ✓

D. ₹27,600

Q20 Quant

The value of $2.3333... + 1.909... - 1.4444...$ is:

A. $\frac{277}{99}$ ✓B. $\frac{276}{104}$ C. $\frac{276}{94}$ D. $\frac{287}{102}$ **Paper Set 38 · 05 Jun 2026 · 4:00 PM - 5:30 PM · Mathematics (English)****Quant****Q1 Quant**

Three friends, P, Q and R, invest ₹6,735, ₹3,675 and ₹7,090, respectively, in a partnership. If the total profit after one year is ₹8,750, then find the sum of the profit shares of P and Q.

A. ₹6,715

B. ₹7,718

C. ₹5,205 ✓

D. ₹4,638

Q2 Quant

A manufacturer offers a trade discount of 25% to a distributor. On the discounted price, the distributor gets an additional scheme discount of 15% for early payment. If the distributor pays ₹5,100 after both discounts, what was the marked price of the goods?

A. ₹6,500

B. ₹7,200

C. ₹8,000 ✓

D. ₹8,500

Q3 Quant

Solve the following system of equations.

$$2x + y + z = 8$$

$$x + y - z = 2$$

$$x - z = 0$$

A. $x = y = z = 1$ B. $x = z = 2, y = 1$ C. $x = z = 1, y = 2$ D. $x = y = z = 2$ ✓**Q4 Quant**

A grocer wants to make 50 kg of rice costing ₹72 per kg by mixing two types of rice. One type costs ₹60 per kg, and the other costs ₹80 per kg. How many kilograms of the ₹60 per kg rice should be used?

A. 10 kg

B. 20 kg ✓

C. 30 kg

D. 40 kg



Q5 Quant

A conference is being organised by an educational institute where the participants will be educators of different subjects. The number of participants in physics, chemistry and mathematics is 112, 144 and 192, respectively. In each room, an equal number of participants are to be seated, and all the participants in a room should be educators of the same subject. What is the minimum number of rooms required during the event?

A. 32

B. 35

C. 23

D. 28

Q6 Quant

A bus moving at a speed of 72 km/hr overtakes a truck 240 m ahead going in the same direction in 18 seconds. The speed of the truck is:

A. 24 km/hr

B. 26 km/hr

C. 25 km/hr

D. 23 km/hr

Q7 Quant

A can do a work alone in 16 days and B can do the same work alone in 12 days. If A and B work together for 6 days, how much part of the work is left to be done?

A. $\frac{1}{4}$ B. $\frac{2}{3}$ C. $\frac{1}{8}$ D. $\frac{3}{4}$ **Q8 Quant**

Mr. Chaudhary owned 950 gold coins all of which he distributed amongst his three daughters Aradhana, Sadhana, and Neetu. Aradhana gave 25 gold coins to her husband, Sadhana donated 15 gold coins and Neetu made jewelry out of 30 gold coins. The new respective ratio of the coins left with them was 20 : 73 : 83. How many gold coins did Aradhana receive from Mr. Chaudhary?

A. 125

B. 320

C. 480

D. 380

Q9 Quant

Find the mode of the following data:

12, 15, 18, 12, 20, 22, 15, 12, 18

A. 12

B. 18

C. 22

D. 15

Q10 Quant

The price of a product increased by 10% and then again increased by 20%. Find the overall percentage increase in the price.

A. 30%

B. 32%

C. 35%

D. 40%

Q11 Quant

Raj and Manish entered into a partnership with capital of ₹10000. Raj invested $\frac{2}{5}$ of his capital and Manish withdrew $\frac{2}{7}$ of his capital after 6 months.

Raj's share in this profit is:

A. ₹984

B. ₹994

C. ₹996

D. ₹1004

Q12 Quant

Four prime numbers are arranged in ascending order. The sum of the first three is 76 and the sum of the last three is 86. Find the largest prime number.

A. 19

B. 23

C. 29

D. 31



Q13 Quant

The speed of a motorboat in still water is 18 km/h and the speed of the river stream is 6 km/h. Find the time it will take the motorboat to travel a distance of 120 km upstream.

- A. 5 hours
- B. 8 hours
- C. 10 hours ✓
- D. 12 hours

Q14 Quant

The population of a town is 8000. It increases by 5% in the first year and decreases by 12% in the second year. What will be the population of the town at the end of two years?

- A. 7392 ✓
- B. 7342
- C. 7482
- D. 7388

Q15 Quant

A shopkeeper fixes the marked price of an item at 52% above its cost price. What percentage of discount on the marked price should be allowed to gain 14%?

- A. 25% ✓
- B. 28%
- C. 22%
- D. 27%

Q16 Quant

Pravin has ₹1,300 with him. He divided it amongst his sons Rishi and Shan and asked them to invest it at 8% rate of interest compounded annually. It was seen that Rishi and Shan got same amount after 12 and 13 years, respectively. How much money (in ₹) did Pravin give to Shan?

- A. 625 ✓
- B. 675
- C. 475
- D. 775

Q17 Quant

If $\tan\theta + \cot\theta = \frac{3}{2}$, then find the value of $\tan^2\theta$.

- A. $\frac{3}{4}$
- B. $\frac{1}{4}$ ✓
- C. $\frac{1}{3}$
- D. $\frac{4}{3}$

Q18 Quant

A solid metal cube has a total volume of 9.24 cubic metres. It is melted and recast into cylindrical rods, each having a length of 3.5 cm and a diameter of 4 cm. Assuming no loss of material during the process, how many such rods can be formed? (Use $\pi = \frac{22}{7}$)

- A. 210000 ✓
- B. 120000
- C. 840000
- D. 480000

Q19 Quant

Let ABC be a triangle, such that $\angle ABC = 50^\circ$ and $\angle ACB = 70^\circ$. If O is the incentre of the triangle, then find $\angle BOC$.

- A. 60°
- B. 120° ✓
- C. 140°
- D. 100°

Q20 Quant

A can do a piece of work in 42 hours; B and C together can complete it in 27 hours, while A and C together can complete it in 18 hours. How long (in hours) will B alone take to complete the work?

- A. 189 ✓
- B. 188
- C. 190
- D. 191



Q1 Quant

If $x + \frac{1}{x} = 15$, what is the value of $x^2 + \frac{1}{x^2}$?

A. 225

B. 223 

C. 218

D. 210

Q6 Quant

Vibha and Anju divide an amount of ₹3,200 and then what will the new ratio of their shares be?

A. 9 : 8

B. 9 : 10

C. 9 : 11 

D. 9 : 13

Q2 Quant

The printed price of a water bottle is ₹420 and a shopkeeper offers successive discounts of 25% and 20% on it. Find the selling price of the water bottle.

A. ₹248

B. ₹252 

C. ₹272

D. ₹280

Q7 Quant

A car travels 100 km at a speed of 50 km/h and next 160 km at a speed of 80 km/h. Find the average speed of the car for the whole journey.

A. 54 km/h

B. 58 km/h

C. 65 km/h 

D. 69 km/h

Q3 Quant

Pipe A can fill a tank in 16 hours, and Pipe B can fill the same tank in 24 hours. If both the pipes are opened together, how long will it take to fill the tank completely?

A. 18 hours 20 minutes

B. 9 hours 36 minutes 

C. 10 hours 40 minutes

D. 11 hours 30 minutes

Q8 Quant

If 35% of a certain number is equal to $\frac{7}{10}$ th of another number, by what percentage is the first number more than the second number?

A. 75%

B. 80%

C. 90%

D. 100% 

Q4 Quant

What is the smallest number that must be added to 6572 to make it divisible by 8?

A. 2

B. 4 

C. 6

D. 5

Q9 Quant

If the mean of a moderately skewed distribution is twice the mode and the median is 30, find the mode.

A. 18 

B. 20

C. 24

D. 30

Q5 Quant

A boat takes 3 hours to go 36 km downstream and 6 hours to return the same distance upstream. Find the speed of the boat in still water.

A. 9 km/hr 

B. 12 km/hr

C. 8 km/hr

D. 15 km/hr



Q10 Quant

Karan and Arjun start a business together. Karan invests ₹80,000 more than Arjun for 5 months, while Arjun invests for 6 months. Out of a total profit of ₹6,512, Karan's share exceeds Arjun's share by ₹1,628. Find the amount invested by Karan.

A. ₹1,60,000 ✓

B. ₹1,64,000

C. ₹1,56,000

D. ₹1,68,000

Q15 Quant

The same amount of money was invested for 2 years at 9% per year, once at simple interest and once at compound interest (compounded annually). The compound interest exceeds the simple interest by ₹81. Find the amount (in ₹) invested in each case.

A. 10,000 ✓

B. 8,000

C. 12,000

D. 9,000

Q11 Quant

If 20% of a number is added to 48, then the result is the same number. 65% of the same number is:

A. 39 ✓

B. 49

C. 69

D. 59

Q16 Quant

If $\triangle ABC \cong \triangle PQR$, which of the following statements is not correct?

A. $AB = PQ$, $BC = QR$ and $\angle C = \angle R$ B. $\angle C = \angle R$, $AB = PQ$ and $\angle A = \angle P$ C. $\angle A = \angle P$, $\angle B = \angle Q$ and $\angle C = \angle R$ D. $BC = PR$, $CA = RP$ and $\angle C = \angle R$ ✓**Q12 Quant**

The LCM of the numbers 8, 12.3 and 0.09 is:

A. 2952 ✓

B. 2152

C. 2656

D. 2160

Q17 Quant

Three angles of a quadrilateral are 65° , 77° and 112° . Find the fourth angle.

A. 74° B. 90° C. 100° D. 106° ✓**Q13 Quant**

The marked price of a cooker is the same at four shops I, II, III and IV. Shop I allows two successive discounts of 89% and 93%, shop II allows successive discounts of 66% and 35%, shop III allows successive discounts of 56% and 88%, and shop IV allows successive discounts of 58%, 57%, and 15% on the marked price of the cooker. Which shop is selling the cooker at the lowest price?

A. I ✓

B. III

C. II

D. IV

Q18 Quant

$\triangle ABC$ and $\triangle DBC$ are two isosceles triangles
If AD is extended to intersect BC at P, then which of the following is true?

A. $AP = AC$

B. AP intersects BC in unequal ratio

C. $DB = CP$

D. DP is perpendicular bisector of BC ✓

Q14 Quant

How long (in years) will it take for ₹1440 to become ₹2700 at a rate of 10% per annum simple interest?

A. 8.75 ✓

B. 7.75

C. 9.75

D. 10.75



Q19 Quant

A number when increased by 60%, gives 3940. The number is:

- A. 2462.5 ✓
- B. 2925.7
- C. 1231.2
- D. 1738.4

Q20 Quant

The pipes P and Q together can completely fill an empty cistern with water in 7 hours. If P alone can fill the cistern with water in 56 hours, in how many hours will Q alone fill three-fourth of the same cistern with water?

- A. 6 ✓
- B. 12
- C. 7
- D. 13

Paper Set 40 · 08 Jun 2026 · 12:30 PM - 2:00 PM · Mathematics (English)

Quant**Q1 Quant**

Find the value of k for which the equation $(4 - k)x^2 + (2k + 4)x + (8k + 1)$ has equal roots.

- A. $k = 0$ or $k = 3$ ✓
- B. $k = 0$ or $k = 2$
- C. $k = 1$ or $k = 2$
- D. $k = 1$ or $k = -2$

Q2 Quant

A specific amount was divided between Karan and Lata in the ratio 10 : 7. If Lata's share is ₹7,000, find the initial amount.

- A. ₹16,000
- B. ₹17,000 ✓
- C. ₹13,000
- D. ₹14,000

Q3 Quant

A 300-metre-long train is moving at a constant speed of 90 km/hr. It needs to cross a 450-metre-long bridge. If the speed of the train were increased by 20%, how much time would it take to cross the bridge?

- A. 10 seconds
- B. 18 seconds
- C. 20 seconds
- D. 25 seconds ✓

Q4 Quant

A 150-metre-long train travelling at 72 km/hr overtakes a 100-metre-long train moving at 54 km/hr in the same direction. How long does it take to completely pass the slower train?

- A. 20 seconds
- B. 30 seconds
- C. 40 seconds
- D. 50 seconds ✓



Q5 Quant

If $x : y = 3 : 4$ and $a : b = 1 : 2$, then the value of $\frac{2xa + yb}{3yb - 4xa}$ is:

A. $\frac{7}{6}$



B. $\frac{6}{7}$

C. $\frac{7}{9}$

D. $\frac{7}{11}$

Q6 Quant

A and B can do a piece of work in 10 days, B and C can do the same work in 15 days and C and A can do it in 20 days. How long will A, B and C take to finish the same work working together?

A. $\frac{60}{13}$ days

B. $\frac{120}{13}$ days



C. $\frac{13}{60}$ days

D. $\frac{13}{120}$ days

Q7 Quant

A digital artist sells an online poster for ₹600, earning a profit of 20%. What was the cost price of the poster?

A. ₹400

B. ₹450

C. ₹500



D. ₹550

Q8 Quant

Which is the least number which, when doubled, will be exactly divisible by 54, 42 and 63?

A. 756

B. 378

C. 189



D. 159

Q9 Quant

If the mean and mode of a certain set of data is 60 and 171, respectively, find the value of the median of the same data by using empirical relation.

A. 81

B. 87

C. 91

D. 97

**Q10 Quant**

If 20% of a number is added to 60, then the result is the same number. 60% of the same number is:

A. 45



B. 55

C. 75

D. 65

Q11 Quant

₹2,232 is divided among Radhika, Gautam, and Brijesh in such a way that if ₹32, ₹50, and ₹38 be deducted from their respective shares, they have money in the ratio 13 : 4 : 7. Find the actual share of Gautam.

A. ₹402



B. ₹305

C. ₹252

D. ₹202

Q12 Quant

If the compound interest (compounded annually) on a sum of ₹y at 5% per year for 2 years is ₹656, what will be the amount after 2 years?

A. ₹7056



B. ₹6562

C. ₹6893

D. ₹6599

Q13 Quant

An arc is a part of the _____ of a circle.

A. radius

B. chord

C. diameter

D. circumference



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Q14 Quant

In a circle, the chords AB and CD intersect internally at L. If AL = 12 cm, BL = 8 cm, DL = 6 cm and CL = X cm, then find the value of X.

A. 14

B. 15

C. 16 ☒

D. 18

Q15 Quant

The number of sides of a regular polygon is 18. What is the measure (in degrees) of each interior angle?

A. 155

B. 160 ☒

C. 150

D. 145

Q16 Quant

In what time (in months) will ₹3,000 fetch an interest of ₹400 at 8% per year simple interest?

A. 20 ☒

B. 17

C. 18

D. 24

Q17 Quant

By how much is 65% of 60 greater than $\frac{3}{5}$ of 35?

A. 18 ☒

B. 15

C. 12

D. 16

Q18 Quant

A and B can complete a piece of work in 11 days and 99 days, respectively. They both work together for 3 days, after which A leaves the work. How long (in days) will B take to complete the remaining work?

A. 69 ☒

B. 70

C. 68

D. 71

Q19 Quant

Express $4.\overline{1} + 2.\overline{3}$ as a vulgar fraction.

A. $\frac{58}{9}$ ☒B. $\frac{57}{14}$ C. $\frac{56}{5}$ D. $\frac{51}{9}$ **Q20 Quant**

A trader gains 48% by selling an article after allowing two successive discounts of 10% and 20% on its marked price. If the cost price of the article is increased by 25%, what single discount should he allow now on the same marked price to obtain the same profit percentage as before?

A. 10% ☒

B. 12%

C. 15%

D. 20%



Q1 Quant

The ages of Ramesh and Suresh are in the ratio of **3 : 5**. If Ramesh is **12 years old**, what is the age of Suresh?

- A. 15 years
- B. 18 years
- C. 20 years ✓
- D. 22 years

Q2 Quant

A cyclist covers a fixed route of 72 km. If his speed is increased by 2 km/h, he arrives 30 minutes earlier. Find his original speed.

- A. 12 km/h
- B. 14 km/h
- C. 16 km/h ✓
- D. 18 km/h

Q3 Quant

A shopkeeper bought 300 writing pads for ₹15,000. The shopkeeper wanted to sell them at a profit, so that they got 30 writing pads free. At what profit percentage should it be sold?

- A. 15%
- B. 17%
- C. 12%
- D. 10% ✓

Q4 Quant

A solid sphere of radius 9 cm is melted and drawn into a wire of uniform circular cross-section with radius 1 cm. What is the length of the wire? [Use $\pi = \frac{22}{7}$]

- A. 9.12 m
- B. 9.32 m
- C. 9.72 m ✓
- D. 9.92 m

Q5 Quant

A man spends 10% of his monthly income on house rent, 22% on food, and 23% on children education; he is then left with ₹8100. Find his monthly income.

- A. ₹18,000 ✓
- B. ₹15,000
- C. ₹21,000
- D. ₹24,000

Q6 Quant

Two partners P and Q invest ₹15,000 and ₹25,000, respectively, in a business. After a year, the total profit is ₹16,000, which they share in the ratio of their investments. What is the share of the profit of Q?

- A. ₹9,500
- B. ₹9,800
- C. ₹10,000 ✓
- D. ₹10,200

Q7 Quant

A bus travels from Town A to Town B, a distance of 70 km, at a speed of 30 km/h. At the same time, a motorcycle starts from Town B towards Town A at 40 km/h. After meeting, the motorcycle reduces its speed to 10 km/h and continues to Town A. Find the distance of the motorcycle from Town A two hours after their meeting.

- A. 10 km
- B. 20 km ✓
- C. 25 km
- D. 30 km

Q8 Quant

If $a+b+c=16$ and $ab+bc+ac=39$, find the value of $a^2 + b^2 + c^2$.

- A. 178 ✓
- B. 100
- C. 149
- D. 134



Q9 Quant

Simplify and find the result in the lowest terms.

$$\frac{4\frac{1}{8}}{3\frac{3}{4}} \text{ of } \frac{3\frac{5}{12}}{12\frac{3}{4}} \div \frac{5}{9} \left[3\frac{1}{2} + \frac{7}{4} \right] \text{ of } \frac{1}{12}$$

A. $\frac{4172}{3197}$

B. $\frac{3608}{2975}$ ✓

C. $\frac{5199}{6341}$

D. $\frac{3999}{4130}$

Q10 Quant

A tank is filled by a pipe in 18 hours. Another pipe emptied it in 21 hours. If both pipes are opened together, in how many hours will the tank be filled?

A. 88

B. 94

C. 112

D. 126 ✓

Q11 Quant

Find the mode of the given set of numbers.

63, 87, 91, 78, 89, 36, 87, 98, 78, 63, 98, 79, 89, 36, 63

A. 79

B. 98

C. 89

D. 63 ✓

Q12 Quant

The sum of all interior angles of a regular polygon is 1620° . How many sides does the polygon have?

A. 13

B. 12

C. 11 ✓

D. 10

Q13 Quant

If 20% of a number is added to 54, then the result is the same number. 80% of the same number is:

A. 54 ✓

B. 64

C. 84

D. 74

Q14 Quant

One pipe can fill a tank in 8 minutes while another pipe can empty the completely filled tank in 32 minutes. If both the pipes are opened together when the tank is empty, how many minutes will it take to fill three-fourths of the tank?

A. 8 ✓

B. 16

C. 9

D. 17

Q15 Quant

₹12,123 is divided among X, Y, and Z such that if ₹84, ₹47, and ₹64 are deducted from their respective shares, the remaining amounts are in the ratio 3:7:11. Find X's share after the deduction.

A. ₹1704 ✓

B. ₹1754

C. ₹1554

D. ₹1854

Q16 Quant

In a division sum, the divisor is 20 times the quotient and 5 times the remainder. If the remainder is 76, what is the dividend?

A. 7296 ✓

B. 7301

C. 7292

D. 7295

Q17 Quant

Amit invested the same amount in two schemes: one at simple interest and the other at compound interest, both at 10% per year for 2 years. At the end, the compound interest was ₹40 more than the simple interest. Find the amount (in ₹) he invested in each scheme.

A. 4000 ✓

B. 5000

C. 6000

D. 8000



Q18 Quant

The arithmetic mean of the observations 26, 25, 55, 41, 29, 64, 86, 56 and 32 is:

A. 46



B. 37

C. 55

D. 50

Q19 Quant

The ratio between the perimeter and the breadth of a rectangle is 4 : 1. If the area of the rectangle is 289 cm^2 , find the perimeter (in cm) of the rectangle.

A. 68



B. 72

C. 64

D. 60

Q20 Quant

Ranjith bought two mobiles at the same price. He sold one at a profit of 20% and the other at a loss of 10%. What is his overall percentage of profit?

A. 5%



B. 6.5%

C. 6%

D. 5.5%

Paper Set 42 · 08 Jun 2026 · 9:00 AM - 10:30 AM · Mathematics (English)

Quant**Q1 Quant**

Pooja and Pawan invest ₹7,850 and ₹8,550, respectively, in a business. They share profits in proportion to their investments. If the total profit is ₹26240, find the profit share of Pooja.

A. ₹ 13800

B. ₹ 13850

C. ₹ 12580

D. ₹ 12560

**Q2 Quant**

A cyclist travels from A to B at 10 km/h and returns at 15 km/h. The total time taken for the journey is 5 hours. What is the distance between A and B?

A. 20 km

B. 25 km

C. 30 km



D. 45 km

Q3 Quant

A trader sells an article at a loss of 22%. If the cost price of the article is ₹2,400, then what is the selling price (in ₹)?

A. 2,160

B. 1,872



C. 1,920

D. 2,880

Q4 Quant

The ratio of the number of ladies to the number of gents at a party was 5 : 8, but when 2 ladies and 4 gents left, the ratio became 2 : 3. How many people were originally present at the party?

A. 39

B. 52

C. 26



D. 78



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Q5 Quant

An experimental high-speed train runs between research stations P and Q, which are 280 km apart. In a performance test, engineers find that when they increase the train's speed by 20% above its standard operating speed, the journey time decreases by t hours. When they decrease the train's speed by 25% below its standard operating speed, the journey time increases by $(t+1)$ hours. What is the standard journey time between stations P and Q?

A. 5 hours

B. 6 hours

C. 7 hours

D. 8 hours

Q6 Quant

A shopkeeper marks an item at 60% above the cost price. He offers two successive discounts of 20% and 25% on the item, and he incurs a loss of ₹180. What is the cost price of the item?

A. ₹4100

B. ₹4200

C. ₹4300

D. ₹4500

Q7 Quant

Simplify: $(4.8 \times 100^4) \div (0.064 \times 10^6)$

A. 7.5×10^2

B. 7.4×10^3

C. 7.5×10^3

D. 7.2×10^3

Q8 Quant

The average weight of 14 students in a class is 42.5 kg. If the weight of all the students has been increased by 5 kg, then find the new average weight of the class.

