

458. Imran sold a machine for Rs. 5060 at a gain of 10%. Find the cost price of the machine?  
 a) Rs. 4820                      b) Rs. 4760  
 c) Rs. 4609                      d) Rs. 4600  
 e) None of these
459. If oranges are bought at the rate of 30 for a rupee, how many must be sold for a rupee in order to gain 50%?  
 a) 17                                      b) 20  
 c) 23                                      d) 10  
 e) None of these
460. In how many years will Rs. 8500 amount to Rs. 15767.50 at  $4\frac{1}{2}$  per cent per annum?  
 a) 19 years                              b) 17 years  
 c) 15 years                              d) 12 years  
 e) None of these
461. A semi-circular shaped window has a diameter of 63 cm. Its perimeter equals.  
 a) 162 cm                              b) 152 cm  
 c) 172 cm                              d) 142 cm  
 e) None of these
462. Simplify:  $\frac{31}{10} \times \frac{3}{10} + \frac{7}{5} \div 20 = ?$   
 a)  $\frac{1}{10}$                                       b) 1  
 c) 2                                        d) 10  
 e) None of these
463.  $\frac{\sqrt{625}}{11} \times \frac{14}{\sqrt{25}} \times \frac{11}{196} = ?$   
 a) 6                                        b) 8  
 c) 5                                        d) 7  
 e) None of these
464.  $3 \div \left[ (8-5) \div \left\{ (4-2) \div \left( 2 + \frac{8}{13} \right) \right\} \right] = ?$   
 a)  $\frac{13}{17}$                                       b)  $\frac{17}{13}$   
 c)  $\frac{23}{17}$                                       d) 24  
 e) None of these
465. Mean proportional between 7 and 28 is  
 a) 14                                      b) 12  
 c) 16                                      d) 17  
 e) None of these

466. Two pipes A and B can fill a tank in 36 hrs and 45 hrs respectively. If both the pipes are opened simultaneously how much time will be taken to fill the tank?  
 a)  $\frac{20}{7}$                                       b)  $\frac{180}{7}$   
 c)  $\frac{1}{20}$                                       d)  $\frac{4}{5}$   
 e) None of these
467. How many seconds will a train 100 metres long running at a speed of 36 km per hour take to pass a pole?  
 a) 7 sec                                      b) 9 sec  
 c) 10 sec                                      d) 12 sec  
 e) None of these

*Directions: (Qns. 468 & 469): Find the value of question mark (?) in each question.*

468. ?% of 73 – 51% of 48 = 26.62  
 a) 60                                      b) 75  
 c) 72                                      d) 70  
 e) None of these
469.  $15.27 - 27.15 + 42.68 - 68.42 + 100.20 = ?$   
 a) 68.52                                      b) 62.58  
 c) 52.68                                      d) 58.62  
 e) None of these
470. Imran sold a machine for Rs. 5060 at a gain of 10%. Find the cost price of the machine?  
 a) Rs. 4820                              b) Rs. 4760  
 c) Rs. 4609                              d) Rs. 4600  
 e) None of these
471. If oranges are bought at the rate of 30 for a rupee, how many must be sold for a rupee in order to gain 50%?  
 a) 17                                      b) 20  
 c) 23                                      d) 10  
 e) None of these
472. In how many years will Rs. 8500 amount to Rs. 15767.50 at  $4\frac{1}{2}$  per cent per annum?  
 a) 19 years                              b) 17 years  
 c) 15 years                              d) 12 years  
 e) None of these
473. A semi-circular shaped window has a diameter of 63 cm. Its perimeter equals.  
 a) 162 cm                              b) 152 cm  
 c) 172 cm                              d) 142 cm  
 e) None of these

474. Simplify:  $\frac{31}{10} \times \frac{3}{10} + \frac{7}{5} \div 20 = ?$

- a)  $\frac{1}{10}$                       b) 1  
c) 2                              d) 10

475.  $\frac{\sqrt{625}}{11} \times \frac{14}{\sqrt{25}} \times \frac{11}{196} = ?$

- a) 6                              b) 8  
c) 5                              d) 7  
e) None of these

476.  $3 \div \left[ (8-5) \div \left\{ (4-2) \div \left( 2 + \frac{8}{13} \right) \right\} \right] = ?$

- a)  $\frac{13}{17}$                       b)  $\frac{17}{13}$   
c)  $\frac{23}{17}$                       d) 24  
e) None of these

477. Mean proportional between 7 and 28 is

- a) 14                              b) 12  
c) 16                              d) 17  
e) None of these

478. Two pipes A and B can fill a tank in 36 hrs and 45 hrs respectively. If both the pipes are opened simultaneously how much time will be taken to fill the tank?

- a)  $\frac{20}{7}$                               b)  $\frac{180}{7}$   
c)  $\frac{1}{20}$                               d)  $\frac{4}{5}$   
e) None of these

479. How many seconds will a train 100 metres long running at a speed of 36 km per hour take to pass a pole?

- a) 7 sec                              b) 9 sec  
c) 10 sec                              d) 12 sec  
e) None of these

480. Which of the following numbers does not fit in the following series ?

- 6, 7, 17, 55, 231, 1164, 6995  
a) 7                                      b) 17  
c) 55                                      d) 231  
e) 1164

Directions: (Qns. 481-488): Find the value of question mark (?) in each question.

481.  $3\frac{2}{3} - 8\frac{1}{5} + 4\frac{5}{6} - 5\frac{?}{10} + 5\frac{1}{5} = 0$

- a) 5                                      b) 6  
c) 7                                      d) 2  
e) None of these

482. 230% of 55 = 110% of ?

- a) 111                                      b) 125  
c) 115                                      d) 105  
e) None of these

483. 21548 - 18372 = 15849 - ?