A. 45.5 kg

B. 47.5 kg

C. 48.5 kg

D. 49.5 kg

Q9 Quant

A and B together complete a piece of work in 6 days. B alone can complete the same work in 9 days. In how many days can A alone complete the same work?

A. 12

B. 14

C. 16

D. 18

Q10 Quant

If the mode of the given data set $\{x, x + 3.5, x + 9.5, x + 5.5, x + 3.5, x + 5.5, x + 3.5\}$ is 50.25, find x .

A. 45.75

B. 46.75

C. 47.75

D. 47.25

Q11 Quant

A, B and C started a business investing amounts of ₹1,500, ₹2,210, and ₹2,350, respectively. If B's share in the profit earned by them is ₹1,196. what is the difference in the profit (in ₹) earned by A and C?

A. ₹460

B. ₹458

C. ₹461

D. ₹462

Q12 Quant

If $x\%$ and 40% successive discounts amount to a single discount of 58%, then the value of x is ____.

A. 40

B. 35

C. 30

D. 48

Q13 Quant

Each year, Ravi's capital grows by 50%. At the end of that year, he donates half of that year's increase (that is, half of the extra amount gained during that year, not half of the whole capital). He repeats this process for three consecutive years. After the third donation, he has ₹33,750 left. How much did he donate at the end of Year 2?

A. ₹4,320

B. ₹5,400

C. ₹6,750

D. ₹8,100



Q14 Quant

The LCM of the numbers 7, 4.9 and 0.89 is:

A. 4361



B. 4447

C. 4391

D. 4383

Q15 Quant

WX is a chord of a circle. ZY is a tangent to the circle at point Z on the circle. The chord WX is extended beyond X so that it meets the tangent at Y. The tangent YZ has length 30 cm, and the segment XY has length 10 cm. Find the length of the chord WX.

A. 90 cm

B. 40 cm

C. 80 cm



D. 60 cm

Q16 Quant

In a parallelogram ABCD, point P divides side AB in ratio 2:3 (from A) and point Q divides side AD in ratio 1:2 (from A). If the area of triangle APQ is 12 square units, then the area of parallelogram ABCD (in square units) is:

A. 180



B. 100

C. 150

D. 120

Q17 Quant

In a courtyard, there are two triangular flower beds. Flower bed LMN has sides LM = 15 m, MN = 12 m and LN = 9 m. Flower bed STU has sides ST = 12 m, TU = 15 m and SU = 9 m. Based on the above information, can it be concluded that flower bed LMN is congruent to flower bed STU?

A. Yes, all three sides of LMN are equal to the corresponding sides of STU.

B. Yes, all three angles of LMN are equal to the corresponding angles of STU.

C. Yes, because LMN and STU have same sides.

D. No, because the corresponding sides of LMN and STU are not equal.

**Q18 Quant**

The pipes P and Q together can completely fill an empty cistern with water in 4 hours. If P alone can fill the cistern with water in 16 hours, in how many hours will Q alone fill three-fourth of the same cistern with water?

A. 4



B. 8

C. 5

D. 9

Q19 Quant

What is the compound interest on ₹16,000 for 3 years at the rates of 6% per annum for the first year, 8% per annum for the second year and 10% per annum for third year, if interest is being compounded annually?

A. ₹3540.28

B. ₹3980.75

C. ₹4148.48



D. ₹4567.76

Q20 Quant

Find the value of x, y and z from the following system of equations.

$$x + y + z = 24$$

$$3x + 3y + z = 50$$

$$5x + y + 2z = 55$$

A. $x = 5, y = 8, z = 11$



B. $x = 8, y = 5, z = 11$

C. $x = 5, y = 11, z = 8$

D. $x = 5, y = 6, z = 2$



Q1 Quant

The area of a rectangular room is 300 m^2 . If the length of the room is reduced by 5 m and the width is increased by 5 m, the area remains unchanged. Find the original breadth of the room.

- A. 20 m
- B. 18 m
- C. 15 m
- D. 25 m

Q2 Quant

A, B and C started a business with investment of ₹34,485, ₹48,279 and ₹55,176 respectively. If the total profit is ₹18,640, find the share of B in the profit.

- A. ₹6,152
- B. ₹6,236
- C. ₹6,428
- D. ₹6,524

Q3 Quant

Two trains are moving in opposite directions. Train A is traveling at a speed of 60 km/hr, and Train B is traveling at a speed of 40 km/hr. What is the relative speed of the two trains, in metres per second (Rounded off to two decimal places)?

- A. 27.33
- B. 33.33
- C. 27.78
- D. 31.11

Q4 Quant

If ₹2,400 is divided among A, B, and C in the ratio 5 : 3 : 2, what is 35% of the share of C?

- A. ₹148
- B. ₹168
- C. ₹188
- D. ₹208

Q5 Quant

A solid cylinder of radius 12 cm and height 25 cm is melted and recast into 112 identical hollow spheres. Each hollow sphere has outer radius r cm and inner radius is half of the outer radius. If 2% of the metal is lost, what is the value of r ?

- A. 1
- B. 2
- C. 3
- D. 4

Q6 Quant

Mayank buys a sports bike for ₹2,40,000. He spends ₹15,000 on repairs and sells it to a friend at a profit of 22%. What is the selling price (in ₹)?

- A. 2,92,800
- B. 3,06,000
- C. 3,11,100
- D. 3,56,100

Q7 Quant

Two goods trains P and Q, of lengths 350 m and 400 m respectively, are moving towards each other on parallel tracks. Train P moves at a speed of 45 km/h, while train Q moves at a speed of 60 km/h. Due to a storm, the speed of train Q is reduced by 10% during the first one-fourth of the total time taken to cross each other, after which it resumes its original speed. Find the total time (in seconds), correct to two decimal places, taken by the two trains to completely cross each other.

- A. 26.09
- B. 25.09
- C. 28.09
- D. 27.09

Q8 Quant

If $\left(\frac{-3}{45}\right)^{-1}$ is divided by a number, the answer is $(-15)^{-1}$. Find the square root of the number.

- A. 12
- B. 13
- C. 14
- D. 15



Q9 Quant

Two friends are assigned to clean 30 desks. If one can clean 2 desks per hour and the other can clean 3 desks per hour, in how many hours can they clean all the desks, working together?

A. 5

B. 6

C. 7

D. 8

Q10 Quant

Mode of a dataset is least affected by which of the following?

A. Middle observations

B. Frequency of observations

C. Extreme observations

D. All observations

Q11 Quant

A regular polygon of N sides have the sum of interior angles equal to 2160°. Find the value of N.

A. 18

B. 10

C. 12

D. 14

Q12 Quant

By how much is 30% of 65 greater than 25% of 40?

A. 9.5

B. 4.5

C. 6.5

D. 11.5

Q13 Quant

One pipe can fill a tank in 4 minutes while another pipe can empty the completely filled tank in 10 minutes. If both the pipes are opened together when the tank is empty, how many minutes will it take to fill three-fourths of the tank?

A. 5

B. 10

C. 6

D. 11

Q14 Quant

₹11,268 is divided among X, Y, and Z such that if ₹36, ₹60, and ₹65 are deducted from their respective shares, the remaining amounts are in the ratio 4 : 20 : 5. Find X's share after deduction.

A. ₹1,532

B. ₹1,382

C. ₹1,482

D. ₹1,582

Q15 Quant

Given that $94^{0.8} = x$, $94^{0.03} = y$ and $x^z = y^2$, then the value of z is close to:

A. 0.08

B. 0.62

C. 1.29

D. 1.15

Q16 Quant
The profit made on a product is 87%. What is the loss percentage (correct to two decimal places) incurred on the sale if the figures of both cost price and selling price are interchanged?

A. 46.52%

B. 48.85%

C. 48.01%

D. 44.04%

Q17 Quant

If the compound interest on a sum of ₹y at 10% per year for 2 years, compounded annually, is ₹903, what will be the amount after 2 years?

A. ₹5,203

B. ₹5,230

C. ₹5,186

D. ₹5,696



Q18 Quant

If $15\sin y + \cos y = \sqrt{2} \sin y$, then what is the value of $\tan y$? By how much is 65% of 70 greater than $\frac{4}{5}$ of 4.

A. $\frac{-15 - \sqrt{2}}{223}$ ✓

B. $\frac{-15 - \sqrt{2}}{233}$

C. $\frac{-15 + \sqrt{2}}{223}$

D. $\frac{-15 + \sqrt{2}}{233}$

Q20 Quant

By how much is 65% of 70 greater than $\frac{4}{5}$ of 4.

A. 9.5 ✓

B. 6.5

C. 3.5

D. 7.5

Q19 Quant

In what time (in months) will ₹3,200 fetch an interest of ₹320 at 5% per year simple interest?

A. 24 ✓

B. 21

C. 22

D. 28

Paper Set 44 · 09 Jun 2026 · 4:00 PM - 5:30 PM · Mathematics (English)

Quant

Q1 Quant

Mohini, Sohni and Rani decide to start a business together. Mohini invested the amount of ₹50,000, Sohini invested ₹75,000 and Rani invested ₹1,00,000. After one year, their business earned a profit of ₹90,000. If Rani decides to reinvest her share of the profit back into the business for the next year, what will her new total investment be?

A. ₹1,70,000

B. ₹1,05,000

C. ₹1,20,000

D. ₹1,40,000 ✓

Q3 Quant

A shopkeeper announces 6% discount on an article and also allows a cash discount of ₹70. If the selling price is ₹400, then find its marked price.

A. ₹500 ✓

B. ₹529

C. ₹540

D. ₹562

Q4 Quant

Simplify the following expression.

$$\frac{50(35 \times 35 + 15 \times 15 - 35 \times 15)}{(35 \times 35 - 15 \times 15)}$$

A. 46.75

B. 46.25 ✓

C. 47.25

D. 47.75

Q2 Quant

Find out the LCM of numbers 1280, 1460 and 2000.

A. 23,36,000 ✓

B. 23,96,000

C. 23,64,000

D. 23,72,000



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Q5 Quant

In an election between two candidates, A and B, B won by a majority of 8976 votes by getting 54% of the votes; and all polled votes are valid. The number of votes received by A was _____.

A. 51,612



B. 51,957

C. 52,302

D. 50,490

Q6 Quant

A boat travels 40 km upstream in 4 hours and 60 km downstream in 3 hours. What is the speed of the stream?

A. 2 km/hr

B. 2.5 km/hr

C. 3 km/hr

D. 5 km/hr

**Q7 Quant**

Three friends can paint a wall together in 6 hours. If one friend alone takes 18 hours to complete the job, how long (in hours) will it take the other two friends to paint the wall working together?

A. 6

B. 9



C. 12

D. 15

Q8 Quant

If the mean of the numbers 18.5, 23.5, 20.5, 11.5, 26.5 and x is 19, then the median of the same observations will be:

A. 19.5



B. 20.5

C. 21.5

D. 22.5

Q9 Quant

A car travels from Mumbai to Pune at a speed of 54 miles/hour and returns from Pune to Mumbai at a speed of 46 miles/hour. What is the average speed of the car for the whole journey (in miles/hour, rounded up to one decimal place)?

A. 49.7



B. 50.2

C. 50

D. 51

Q10 Quant

A conical shape has a base diameter 24 cm and height 16 cm. What is the cost of painting the surface of the conical shape at the rate of 84 paise per cm^2 (rounded off to the nearest rupee and use $\pi = 22/7$)?

A. ₹648

B. ₹634



C. ₹618

D. ₹624

Q11 Quant

By how much is 30% of 65 greater than 25% of 50?

A. 7



B. 2

C. 4

D. 9

Q12 Quant

One pipe can fill a tank in 4 minutes while another pipe can empty the completely filled tank in 8 minutes. If both the pipes are opened together when the tank is empty, how many minutes will it take to fill three-fourths of the tank?

A. 6



B. 12

C. 7

D. 13



Q13 Quant

₹5,662 is divided among P, Q, and R in such a way that if ₹78, ₹33, and ₹79 be deducted from their respective shares, they have money in the ratio 3 : 2 : 11. Find P's share after deduction.

A. ₹1,026



B. ₹926

C. ₹1,176

D. ₹976

Q14 Quant

If ₹99,800 is invested at 5% per year for 2 years, what is the difference between the compound interest (compounded annually) and the simple interest?

A. ₹249.50



B. ₹251.40

C. ₹245.30

D. ₹255.20

Q15 Quant

Simplify: $\sqrt{144} + \sqrt{0.0361} - \sqrt{5.29}$

A. 9.89



B. 6.96

C. 15.51

D. 6.82

Q16 Quant

The total surface area of a solid cylinder having radius 23 cm and height 21 cm is:

A. $2024\pi \text{ cm}^2$



B. $2021\pi \text{ cm}^2$

C. $2015\pi \text{ cm}^2$

D. $1929\pi \text{ cm}^2$

Q17 Quant

If a regular polygon has n sides and the measure of each interior angle is 156° , find the number of sides n and ratio of the perimeter of this polygon to the perimeter of a heptagon whose side is equal to the side of the polygon.

A. 11, 11 : 5

B. 12, 12 : 7

C. 14, 14 : 7

D. 15, 15 : 7

**Q18 Quant**

In what time (in months) will ₹3,000 fetch an interest of ₹500 at 10% per year simple interest?

A. 20



B. 17

C. 18

D. 24

Q19 Quant

A trader gains 30% by selling an article after two successive discounts of 35% and 40% on its marked price. If the cost price of the article is increased by 62%, then what single discount should he now give on the same marked price to get the same profit percentage as earlier?

A. 36.82%



B. 35.39%

C. 39.86%

D. 38.75%

Q20 Quant

Which of the following ratios is greater than 9 : 13?

(Note: Compare the values up to 2 decimal places.)

A. 4 : 7

B. 8 : 15

C. 6 : 10

D. 7 : 9



Q1 Quant

A sum of ₹12,000 is divided among A, B, and C in the ratio of their ages. If the ratio of their ages is 3 : 4 : 5, what is C's share?

A. ₹4,000

B. ₹4,500

C. ₹5,000 ☒

D. ₹5,500

Q2 Quant

Two pipes A and B can fill a tank in 20 hours and 14 hours, respectively. If both the pipes are opened simultaneously, in how much time will the tank be full (rounded off to two decimal places)?

A. 8.47 hours

B. 8.24 hours ☒

C. 8.03 hours

D. 8.67 hours

Q3 Quant

The average weight of 7 men is 60 kg. One man leaves, and the average weight of the remaining 6 men is 58 kg. What is the weight of the man who left?

A. 64 kg

B. 68 kg

C. 72 kg ☒

D. 76 kg

Q4 Quant

A person travels 180 km partly by bicycle and partly by car in 9 hours. His speed on bicycle is 12 km/h and by car is 30 km/h. Find the distance he travelled by car.

A. 100 km

B. 120 km ☒

C. 60 km

D. 90 km

Q5 Quant

If $\frac{(28)^2 - 529}{25 \times 40 - 745} = 2K - 1$, then the value of K is:

A. 0

B. 1 ☒

C. -1

D. 2

Q6 Quant

Shree, Tapi and Urmi start a business with a total investment of ₹80,000, where Tapi's investment is ₹3,500 more than Urmi's and Urmi's investment is ₹7,500 more than Shree's. After 6 months, Shree withdraws ₹9,000 from the business. Find the amount (in ₹) received by Shree from the profit at the year-end if Tapi receives ₹9,450.

A. 4,800 ☒

B. 5,732

C. 6,150

D. 8,405

Q7 Quant

The ratio of the first-class to second-class fares between two railway stations is 5 : 1, and the ratio of the number of passengers travelling by first class to those travelling by second class is 1 : 50. If ₹5500 is collected as total fare on a particular day, what is the amount (in ₹) collected from second-class passengers?

A. 5000 ☒

B. 4000

C. 3000

D. 4500

Q8 Quant

The numbers 3, x, 2, and 4 represent the scores obtained by a student in four class tests. If the mean of these four scores is x, then what is the mode of the data?

A. 1

B. 2

C. 3 ☒

D. 4



Q9 Quant

A shoe manufacturing factory produces shoes in batches of 24, 36 and 96 units. What is the minimum number of units of shoes the factory needs to produce so that these may be produced in any one of the batches?

A. 286

B. 285

C. 288 

D. 284

Q10 Quant

A man drove his car on a square-shaped road and came back to the starting point. His speed through the sides of the square path were 15 km/hr, 24 km/hr, 30 km/hr and 20 km/hr. His average speed was (rounded off to two decimal places):

A. 17.25 km/hr

B. 19.10 km/hr

C. 20.87 km/hr 

D. 22.48 km/hr

Q11 Quant

Radhika buys a gold necklace for ₹ 3,20,000. After some time, she sells it to a jeweller at a loss of 12 %. If the jeweller sells it to Bhoomi at a profit of 32%, find the cost price of the necklace for Bhoomi.

A. ₹ 3,71,912

B. ₹ 3,11,712

C. ₹ 3,71,712 

D. ₹ 3,61,712

Q12 Quant

The value of a stock depreciates by 10% in the first year, increases by 20% in the second year, and increases by 25% in the third year. Find the percentage change over 3 years?

A. 25% increase

B. 25% decrease

C. 35% increase 

D. 35% decrease

Q13 Quant

Given that $27^{0.48} = x$, $27^{0.86} = y$ and $x^z = y^{10}$, then the value of z is close to:

A. 17.92 

B. 17.02

C. 20.86

D. 18.65

Q14 Quant

If the simple interest for 2 years is ₹80 and the compound interest for the same period is ₹81 at the same rate, what is the principal (in ₹)?

A. 1,600 

B. 1,800

C. 1,848

D. 1,648

Q15 Quant

PQ is a tangent to a circle of length 16 cm. PS is a secant to the circle intersecting the circle at R and S. The external segment PR of the secant is 12 cm. What is the length (in cm) of the secant PS?

A. $21\frac{1}{3}$ B. $18\frac{1}{3}$ C. $24\frac{1}{3}$ D. $20\frac{1}{3}$ **Q16 Quant**

Let C be a circle with centre O and P be an external point to C. Let PR and PS be two tangents to C with R and S being the tangency points on C, respectively. If $\angle RPS = 30^\circ$, find $\angle ROS$.

A. 75° B. 150° C. 120° D. 100° **Q17 Quant**

A rectangle with sides in the ratio 2 : 5 is cut into minimum number of identical squares. The ratio of the perimeter of all the squares to the perimeter of the rectangle is:

A. 10 : 7

B. 7 : 10

C. 7 : 20

D. 20 : 7 

Q18 Quant

By how much is 65% of 50 greater than $\frac{4}{5}$ of 15?

A. 20.5



B. 17.5

C. 14.5

D. 18.5

Q20 Quant

Pipe A can fill a tank in 12 hours, pipe B can do it in 32 hours, and pipe C can do it in 96 hours. If all three pipes operate together, how many hours will they take to fill one-fourth of the tank?

A. 2



B. 3

C. 4

D. 5

Q19 Quant

A dealer sells two ovens at the rate of ₹99000 per oven. On one he earns a profit of 65% and on the other he loses 40%. What is his loss percentage in the whole transaction?

A. 12%



B. 10%

C. 13%

D. 14%

Paper Set 46 · 10 Jun 2026 · 12:30 PM - 2:00 PM · Mathematics (English)

Quant

Q1 Quant

The simplified value of $0.\overline{54} + 0.\overline{29} + 0.\overline{92}$ is

A. $1.\overline{75}$

B. $1.\overline{76}$



C. $1.\overline{74}$

D. $1.\overline{75}$

Q3 Quant

Find the value of x that satisfies the equation: $4(4x^2 - 5) - 4(4x^2 + 7x - 7) = 20$

A. $-\frac{3}{7}$



B. $-\frac{1}{7}$

C. $\frac{10}{9}$

D. $-\frac{9}{7}$

Q2 Quant

A garden is in the shape of a semicircle attached to one end of a rectangle. The rectangle is 28 metres long and the semicircle is attached along the width (14 metres). What is the perimeter (in metre) of the garden?

(Use $\pi = \frac{22}{7}$)

A. A. 114

B. C. 100

C. B. 92



D. D. 90

Q4 Quant

A store offers a "BUY ONE GET ANOTHER ONE 45% OFF" scheme on an article. If the marked price of an article is ₹800, how much will a customer pay for two articles?

A. A. ₹1,200

B. B. ₹1,220

C. D. ₹1,240



D. C. ₹1,280



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Q5 Quant

If the cost of 7 metres of cloth is ₹315, find the cost of 2.5 metres of the same cloth.

- A. C. ₹100
- B. D. ₹105.50
- C. A. ₹110.25
- D. B. ₹112.50

Q6 Quant

Two trains, A and B, are running in opposite directions on parallel tracks. Train A is 180 m long and moving at 54 km/hr, while train B is 120 m long and moving at 36 km/hr. Find the time taken by the faster train (A) to cross a man standing on the platform.

- A. D. 10 seconds
- B. C. 12 seconds
- C. B. 14 seconds
- D. A. 15 seconds

Q7 Quant

If a car travels 50 km at 30 km/h, 80 km at 40 km/h, and 70 km at 35 km/h, the average speed (in km/h) is:

- A. $35\frac{5}{17}$
- B. $35\frac{5}{7}$
- C. $37\frac{5}{17}$
- D. $37\frac{5}{7}$

Q8 Quant

A quadrilateral ABCD has sides such that AB=DC and BC=DA. If its diagonal intersects at right angle, what is the type of quadrilateral ABCD?

- A. A. Rectangle
- B. C. Kite
- C. B. Rhombus
- D. D. Square

Q9 Quant

A, B, and C can paint a house in 20 days, 30 days, and 60 days, respectively. If all three work together, in how many days will the house be painted completely?

- A. 8 days
- B. 10 days
- C. 12 days
- D. 15 days

Q10 Quant

If 16 workers can complete a job in $2x$ days ($x > 0$), then how many days will the same 8 workers take to complete the job?

- A. A. x days
- B. B. $2x$ days
- C. C. $4x$ days
- D. D. $3x$ days

Q11 Quant

Find the mode of the given data (rounded off to two decimal places).

Class interval	0-6	6-12	12-18
Frequency	4	6	8

- A. C. 10.64
- B. B. 11.38
- C. D. 12.69
- D. A. 13.71

Q12 Quant

The average age of 35 students of a class is 14 years. When the age of the class teacher is included, the average becomes 15 years. What is the age of the class teacher?

- A. A. 40 years
- B. B. 45 years
- C. D. 48 years
- D. C. 50 years

Q13 Quant

Rajiv and Sachin started a business by investing ₹240 and ₹120, respectively. If Sachin's share in the profit earned by them is ₹930, what is the total profit (in ₹) earned by them together?

- A. C. 2790
- B. A. 2886
- C. D. 2744
- D. B. 2750



Q14 Quant

Subtracting 19% of X from X is equal to multiplying X by:

- A. A. 0.81 ✓
- B. C. 0.19
- C. B. 0.5
- D. D. 0.019

Q15 Quant

One pipe can fill a tank in 3 minutes, while another pipe can empty the completely filled tank in 12 minutes. If both the pipes are opened together when the tank is empty, how many minutes will it take to fill three-fourths of the tank?

- A. A. 3 ✓
- B. B. 6
- C. D. 4
- D. C. 7

Q16 Quant

If $\triangle ABC$ is similar to $\triangle RST$ and the area of $\triangle ABC$ is four times the area of $\triangle RST$, and $AB = 12$ cm, then find the length of RS .

- A. B. 6 cm ✓
- B. A. 9 cm
- C. C. 8 cm
- D. D. 3 cm

Q17 Quant

The cost of a bicycle is first increased by 10%, then by 20%. Find the overall increase in the cost.

- A. C. 28%
- B. A. 30%
- C. B. 32% ✓
- D. D. 34%

Q18 Quant

Two partners invest ₹12,500 and ₹8,500, respectively, in a business. They agree that 60% of the profit should be divided equally between them, and the remaining 40% of the profit should be shared in proportion to their capitals. If the partner with the higher investment gets ₹600 more than the other, then the total profit made in the business is:

- A. ₹6784
- B. ₹7784
- C. ₹7875 ✓
- D. ₹7800

Q19 Quant

Ajay gets double the amount in 4 years when invested at compound interest, compounded annually. In how many years will the amount become sixteen times the original amount?

- A. C. 16 ✓
- B. A. 8
- C. B. 32
- D. D. 34

Q20 Quant

A dealer buys an article with a marked price of ₹25,000 with successive discounts of 20% and 5%. He spends ₹1,000 on its repairs and sells it for ₹25,000. What is his profit percentage?

- A. D. 20%
- B. B. 25% ✓
- C. C. 15%
- D. A. 10%

Paper Set 47 · 10 Jun 2026 · 4:00 PM - 5:30 PM · Mathematics (English)



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Q1 Quant

Find a quadratic equation whose roots are 5 and -3.

A. $x^2 - 2x - 15 = 0$ ✓

B. $x^2 - 2x + 15 = 0$

C. $x^2 + 2x + 15 = 0$

D. $x^2 + 2x - 15 = 0$

Q2 Quant

The perimeter of a triangle formed by the points (0, 0), (3, 0) and (0, 4) is:

A. 6 units

B. 14 units

C. 7 units

D. 12 units ✓

Q3 Quant

A shopkeeper sells a watch with a marked price of ₹1,500. He allows a trade discount of 10% and then a scheme discount of 5% on the reduced price. Find the selling price of the watch.

A. ₹1,275.50

B. ₹1,282.50 ✓

C. ₹1,285.25

D. ₹1,290.50

Q4 Quant

Two cities, X and Y, are 360 km apart. Train A leaves city X for city Y at 8:00 a.m., travelling at 60 km/hr. Train B leaves city Y for city X at 9:00 a.m., travelling at 90 km/hr. At what time will the two trains meet?

A. 10:24 a.m.

B. 10:48 a.m.

C. 11:00 a.m. ✓

D. 11:12 a.m.

Q5 Quant

Two numbers are in the ratio of 17 : 45. One-third of the smaller number is less than $\frac{1}{5}$ of the bigger number by 30. The smaller number is:

A. 153 ✓

B. 137

C. 169

D. 159

Q6 Quant

The highest common factor of 32, 56, and 72 is:

A. 4

B. 6

C. 8 ✓

D. 9

Q7 Quant

A pipe can fill a tank in 48 minutes, and another pipe can empty it in 2 hours. If both the pipes are opened together, then in how long will the tank be filled?

A. 80 minutes ✓

B. 75 minutes

C. 60 minutes

D. 55 minutes

Q8 Quant

Two trains, 195 m and 210 m in length, are running in opposite directions, one at a speed of 84 km/hr and the other at a speed of 78 km/hr, respectively. After how much time will they cross each other?

A. 7 seconds

B. 8 seconds

C. 9 seconds ✓

D. 10 seconds

Q9 Quant

The ratio of two numbers is 12:17. If their sum is 696, find the smaller number.

A. 264

B. 288 ✓

C. 312

D. 328



Q10 Quant

Find the mode of the given data.

Class interval	0-3	3-6	6-9	9-12
Frequency	2	4	1	3

A. 3.6

B. 4.2

C. 5.3

D. 6.4

Q11 Quant

Subtracting 16% of X from X is the same as multiplying X by:

A. 0.84

B. 0.16

C. 0.5

D. 0.016

Q12 Quant

M and N start a business. N invests some amount for 6 months, while M invests ₹81,000 more than N and for a period of 7 months. If, out of a total profit of ₹2,975, M's share is ₹425 more than that of N, find the capital contributed by M.

A. ₹6,48,000

B. ₹6,47,821

C. ₹6,47,857

D. ₹6,47,936

Q13 Quant

If at the same rate of interest, in 2 years, the simple interest is ₹46 and compound interest is ₹47, then what is the principal (in ₹)?

A. 529

B. 524

C. 522

D. 533

Q14 QuantSimplify: $44 - \{(-8) \times (-19 - 3 - 10)\} \div [10 \times (6 + (-1) \times (-4))]$ A. $\frac{1036}{25}$ B. $\frac{83}{2}$ C. $\frac{4253}{100}$ D. $\frac{827}{20}$ **Q15 Quant**

Consider a circle with centre C and a 12-cm-long-chord of the circle is at a distance of 8 cm from the centre C. Find the length of the longest possible chord of the circle.

A. 10 cm

B. 5 cm

C. 20 cm

D. 14 cm

Q16 QuantIf $6x = \operatorname{cosec} \theta$ and $\frac{6}{x} = \cot \theta$, find the value of 7.

A. 18

B. 8

C. 12

D. 14

Q17 Quant

In how much time (in months) will ₹3200 fetch an interest of ₹400 at 6% per year simple interest?

A. 25

B. 22

C. 23

D. 29

Q18 Quant

A number when increased by 60%, gives 3400. The number is:

A. 2125

B. 2250

C. 1062

D. 1375



Q19 Quant

A, B and C together finish work in 3 days. If A alone can finish the same work in 4 days and B in 48 days, how long (in days) will C take to finish the work?

A. 16



B. 15

C. 17

D. 18

Q20 Quant

An article is purchased for ₹560 and marked at ₹1,288. If the seller gives a 50% discount on the marked price, what is his profit percentage on the sale?

A. 15%



B. 14%

C. 18%

D. 12%

Paper Set 48 · 10 Jun 2026 · 9:00 AM - 10:30 AM · Mathematics (English)**Quant****Q1 Quant**

The surface area of a cuboid is $12,600 \text{ ft}^2$. If the cuboid's length and height are 60 ft and 30 ft, find the width of the cuboid (in ft).

A. B. 40

B. C. 50



C. D. 45

D. A. 55

Q2 Quant

Two trains, 210 m and 230 m long respectively, are running on parallel tracks in opposite directions. The faster train runs at 108 km/hr, while the slower train runs at 90 km/hr. How long will it take for the two trains to completely cross each other? How much time will the trains take to cross each other if they run in the same direction?

A. A. 5 seconds, 55 seconds

B. C. 6 seconds, 66 seconds

C. D. 8 seconds, 88 seconds



D. B. 9 seconds, 99 seconds

Q3 Quant

A store offers a scheme "Buy 3 and get 1 free" on soap bars. What is the effective discount percentage under the scheme?

A. B. 22%

B. A. 24%

C. C. 25%



D. D. 28%

Q4 Quant

A train travels 120 km at 55 km/h and returns at 45 km/h. What is its average speed for the whole journey?

A. A. 49.5 km/h



B. B. 50.5 km/h

C. C. 51.5 km/h

D. D. 48.5 km/h



Q5 Quant

X and Y can do a piece of work in 16 days, while Z and W can do the same work in 48 days. In how long will X, Y, Z and W do it together?

- A. B. 10 days
- B. D. 12 days
- C. C. 14 days
- D. A. 16 days

Q6 Quant

Find the median of the given set of numbers: {21.2, 23.6, 27.5, 29.1, 21.6, 22.2, 23.5, and 22.1}

- A. C. 22.75
- B. D. 22.85
- C. B. 22.95
- D. A. 23.05

Q7 Quant

Three partners, P, Q and R, agree to share the profits in the ratio of 2 : 3 : 5. After one year, the total profit is ₹1,80,000. What is R's share of the profit?

- A. C. ₹80,000
- B. D. ₹90,000
- C. A. ₹75,000
- D. B. ₹88,000

Q8 Quant

If $4095 \div 22.5 = 182$, then find the value of $40.95 \div 2.25$.

- A. B. 1.82
- B. D. 18.2
- C. A. 0.182
- D. C. 0.0182

Q9 Quant

A charitable organisation is distributing food packets to villages affected by a recent flood. The number of packets each volunteer can prepare is inversely proportional to the number of hours they work per day. Suppose 8 volunteers working 6 hours a day can prepare a total of 960 packets. Then, how many volunteers would be needed to prepare 1440 packets if they each work 4 hours a day, given that the total number of working hours available per day for all volunteers combined cannot exceed 120 hours?

- A. A. 16 volunteers
- B. D. 17 volunteers
- C. C. 18 volunteers
- D. B. 19 volunteers

Q10 Quant

If 20% of a number is added to 48, then the result is the same number. 80% of the same number is:

- A. B. 48
- B. A. 58
- C. C. 78
- D. D. 68

Q11 Quant

A and B working together can do a piece of work in 6 days. B alone can do the same work in 9 days. How long (in days) will A alone take to do thrice the work?

- A. B. 54
- B. D. 108
- C. A. 162
- D. C. 216

Q12 Quant

Mahesh has ₹1,300 with him. He divided it amongst his sons Vijay and Ajay and asked them to invest it at 8% rate of interest compounded annually. It was seen that Vijay and Ajay got same amount after 19 and 20, years respectively. How much money (in ₹) did Mahesh give to Ajay?

- A. A. 625
- B. D. 675
- C. C. 475
- D. B. 775



Q13 Quant

The internal surface area (in m^2) of an open cuboidal tank whose internal length, internal breadth, and internal height are given as 46 m, 36 m, and 20 m, respectively, is:

A. B. 4936



B. A. 4888

C. D. 4920

D. C. 4894

Q14 Quant

In what time (in months) will ₹3,000 fetch an interest of ₹420 at 7% per year simple interest?

A. 24



B. 21

C. 22

D. 28

Q15 Quant

By how much is 65% of 60 greater than $\frac{4}{5}$ of 35?

A. A. 11



B. D. 8

C. B. 5

D. C. 9

Q16 Quant

$6.222\ldots + 6.333\ldots$ in fraction form is:

A. $\frac{113}{9}$



B. $\frac{117}{8}$

C. $\frac{116}{11}$

D. $\frac{115}{18}$

Q17 Quant

A trader gains 25% by selling an article after allowing two successive discounts of 20% and 25% on its marked price. If the cost price of the article is increased by 60%, what single discount should he allow now on the same marked price to obtain the same profit percentage as before?

A. C. 4%



B. D. 2%

C. B. 3%

D. A. 5%

Q18 Quant

The product of two consecutive positive integers is 182. If the smaller of these two integers is represented by x , which of the options below will correspond to the equation for finding out the value of x ?

A. $x^2 + x - 182 = 0$



B. $x^2 + x + 182 = 0$

C. $x^2 - x - 182 = 0$

D. $x^2 - x + 182 = 0$

Q19 Quant

An observer on the top of a cliff, 250 m above the sea level, observes two ships at sea. One ship is due south of the other.

What is the distance (in m) between the ships if the angle of depression of the nearer ship is 30° and the angle of depression of the farther ship is 45° ?

A. B. 174

B. D. 169

C. C. 183



D. A. 176

Q20 Quant

A doctor prescribes a medicine dosage in proportion to the weight of a person. A person weighing 60 kg is prescribed a dosage of 400 mg.

What would be the dosage for a person weighing 75 kg?

A. D. 400 mg



B. A. 380 mg

C. C. 350 mg

D. B. 340 mg



Q1 Quant

The ratio of the present ages of A and B is 7 : 5. After 6 years from now, the ratio of their ages will become 9 : 7. Find the present age of A.

A. C. 14 years

B. B. 21 years ☒

C. A. 28 years

D. D. 35 years

Q2 Quant

A man in his journey, covers the first 300 km at 90 km/hr and the next 80 km at 120 km/hr. Find the average speed of his 380 km journey.

A. A. 110 km/hr

B. D. 95 km/hr ☒

C. C. 100 km/hr

D. B. 90 km/hr

Q3 Quant

A shopkeeper sold two articles of equal worth at equal cost. On one article, the gain is 15%, while he incurs a loss of 15% on the other. What is the gain or loss in the whole transaction?

A. A. Loss of 1.5%

B. B. Gain of 1.5%

C. D. No gain or loss ☒

D. C. Gain of 3%

Q4 Quant

Bus A covers a certain distance in 10 hours at a speed of 80 km/hr. Bus B covers 130 km more than Bus A in the same time. Find the average speed of Bus B.

A. B. 90 km/hr

B. D. 91 km/hr

C. A. 92 km/hr

D. C. 93 km/hr ☒

Q5 Quant

If $7.5 = \frac{(0.0009)^{-\frac{1}{2}} + (Y)^{-\frac{1}{2}}}{(0.09)^{-1}}$, then on simplification, the value of Y is

A. 0.04

B. 0.0004 ☒C. $\frac{1}{0.04}$ D. $\frac{1}{0.0004}$

Q6 Quant

If 'x' be the product of the prime numbers between 50 and 60, and 'y' be the sum of the prime numbers between 30 and 40, then find the value of $x-2y$.

A. C. 2991 ☒

B. B. 3291

C. D. 1286

D. A. 2408

Q7 Quant

The roots of the equation $2x^2 - 6x + 37 = 0$ are:

A. C. real and equal

B. B. rational

C. D. irrational

D. A. imaginary ☒

Q8 Quant

Pipe A can fill a reservoir in 6 hours and Pipe B can fill the same reservoir in 6 hours. Calculate the total time required to fill the reservoir if both pipes are opened, simultaneously.

A. A. 2 hours

B. B. 3 hours ☒

C. C. 4 hours

D. D. 5 hours



Q9 Quant

The values in a dataset are 2, 3, 3, 3, 4, 5, 5, 5, 6, 6, 6, 7, 9, and 11. Find the mode(s) of the dataset.

A. D. 3,5

B. B. 6

C. C. 3,5,6

D. A. 5,6

Q10 Quant

A right circular cone and a right circular cylinder have equal base and equal height. If the radius of the base and the height are in the ratio 4 : 3, then the ratio of the total surface area of the cylinder to that of the cone is:

A. A. 14 : 9

B. C. 19 : 7

C. D. 13 : 14

D. B. 11 : 8

Q11 Quant

Pawan and Dinesh started a business by investing amounts of ₹2,600 and ₹1,300, respectively. If Pawan's share in the profit earned by them is ₹640, what is the total profit (in ₹) earned by them together?

A. C. 960

B. D. 910

C. B. 1,116

D. A. 926

Q12 Quant

The average of 6.5, 10.7, 20.2 and a is 19. The value of a is:

A. A. 38.6

B. C. 37.6

C. D. 39.6

D. B. 40.6

Q13 Quant

By how much is 30% of 65 greater than 25% of 35?

A. D. 10.75

B. B. 5.75

C. C. 7.75

D. A. 12.75

Q14 Quant

A and B working together can do a piece of work in 5 days. B alone can do the same work in 20 days. How long (in days) will A alone take to do thrice the work?

A. A. 20

B. C. 40

C. B. 60

D. D. 80

Q15 Quant

₹7,544 is divided among X, Y, and Z such that if ₹14, ₹25, and ₹85 are deducted from their respective shares, the remaining amounts are in the ratio 20:4:11. Find X's share after the deduction.

A. A. ₹4240

B. B. ₹4090

C. D. ₹4390

D. C. ₹4140

Q16 Quant

Krish has ₹1281 with him. He divided it amongst his sons Veer and Nitin and asked them to invest it at 10% rate of interest compounded annually. It was seen that Veer and Nitin got same amount after 18 and 19 years, respectively. How much money (in ₹) did Krish give to Nitin?

A. 610

B. 671

C. 460

D. 771

Q17 Quant

In a circle with centre O, two chords AB and BC are drawn. Points A and C are connected to the centre O. If $\angle OAB$ and $\angle OCB$ are 36° and 50° , respectively, then what is the degree measure of the reflex $\angle AOC$?

A. A. 207°

B. C. 188°

C. B. 200°

D. D. 220°



Q18 Quant

If $12\sin y + \cos y = \sqrt{8} \sin y$, then what is the value of $\tan y$?

A. $\frac{-12 - \sqrt{8}}{136}$ ✓

B. $\frac{-12 + \sqrt{8}}{136}$

C. $\frac{12 + \sqrt{8}}{136}$

D. $\frac{12 - \sqrt{8}}{136}$

Q20 Quant

Ramesh sells a table to Mukesh at a profit of 25%, and then Mukesh sells it to Jaybind at a profit of 60%. If Jaybind pays ₹1,286 for the table, its cost price (in ₹) for Ramesh is:

A. B. 643 ✓

B. C. 645

C. A. 640

D. D. 642

Q19 Quant

By how much is 65% of 75 greater than $\frac{1}{5}$ of 35?

A. A. 41.75 ✓

B. B. 38.75

C. C. 35.75

D. D. 39.75

Paper Set 50 · 11 Jun 2026 · 4:00 PM - 5:30 PM · Mathematics (English)

Quant

Q1 Quant

When the sun's altitude changes from 30° to 60° , the length of the shadow of a building decreases. If the height of the building is $145\sqrt{3}$ m, find the value of x .

A. 45

B. 120

C. 190

D. 290 ✓

Q3 Quant

Two trains are travelling in opposite directions on parallel tracks. The first train is 400 metres long and travels at a speed of 100 km/hr. The second train is 600 metres long and travels at a speed of 80 km/hr. The distance between the two trains when they start is 10 km. Find how much time will it take for the two trains to completely pass each other?

A. 220 seconds ✓

B. 210 seconds

C. 200 seconds

D. 215 seconds

Q2 Quant

If the marked price of a shirt is ₹1,000 and a shopkeeper offers a 20% discount, what is the selling price of the shirt?

A. ₹900

B. ₹800 ✓

C. ₹700

D. ₹950



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Q4 Quant

A cyclist travels to a point. If he travel at 16 km/hr for the first half of the journey and then 12 km/hr for the second half, he is 10 minutes late. If he travel at 18 km/hr for the first half and 16 km/hr for the second half, he is 5 minutes early. What is the distance (in km)?

A. 15

B. 18 ☒

C. 21

D. 24

Q9 Quant

Solve the following system of linear equations:

$$3x + y + 2z = 3$$

$$x + 2y + 2z = 0$$

$$2x + y + 5z = 1$$

A. $x = 22/17, y = -4/17, z = -7/17$ B. $x = 22/17, y = -7/17, z = -4/17$ ☒C. $x = -22/17, y = 4/17, z = 7/17$ D. $x = 7/17, y = -4/17, z = -22/17$ **Q5 Quant**

A vendor sells candles in packs of 6 and lanterns in packs of 9. He creates gift sets with equal numbers of candles and lanterns, using the smallest possible total. If each candle costs ₹5 and each lantern costs ₹10, how much does one gift set cost?

A. ₹210

B. ₹270 ☒

C. ₹300

D. ₹360

Q10 Quant

Subtracting 14% of X from X is the same as multiplying X by:

A. 0.86 ☒

B. 0.14

C. 0.5

D. 0.014

Q6 Quant

If the ratio of mean and median of a certain set of data is $\frac{2}{3} : \frac{4}{5}$ respectively, then, by using empirical relation, find the ratio of its mode and median.

A. 4 : 3 ☒

B. 3 : 4

C. 8 : 5

D. 5 : 8

Q11 Quant

Three numbers are in the ratio 4 : 17 : 9, and their LCM is 8568. Their HCF is:

A. 14 ☒

B. 25

C. 35

D. 21

Q12 Quant

₹2,384 is divided among Geeta, Mukul, and Ravi in such that if ₹20, ₹32, and ₹29 are deducted from their respective shares, the remaining amounts are in the ratio 17:16:14. Find Ravi's share after deduction.

A. ₹686 ☒

B. ₹786

C. ₹536

D. ₹736

Q7 Quant

Find the mean proportional to 9.6 and 2.4.

A. 3.6

B. 4.8 ☒

C. 5.2

D. 6.4

Q13 Quant

At a certain rate of interest, the simple interest for 2 years is ₹76, while the compound interest (compounded annually) for the same period is ₹78. What is the sum (in ₹)?

A. 722 ☒

B. 716

C. 712

D. 726

Q8 Quant

A, B and C started a business investing amounts of ₹2,200, ₹1,280, and ₹920 respectively. If B's share in the profit earned by them is ₹910. what is the difference in the profit (in ₹) earned by A and C?

A. ₹910 ☒

B. ₹913

C. ₹909

D. ₹912



Q14 Quant

Simplify: $\frac{1}{2} + \frac{\tan 4^\circ \tan 43^\circ \tan 45^\circ \tan 47^\circ \tan 86^\circ}{\sin^2 35^\circ + \sin^2 40^\circ + \sin^2 50^\circ + \sin^2 55^\circ + \sin^2 60^\circ} + \frac{\tan(90^\circ - 45^\circ) - \cos 27^\circ + \cos 63^\circ}{2(\sin^2 30^\circ + \cos^2 60^\circ)} + 200$

A. 0

B. $\sec^2 \theta$

C. $\sec^2 35^\circ$

D. $\frac{2}{3}$ ✓

Q17 Quant

In how much time (in months) will ₹3000 fetch an interest of ₹300 at 8% per year simple interest?

A. 15 ✓

B. 12

C. 13

D. 19

Q18 Quant

A, B and C together finish work in 2 days. If A alone can finish the same work in 15 days and B in 30 days, how long (in days) will C take to finish twice the same work?

A. 5 ✓

B. 2.5

C. 6

D. 3.5

Q19 Quant

A shopkeeper sells an item for ₹720 after giving two successive discounts of 20% and 10% on its marked price. Had he not given any discount, he would have earned a profit of 25% on the cost price. What is the cost price (in ₹) of the item?

A. 800 ✓

B. 750

C. 850

D. 900

Q20 Quant

The monthly income of a person is ₹7,600. If his income is increased by 22%, what will be his new monthly income?

A. ₹9,262

B. ₹9,272 ✓

C. ₹9,282

D. ₹9,292

Q15 Quant

Simplify: $(\sin^4 A - \cos^4 A + 1) \sec^2 A$

A. $2 \tan^2 A$ ✓

B. $2 \cot^2 A$

C. $2 \sin^2 A$

D. $2 \cos^2 A$

Q16 Quant

A, B and C together can complete a piece of work in 15 days, while A alone can complete it in 30 days and C alone can complete it in 40 days. In how much time can B alone complete the work?

A. 120 days ✓

B. 100 days

C. 90 days

D. 80 days

Q1 Quant

If α and β are roots of $x^2 - 3x + 54 = 0$, then the value of $(\alpha^2 + \beta^2)(\alpha + \beta)$ is:

- A. A. -291
- B. B. -293
- C. D. -295
- D. C. -297



Q2 Quant

Two stations A and B are 480 km apart. A train starts from A towards B at 80 km/hr. After 2 hours, another train starts from B towards A at 60 km/hr. When they meet, the first train reduces its speed by 20% and continues to B, while the second train increases its speed by 25% and continues to A. Find the difference in their arrival times at their respective destinations. (Rounded off to the nearest minute)

- A. B. 102 minutes
- B. C. 26 minutes
- C. D. 30 minutes
- D. A. 35 minutes



Q3 Quant

A shirt is marked at ₹1,200. The shopkeeper sells it for ₹900. What is the discount percentage offered?

- A. C. 20%
- B. D. 25%
- C. B. 30%
- D. A. 40%



Q4 Quant

A cyclist covers 30 km at 15 km/h and returns the same distance at 10 km/h. Find their average speed.

- A. D. 12 km/h
- B. B. 13 km/h
- C. A. 14 km/h
- D. C. 15 km/h



Q5 Quant

Three friends X, Y and Z start a business together. X invests ₹20,000, Y invests ₹30,000 and Z invests ₹40,000. If the total profit is ₹18,000, find Y's share of the profit.

- A. C. ₹4,000
- B. A. ₹5,000
- C. D. ₹6,000
- D. B. ₹8,000



Q6 Quant

Simplify: $(\sqrt{121} + \sqrt{49})^2 - (\sqrt{81} + \sqrt{25})^2$

- A. C. 100
- B. A. 112
- C. D. 120
- D. B. 128



Q7 Quant

Priya and Neha working together can finish a project in 12 days. If Priya alone can finish the same project in 36 days, find the time taken by Neha alone to finish it.

- A. B. 15 days
- B. A. 18 days
- C. C. 20 days
- D. D. 24 days



Q8 Quant

If the fourth proportional to 15, 25 and 40 is 8m (where, $m > 0$), then the value of $2m - 5$ is:

- A. $\frac{50}{3}$
- B. $\frac{25}{3}$
- C. $\frac{35}{3}$
- D. $\frac{20}{3}$



Q9 Quant

Find the mode of the given data.

Class interval	0-5	5-10	10-15	15-20	20-25
Frequency	4	6	8	5	3

A. C. 8

B. D. 10

C. B. 12

D. A. 14

Q10 Quant

Subtracting 13% of X from X is the same as multiplying X by:

A. A. 0.87

B. D. 0.13

C. B. 0.5

D. C. 0.013

Q11 Quant

A sum of ₹3,101 is divided into three parts such that half of the first part, one-fourth of the second part, and one-eighth of the third part are equal. What is the positive difference (in ₹) between the first and the second parts?

A. B. 443

B. A. 293

C. D. 593

D. C. 343

Q12 Quant

What will be the amount after 1 year, if ₹1600 is invested at 20% compound interest per annum, compounded half-yearly?

A. D. ₹1936

B. C. ₹2820

C. A. ₹1216

D. B. ₹2460

Q13 Quant

A shopkeeper fixes the marked price of an item 40% above its cost price. What percentage discount should be given on the marked price to gain 33% on the transaction?

A. B. 5%

B. A. 4%

C. D. 8%

D. C. 2%

Q14 Quant

The value of $2 \left(\frac{\sin A}{1 - \cos A} + \frac{1 - \cos A}{\sin A} \right) \div 2 \left(\frac{\cot^2 A}{1 + \operatorname{cosec} A} + 1 \right)$ is:

A. 1

B. -1

C. 2

D. $\frac{1}{2}$ **Q15 Quant**

PQ and RS are parallel lines intersected by a transversal XY at L and M respectively, If $\angle RMY = 64^\circ$, find $\angle QLM$.

A. C. 64° B. A. 26° C. B. 96° D. D. 116° **Q16 Quant**

If $\cos \theta = \frac{2}{5}$ and $\theta < 90^\circ$, then the value of $\tan \theta$

A. $\frac{\sqrt{21}}{5}$ B. $\frac{\sqrt{21}}{25}$ C. $\frac{\sqrt{21}}{4}$ D. $\frac{\sqrt{21}}{2}$ **Q17 Quant**

In what time (in months) will ₹3000 fetch an interest of ₹300 at 6% per year simple interest?

A. A. 20

B. C. 17

C. D. 18

D. B. 24



Q18 Quant

One pipe can completely fill the tank in 17 minutes, while another pipe can empty the completely filled tank in 51 minutes. If both the pipes are operated together when the tank is empty, how long (in minutes) will it take to fill two-thirds of the tank?

A. C. 17



B. D. 34

C. B. 51

D. A. 14

Q20 Quant

A shopkeeper was selling a pen for ₹60. He reduced its price to ₹48 during a sale. What is the percentage decrease in the price?

A. 10%

B. 15%

C. 20%



D. 25%

Q19 Quant

Simplify: $\sqrt{1079} + \sqrt{81} + \sqrt{331} + \sqrt{869} + \sqrt{961}$

A. B. 33



B. C. 37

C. A. 36

D. D. 31

Paper Set 52 · 12 Jun 2026 · 12:30 PM - 2:00 PM · Mathematics (English)

Quant**Q1 Quant**

If the length and breadth of a rectangular park are in the ratio of 6 : 5 and its area is 0.375 hectares, then find the perimeter of the park.

A. $110\sqrt{5}$ m



B. 110 m

C. $25\sqrt{5}$ m

D. 50 m

Q3 Quant

A is twice as efficient as B. If A alone can complete a task in 30 days, then how long will A and B take together to finish the task?

A. 20 days



B. 12 days

C. 14 days

D. 18 days

Q4 Quant

The LCM of 16, 24, 36 and 54 is:

A. 432



B. 864

C. 216

D. 1024

Q2 Quant

A sailor takes 11 hours 15 minutes for sailing a boat downstream from point X to Y and coming back to a point Z midway between X and Y. If the speed of the boat in still water is 11 km/hr and the speed of stream is 3 km/hr, find the distance between point X and Y.

A. 56 km

B. 64 km

C. 84 km



D. 90 km



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Q5 Quant

A train is 0.25 km long. If the train takes 50 seconds to cross a tree by the railway line, then the speed of the train in km/hr is:

A. 18



B. 20

C. 17

D. 16

Q6 Quant

The marks scored by a student in Science and English are 75 and 80, respectively. If the weights assigned to both subjects are 3 and 5, find the weighted arithmetic mean marks (rounded off to two decimal places).

A. 77.51

B. 78.13



C. 79.42

D. 80.63

Q7 Quant

Three partners, X, Y and Z, agree to share the profits in the ratio of 2 : 3 : 5. After one year, the total profit is ₹2,40,000. What is Y's share of the profit?

A. ₹80,000

B. ₹90,000

C. ₹85,000

D. ₹72,000

**Q8 Quant**

Which of the following ratios is NOT greater than 3 : 4?

2 : 3, 4 : 5, 6 : 5, 8 : 7

A. 2 : 3



B. 4 : 5

C. 6 : 5

D. 8 : 7

Q9 Quant

The average of 6.5, 10.7, 20.2 and a is 16. The value of a is:

A. 26.6



B. 25.6

C. 27.6

D. 28.6

Q10 Quant

Subtracting 10% of X from X is the same as multiplying X by:

A. 0.9



B. 0.1

C. 0.5

D. 0.01

Q11 Quant

Three friends X, Y and Z started a business by investing a sum of money in the ratio of 6 : 3 : 5. After 6 months, X withdrew half of his capital. Out of a total profit of ₹33,000 at the year end, what is the difference between X's and Y's shares of profit?

A. ₹3960



B. ₹5880

C. ₹3635

D. ₹4755

Q12 Quant

A shopkeeper fixes the marked price of an item at 25% above its cost price. What percentage of discount on the marked price should be allowed to gain 5%?

A. 16%



B. 15%

C. 14%

D. 19%

Q13 Quant

Simplify: $\sqrt{361} + \sqrt{0.0144} - \sqrt{4.84}$

A. 16.92



B. 4.01

C. 15.26

D. 8.02

Q14 Quant

Two concentric circles P and Q with centre O have a radius of 15 cm and 9 cm, respectively. If XY is the diameter of the circle P and YZ is tangent to the smaller circle Q touching it at Z, then the length of XZ (in cm) is:

A. $7\sqrt{11}$

B. $11\sqrt{7}$

C. $13\sqrt{6}$

D. $6\sqrt{13}$



Q15 Quant

If $\triangle ABC \sim \triangle XYZ$, $AB = 9$ cm, $XY = 18$ cm, $YZ = 12$ cm, and $ZX = 16$ cm, then find the perimeter of $\triangle ABC$.

A. 27 cm

B. 23 cm ☒

C. 36 cm

D. 46 cm

Q16 Quant

A motorcycle originally priced at ₹60,000 is available at a festival sale within two successive discounts of 18% and 7%. What is the final price?

A. ₹43,200

B. ₹45,000

C. ₹45,756 ☒

D. ₹47,500

Q17 Quant

After decreasing 40% in the actual cost price, the reduced cost price of an article is ₹1,056. The actual cost price of the article (in ₹) is:

A. 1,760 ☒

B. 1,720

C. 1,640

D. 1,680

Q18 Quant

A, B and C together finish a piece of work in 2 days. If A alone can finish the same work in 6 days and B in 30 days, how long (in days) will C take to finish thrice the same work?

A. 10 ☒

B. 12

C. 13

D. 11

Q19 Quant

What is the compound interest (in ₹) on a sum of ₹18,000 at 12% per annum for 2 years?

Assume that the interest for the fractional year is compounded.

A. 18992 ☒

B. 18547

C. 18189

D. 18073

Q20 Quant

The roots of the quadratic equation $6x^2 + 12x - 18 = 0$ are:

A. 1, -3 ☒

B. -1, -3

C. 1, 3

D. -1, 3



Q1 Quant

P and Q invested in a business. The profit earned was divided in the ratio 2 : 3. If P invested ₹60,000, the amount invested by Q is:

A. ₹90,000 ✓

B. ₹80,000

C. ₹85,000

D. ₹75,000

Q2 Quant

If α and β are roots of $x^2 - x - 42 = 0$, then find the equation which has roots $\alpha + \beta$ and $\alpha\beta$.

A. $x^2 + 41x - 42 = 0$ ✓B. $x^2 + 42x - 43 = 0$ C. $x^2 + 43x - 44 = 0$ D. $x^2 + 41x - 40 = 0$

Q3 Quant

Two trains measuring 120 m and 180 m cross each other completely in 10 seconds when running in opposite directions, and the faster train takes 30 seconds to cross the slower train when the two trains are running in the same direction. Find the speed (in km/hr) of the faster train.

A. 30 km/hr

B. 36 km/hr

C. 54 km/hr

D. 72 km/hr ✓

Q4 Quant

Two trains of lengths 120 m and 180 m move in opposite directions at 54 km/h and 36 km/h, respectively. How long do they take to completely cross each other?

A. 8 s

B. 10 s

C. 12 s ✓

D. 15 s

Q5 Quant

Wastewater of ₹760 was used to buy shoes after getting a 20% discount. What is the marked price of the shoes?

A. ₹800

B. ₹900

C. ₹950 ✓

D. ₹1,000

Q6 Quant

A solid metallic sphere of radius 8 cm is melted and recast into smaller spherical balls, each of radius 2 cm. During the recasting process, 25% of the metal is lost. Find the number of smaller balls that can be made.

A. 48 ✓

B. 27

C. 24

D. 64

Q7 Quant

112 persons can repair a road in 19 days by working 6 hours a day. In how long would 38 persons, working 8 hours a day, complete the same work?

A. 42 days ✓

B. 45 days

C. 48 days

D. 51 days

Q8 Quant

How many numbers between 40 and 60 are coprime to 18?

A. 6

B. 7 ✓

C. 8

D. 9

Q9 Quant

The average monthly income from two jobs is ₹16,000 and ₹18,000. If the working hours are in the ratio 5:3, find the weighted arithmetic mean income.

A. ₹16,320

B. ₹16,460

C. ₹16,750 ✓

D. ₹16,980



Q10 Quant

A vertical tower stands on a horizontal plane, casting a shadow of length 12 m. At the same time a pole of height 8 m casts its shadow of length 3 m. What will be the height of the tower?

A. 30 m

B. 32 m ✓

C. 31 m

D. 33 m

Q11 Quant

Subtracting 12% of X from X is the same as multiplying X by:

A. 0.88 ✓

B. 0.12

C. 0.5

D. 0.012

Q12 Quant

Three friends X, Y and Z started a business by investing a sum of money in the ratio of 4 : 2 : 5. After 6 months, X withdrew half of his capital. Out of a total profit of ₹74000 at the year end, what is the difference between the X's and Y's shares of profit?

A. ₹7400 ✓

B. ₹6815

C. ₹5565

D. ₹8920

Q13 Quant

In a division sum, the divisor is 7 times the quotient and 6 times the remainder. If the remainder is 35, what is the dividend?

A. 6335 ✓

B. 6333

C. 6334

D. 6340

Q14 Quant

Find the value of $\left(\frac{1}{\tan\theta - \sec\theta} + \frac{1}{\cos\theta}\right)$, $0^\circ < \theta < 90^\circ$.

A. $\tan\theta$

B. $-\cot\theta$

C. $-\tan\theta$ ✓

D. $2\sec\theta$

Q15 Quant

A convex polygon has 90 diagonals. How many sides does it have?

A. 15 ✓

B. 10

C. 12

D. 18

Q16 Quant

In how much time (in months) will ₹3000 fetch an interest of ₹300 at 10% per year simple interest?

A. 12 ✓

B. 9

C. 10

D. 16

Q17 Quant

An article's cost price is reduced by 25%, and the new cost price becomes ₹1,032. Find the original cost price (in ₹) of the article.

A. 1,376 ✓

B. 258

C. 4,128

D. 774

Q18 Quant

A, B and C together finish work in 2 days. If A alone can finish the same work in 20 days and B in 4 days, how long (in days) will C take to finish twice the same work?

A. 10 ✓

B. 5

C. 11

D. 6



Q19 Quant

What is the compound interest (in ₹) on a sum of ₹32000 for $2\frac{5}{6}$ years at 15% per annum, comp

Assume that the interest for the fractional year is calculated as simple interest.

A. 15610



B. 14910

C. 16265

D. 15240

Q20 Quant

The total cost price of 20 articles is equal to the total selling price of x articles. If the profit is 25%, then the value of x is:

A. 16



B. 13

C. 18

D. 14

Paper Set 54 · 12 Jun 2026 · 9:00 AM - 10:30 AM · Mathematics (English)

Quant**Q1 Quant**

A shop announces a "Festival Offer: Buy goods worth ₹2,000 at 15% discount". What is the amount to be paid after discount?

A. ₹1,680

B. ₹1,700



C. ₹1,720

D. ₹1,750

Q2 Quant

A, B and C enter into a partnership. A invests ₹50,000 for 6 months, B invests ₹75,000 for 8 months and C invests ₹1,00,000 for 4 months. If the total profit is ₹1,85,991, then the share of C is:

A. ₹57,228



B. ₹57,388

C. ₹56,288

D. ₹56,388

Q3 Quant

Two trains, 280 m and 220 m long, are running on parallel rails in the same direction at speeds of 60 km/hr and 65 km/hr, respectively. Calculate the time (in seconds) taken by the faster train to cross the slower train.

A. 340

B. 350

C. 360



D. 370

Q4 Quant

Pipe P can empty a tank fully in 56 minutes. What will be the time (in minutes) taken by the pipe to empty the tank to the one-eighth water level in the tank?

A. 7



B. 24

C. 35

D. 49



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Q5 Quant

The value of the expression $\frac{0.65}{3} \times \frac{100}{13} \times 0.6$ is _____.

A. 0.5

B. 1 ☒

C. 2

D. 4

Q10 Quant

If 20% of a number is added to 60, then the result is the same number. 65% of the same number is:

A. 48.75 ☒

B. 58.75

C. 78.75

D. 68.75

Q6 Quant

A two-digit number has digits whose sum is 9. If 45 is added to the number, its digits are reversed. Find the number.

A. 23

B. 25

C. 27 ☒

D. 29

Q11 Quant

M and N start a business. N invests some amount for 5 months, while M invests ₹89,000 more than N and for a period of 7 months. If, out of a total profit of ₹3,175, M's share is ₹635 more than that of N, find the capital contributed by M.

A. ₹13,35,000 ☒

B. ₹13,34,937

C. ₹13,34,915

D. ₹13,35,150

Q7 Quant

If the mean of a distribution is '4a' and the median is '3.5a', then the mode of the distribution is:

A. 3.5a

B. 2.5a ☒

C. 3a

D. a

Q12 Quant

A shopkeeper fixes the marked price of an item at 50% above its cost price. What percentage of discount on the marked price should be allowed to gain 17%?

A. 22% ☒

B. 19%

C. 20%

D. 23%

Q8 Quant

Two partners Seerat and Tashreef invested ₹69,000 and ₹1,15,000, respectively in a business. Both the partners distributed the total profit earned at the end of the year in proportion to their investments. If Tashreef received ₹4,000 more than Seerat, find the total profit.

A. ₹16,000 ☒

B. ₹24,000

C. ₹32,000

D. ₹40,000

Q13 Quant

If the compound interest on a sum of ₹y at 10% per year for 2 years, compounded annually, is ₹504, what will be the amount after 2 years?

A. ₹2904 ☒

B. ₹2410

C. ₹3001

D. ₹2768

Q9 Quant

A car covers two equal distances with speeds of 15 km/hr and 20 km/hr, respectively. Find the average speed (rounded up to two decimal places) of the car for the whole journey.

A. 16.67 km/hr

B. 17.14 km/hr ☒

C. 17.84 km/hr

D. 16.16 km/hr



Q14 Quant

The value of $\frac{\left(\frac{\sin A}{1 - \cos A} + \frac{1 - \cos A}{\sin A}\right)}{2\left(\frac{\cot^2 A}{1 + \operatorname{cosec} A} + 1\right)} + 1$ is:

- A. 1
- B. 2
- C. 0
- D. -1

Q15 Quant

The perimeter of a square is equal to the perimeter of a rectangle whose length and breadth are 16 cm and 20 cm respectively. If the diameter of a circle is twice the side of the square, find the radius (in cm) of the circle.

- A. 18
- B. 16
- C. 24
- D. 36

Q16 Quant

The ratio of the lengths of two corresponding sides of two similar triangles is 3 : 2. The ratio of the areas of these two triangles, in the order mentioned, is:

- A. 9 : 4
- B. 3 : 2
- C. $3\sqrt{3} : 2$
- D. 4 : 9

Q17 Quant

In what time (in months) will ₹3000 fetch an interest of ₹360 at 6% per year simple interest?

- A. 24
- B. 21
- C. 22
- D. 28

Q18 Quant

The cost price of an article is reduced by 25%, making the new cost price ₹1,044. Find the original cost price (in ₹) of the article.

- A. 1,392
- B. 261
- C. 4,176
- D. 783

Q19 Quant

A tap fills a tank in 9 hours. Another tap empties the full tank in 63 hours. How long (in hours) will it take to fill two-thirds of the tank, if the tank is empty initially and both the taps are opened together?

- A. 7
- B. 9
- C. 6
- D. 8

Q20 Quant

Simplify: $\sqrt{865} + \sqrt{1188} + \sqrt{1344} + \sqrt{595}$

- A. 30
- B. 31
- C. 29
- D. 32



Q1 Quant

Mokshith has to travel from Town A to City E, passing through Villages B, C and D. The distance is 150 km, which took 3 hours. The distances from B to C and from D to E are both represented by $\frac{1}{5}$ of the total distance. The average speed is 60 km/hr, find the value of $\frac{BC}{DE}$.

A. 132



B. 146

C. 158

D. 172

Q2 Quant

Pallavi, Ritu, and Vidya started a business with a capital in the ratio 3:5:8. At the end, they received a profit in the ratio 4:5:12. What is the ratio of the time they invested?

A. 4:6:9

B. 4:3:9

C. 8:3:6

D. 8:6:9



Q3 Quant

A man buys a washing machine for ₹34,000. He spends ₹6,000 on repairs and sells it to a friend at a profit of 15%. What is the selling price (in ₹)?

A. 45,000

B. 45,500

C. 46,000



D. 46,500

Q4 Quant

Water is flowing through a cylindrical pipe of radius 7 cm at a speed of 5 m/s. How much water (in liters) flows through the pipe in 1 minute? (Use $\pi = \frac{22}{7}$)

A. 3620

B. 4620



C. 3820

D. 4820

Q5 Quant

Nupur invests ₹22560, which is 24% of her monthly income. What is her monthly income?

A. ₹98600



B. ₹108600

C. ₹86600

D. ₹93600

Q6 Quant

The simplified value of the expression $-3(-2 \times 4 + (-$

A. 3



B. -3

C. 2

D. -2

Q7 Quant

A sum of ₹1,11,618 is divided among three children C, D and E so that C may receive five-eighth of what D and E together receive and D may receive two-seventh of what C and E together receive. Find the difference in the shares of C and E.

A. ₹18,126

B. ₹954



C. ₹19,080

D. ₹580

Q8 Quant

Ajay is three times as efficient as Vijay. Working together, they complete a task in 15 days. Find the number of days Ajay alone will take to finish the task.

A. 12 days

B. 20 days



C. 30 days

D. 45 days



Q9 Quant

If each observation in a dataset is multiplied by $3k$ (where $k > 0$), then the weighted mean of the dataset will _____.

- A. remain unchanged
- B. be divided by $3k$
- C. be multiplied by $3k$ ✓
- D. be increased by $3k$

Q10 Quant

A train travels at a speed of 80 km/hr. How much time will it take to cover a distance of 400 km?

- A. 5 hours ✓
- B. 6 hours
- C. 4 hours
- D. 8 hours

Q11 Quant

From a point A in between two parallel lines PQ and RS, lines AB and AC are drawn which intersect PQ and RS at points B and C, respectively. If $\angle QBA = 144^\circ$ and $\angle ACR = 28^\circ$, then what is the degree measure of the acute $\angle BAC$?

- A. 72°
- B. 64° ✓
- C. 76°
- D. 68°

Q12 Quant

If 20% of a number is added to 30, then the result is the same number. 60% of the same number is:

- A. 22.5 ✓
- B. 7.5
- C. 52.5
- D. 42.5

Q13 Quant

One pipe can fill a tank in 5 minutes, while another pipe can empty the completely filled tank in 20 minutes. If both the pipes are opened together when the tank is empty, how many minutes will it take to fill three-fourths of the tank?

- A. 5 ✓
- B. 10
- C. 6
- D. 11

Q14 Quant

A sum of ₹5,376 is divided into three parts such that half of the first part, one-fourth of the second part, and one-eighth of the third part are equal. What is the positive difference (in ₹) between the first and the second parts?

- A. 768 ✓
- B. 618
- C. 718
- D. 818

Q15 Quant

The profit made on a product is 68%. What is the loss percentage (correct to two decimal place) incurred on the sale if the figures of both cost price and selling price are interchanged?

- A. 40.48% ✓
- B. 40.31%
- C. 42.12%
- D. 38.04%

Q16 Quant

If ₹16,000 is invested at 5% per year for 2 years, what is the difference between the compound interest (compounded annually) and the simple interest?

- A. ₹40 ✓
- B. ₹46
- C. ₹34
- D. ₹48

Q17 Quant

Simplify: $\sqrt{196} + \sqrt{0.0169} - \sqrt{7.84}$

- A. 11.33 ✓
- B. 15.95
- C. 2.39
- D. 8.97



Q18 Quant

A right circular conical tent has a volume of $78,848 \text{ m}^3$ and a base area of $2,464 \text{ m}^2$. The tent is constructed with three rectangular window openings, each measuring $3 \text{ m} \times 2 \text{ m}$. Assuming the tent consists only of the sloping side walls (no floor) and ignoring any fabric waste for seams, find the total area of cloth required to make the tent (in m^2). (Take $\pi = \frac{22}{7}$)

A. 9600

B. 8782 

C. 9464

D. 8800

Q20 Quant

A quadratic equation $ax^2 + bx + c = 0$ has two complex roots if:

A. Discriminant = 0

B. Discriminant < 0 

C. Discriminant > 0

D. Discriminant ≤ 0 **Q19 Quant**

What sum of money (in ₹) will yield ₹600 as simple interest in 2 years at 10% per annum?

A. 3000 

B. 2500

C. 3200

D. 3400

Paper Set 56 · 13 Jun 2026 · 4:00 PM - 5:30 PM · Mathematics (English)**Quant****Q1 Quant**

A, B and C invest in a business in the ratio 9 : 7 : 2. If the total profit at the end of the year is ₹1,62,000, find each partner's share of the profit.

A. A's share = ₹80,000, B's share = ₹64,000 and C's share = ₹18,000

B. A's share = ₹81,000, B's share = ₹63,000 and C's share = ₹18,000 

C. A's share = ₹79,000, B's share = ₹65,000 and C's share = ₹18,000

D. A's share = ₹81,000, B's share = ₹60,000 and C's share = ₹21,000

Q2 Quant

If the cost of 36 apples is ₹63, then what is the cost of 28 such apples?

A. ₹49 

B. ₹16

C. ₹55

D. ₹21

Q3 Quant

The radius of a circle and a cylinder are equal. The circumference of the circle is $8\pi \text{ cm}$. If the height of the cylinder is 6 cm more than its radius, then what is the volume (in cm^3) of the cylinder?

A. 90π B. 160π C. 250π D. 360π **Q4 Quant**

A 210-m-long train crosses a man walking in the same direction at a speed of 4 km/hr in 9 seconds. What is the speed of the train (in km/hr)?

A. 84 km/hr

B. 96 km/hr

C. 88 km/hr 

D. 92.5 km/hr



Q5 Quant

A shopkeeper bought a watch for ₹2,500 and sold it for ₹2,812.5. What is his profit percentage?

- A. 10 %
- B. 12.5 % ✓
- C. 14 %
- D. 15.5 %

Q6 Quant

Two trains are travelling at speeds of 93 km/hr and 85 km/hr, respectively. If the first train starts from 20 km behind the second train, and if the two trains are moving in the same direction, how long will it take for the first train to catch up with the second train?

- A. 2 hours
- B. 2.5 hours ✓
- C. 3 hours
- D. 4 hours

Q7 Quant

Pipe A can fill a tank in 15 hours, while Pipe B can empty the full tank in 20 hours. If both pipes are opened simultaneously, find the time taken to completely fill the empty tank.

- A. 30 hours
- B. 45 hours
- C. 60 hours ✓
- D. 75 hours

Q8 Quant

If the mode of certain set of data is more than its mean by 38.4, by using empirical formula, the mode of the same data is more than its median by:

- A. 15.8
- B. 22.5
- C. 25.6 ✓
- D. 26.6

Q9 Quant

If 20% of a number is added to 36, then the result is the same number. 75% of the same number is:

- A. 33.75 ✓
- B. 43.75
- C. 63.75
- D. 53.75

Q10 Quant

A and B working together can do a piece of work in 6 days. B alone can do the same work in 42 days. How many days will A take to do twice the work alone?

- A. 14 ✓
- B. 15
- C. 7
- D. 17

Q11 Quant

M and N start a business. N invests some amount for 5 months, while M invests ₹43,000 more than N and for a period of 6 months. If, out of a total profit of ₹1,812, M's share is ₹302 more than that of N, find the capital contributed by M.

- A. ₹3,01,000 ✓
- B. ₹3,01,189
- C. ₹3,01,030
- D. ₹3,00,976

Q12 Quant

A sum of money was invested at simple interest, and the same sum was invested at compound interest (compounded annually) for 2 years at 8% per annum. The difference between the compound interest and the simple interest at the end of 2 years is ₹100. Find the sum invested (in ₹) in each case.

- A. 15,625 ✓
- B. 14,875
- C. 14,725
- D. 15,975

Q13 Quant

If $\cos A + \sin A = p$ and $\sec A + \operatorname{cosec} A = q$, then the value of $q(p^2 - 1)$ is equal to:

- A. p
- B. 2p ✓
- C. $p + 2$
- D. $p - 2$



Q14 Quant

If $14\sin y + \cos y = \sqrt{9} \sin y$, then what is the value of $\tan y$?

A. $-\frac{1}{11}$ ✓

B. $-\frac{1}{8}$

C. $-\frac{1}{2}$

D. $-\frac{1}{19}$

Q15 Quant

In what time (in months) will ₹3,000 fetch an interest of ₹500 at 5% per year simple interest?

A. 40 ✓

B. 37

C. 38

D. 44

Q16 Quant

A number when increased by 60%, gives 3540. The number is:

A. 2212.5 ✓

B. 2425.2

C. 1106.2

D. 1637.5

Q17 Quant

The selling price of brand A watches is 15% higher than its original price. Due to increase in demand by 10%. How much profit will be obtained in selling the watches?

A. 25%

B. 25.5%

C. 27%

D. 26.5% ✓

Q18 Quant

The product of $(x - 16)$ and $(x + 14)$ is:

A. $x^2 - 2x - 224$ ✓

B. $x^2 + 3x - 224$

C. $x^2 - x + 224$

D. $x^2 + 2x + 224$

Q19 Quant

Simplify: $\left(6\frac{2}{5} \times 3\frac{3}{4}\right) \div \left(4\frac{1}{2} + 2\frac{2}{3}\right)$

A. $\frac{144}{43}$ ✓

B. $\frac{121}{30}$

C. $\frac{600}{121}$

D. $\frac{120}{43}$

Q20 Quant

A sum of ₹8,000 is to be divided among P, Q and R in the ratio 4: 5: 7. How much does each person receive?

A. ₹2,000, ₹2,500 and ₹3,500, respectively ✓

B. ₹1,000, ₹2,000 and ₹3,000, respectively

C. ₹1,500, ₹2,500 and ₹3,500, respectively

D. ₹2,000, ₹3,000 and ₹3,500, respectively



Q1 Quant

Varun is running in a train A $\frac{3}{2}$ times the speed of the train but in the opposite direction. Meanwhile, Mohan is running at $\frac{3}{4}$ of the train's speed with respect to the ground, but in the opposite direction. The distance between them is 50 metres, and Mohan catches up to Varun in 10 seconds. Find the sum of Mohan's speed and the train's speed.

- A. 5 m/s
B. 4 m/s
C. 7 m/s
D. 2.5 m/s

Q2 Quant

Simplify: $\frac{(843 + 378)^2 + (843 - 378)^2}{2(843 \times 843 + 378 \times 378)}$.

- A. 1
B. 2
C. 3
D. 4

Q3 Quant

Two pipes, A and B, can fill a tank in 12 hours and 15 hours, respectively. Another pipe, C, can empty the tank in 20 hours. If all the pipes are opened together, in how long will the tank be filled?

- A. 8 hours
B. 10 hours
C. 9 hours
D. 12 hours

Q4 Quant

Shalini has to purchase a microwave. The microwave is available at a discount of 20% and an additional festival discount of 5%. If the marked price of the microwave is ₹7,000, then what is the selling price of the microwave?

- A. ₹5,330
B. ₹5,340
C. ₹5,320
D. ₹5,350

Q5 Quant

The ratio of two numbers is 3 : 5, and their sum is 64. What are the two numbers?

- A. 20 and 44
B. 24 and 40
C. 18 and 46
D. 22 and 42

Q6 Quant

A train runs at a speed of 72 km/hr. How much distance will it cover in 25 minutes?

- A. 30 km
B. 40 km
C. 24 km
D. 28 km

Q7 Quant

The volume of a cone is $9,856 \text{ cm}^3$, and its height is 24 cm. If the radius is increased by 25% and the height is decreased by 20%, what will be the percentage change in volume?
[Use $\pi = \frac{22}{7}$]

- A. 20% decrease
B. 24% increase
C. 25% increase
D. 28% decrease

Q8 Quant

Solve $(6.4 - 4.5) \times 2.7 + (12.8 \div 3.2)$.

- A. 5.13
B. 7.13
C. 9.13
D. 11.13

Q9 Quant

Find the arithmetic mean of the following data.

Class interval	0-8	8-16	16-24	24-32
Frequency	2	1	4	3

- A. 14.8
B. 16.3
C. 17.7
D. 18.4



Q10 Quant

Ravi, Rishi and Vaibhav start a business with ₹62,000. Ravi, subscribes ₹5,000 more than Rishi and Rishi ₹6,000 more than Vaibhav. Out of a total profit of ₹31,000, Ravi receives:

- A. ₹14,000
- B. ₹13,000 ✓
- C. ₹15,000
- D. ₹16,000

Q11 Quant

By how much is 30% of 65 greater than 25% of 30?

- A. 12 ✓
- B. 7
- C. 9
- D. 14

Q12 Quant

Three numbers are in the ratio 3 : 11 : 2, and their LCM is 7590. Their HCF is:

- A. 115 ✓
- B. 153
- C. 96
- D. 100

Q13 Quant

A sum of ₹5,432 is divided into three parts such that half of the first part, one-fourth of the second part, and one-eighth of the third part are equal. What is the positive difference (in ₹) between the first and the second parts?

- A. 776 ✓
- B. 676
- C. 926
- D. 626

Q14 Quant

The profit made on a product is 59%. What is the loss percentage (correct to two decimal place) incurred on the sale if the figures of both cost price and selling price are interchanged?

- A. 37.11% ✓
- B. 39.10%
- C. 36.58%
- D. 38.53%

Q15 Quant

What will be the amount after 1 year, if ₹4700 is invested at 20% compound interest per annum, compounded half-yearly?

- A. ₹5687 ✓
- B. ₹5228
- C. ₹5597
- D. ₹6114

Q16 Quant

The line intersecting any circle at exactly one point is called a:

- A. Secant
- B. Tangent ✓
- C. Chord
- D. Diameter

Q17 Quant

The radius of a cone is 18 cm and its height is 24 cm. The total surface area (in cm^2) of the cone is: (Use $\pi = 22/7$, and round off your answer to the nearest integer)

- A. 2715 ✓
- B. 1247
- C. 3027
- D. 2118

Q18 Quant

In what time (in months) will ₹3300 fetch an interest of ₹440 at 8% per year simple interest?

- A. 20 ✓
- B. 17
- C. 18
- D. 24



Q19 Quant

A number when increased by 60%, gives 3470. The number is:

- A. 2168.75 ✓
- B. 2337.5
- C. 1084.37
- D. 1506.25

Q20 Quant

The pipes P and Q together can completely fill an empty cistern with water in 8 hours. If P alone can fill the cistern with water in 40 hours, in how many hours will Q alone fill half of the cistern with water?

- A. 5 ✓
- B. 10
- C. 6
- D. 11

Paper Set 58 · 16 Jun 2026 · 12:30 PM - 2:00 PM · Mathematics (English)**Quant****Q1 Quant**

Two trains of lengths 77 m and 91 m are moving in opposite directions at 7 m/s and 5 m/s, respectively. Find the time taken by the trains to cross each other.

- A. C. 10 seconds
- B. A. 11 seconds
- C. B. 12 seconds
- D. D. 14 seconds ✓

Q2 Quant

Six years ago, a father's age was 26 years more than twice his son's age. After how many years from now will the father's age be exactly twice his son's age?

- A. C. 20 ✓
- B. D. 16
- C. B. 24
- D. A. 22

Q3 Quant

A painter can paint a house in 10 days, while his assistant alone takes 15 days to do the same task. If the assistant starts the work alone but leaves after working for 5 days, how much more time will the painter need to complete the job?(Rounded upto two decimal places)

- A. D. 6.67 days ✓
- B. A. 7.76 days
- C. C. 8.34 days
- D. B. 10.33 days

Q4 Quant

A grocer wants to mix two types of rice, one costing ₹30/kg and the other ₹60/kg, to make a mixture worth ₹50/kg. In what ratio should he mix them?

- A. C. 2:1
- B. D. 1:2 ✓
- C. B. 1:1
- D. A. 2:3



Q5 Quant

If ₹918 is divided among A, B and C in the ratio of 9 : 16 : 2, then the share of B exceeds that of A by:

A. A. ₹131

B. D. ₹238 ☒

C. C. ₹262

D. B. ₹119

Q6 Quant

A bus can cover 570 km in 6 hours. If the speed is increased by 25 km/hr, then the time taken by the bus to cover 840 km is:

A. B. 6 hours

B. D. 5 hours

C. C. 7 hours ☒

D. A. 4 hours

Q7 Quant

Convert $3.\overline{2527}$ into a vulgar fraction.

A. $\frac{1789}{550}$ ☒B. $\frac{1689}{550}$ C. $\frac{1789}{510}$ D. $\frac{1889}{510}$ **Q8 Quant**

Ruchi spends 20% of her total salary on house rent and 50% of the rest on other household expenditures. If she saves the remaining ₹24200, then what is her total monthly salary?

A. D. ₹60400

B. C. ₹60500 ☒

C. A. ₹60600

D. B. ₹60300

Q9 Quant

A man buys a watch for ₹2,500. He sells it at a loss of 8%. Then the buyer sells it at a gain of 15%. Find the final selling price.

A. A. ₹2,665

B. D. ₹2,545

C. C. ₹2,645 ☒

D. B. ₹2,465

Q10 Quant

Find the arithmetic mean of the following data.

Class interval	0-8	8-16	16-24	24-32	32-40
Frequency	5	4	10	2	4

A. C. 15.32

B. B. 16.62

C. D. 18.72 ☒

D. A. 19.52

Q11 Quant

The volume of a solid cylinder is 34650 cm^3 and its height is 25 cm. What is the total surface area of the solid cylinder? (Use $\pi = 22/7$)

A. A. 6072 cm^2 ☒B. B. 6045 cm^2 C. C. 6095 cm^2 D. D. 6038 cm^2 **Q12 Quant**

If 20% of a number is added to 42, then the result is the same number. 60% of the same number is:

A. C. 31.5 ☒

B. D. 41.5

C. A. 61.5

D. B. 51.5

Q13 Quant

Given that $14^{0.34} = x$, $14^{0.28} = y$ and $x^z = y^9$, then the value of z is close to:

A. B. 7.41 ☒

B. A. 5.34

C. C. 9.03

D. D. 9.27

Q14 Quant

A sum of ₹3,668 is divided into three parts such that half of the first part, one-fourth of the second part, and one-eighth of the third part are equal. What is the positive difference (in ₹) between the first and the second parts?

A. A. 524 ☒

B. B. 424

C. C. 574

D. D. 374



Q15 Quant

Ashish has ₹1300 with him. He divided it amongst his sons Arun and Mahesh and asked them to invest it at 8% rate of interest compounded annually. It was seen that Arun and Mahesh got same amount after 16 and 17 years, respectively. How much money (in ₹) did Ashish give to Mahesh?

A. D. 625



B. A. 675

C. B. 475

D. C. 775

Q16 Quant

Two triangles ABC and DEF are similar. The sides of triangle ABC are 3, 4 and 5 units. The sum of the lengths of the sides of triangle DEF is 60 units. The area (in square units) of the triangle DEF is:

A. D. 150



B. B. 120

C. C. 100

D. A. 180

Q17 Quant

The length of a tangent from point A at a distance of 10 cm from the centre of the circle is 8 cm. Find the radius of the circle.

A. D. 2 cm

B. A. 4 cm

C. C. 6 cm



D. B. 8 cm

Q18 Quant

By how much is the ratio 3 : 4 greater than the r

A. $\frac{1}{4}$

B. $\frac{1}{12}$



C. $\frac{1}{9}$

D. $\frac{1}{6}$

Q19 Quant

A person purchases a book for ₹5000 and sells it to another person, making a profit of 20%. The second person then sells the book at a loss of 10% based on their own cost price. What is the final selling price of the book?

A. B. ₹5400



B. C. ₹5240

C. A. ₹5740

D. D. ₹5920

Q20 Quant

One pipe can fill the tank in 3 minutes, while another pipe can empty a completely filled tank in 12 minutes. If both the pipes are operated together when the tank is empty, how long (in minutes) will it take to fill the tank completely?

A. 4



B. 5

C. 6

D. 7



Q1 Quant

Manju bought a Jacket from Sarojini market at ₹1,000 and marked up its price by $P\%$. She then gave a discount of $(0.4 \times P)\%$ and still got a profit percentage of $(0.4 \times P)\%$. What is the value of P ?

A. 40

B. 45

C. 50 ✓

D. 35

Q2 Quant

Ramesh and Ranjan started a business with investment of ₹45,934 and ₹52,496 respectively. If the total profit earned at the end of the year is ₹13,440, find the profit share of Ranjan.

A. ₹6,184

B. ₹6,676

C. ₹7,026

D. ₹7,168 ✓

Q3 Quant

A train 140 m long takes 15 seconds to cross another train 160 m long, running in the opposite direction. Find the relative speed (in m/s) between both the trains.

A. 20 ✓

B. 15

C. 10

D. 16

Q4 Quant

Clark got ₹3,000 as his share out of a total profit of ₹4,500 which he and Rohit earned at the end of one year. If Clark invested ₹10,000 for 6 months, whereas Rohit invested his amount for the whole year, what was the amount invested by Rohit?

A. ₹2500 ✓

B. ₹3200

C. ₹2200

D. ₹2800

Q5 Quant

A man can row 18 km downstream in 2.5 hours and return in 8 hours. Find the speed of the current.

A. 2.145 km/h

B. 2.255 km/h

C. 2.365 km/h

D. 2.475 km/h ✓

Q6 Quant

A and B together finish a task in 13 hours. A alone can do it in 26 hours. How long would B take to complete the task alone?

A. 39 hours

B. 19.5 hours

C. 26 hours ✓

D. 32.5 hours

Q7 Quant

The cost of 3 pens and 2 notebooks is ₹46, while the cost of 5 pens and 4 notebooks is ₹78. Find the total cost of one pen and one notebook.

A. ₹16 ✓

B. ₹18

C. ₹24

D. ₹20

Q8 Quant

The observations 10, 20, and 30 have corresponding weights x , $3x$, and $2.5x$, respectively, where $x > 0$. Find the weighted mean of the observations (rounded off to the nearest integer).

A. 23

B. 22 ✓

C. 24

D. 21

Q9 Quant

By how much is 30% of 65 greater than 20% of 50?

A. 9.5 ✓

B. 4.5

C. 6.5

D. 11.5



Q10 Quant

A and B working together can complete a piece of work in 5 days. B alone can complete the same work in 8 days. How long (in days) will A alone take to complete thrice the work?

A. 40



B. 80

C. 120

D. 160

Q11 Quant

₹13,372 is divided among X, Y, and Z in such a way that if ₹31, ₹12, and ₹67 be deducted from their respective shares, they have money in the ratio 15 : 14 : 9. Find X's share after deduction.

A. ₹5,235



B. ₹5,135

C. ₹5,385

D. ₹5,185

Q12 Quant

What will be the amount after 1 year, if ₹8600 is invested at 20% compound interest per annum, compounded half-yearly?

A. ₹10,406



B. ₹10,096

C. ₹10,024

D. ₹10,094

Q13 Quant

Simplify: $95 - \{ (-20) \times (-3 - 4 - 17) \} \div [8 \times (8 + (-3) \times (-5))]$

A. $\frac{2125}{23}$ B. $\frac{8499}{92}$ C. $\frac{8495}{92}$ D. $\frac{16995}{184}$ **Q14 Quant**

In $\triangle OPQ$, $\angle O = 65^\circ$ and $\angle P = 73^\circ$. The bisectors of $\angle Q$ and $\angle P$ meet at point R. Find $\angle ORQ$.

A. 120° B. 120.5° C. 122° D. 122.5° **Q15 Quant**

If $7\sin^2\theta + 2\cos^2\theta = 3$, then what is the value of $\tan^2\theta$?

A. 28

B. 15

C. 10

D. 18

**Q16 Quant**

The ratio of the lengths of two corresponding sides of two similar triangles is 19 : 13. The ratio of the areas of these two triangles, in the order mentioned, is:

A. 361 : 169



B. 19 : 13

C. 13 : 19

D. 169 : 361

Q17 Quant

In what time (in months) will ₹3000 fetch an interest of ₹340 at 8% per year simple interest?

A. 17



B. 14

C. 15

D. 21

Q18 Quant

By how much is 65% of 75 greater than $\frac{1}{5}$ of 240?

A. 43.75



B. 40.75

C. 37.75

D. 41.75



Q19 Quant

Simplify: $213 - 2 \times (20 + 13) + 96$

A. 243



B. 235

C. 252

D. 246

Q20 Quant

A shopkeeper sells an item for ₹1530 after giving two successive discounts of 15% and 10% on its marked price. Had he not given any discount, he would have earned a profit of 25% on the cost price. What is the cost price (in ₹) of the item?

A. 1600



B. 1620

C. 1580

D. 1700

Paper Set 60 · 16 Jun 2026 · 9:00 AM - 10:30 AM · Mathematics (English)**Quant****Q1 Quant**

A, B and C enter into a partnership in the ratio 3 : 2 : 5. After 4 months, A increases his share by 50%. If the total profit at the end of one year is ₹39,600, what is B's share in the profit?

A. D. ₹3,600

B. B. ₹7,200



C. C. ₹4,800

D. A. ₹7,600

Q2 Quant

The total surface area of a solid hemisphere of radius 3 cm is:

A. B. $9\pi \text{ cm}^2$

B. D. $27\pi \text{ cm}^2$



C. A. $18\pi \text{ cm}^2$

D. C. $36\pi \text{ cm}^2$

Q3 Quant

The sum of A's age and three times B's age is 35 years. If five times A's age is added to four times B's age, the total is 87 years. Find the sum of A's and B's ages (in years).

A. A. 19



B. D. 21

C. C. 14

D. B. 22

Q4 Quant

A steamer covers a certain distance in 12 hours downstream and 16 hours upstream. If the speed of the steamer in still water is 35 km/hr, then what is the speed of the current?

A. D. 7 km/hr

B. C. 6 km/hr

C. B. 5 km/hr



D. A. 4 km/hr



Q5 Quant

A trader marked an article at ₹400. He offers two successive discount of 5% and 10% on the marked price. Find the selling price of the article.

A. D. ₹342 ✓

B. B. ₹346

C. C. ₹352

D. A. ₹356

Q6 Quant

A triangular park has its three sides measuring 13 m, 14 m, and 15 m, respectively. A circular fountain is to be constructed inside the park such that the circle touches all three sides of the triangle. The cost of constructing the fountain is ₹350 per square metre. Determine the total cost required to construct the fountain.

$$\left(\text{Use } \pi = \frac{22}{7} \right)$$

A. D. ₹17,600 ✓

B. B. ₹16,700

C. A. ₹18,600

D. C. ₹15,900

Q7 Quant

Two trains, X and Y, 200 meters and 150 meters long, respectively, are moving towards each other on parallel tracks. Train X is moving at 60 km/h and Train Y at 54 km/h. If Train X moves at 45 km/h once the trains are halfway through the crossing, how long (in seconds) will it take for them to completely cross each other? [Give your answer correct to two places after the decimal point.]

A. C. 9.89 seconds

B. D. 10.89 seconds

C. B. 11.89 seconds ✓

D. A. 12.89 seconds

Q8 Quant

Find the value of $(2.4)^3 - (1.2)^3 - (1.2)^3$.

A. A. 10.168

B. C. 10.268

C. B. 10.368 ✓

D. D. 10.468

Q9 Quant

A can complete a piece of work in 22 days and B can complete the same work in 25 days. If both work together, in how much time will the work be completed?

A. $7\frac{18}{23}$ daysB. $9\frac{27}{34}$ daysC. $10\frac{31}{39}$ daysD. $11\frac{33}{47}$ days ✓**Q10 Quant**

If the mean and median of a certain set of data are 43.5 and 64.4, respectively, find the value of the mode of the same data by using empirical relation.

A. 104.2

B. 105.2

C. 106.2 ✓

D. 108.2

Q11 Quant

Find the fourth proportional to 4.8, 9.6 and 11.2.

A. C. 20.4

B. A. 22.4 ✓

C. B. 24.6

D. D. 25.8

Q12 Quant

Subtracting 17% of X from X is equal to multiplying X by:

A. D. 0.83 ✓

B. A. 0.17

C. C. 0.5

D. B. 0.017

Q13 Quant

The LCM of the numbers 10, 14 and 0.16 is:

A. A. 140 ✓

B. C. 280

C. B. 420

D. D. 70



Q14 Quant

A sum of ₹5,943 is divided into three parts such that half of the first part, one-fourth of the second part, and one-eighth of the third part are equal. What is the positive difference (in ₹) between the first and the second parts?

A. D. 849



B. A. 799

C. B. 899

D. C. 749

Q15 Quant

The difference between the simple interest and the compound interest, compounded annually, on a certain principal for 2 years at 17% per annum is ₹465. Find the principal amount. (Round off your answer to the nearest rupee.)

A. C. ₹16,090



B. B. ₹16,085

C. D. ₹16,098

D. A. ₹16,084

Q16 Quant

In a pair of parallel lines cut by a transversal, one of the corresponding angles is 45 degrees. What is the measure (in degrees) of the alternate exterior angle?

A. C. 45



B. B. 75

C. A. 15

D. D. 110

Q17 Quant

In how much time (in months) will ₹3000 fetch an interest of ₹300 at 5% per year simple interest?

A. A. 24



B. D. 21

C. B. 22

D. C. 28

Q18 Quant

Pipes P and Q together can completely fill an empty cistern with water in 6 hours. If P alone can fill the same amount of water in 7 hours, in how many hours will Q alone fill the same amount of water?

A. A. 42



B. B. 43

C. D. 44

D. C. 41

Q19 Quant

A shopkeeper sells an item for ₹765 after giving two successive discounts of 10% and 15% on its marked price. Had he not given any discount, he would have earned a profit of 25% on the cost price. What is the cost price (in ₹) of the item?

A. D. 800



B. B. 775

C. A. 750

D. C. 850

Q20 Quant

A company's profit increased from ₹50,000 to ₹60,000. What is the percentage increase?

A. B. 15%

B. C. 20%



C. A. 25%

D. D. 30%



Quant

Q1 Quant

Simplify the following expression.

$$(2x - 5y)^3 + (2x + 5y)^3 - 300xy^2$$

A. C. $16x^3$



B. D. $16y^3$

C. A. $300y^2x$

D. B. $300x^2y$

Q5 Quant

The list price of an article is ₹800. Two successive discounts of 12% and 10% are offered on it. Find the selling price of the article.

A. A. ₹612.60

B. C. ₹623.65

C. B. ₹633.60



D. D. ₹636

Q2 Quant

Two pipes A and B can fill a tank in 20 hours and 17 hours, respectively. If both the pipes are opened simultaneously, in how much time will the tank be full (rounded off to two decimal places)?

A. A. 8.97 hours

B. C. 9.19 hours



C. D. 9.43 hours

D. B. 9.35 hours

Q6 Quant

Sasi, Keya, and Venu each invested ₹40,000. After 6 months, Keya invested an additional ₹25,000. Find Sasi's profit if the total profit received after a year is ₹1,06,000.

A. A. ₹30,000

B. D. ₹32,000



C. C. ₹28,000

D. B. ₹24,000

Q3 Quant

Two trains, P m and $(P + 50)$ m long, move in opposite directions at 54 km/h and 36 km/h respectively and take 14 seconds to cross each other completely. If two new trains whose lengths are $(P + 50)$ m and $(P + 100)$ m, respectively, move in opposite directions at the same relative speed as the first pair, how much more time (in seconds) will they take to cross each other completely?

A. B. 2

B. A. 2.5

C. D. 4



D. C. 4.5

Q7 Quant

A, B, and C started a business together by investing ₹10,000 for 12 months, ₹12,000 for 8 months, and ₹8,000 for 6 months, respectively. If the total profit earned at the end of the year was ₹7,700, find the difference between A's share and B's share of the profit.

A. B. ₹1,400

B. D. ₹700



C. A. ₹2,100

D. C. ₹2,800

Q4 Quant

Find the largest 3-digit number which is divisible by both 4 and 6.

A. A. 999

B. D. 996



C. B. 994

D. C. 992

Q8 Quant

If the mean of a moderately skewed distribution is 6 more than the mode and the median is 28, find the mean.

A. D. 30



B. C. 32

C. A. 34

D. B. 36



Q9 Quant

A, B and C started a business investing amounts of ₹510, ₹1,170, and ₹1,160, respectively. If B's share in the profit earned by them is ₹639, what is the difference in the profit (in ₹) earned by A and C?

A. C. ₹355



B. D. ₹356

C. A. ₹353

D. B. ₹357

Q10 Quant

If 20% of a number is added to 48, then the result is the same number. 60% of the same number is:

A. 36



B. 46

C. 66

D. 56

Q11 Quant

Three numbers are in the ratio 7 : 13 : 12, and their LCM is 4368. Their HCF is:

A. C. 4



B. A. 30

C. D. 19

D. B. 21

Q12 Quant

How long (in years) will it take for ₹1680 to become ₹2100 at a rate of 2% per annum simple interest?

A. C. 12.5



B. A. 11.5

C. B. 13.5

D. D. 14.5

Q13 Quant

ABC and DBC are two triangles on the same base BC, such that AB = AC, BD = CD, and point D lies inside $\triangle ABC$. If $\angle ABC = 80^\circ$ and $\angle DBC = 43^\circ$, find the value of $\angle ACD$.

A. B. 37°



B. A. 43°

C. D. 55°

D. C. 80°

Q14 Quant

AB is parallel to CD. A transversal PQ intersects AB and CD at E and F, respectively, and $\angle PEB = 63^\circ$. G is a point between AB and CD such that $\angle BEG = 36^\circ$ and $\angle GFE = 42^\circ$. What is the measure of $\angle EGF$?

A. B. 57°



B. D. 53°

C. A. 46°

D. C. 44°

Q15 Quant

The ratio of the lengths of two corresponding sides of two similar triangles is 2 : 18. The ratio of the areas of these two triangles, in the order mentioned, is:

A. D. 1:81



B. B. 1:9

C. $\sqrt{2} : 9$

D. C. 81:1

Q16 Quant

A number when increased by 60%, gives 3890. The number is:

A. D. 2431.25



B. B. 2862.54

C. C. 1215.62

D. A. 1793.75

Q17 Quant

Two trains, 250 m and 150 m long, are running on parallel tracks. When moving in the same direction, the faster train passes the slower train in 40 seconds. When moving in opposite directions, they cross each other in 8 seconds. Find the speed of the slower train.

A. B. 23 m/s

B. D. 20 m/s



C. C. 24 m/s

D. A. 14 m/s

Q18 Quant

One pipe can completely fill a tank in 5 minutes, while another pipe can empty completely filled tank in 10 minutes. If both the pipes are operated together when the tank is empty, how long (in minutes) will it take to fill half of the tank?

A. A. 5



B. B. 6

C. D. 10

D. C. 11



Q19 Quant

What is the compound interest (in ₹) received on the investment of sum ₹29,000 at an annual interest rate of 5% for 2 years, compounded annually?

A. B. 2,970.50

B. D. 2,999.50

C. A. 2,972.50



D. C. 2,978.50

Q20 Quant

The marked price of an article is ₹440. The shopkeeper offers a discount of 25% on the purchase of the article. Thereby, he makes a profit of 10%. The cost price of the article is:

A. B. ₹300



B. A. ₹303

C. C. ₹302

D. D. ₹335

Paper Set 62 · 17 Jun 2026 · 4:00 PM - 5:30 PM · Mathematics (English)**Quant****Q1 Quant**

If a vehicle covers a distance of 10.44 km in 15 minutes, then find its speed in km/hr.

A. 40.89

B. 85.96

C. 41.76



D. 47.98

Q2 Quant

A shopkeeper marks a pair of shoes at ₹2,400. During a festival sale, he offers two successive discounts of 15% and 10%. Find the selling price of the shoes.

A. ₹1,836



B. ₹1,850

C. ₹1,866

D. ₹1,878

Q3 Quant

Two trains, A and B, are moving towards each other. Train A is travelling at 55 km/hr, and train B is travelling at 85 km/hr. What is 55% of their relative speed?

A. 77 km/hr



B. 140 km/hr

C. 70 km/hr

D. 154 km/hr

Q4 Quant

A car covers 315 km in 7 hours. How far will it travel in 9 hours at the same speed?

A. 405 km



B. 409 km

C. 415 km

D. 417 km



Q5 Quant

Two friends, Sita and Anaya, invest ₹4,00,000 and ₹9,00,000, respectively, in a business. On this investment, they earn a profit of ₹1,25,450. This profit is shared between Sita and Ananya according to their investment ratio. What is the difference between Sita's and Anaya's shares, respectively, in the profit?

A. ₹48,250



B. ₹49,775

C. ₹52,210

D. ₹54,155

Q6 Quant

The length of each side of a square park is $(x + 5)$ metres. Inside the park, there is a smaller square garden whose each side is $(x - 5)$ metres long. What is the area of the region of the park that does not fall inside the garden?

A. $10x$

B. $20x$



C. $4x^2 + 25$

D. $x^2 - 25$

Q7 Quant

An inlet pipe B fills a tank in 2 hours if open alone, but with drain pipe A also being open, it takes 6 hours. How long does pipe A take to empty the full tank alone?

A. 2 hours

B. 3 hours



C. 4 hours

D. 5 hours

Q8 Quant

In a moderately skewed distribution, the mean is 45 and the mode is 36. Find the median.

A. 39

B. 40

C. 42



D. 43

Q9 Quant

Viswaj and Karun invest in a saffron cultivation business in the ratio 2 : 7. If 10% of the total profit goes to tax and Viswaj's share is ₹5,000, find the total profit (in ₹).

A. 22,500

B. 24,500

C. 25,000



D. 25,500

Q10 Quant

By how much is 30% of 65 greater than 25% of 45?

A. 8.25



B. 3.25

C. 5.25

D. 10.25

Q11 Quant

Three friends X, Y and Z started a business by investing a sum of money in the ratio of 4 : 2 : 5. After 6 months, X withdrew half of his capital. Out of a total profit of ₹51,000 at the year end, what is the difference between X's and Y's shares of profit?

A. ₹5100



B. ₹4605

C. ₹4560

D. ₹3735

Q12 Quant

In a division sum, the divisor is 15 times the quotient and 6 times the remainder. If the remainder is 30, what is the dividend?

A. 2190



B. 2195

C. 2187

D. 2194

Q13 Quant

Anil has ₹1,300 with him. He divided it amongst his sons Ashok and Raj and asked them to invest it at 8% rate of interest compounded annually. It was seen that Ashok and Raj got same amount after 18 and 19 years, respectively. How much money (in ₹) did Anil give to Raj?

A. 625



B. 675

C. 475

D. 775



Q14 Quant

PQ is the diameter of a circle with centre R. Let S be a point on it. If $\angle SRP = 120^\circ$, then $\angle SQR$ is equal to:

A. 60°



B. 90°

C. 45°

D. 50°

Q15 Quant

The value of $\tan^2\theta + \cot^2\theta - \sec^2\theta \operatorname{cosec}^2\theta + \frac{1}{2}$ is:

A. $-\frac{1}{2}$

B. $\frac{1}{2}$

C. $\frac{3}{2}$

D. $-\frac{3}{2}$

**Q16 Quant**

The number of sides of a polygon whose sum of all interior angles is 1440 degrees is:

A. 10



B. 12

C. 6

D. 8

Q17 Quant

In what time (in months) will ₹3200 fetch an interest of ₹480 at 6% per year simple interest?

A. 30



B. 27

C. 28

D. 34

Q18 Quant

A number when increased by 60%, gives 3520. The number is:

A. 2200



B. 2400

C. 1100

D. 1600

Q19 Quant

The pipes P and Q together can completely fill an empty cistern with water in 9 hours. If P alone can fill the cistern with water in 12 hours, in how many hours will Q alone fill half of the cistern with water?

A. 18



B. 36

C. 19

D. 37

Q20 Quant

If the selling price of a plot is ₹2200000, then the seller will get 10% profit. If the price is increased to ₹2600000, what is the profit percentage?

A. 20%

B. 25%

C. 30%



D. 35%



Q1 Quant

A shopkeeper offers two successive discounts of 10% and 20% on a shirt marked at ₹1,000. What is the selling price?

A. ₹700

B. ₹720 ✓

C. ₹750

D. ₹770

Q2 Quant

The ratio of marks obtained by three students P, Q, R is 3 : 4 : 5. If the difference between the highest and lowest marks is 40, find the marks of Q.

A. 60

B. 80 ✓

C. 85

D. 90

Q3 Quant

A boat can travel 20 km downstream in 2 hours and the same distance upstream in 5 hours. Find the speed of the stream.

A. 3 km/hr ✓

B. 2 km/hr

C. 3.5 km/hr

D. 2.5 km/hr

Q4 Quant

A can complete a work in 6 days while B can do it in 12 days. If they work together and complete it, the portion of work done by A is:

A. $\frac{2}{3}$ ✓B. $\frac{1}{3}$ C. $\frac{4}{5}$ D. $\frac{3}{5}$

Q5 Quant

The average speed of car during a journey should be 70 km per hour. It covers 50% of the total distance of the journey with a speed of 62 km per hour. What is its speed in the rest 50% distance of the journey in km per hour? (Round your answer to the nearest integer)

A. 72

B. 74

C. 76

D. 80 ✓

Q6 Quant

Mahesh's income increased successively by 10%, 20%, 30%, and 40% over four years. If his income after four years is ₹4,80,480, what was 40% of his initial income (in ₹)?

A. 80,000 ✓

B. 1,20,000

C. 1,60,000

D. 60,000

Q7 Quant

The ratio of the number of girls to boys in a class of 198 students is 4 : 7. If 18 boys left the class, find how many new girls would be admitted so that the number of girls and the number of boys becomes equal.

A. 18

B. 24

C. 30

D. 36 ✓

Q8 Quant

The following data gives the total scores (out of 500 marks) of 14 students in a class.

Total Score	252	280	308	322	406
No. of students	3	4	3	3	1

Find the average score of these 14 students.

A. 291

B. 298 ✓

C. 301

D. 311



Q9 Quant

Simplify $49 \div 7 \times (6 + 3) - 6$.

A. B. 57



B. C. 54

C. A. 53

D. D. 52

Q10 Quant

Divide ₹8330 into three parts in such a way that half of the first part, one-fourth of the second part and one-eighth of the third part are equal. What is the value of the second part (in ₹)?

A. C. 2380



B. D. 2880

C. A. 3880

D. B. 2980

Q11 Quant

If the compound interest on a sum of ₹y at 5% per year for 2 years, compounded annually, is ₹246, what will be the amount after 2 years?

A. D. ₹2646



B. A. ₹2554

C. C. ₹2900

D. B. ₹2246

Q12 Quant

Simplify: $72 - \{(-17) \times [(-7 - 5 - 7)]\} \div [2 \times \{9 + (-1) \times (-2)\}]$

A. $\frac{1261}{22}$



B. $\frac{1269}{22}$

C. $\frac{1253}{22}$

D. $\frac{1254}{22}$

Q13 Quant

In triangle ABC, the sides have lengths AB = 7 cm, BC = 9 cm, and AC = 14 cm. If AD is the angle bisector of angle BAC, and D lies on BC, find the length (in cm) of BD.

A. C. 3



B. D. 6

C. B. 7

D. A. 10

Q14 Quant

The length of a rectangle is twice its breadth. If the length is decreased by half of 20 cm and the breadth is increased by half of 20 cm, the area of the rectangle becomes 200 cm^2 . Find the breadth of the rectangle (in cm).

A. C. 40

B. B. 30

C. D. 20

D. A. 10

**Q15 Quant**

The perimeter of a square is 36 cm. What is the length (in cm) of its diagonal?

A. $6\sqrt{2}$

B. $12\sqrt{2}$

C. $9\sqrt{2}$



D. $18\sqrt{2}$

Q16 Quant

In what time (in months) will ₹3,000 fetch an interest of ₹380 at 8% per year simple interest?

A. B. 19



B. C. 16

C. A. 17

D. D. 23

Q17 Quant

A number when increased by 60%, gives 3930. The number is:

A. C. 2456.25



B. B. 2912.53

C. D. 1228.12

D. A. 1768.75



Q18 Quant

Ashok can prepare one wooden wardrobe in 2 days and Robin can prepare the same wardrobe in 3 days. If they work together, in how many days will they prepare 115 wardrobes of the same kind?

A. C. 138



B. D. 134

C. A. 140

D. B. 142

Q20 Quant

The roots of the equation $x^2 - 2x - 143 = 0$ are _____.

A. A. positive

B. C. equal

C. D. one positive and other negative



D. B. negative

Q19 Quant

The marked price of a television set is ₹74,300. It is sold to a retailer after two successive discounts of 20% and 30%. The retailer wants to earn a profit of 50% on his cost price after allowing a 16% discount on the marked price set by him to the customer. At what price should he mark the television set?

A. C. ₹74,300



B. B. ₹74,397

C. D. ₹74,173

D. A. ₹74,491

Paper Set 64 · 18 Jun 2026 · 12:30 PM - 2:00 PM · Mathematics (English)

Quant**Q1 Quant**

If 6 and $-\frac{1}{2}$ are two of the roots of the equation $2x^3 - 25x^2 + 71x + 42 = 0$, find the third root.

A. C. 7

B. $\frac{39}{2}$

C. A. -30

D. $-\frac{25}{6}$ **Q3 Quant**

Anu and Ravi are friends. They are both working on a project. Anu takes 12 days, whereas Ravi takes 8 days to complete the project. If they work together, how long will it take to complete the project?

A. D. 4.2 days

B. B. 6.1 days

C. A. 7.2 days



D. C. 8.1 days

Q4 Quant

A wholesaler offers a scheme 'Buy 3 get 1 free' on notebooks. If the marked price of one notebook is ₹120, what is the effective percentage discount on this scheme?

A. C. 20%

B. A. 22.5%

C. D. 25%



D. B. 30%

Q2 Quant

Find the median if mean and mode are 8 and 14, respectively.

A. A. 9

B. D. 11

C. B. 12

D. C. 10



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Q5 Quant

₹5,625 is divided among A, B and C so that A may receive $\frac{1}{2}$ as much as B and C together receive. The share of A is more than that of B by.

A. C. ₹750



B. B. ₹650

C. D. ₹850

D. A. ₹550

Q9 Quant

Three numbers are in the ratio 4:3:5. If 12 is added to the first, 8 is subtracted from the second and 8 is added to the third, the new ratio becomes 34:17:44. Find the difference between the third and the first original numbers.

A. D. 14



B. A. 17

C. B. 18

D. C. 19

Q6 Quant

A man travels 360 km at 60 km/hr, 240 km at 80 km/hr and 300 km at 50 km/hr. What is his average speed for the whole journey (in km/hr)?

A. A. 60



B. D. 62

C. B. 65

D. C. 58

Q10 Quant

The ratio of the monthly incomes of A and B is 11 : 13 and the ratio of their expenses is 4 : 5. If both of them save ₹8,700 per month, find the difference in their incomes.

A. B. ₹4,800

B. C. ₹5,800



C. D. ₹6,800

D. A. ₹6,400

Q7 Quant

Train A moves three times as fast as train B. The trains are running in opposite directions and cross each other in 15 seconds. The difference in their speeds is 57.6 km/h. If the length of train B is 120 m, find the length of train A.

A. B. 240 m

B. A. 480 m

C. C. 360 m



D. D. 180 m

Q11 Quant

If 20% of a number is added to 36, then the result is the same number. 80% of the same number is:

A. B. 36



B. A. 46

C. D. 66

D. C. 56

Q8 Quant

If the cost of 7 kg of wheat is ₹139 and the cost of 12 kg of rice is ₹228, then what is the total cost of 14 kg of wheat and 8 kg of rice?

A. D. ₹430



B. B. ₹456

C. A. ₹480

D. C. ₹506

Q12 Quant

The marked price of a cooker is same at four shops I, II, III and IV. Shop I allows two successive discounts of 36% and 74%, shop II allows successive discounts of 69% and 86%, shop III allows successive discounts of 21% and 95% and shop IV allows successive discounts of 99%, 98%, and 62% on the marked price of the cooker. Which shop is selling the cooker at the lowest price?

A. C. IV



B. A. III

C. B. II

D. D. I



Q13 Quant

What sum of money (in ₹) will amount to ₹4920 at 5% per annum simple interest in 4 years?

- A. A. 4100
- B. C. 4050
- C. B. 4150
- D. D. 24600

Q14 Quant

When difference between compound interest (compounded annually) and simple interest for three years is ₹744 at 10% interest per annum, the principal is ₹_____.

- A. 24,000
- B. 23,425
- C. 24,420
- D. 25,200

Q15 Quant

Simplify: $3 - \{(-15) \times [(-11 - 10 - 15)]\} \div [10 \times \{3 + (-3) \times (-2)\}]$

- A. A. -3
- B. C. 2
- C. B. -1
- D. D. -11

Q16 Quant

In a circle with centre O, the measures of minor arcs AB and BC are in the ratio 12 : 5. If $\angle BOC = 45^\circ$ and point D lies on the major arc AB, find the measure of $\angle ADB$.

- A. C. 108°
- B. A. 63°
- C. D. 126°
- D. B. 54°

Q17 Quant

In triangle ABC, $AB = AC$. If angle $\angle A$ is twice

- A. 30°
- B. 45°
- C. 60°
- D. 90°

Q18 Quant

If x and y are complementary angles, then the value of

- A. 0
- B. $\sin^2 x$
- C. $\sin^2 y$
- D. 1

Q19 Quant

The pipes P and Q together can completely fill an empty cistern with water in 10 hours. If P alone can fill the cistern with water in 20 hours, in how many hours will Q alone fill one-fourth of the same cistern with water?

- A. D. 5
- B. B. 10
- C. C. 6
- D. A. 11

Q20 Quant

Ancy saves 8% of her income. If her expenditure is ₹13,800, find Ancy's income (in ₹).

- A. B. 14,904
- B. C. 15,000
- C. A. 15,206
- D. D. 15,400



Q1 Quant

What is the surface area (in cm^2) of the sphere having radius 30 cm?
(Use $\pi = 3.14$)

- A. 2,826
- B. 5,652
- C. 8,478
- D. 11,304



Q2 Quant

A delivery truck travels in four segments: first 60 km at 40 km/hr, then 80 km at 50 km/hr, followed by a 30-minute rest stop, then 90 km at 60 km/hr and finally 70 km at 35 km/hr. What is the average speed for the entire journey including the rest time? (Rounded off to two decimal places)

- A. 40.55 km/hr
- B. 42.25 km/hr
- C. 44 km/hr
- D. 45.55 km/hr



Q3 Quant

A, B, and C invest in a business in the ratio 2:3:5. If the total profit is ₹50,000, what is B's share?

- A. ₹10,000
- B. ₹15,000
- C. ₹25,000
- D. ₹35,000



Q4 Quant

A and B are partners in a business. A invests ₹10,000 for 12 months and B invests ₹15,000 for 8 months. If the total profit in business is ₹9,000, find B's share of the profit.

- A. ₹3,000
- B. ₹4,000
- C. ₹4,500
- D. ₹5,000



Q5 Quant

The area of a trapezium is 260 cm^2 and its altitude is 8 cm. The difference of the lengths of its parallel sides is 30 cm. Find the perimeter of the trapezium.

- A. 68 cm
- B. 76 cm
- C. 89 cm
- D. 99 cm



Q6 Quant

A cyclist covers 12 km. He rides three-fourth of the distance at 6 km/h and the rest of the distance in one hour. What is the average speed (in km/h) of the cyclist?

- A. 2.5
- B. 3
- C. 4
- D. 4.8



Q7 Quant

What is the sum of x and z, if $x + y + z = 6$, $x + y - z = 2$, $x - y + z = 2$?

- A. 5
- B. 4
- C. 6
- D. 3



Q8 Quant

A shopkeeper marks a pair of shoes at ₹2,000 and offers two successive discounts of 10% and 5%. What price does the customer finally pay?

- A. ₹1,750
- B. ₹1,720
- C. ₹1,730
- D. ₹1,710



Q9 Quant

Pipe X can fill a cistern in 12 hours, but Pipe Y can empty the same cistern in 16 hours. If both pipes are opened simultaneously, determine the total time required to fill the empty cistern.

- A. 14 hours
- B. 28 hours
- C. 48 hours
- D. 56 hours



Q10 Quant

Find the median of the following data.

Class interval	0-6	6-12	12-18	18-24	24-30
Frequency	2	4	6	5	3

A. 12

B. 14

C. 16

D. 18

Q11 Quant

Simplify $100 - 72 \div 4 + 8 \times 2$.

A. 142

B. 23

C. 4.6

D. 98

Q12 Quant

The average marks of 21 students is 32. If the first 10 students' average marks is 28 and the last 10 students' average marks is 30, find the marks of the 11th student.

A. 80

B. 82

C. 92

D. 95

Q13 Quant

If 20% of a number is added to 54, then the result is the same number. 60% of the same number is:

A. 40.5

B. 50.5

C. 70.5

D. 60.5

Q14 Quant

₹972 is divided among Pooja, Harsh, and Madhur in such that if ₹39, ₹48, and ₹21 are deducted from their respective shares, the remaining shares are in the ratio 7 : 17 : 8. Find Madhur's share after deduction.

A. ₹216

B. ₹366

C. ₹316

D. ₹266

Q15 Quant

Prakash has ₹1300 with him. He divided it between his sons Gopal and Akshay and asked them to invest it at 8% rate of interest compounded annually. It was seen that Gopal and Akshay got the same amount after 15 and 16 years, respectively. How much money (in ₹) did Prakash give to Akshay?

A. 625

B. 675

C. 475

D. 775

Q16 Quant

Simplify: $\sqrt{196} + \sqrt{0.04} - \sqrt{5.76}$

A. 11.8

B. 14.8

C. 13.6

D. 14.6

Q17 Quant

If one cubic centimetre of iron weighs 24.5 g, then find the mass of a hollow sphere with outer radius of 2 cm, and thickness of the shell is 0.5 cm.

(Take $\pi = \frac{22}{7}$ and Density = $\frac{\text{Mass}}{\text{Volume}}$)

A. 46.2 kg

B. 46.2 gm

C. 184.8 kg

D. 184.8 gm

Q18 Quant

A dealer sells two water heaters at the rate of ₹28,000 per water heater. On one he earns a profit of 12% and on the other he loses 84%. What is his loss percentage in the whole transaction?

A. 72%

B. 71%

C. 73%

D. 75%



Q19 Quant

The pipes P and Q together can completely fill an empty cistern with water in 5 hours. If P alone can fill the cistern with water in 8 hours, in how many hours will Q alone fill three-fourth of the same cistern with water?

A. 10



B. 20

C. 11

D. 21

Q20 Quant

The price of a product is increased by 20% and then decreased by 10%. What is the net percentage change?

A. 8% increase



B. 8% decrease

C. 10% increase

D. 10% decrease

Paper Set 66 · 18 Jun 2026 · 9:00 AM - 10:30 AM · Mathematics (English)

Quant**Q1 Quant**

Find the roots of the quadratic equation $2x^2 + 5x + 3 = 0$.

A. $x = -1$ and $x = -\frac{3}{2}$



B. $x = 1$ and $x = \frac{3}{2}$

C. $x = -2$ and $x = -3$

D. $x = 2$ and $x = 3$

Q2 Quant

A cistern has two pipes, Pipe A and Pipe B. Pipe A can fill the cistern in 6 hours, while Pipe B can fill it in 8 hours. A third pipe, Pipe C, is an outlet pipe that can empty the full cistern in 12 hours. If all three pipes are opened together, how long will it take to fill the cistern completely?

A. A. 4.5 hours

B. C. 4.8 hours



C. B. 5.2 hours

D. D. 5.8 hours

Q3 Quant

A solid cone has a radius of 21 cm. The slant height of the cone is 28 cm. The cone is hollowed out such that the hollow part is a smaller cone similar to the original cone with its radius half of the original radius. Find the curved surface area of the remaining solid.

A. $421\pi \text{ cm}^2$

B. $431\pi \text{ cm}^2$

C. $441\pi \text{ cm}^2$



D. $451\pi \text{ cm}^2$

Q4 Quant

A shopkeeper sells an item for ₹2,988 and incurs a loss of 17%. What was the cost price of the item (in ₹)?

A. D. 2,555

B. A. 3,500

C. B. 3,600



D. C. 3,700



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Q5 Quant

A, B and C start a business. A invests ₹60,000 for 12 months. B invests ₹45,000 for 12 months. C joins after 4 months with ₹30,000 and stays till year end. If the total profit at the end of the year is ₹125,000, find C's share.

A. ₹10,000

B. ₹15,000

C. ₹20,000 ✓

D. ₹25,000

Q10 Quant

Find the median of the following data.

Class interval	0-8	8-16	16-24	24-32	32-40
Frequency	4	6	8	5	7

A. D. 17

B. C. 19

C. B. 21 ✓

D. A. 23

Q6 Quant

The amount ₹644 is divided among X, Y and Z in such a manner that X : Y is 3 : 7 and Y : Z is 5 : 6. What is X's share?

A. B. ₹105 ✓

B. D. ₹214

C. C. ₹193

D. A. ₹161

Q11 Quant

If the ratio of two numbers is 9 : 5, and their HCF is 6, then their LCM is:

A. C. 270 ✓

B. D. 311

C. B. 288

D. A. 301

Q7 Quant

A train travels 132 km, the first 60 km at a certain speed and the remaining distance at a speed of 8 km/hr more than its previous speed. If it takes 3 hours for the train to complete the journey, find the speed (in km/hr) in the first part of the journey.

A. A. 38

B. D. 40 ✓

C. C. 42

D. B. 45

Q12 Quant

Amit invested equal amounts at simple interest and compound interest (compounded annually) for 2 years at the same rate of 8% per annum. At the end of the period, the difference between the interests earned was ₹96. What was the amount (in ₹) invested in each case?

A. D. 15,000 ✓

B. A. 12,000

C. C. 16,000

D. B. 18,000

Q8 Quant

There are 1020 students in a school, of which 600 are girls. What is the ratio of the number of boys to that of girls in the school?

A. D. 5 : 7

B. C. 10 : 9

C. A. 7 : 10 ✓

D. B. 11 : 15

Q13 Quant

Which of the following is true for triangles?

(a) The sum of two sides is equal to the third side.

(b) Two interior angles can be right angles.

(c) The angle opposite to the longest side is the greatest.

(d) All interior angles cannot be acute angles.

A. C. (a)

B. A. (b)

C. D. (c) ✓

D. B. (d)

Q9 Quant

Simplify $73 - (-3)(-2 - 8 - 4) \div [35 + (-2)(-1)]$.

(Round off your answer to three decimal places.)

A. B. 70.345

B. D. 71.865 ✓

C. C. 72.752

D. A. 73.644



Q14 Quant

The total surface area of a cube with side 28 cm is:

- A. A. 4704 cm^2 ✓
- B. D. 4664 cm^2
- C. B. 4780 cm^2
- D. C. 4610 cm^2

Q15 Quant

A number is first decreased by 25% and then increased by 20%. The number so obtained is 356 less than the original number. What is 40% of the original number?

- A. A. 1244
- B. C. 1224
- C. B. 1424 ✓
- D. D. 1422

Q16 Quant

The price of a stock decreased by 8% one week and increased by 20% in the following week. If the initial price of the stock was ₹48,000, find the final price of the stock after these two weeks.

- A. D. ₹52,792
- B. B. ₹52,992 ✓
- C. A. ₹52,469
- D. C. ₹52,575

Q17 Quant

A dealer sells two washing machines at the rate of ₹87000 per washing machine. On one he earns a profit of 20% and on the other he loses 40%. What is his loss percentage in the whole transaction?

- A. A. 20% ✓
- B. C. 19%
- C. D. 22%
- D. B. 18%

Q18 Quant

A person travels 60 km by car at a speed of 40 km/h and then covers the next 40 km by bus at a speed of 60 km/h. What is the average speed (rounded off to two decimal places) of the person for the entire trip?

- A. D. 46.15 km/h ✓
- B. C. 49.25 km/h
- C. A. 41.52 km/h
- D. B. 44.53 km/h

Q19 Quant

A can complete a piece of work in 72 hours; B and C together can complete it in 48 hours, while A and C together can complete it in 36 hours. How long (in hours) will B alone take to complete the work?

- A. A. 144 ✓
- B. C. 143
- C. B. 145
- D. D. 146

Q20 Quant

The average of the first 17 multiples of 3 is:

- A. A. 27 ✓
- B. C. 3
- C. D. 17
- D. B. 25.5



Q1 Quant

A shopkeeper offers a scheme "Buy 3, Get 1 free". If the marked price of each article is ₹200, what is the effective discount percentage?

A. D. 20%

B. C. 22%

C. A. 25% ✓

D. B. 30%

Q2 Quant

A boat can travel 36 km downstream in 3 hours and the same distance upstream in 6 hours. What is the speed of the stream?

A. B. 3 km/hr ✓

B. A. 4 km/hr

C. D. 5 km/hr

D. C. 6 km/hr

Q3 Quant

A, B and C start a business, where they invest 24,000 for 10 months, 36,000 for 8 months and 56,000 for 6 months, respectively. A being a working member receives 5% of the profit. The remaining profit is distributed in the ratio of their investments. Find the total amount (in ₹) received from the profit by A for the year if B receives ₹456 as his share of the profit.

A. B. ₹380

B. A. ₹398

C. C. ₹426

D. D. ₹452 ✓

Q4 Quant

The working efficiency of P and Q for completing a piece of work is in the ratio 5 : 8. The number of days taken by them to complete the work will be in the ratio:

A. B. 5 : 4

B. A. 4 : 5

C. C. 5 : 8

D. D. 8 : 5 ✓

Q5 Quant

A number is first increased by 30% and then decreased by 20%. What is the net percentage change in the number?

A. B. Increase of 3%

B. A. Increase of 4% ✓

C. D. Decrease of 4%

D. C. Decrease of 5%

Q6 Quant

The average score of 8 players was initially recorded as 45. However, it was later discovered that a score of 24 had been mistakenly read as 42. Determine the correct average score.

A. D. 42.75 ✓

B. A. 43.5

C. C. 44.75

D. B. 45.5

Q7 Quant

A and B started a business by investing ₹48,000 and ₹72,000, respectively. At the end of the year, they earned a profit of ₹9,890. What is B's share of the profit?

A. B. ₹3,956

B. A. ₹4,945

C. D. ₹5,934 ✓

D. C. ₹6,923

Q8 Quant

The mean of a moderately skewed distribution is 28 and the mode is one-third of the median. Find the median.

A. A. 21 ✓

B. D. 29

C. B. 30

D. C. 34

Q9 Quant

Manisha can cover a distance of 280 meters in 3
At that given speed, how much distance can Ma

A. D. 28 ✓

B. B. 22

C. A. 24

D. C. 26



Q10 Quant

Find the least value of $(2K + 5)$ for which the number 35K83 is divisible by 3.

A. D. 7

B. B. 9 ☒

C. A. 11

D. C. 13

Q11 Quant

Raj and Ahaana invest in a company by purchasing shares as shown in the table below:

Name of the shareholder	No. of shares bought	Market Value of each share (in ₹)
Raj	180	40
Ahaana	240	35

The company declares a total dividend of ₹32,500 for both the investors. If the dividend is distributed in proportion to their investments, how much does Ahaana get?

A. B. ₹17,500 ☒

B. C. ₹15,000

C. A. ₹18,000

D. D. ₹22,500

Q12 Quant

Subtracting 20% of X from X is equal to multiplying X by:

A. B. 0.8 ☒

B. A. 0.2

C. C. 0.5

D. D. 0.02

Q13 Quant

Three numbers are in the ratio 5 : 3 : 7, and their LCM is 2940. Their HCF is:

A. C. 28 ☒

B. A. 46

C. D. 68

D. B. 9

Q14 Quant

Pravin has ₹1300 with him. He divided it amongst his sons Rishi and Shan and asked them to invest it at 8% rate of interest compounded annually. It was seen that Rishi and Shan got same amount after 17 and 18 years, respectively. How much money (in ₹) did Pravin give to Shan?

A. A. 625 ☒

B. C. 675

C. D. 475

D. B. 775

Q15 Quant

Let C be a circle of radius 2 units. Consider the following two statements.

A: There exists a chord of length less than or equal to 3 units.

B: There exists a secant such that the length of the segment intercepted inside the circle is less than or equal to 3 units.

Then:

A. C. Both statements are correct ☒

B. D. Statement B is true, but the statement A is false.

C. B. Statement A is true, but the statement B is false.

D. A. Neither statement is valid.

Q16 Quant

A tangent is drawn from a point P to a circle with centre at C. If CP is 13.5 units and the radius of the circle is 5.5 units, then the length (in units) of the tangent is:

A. $\sqrt{152}$ ☒B. $\sqrt{132}$ C. $\sqrt{162}$ D. $\sqrt{142}$ **Q17 Quant**

The internal surface area (in m^2) of an open cuboidal tank whose internal length, internal breadth, and internal height are given as 30 m, 49 m, and 4 m, respectively, is:

A. 2102 ☒

B. 2096

C. 2064

D. 2100



Q18 Quant

One pipe can completely fill a tank in 16 minutes, while another pipe can empty completely filled tank in 80 minutes. If both the pipes are operated together when the tank is empty, how long (in minutes) will it take to fill one-fourth of the tank?

A. B. 5



B. D. 8

C. A. 10

D. C. 15

Q20 Quant

An article is purchased for ₹285 and marked at ₹1,140. If the seller gives a 70% discount on the marked price, what is his profit percentage on the sale?

A. A. 20%



B. B. 17%

C. C. 19%

D. D. 23%

Q19 Quant

The product of $(x - 19)$ and $(x + 18)$ is:

A. A. $x^2 - x - 342$



B. C. $x^2 + 2x - 342$

C. D. $x^2 + 342$

D. B. $x^2 + x + 342$

Paper Set 68 · 19 Jun 2026 · 4:00 PM - 5:30 PM · Mathematics (English)**Quant****Q1 Quant**

P, Q and R started a business in partnership. Initially, P invested ₹2,900 while Q and R invested ₹2,500 each. After 4 months, P withdrew ₹300. After 2 more months, R invested ₹1,200 more. Find the share of R (in ₹) in the profit of ₹3,320 at the end of the year.

A. ₹1,220

B. ₹1,240



C. ₹1,250

D. ₹1,260

Q3 Quant

Two trains start simultaneously from two stations 150 km apart and move towards each other on parallel tracks. If their speeds are 40 km/h and 50 km/h, how long will they take to meet?

A. 1 hour 20 minutes

B. 1 hour 30 minutes

C. 1 hour 40 minutes



D. 1 hour 50 minutes

Q2 Quant

A carriage running in a fog crossed a man who was walking at the rate of 5 km/hr in the same direction. He could see the carriage for half a minute, and it was visible to him up to a distance of 50 m. What was the speed (in km/hr) of the carriage?

A. 9

B. 8

C. 10

D. 11

**Q4 Quant**

The marks of 8 students in a test are: 45, 50, 55, 60, 65, 70, 75, x. If the average marks are 60, what is the value of x?

A. 40

B. 60



C. 70

D. 80



Q5 Quant

A trader buys cryptocurrency for ₹10,000. Its value rises by 20%, and then falls by 10%. What is the final value of the investment?

- A. ₹10,000
- B. ₹10,800 ✓
- C. ₹10,900
- D. ₹11,000

Q6 Quant

Arrange the following ratios in ascending order.
9:13, 13:21, 23:29 and 33:44

- A. 13:21, 9:13, 33:44 and 23:29 ✓
- B. 9:13, 13:21, 33:44 and 23:29
- C. 9:13, 33:44, 13:21 and 23:29
- D. 13:21, 9:13, 23:29 and 33:44

Q7 Quant

An amount of ₹60,91,094 is divided among R, S and T in such a manner that the ratio of the amount of R to that of S is 2 : 5 and the ratio of the amount of S to that of T is 3 : 8. Find the amount of money received by T.

- A. ₹5,99,124
- B. ₹14,97,810
- C. ₹39,94,160 ✓
- D. ₹45,93,284

Q8 Quant

A can complete a piece of work in 12 days and B can complete the same work in 15 days. If both work together, in how much time will the two-thirds of the work be completed?

- A. $2\frac{1}{7}$ days
- B. $3\frac{2}{9}$ days
- C. $4\frac{4}{9}$ days ✓
- D. $5\frac{5}{7}$ days

Q9 Quant

Find the median of the following data.

Class interval	0-5	5-10	10-15	15-20	20-25	25-30
Frequency	2	4	5	3	4	2

- A. 10
- B. 12
- C. 14 ✓
- D. 16

Q10 Quant

Find the least value of $(P^2 + P)$ for which the six-digit number 958P71 is divisible by 11.

- A. 45
- B. 50
- C. 56 ✓
- D. 63

Q11 Quant

Water flows out through a circular pipe whose internal diameter is 2 cm, at the rate of 3 metres per second into a cylindrical tank, the radius of whose base is 75 cm. By how much will the level of water rise in 30 minutes?

- A. 96 cm ✓
- B. 98 cm
- C. 105 cm
- D. 97 cm

Q12 Quant

If 20% of a number is added to 48, then the result is the same number. 70% of the same number is:

- A. 42 ✓
- B. 52
- C. 72
- D. 62

Q13 Quant

Given that $116^{0.26} = x$, $116^{0.1} = y$ and $x^z = y^4$, then the value of z is close to:

- A. 1.54 ✓
- B. 0.58
- C. 3.39
- D. 2.42



Q14 Quant

If, at the same annual rate of interest, the simple interest in 2 years is ₹60 and the compound interest (compounded annually) for 2 years is ₹66, what is the principal (in ₹)?

A. 150



B. 145

C. 143

D. 154

Q15 Quant

The area of a regular hexagon inscribed in a circle of radius 3 cm is:

A. $13.5\sqrt{3} \text{ cm}^2$



B. $12.5\sqrt{3} \text{ cm}^2$

C. $11.5\sqrt{3} \text{ cm}^2$

D. $14.5\sqrt{3} \text{ cm}^2$

Q16 Quant

The total surface area of a solid cylinder having radius 9 cm and height 14 cm is:

A. $414\pi \text{ cm}^2$



B. $348\pi \text{ cm}^2$

C. $433\pi \text{ cm}^2$

D. $440\pi \text{ cm}^2$

Q17 Quant

Rahul sells a table to Mohit at a profit of 25%, and then Mohit sells it to Vinod at a profit of 40%. If Vinod pays ₹6,475 for the table, its cost price (in ₹) for Rahul is:

A. 3,700



B. 3,701

C. 3,699

D. 3,698

Q18 Quant

One pipe can fill the tank in 4 minutes, while another pipe can empty a completely filled tank in 8 minutes. If both the pipes are operated together when the tank is empty, how long (in minutes) will it take to fill the tank completely?

A. 8



B. 9

C. 10

D. 11

Q19 Quant

The product of $(x - 17)$ and $(x + 8)$ is:

A. $x^2 - 9x - 136$



B. $x^2 + 10x - 136$

C. $x^2 - 8x + 136$

D. $x^2 + 9x + 136$

Q20 Quant

A number is increased by 15% and then decreased by 10%. What is the net percentage increase in the number?

A. 25%

B. 5%

C. 2.5%

D. 3.5%



Q1 Quant

Find the volume of a right circular cylinder (in cm^3) of radius 25 cm and height 749 cm.
 (Use $\pi = \frac{22}{7}$)

A. C. 96,250 ☒

B. D. 98,200

C. A. 86,250

D. B. 92,350

Q5 Quant

Simplify: $30 \div 6 \times \left(\frac{2}{14} \text{ of } \frac{5}{5} \div \frac{7}{7} \text{ of } \frac{7}{10} \right)$

A. D. 25 ☒

B. C. 1

C. A. 24

D. B. 12

Q2 Quant

Two pipes, P and Q, can fill a tank in 18 minutes and 20 minutes, respectively. If both pipes are opened simultaneously, then find the time taken to fill the tank completely.

A. $7\frac{2}{11}$ minutesB. $8\frac{5}{17}$ minutesC. $9\frac{9}{19}$ minutes ☒D. $10\frac{7}{22}$ minutes

Q6 Quant

Find the curved surface area of a sphere whose

(Use $\pi = \frac{22}{7}$)

A. $487\frac{3}{7} \text{ cm}^2$ B. $563\frac{4}{7} \text{ cm}^2$ C. $786\frac{3}{7} \text{ cm}^2$ D. $804\frac{4}{7} \text{ cm}^2$ ☒

Q3 Quant

The ratio of two numbers is 3 : 5. If each number is increased by 10, the ratio becomes 5 : 7. Find the numbers.

A. A. 15 and 25 ☒

B. C. 15 and 20

C. D. 12 and 25

D. B. 12 and 20

Q7 Quant

Find the actual price of a dress if it is sold for ₹4,624 after a 32% discount.

A. D. ₹6,800 ☒

B. C. ₹6,900

C. B. ₹5,960

D. A. ₹6,850

Q4 Quant

A car travels from Delhi to Jaipur at 60 km/hr and returns at 80 km/hr. If the total time taken for the journey is 8.75 hours, find the distance between Delhi and Jaipur.

A. C. 300 km ☒

B. A. 330 km

C. D. 360 km

D. B. 390 km

Q8 Quant

The median of the data 5, 8, 12, 15, 20, 34, 36, is

A. A. 10

B. C. 15 ☒

C. D. 20

D. B. 25



Q9 Quant

18 women can finish a work in 48 hours. How many women are required to complete the same work in 36 hours?

A. A. 21

B. B. 24 ☒

C. D. 22

D. C. 23

Q10 Quant

If 20% of a number is added to 48, then the result is the same number. 75% of the same number is:

A. D. 45 ☒

B. A. 55

C. B. 75

D. C. 65

Q11 Quant

A and B working together can do a piece of work in 4 days. B alone can do the same work in 8 days. How long (in days) will A alone take to do thrice the work?

A. C. 24 ☒

B. B. 48

C. D. 72

D. A. 96

Q12 Quant

₹509 is divided among Nitin, Asha and Aaditya in such a way that if ₹24, ₹22 and ₹19 are deducted from their respective shares, they have money in the ratio 5 : 18 : 14. Find the actual share of Asha.

A. D. ₹238 ☒

B. C. ₹218

C. B. ₹254

D. A. ₹266

Q13 Quant

If at the same rate of interest, in 2 years, the simple interest is ₹60 and compound interest is ₹70, then what is the principal (in ₹)?

A. B. 90 ☒

B. C. 85

C. A. 83

D. D. 94

Q14 Quant

Two lines EF and GH are parallel to each other such that $\angle GSR = 110^\circ$, then determine the value of $\angle ARE$

A. $110^\circ, 110^\circ$ ☒B. $120^\circ, 110^\circ$ C. $130^\circ, 130^\circ$ D. $130^\circ, 140^\circ$ **Q15 Quant**

₹610 amounts to ₹970 at a certain rate of simple interest in 3 years. Find the interest (in ₹) for the given 3 years.

A. A. 360 ☒

B. C. 370

C. D. 355

D. B. 375

Q16 Quant

Mr. Ramanujan planned his monthly expenditure for rent, food, education and savings in the ratio 3 : 2 : 5 : 2. Find the percentage of his savings.

A. $15\frac{3}{4}\%$ B. $13\frac{1}{4}\%$ C. $16\frac{2}{3}\%$ ☒D. $14\frac{2}{5}\%$ **Q17 Quant**

A manufacturer sells a product to a wholesaler at a profit of 25%. The wholesaler, in turn, sells it to a retailer at a profit of 25%, and the retailer sells it to a customer at a profit of 28%. If the customer pays ₹804, what is the cost price (in ₹) of the product for the manufacturer?

A. C. 402 ☒

B. A. 405

C. B. 408

D. D. 404



Q18 Quant

Simplify: $\sqrt{121} + \sqrt{0.0256} - \sqrt{8.41}$

A. B. 8.26



B. D. 13.11

C. A. 14.03

D. C. 5.14

Q20 Quant

A man is walking at a speed of 4 km/h. After every kilometer, he takes rest for 47 minutes. How much time will he take to cover a distance of 92 km?

A. 94 h 17 m



B. 91 h 18 m

C. 93 h 21 m

D. 96 h 19 m

Q19 Quant

The product of two consecutive positive integers is 380. If the smaller of these two integers is represented by x, which of the options will correspond to the equation for finding out the value of x?

A. C. $x^2 + x - 380 = 0$



B. D. $x^2 + x + 380 = 0$

C. A. $x^2 - x - 380 = 0$

D. B. $x^2 - x + 380 = 0$

Paper Set 70 · 28 Jun 2026 · 12:30 PM - 2:00 PM · Mathematics (English)

Quant**Q1 Quant**

A boat going downstream covers a distance of 21 km in 3 hours and takes 7 hours to cover the same distance upstream. What is the speed (in km/hr) of the stream?

A. 1

B. 2



C. 3

D. 4

Q3 Quant

Which among the following pairs of numbers are co-primes?

A. (45,87)

B. (77,120)



C. (54,84)

D. (117,162)

Q4 Quant

A cylindrical vessel has diameter 30 cm and unknown height. Water is poured into two identical cylindrical vessels, each with radius 10 cm and height 45 cm, filling them completely. Find the height of the original cylinder.

A. 45 cm

B. 30 cm

C. 35 cm

D. 40 cm

**Q2 Quant**

A and B started a business by investing ₹30,000 and ₹20,000 respectively. If the total profit at the end of the year is ₹25,000, then what is B's share of profit?

A. ₹10,000



B. ₹12,000

C. ₹13,000

D. ₹15,500



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Q5 Quant

Manju purchased a book for ₹380 and marked it up by 20%. Later she sold it at a discount of 10%. Find her profit percentage.

- A. 5%
- B. 8% ✓
- C. 9%
- D. 12%

Q6 Quant

Two pipes can fill a tank in 100 hours and 140 hours, respectively. Find the time taken to fill the tank

- A. $56\frac{1}{3}$ hours
- B. $57\frac{1}{3}$ hours
- C. $58\frac{1}{3}$ hours ✓
- D. $59\frac{1}{3}$ hours

Q7 Quant

One car travels at 70 m/s and two other cars travel at 30 m/s more than the first car, what is the average speed of all three cars?

- A. 80 m/s
- B. 90 m/s ✓
- C. 100 m/s
- D. 110 m/s

Q8 Quant

If $x + 7y + 6z = 28$; $3x - 4y + z = 7$; $2x - z + 3y = 19$, then what is the value of $x + y + z$?

- A. 5
- B. 7
- C. 9 ✓
- D. 10

Q9 Quant

Find the mode of the given data.

Class interval	0-4	4-8	8-12	12-16
Frequency	2	5	4	3

- A. 5
- B. 6
- C. 7 ✓
- D. 8

Q10 Quant

Dev and Tej started a business investing amounts of ₹1,680 and ₹2,380, respectively. If Dev's share in the profit earned by them is ₹960, what is the total profit (in ₹) earned by them together?

- A. 2,320 ✓
- B. 2,294
- C. 2,464
- D. 2,302

Q11 Quant

Subtracting 15% of X from X is the same as multiplying X by:

- A. 0.85 ✓
- B. 0.15
- C. 0.5
- D. 0.015

Q12 Quant

Given that $36^{0.93} = x$, $36^{0.17} = y$ and $x^z = y^2$, then the value of z is close to:

- A. 0.37 ✓
- B. 0.68
- C. 1.68
- D. 1.07

Q13 Quant

A shopkeeper fixes the marked price of an item at 30% above its cost price. What percentage of discount on the marked price should be allowed to gain 4%?

- A. 20% ✓
- B. 22%
- C. 21%
- D. 23%



Q14 Quant

Varun has ₹1302 with him. He divided it amongst his sons, Ashish and Arun, and asked them to invest it at 10% rate of interest compounded annually. It was seen that Ashish and Arun got the same amount after 16 and 17 years, respectively. How much money (in ₹) did Varun give Arun?

A. 620



B. 682

C. 470

D. 782

Q15 Quant

Let C be a circle with centre O and PQ be a chord of C such that PQ subtends an angle 70° at O. Let S be a point on minor arc PQ. Find $\angle PSQ$.

A. 135°

B. 40°

C. 145°



D. 35°

Q16 Quant

In $\triangle ABC$, points D and E lie on sides AB and BC, respectively, such that $DE \parallel AC$. Also, $BD = 24$ m, $AD = x$ m, $BE = y$ m, $EC = 36$ m and $x = 6y$. If the area of $\triangle ABC$ is 432 m^2 , find the area of $\triangle BDE$.

A. 54 m^2

B. 144 m^2

C. 72 m^2

D. 27 m^2

**Q17 Quant**

₹610 amounts to ₹970 at a certain rate of simple interest in 2 years. Find the interest (in ₹) for the given 2 years.

A. 360



B. 370

C. 355

D. 375

Q18 Quant

After decreasing 40% in the actual cost price, the reduced cost price of an article is ₹1068. The actual cost price of the article (in ₹) is:

A. 1780



B. 1720

C. 1670

D. 1640

Q19 Quant

X, Y, and Z become partners in a business by investing money in the ratio of 5 : 7 : 6. Next year, they increased their investments by 26%, 20%, and 15%, respectively. In what ratio should the profit earned during the second year be distributed?

A. 21:28:23



B. 21:28:25

C. 21:27:26

D. 21:27:22

Q20 Quant

One pipe can completely fill a tank in 15 minutes, while another pipe can empty completely filled tank in 90 minutes. If both the pipes are operated together when the tank is empty, how long (in minutes) will it take to fill two-thirds of the tank?

A. 12



B. 14

C. 18

D. 16



Q1 Quant

A person travels 40 km on foot at a speed of 5 km/hr, 80 km by bicycle at 20 km/hr, and 100 km by car at 50 km/hr. The person also spends an additional 2 hours resting between transitions. What is the average speed for the entire journey? (Rounded up to the nearest integer.)

- A. 25 km/hr
- B. 20 km/hr
- C. 15 km/hr
- D. 14 km/hr



Q2 Quant

A dealer buys a product at ₹100 and sells it at a 10% profit, and then the buyer sells it at a 20% profit. What is the final selling price?

- A. ₹120
- B. ₹132
- C. ₹140
- D. ₹150



Q3 Quant

Amit and Gaurav started a business in partnership. Amit's investment was thrice the investment of Gaurav and period of his investment was two times that of Gaurav. If Gaurav received ₹4,000 as profit share, then total profit is:

- A. ₹28,000
- B. ₹26,000
- C. ₹24,000
- D. ₹22,000



Q4 Quant

The diagonals of a quadrilateral bisect each other at right angles, and one diagonal is equal in length to the other. If the length of each diagonal is d , identify the quadrilateral and find its area.

- A. Rhombus, $\frac{d^2}{4}$
- B. Rectangle, $\frac{d^2}{2}$
- C. Square, $\frac{d^2}{2}$
- D. Kite, $\frac{d^2}{2}$



Q5 Quant

The HCF and the LCM of two positive integers are 24 and 1728 respectively. If one of the numbers is 192, then what is the other number?

- A. 216
- B. 144
- C. 288
- D. 324



Q6 Quant

If $A:B=7:9$ and $B:C=8:11$, find the value of $A:C$.

- A. 14:33
- B. 28:57
- C. 42:89
- D. 56:99



Q7 Quant

If the mean of the numbers 12, 23, 17, 36, 24 and x is 25, then the median of the same observations will be:

- A. 22.5
- B. 23.5
- C. 24.5
- D. 25.5



Q8 Quant

A person walks 800 m in 9 minutes. What is his

- A. $3\frac{1}{3}$
- B. $4\frac{1}{3}$
- C. $5\frac{1}{3}$
- D. $6\frac{1}{3}$



Q9 Quant

What is the average of 30, 55, 21, 11, 10, 80, 73?

A. 50

B. 40 

C. 45

D. 55

Q10 Quant

Subtracting 11% of X from X is the same as multiplying X by:

A. 0.89 

B. 0.11

C. 0.5

D. 0.011

Q11 Quant

The largest four-digit number which, when divided by 8, 15 and 10, leaves a remainder of 7 in each case, is:

A. 9967 

B. 9651

C. 9857

D. 9635

Q12 Quant

Three friends P, Q and R started a business by investing a sum of money in the ratio of 5 : 6 : 3. After 6 months, Q withdraws half of his capital. If the sum invested by P is ₹15,000, then out of a total annual profit of ₹11,000, find the share of Q in the profit.

A. ₹3960 

B. ₹5875

C. ₹5065

D. ₹4830

Q13 Quant

If ₹65,200 is invested at 6% per year for 2 years, what is the difference between the compound interest (compounded annually) and the simple interest?

A. ₹234.72 

B. ₹225.72

C. ₹230.46

D. ₹231.46

Q14 Quant

If $m = (1 + \tan^2\theta) \times (1 + \frac{1}{\tan^2\theta})$, find the value of

A. $\sin\theta \cos\theta$ B. $\sec\theta \operatorname{cosec}\theta$ C. $\sin\theta \tan\theta$ D. $\cos\theta \cot\theta$ **Q15 Quant**

ABCD is a trapezium with AB parallel to CD. P is a point on AD and Q is a point on BC such that PQ is parallel to AB and CD.

R is point of intersection of PQ and AC. What is the ratio of AR to RC?

A. 16 : 1 

B. 4 : 1

C. 2 : 1

D. 32 : 1

Q16 Quant

Sohan spends 20% of their income on rent, 32% on utilities, 28% on education, and saves the rest. If the total savings are ₹17,200, find the total income.

A. ₹96,000

B. ₹86,000 

C. ₹82,000

D. ₹88,000

Q17 Quant

One pipe can completely fill a tank in 12 minutes, while another pipe can empty completely filled tank in 18 minutes. If both the pipes are operated together when the tank is empty, how long (in minutes) will it take to fill one-third of the tank?

A. 12 

B. 14

C. 36

D. 48



Q18 Quant

Two-fifth of a certain goods was sold at a profit of 8% and the remaining at a loss of 3%. If the total profit was ₹6,839, then what was the cost price (in ₹) of the goods?

A. 4,55,800

B. 4,60,000

C. 4,72,300

D. 4,88,500

Q19 Quant

A can lay railway track between two given stations in 16 days and B can do the same job in 16 days. With the help of C, they did the job in 5 days only. Then, C alone can do the job in

A. $13\frac{1}{3}$ daysB. $9\frac{1}{3}$ daysC. $18\frac{1}{3}$ daysD. $19\frac{1}{3}$ days**Q20 Quant**

The roots of the quadratic equation $9x^2 + 9x - 18 = 0$ is:

A. 1, -2

B. -1, -2

C. 1, 2

D. -1, 2

Paper Set 72 · 28 Jun 2026 · 9:00 AM - 10:30 AM · Mathematics (English)**Quant****Q1 Quant**

The volume of a right circular cylinder of height 16 cm and base radius 3 cm is

A. $144\pi \text{ cm}^3$ B. $48\pi \text{ cm}^3$ C. $192\pi \text{ cm}^3$ D. $108\pi \text{ cm}^3$ **Q2 Quant**

A can complete a piece of work in 8 days, and B can do the same work in 10 days. If they work together, how long will they take to finish the work?
(Round off to 2 decimal places.)

A. 5.25 days

B. 4.44 days

C. 4.25 days

D. 3.87 days

Q3 Quant

Solve the following system of equations and find the value of z.

$$x + y + z = 6$$

$$2x - y + z = 3$$

$$x + 2y - z = 4$$

A. $\frac{15}{7}$ B. $\frac{12}{5}$ C. $\frac{14}{3}$ D. $\frac{13}{7}$ 

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Q4 Quant

Akhil purchased a pillow for ₹850 and sold it to Sohil at 20% profit. Later, Sohil sold it to Ravi at 30% loss. Find the difference between the cost prices of Akhil and Ravi.

- A. ₹116
- B. ₹126
- C. ₹130
- D. ₹136

**Q9 Quant**

Find the median of the following set of numbers: -1.5, 3.6, -2.5, -2.1, -1.6, 2.2, -3.5, 1.1

- A. 1.5
- B. -1.5
- C. 1.55
- D. -1.55

**Q10 Quant**

If 20% of a number is added to 30, then the result is the same number. 80% of the same number is:

- A. 30
- B. 20
- C. 60
- D. 50

**Q11 Quant**

A sum of ₹7490 is divided into three parts in such a way that half of the first part, one-fourth of the second part and one-eighth of the third part are equal. What is the value of the second part (in ₹)?

- A. 2140
- B. 2640
- C. 3140
- D. 3640

**Q12 Quant**

Given that $102^{0.63} = x$, $102^{0.94} = y$ and $x^z = y^5$, then the value of z is close to:

- A. 7.46
- B. 6.41
- C. 9.71
- D. 8.63

**Q13 Quant**

How long (in years) will it take for ₹1200 to become ₹2700 at a rate of 10% per annum simple interest?

- A. 12.5
- B. 11.5
- C. 13.5
- D. 14.5

**Q5 Quant**

When a man covers equal distances at speeds S_1 and S_2 , his average speed is 4 km/hr, but when he travels at these speeds for equal intervals of time, his average speed is 4.5 km/hr. Find the difference between the speeds.

- A. 3 km/hr
- B. 4 km/hr
- C. 5 km/hr
- D. 4.5 km/hr

**Q6 Quant**

P, Q, and R invest in a business in the ratio 4 : 5 : 6. After 12 months, they share a total profit of ₹33,000 based on their investment ratio. How much profit does Q from total profit?

- A. ₹9,500
- B. ₹10,000
- C. ₹10,500
- D. ₹11,000

**Q7 Quant**

Saloni is driving her car with three-fourth of its actual speed. She covers 105 km in 175 minutes. The actual speed of the car is:

- A. 35 km/hr
- B. 42 km/hr
- C. 45 km/hr
- D. 48 km/hr

**Q8 Quant**

If 15 is the mean proportion between x and 9, what is the value of x ?

- A. 21
- B. 25
- C. 27
- D. 30



Q14 Quant

Varun has ₹1,302 with him. He divided it amongst his sons Ashish and Arun and asked them to invest it at 10% rate of interest compounded annually. It was seen that Ashish and Arun got the same amount after 11 and 12 years, respectively. How much money (in ₹) did Varun give to Arun?

- A. 620 ✓
- B. 682
- C. 470
- D. 782

Q15 Quant

From an external point P, a tangent PT, where T is a point of contact, and a line segment PAB is drawn to a circle with centre O. OM is perpendicular on the chord AB. If PB = 34 cm, AM = 10 cm. Find the value (in cm^2) of PT^2 .

- A. 576
- B. 476 ✓
- C. 625
- D. 525

Q16 Quant

In a triangle, the two angles are 45° and 55° . Find the third angle of the triangle.

- A. 45°
- B. 55°
- C. 100°
- D. 80° ✓

Q17 Quant

A number when increased by 60%, gives 3870. The number is:

- A. 2418.75 ✓
- B. 2837.52
- C. 1209.37
- D. 1756.25

Q18 Quant

Which number should be added to 1394 to make it divisible by 37?

- A. 25
- B. 19
- C. 12 ✓
- D. 8

Q19 Quant

A shopkeeper sold 24 pens at a profit of 25% and another 20 pens of at a profit of 15%. Each pen has the same cost price. The total profit would have been ₹5.60 less if all 44 pens were sold at a profit of 20%. What is the cost price of each pen?

- A. ₹24
- B. ₹28 ✓
- C. ₹22
- D. ₹26

Q20 Quant

A can lay a railway track between two given stations in 6 days and B can do the same job in 28 days. With the help of C, they complete the job in 4 days only. In how many days can C alone complete the work?

- A. 21 ✓
- B. 22
- C. 23
- D. 24