- a) 22673                                      b) 12773  
c) 13673                                      d) 12673  
e) None of these

484. 65% of 220 - 35% of 280 + ? = 200

- a) 245                                      b) 150  
c) 165                                      d) 145  
e) None of these

485.  $2.14 \times 3.1 + 4.28 \times 6.2 = ?$

- a) 43.17                                      b) 33.27  
c) 34.17                                      d) 33.17  
e) None of these

486.  $\frac{10.396}{0.23} + \frac{1139.8}{4.1} = ?$

- a) 323.3                                      b) 323.2  
c) 223.3                                      d) 343.2  
e) None of these

487.  $(1/3) : (4/5) :: (0/4) : ?$

- a) 0.096                                      b) 0.98  
c) 9.6                                      d) 0.96  
e) None of these

488.  $8917 \times 113 + 8917 \times 87 = ?$

- a) 891700                                      b) 1783400  
c) 169856                                      d) 1563600  
e) None of these

489. Which of the following fractions are in the ascending order the values?

- a)  $\frac{5}{8}, \frac{13}{15}, \frac{7}{12}$                                       b)  $\frac{7}{12}, \frac{13}{15}, \frac{5}{8}$   
c)  $\frac{7}{12}, \frac{5}{8}, \frac{13}{15}$                                       d)  $\frac{13}{15}, \frac{5}{8}, \frac{7}{12}$   
e) None of these

490. If  $A = 4^3 \times 5^2 \times 6$  and  $B = 4^2 \times 5 \times 6^2$  then HCF of A and B is

- a) 168                                      b) 480  
c) 590                                      d) 72  
e) None of these

491. Find the value of:  $421 \times 0.9 + 130 \times 101$

- a) 13805                      b) 13589  
c) 13507                      d) 13508.9  
e) None of these

492. What is the value of question mark (?) in the following equation.

$$4024 + 1632 + 15\% \text{ of } 1496 = ?$$

- a) 5890                      b) 5884  
c) 5880.4                      d) 5888.4  
e) None of these

493. The value of  $\frac{(75.8)^2 - (55.8)^2}{20}$  is

- a) 125.2                      b) 129.6  
c) 131.6                      d) 126.5  
e) None of these

494. The value of  $\frac{4 - \sqrt{0.04}}{4 + \sqrt{0.4}}$  is

- a) 0.904                      b) 0.488  
c) 1.23                      d) 0.009  
e) None of these

495. The least perfect square, which is divisible by each of 21, 36 and 66 is

- a) 213444                      b) 214344  
c) 214434                      d) 231444  
e) None of these

496.  $\left(\frac{1}{2}\right)^{\frac{1}{2}}$  is equal to

- a)  $\frac{1}{2}$                       b)  $\frac{1}{\sqrt{2}}$   
c)  $\sqrt{2}$                       d)  $2\sqrt{2}$   
e) None of these

497.  $1 + \frac{1}{1 + \frac{1}{3}}$  is equal to

- a)  $\frac{4}{7}$                       b)  $\frac{7}{4}$   
c)  $\frac{4}{3}$                       d)  $\frac{3}{4}$   
e) None of these

498. What must be added to make 2203 a perfect square?

- a) 1                      b) 3  
c) 4                      d) 6  
e) None of these

499. A cloth merchant on selling 33 metres of cloth obtains a profit equal to the selling price of 11 metres of cloth. Find the profit percentage?

- a) 49                      b) 50  
c) 51                      d) 52  
e) None of these

500. In selling an article for Rs. 76, there is a profit of 52%. If it is sold for Rs. 75 then the profit percent will be

- a) 48%                      b) 50%  
c) 54%                      d) Remains the same  
e) None of these

501. If the cost price of 10 articles is equal to the selling price of 9 articles, then the gain or loss percent is

- a)  $11\frac{1}{9}\%$  profit                      b)  $11\frac{1}{9}\%$  loss  
c)  $11\frac{9}{1}\%$  loss                      d)  $11\frac{9}{1}\%$  profit  
e) None of these

502. If the average marks of three batches of 55, 60 and 45 students are respectively 50, 55 and 60, then the average marks of all the students will be

- a) 54.68                      b) 45.86  
c) 64.86                      d) 60  
e) None of these

503. The average age of 20 boys in a class is 12 years. 5 new boys are admitted to the class whose average age is 7 years. The average age of the boys in the class becomes

- a) 8 years                      b) 9 years  
c) 10 years                      d) 11 years  
e) None of these

504. The average of a collection of 20 measurements was calculated to be 56 cm. But later it was found that a mistake had occurred in one of the measurements, which was recorded as 64 cm, but should have been 61 cm. Find the correct average.

- a) 50                      b) 57  
c) 55.85                      d) 59  
e) None of these



505. Which number is 40% less than 90?  
 a) 36                      b) 50  
 c) 60                      d) 54  
 e) None of these
506. A man walks a certain distance and rides back in 4 hours 30 minutes. He could ride both ways in 3 hours. The time required by the man to walk both ways is  
 a) 4 hrs 30 mins      b) 1 hr 30 mins  
 c) 5 hrs                  d) 6 hrs  
 e) None of these
507. The area of a square field is 625 sq.km. How long will a horse take to run around it at a speed of 10 km/hr?  
 a) 6 hrs                      b) 10 hrs  
 c) 8 hrs                      d) 14 hrs
508. The inner circumference of a circular race track 14 m wide is 440 m. Find the radius of the outer circle.  
 a) 84 m                      b) 56 m  
 c) 70 m                      d) 89 m  
 e) None of these
509. The sides of a triangle are 5 cm, 12 cm and 13 cm. Find its area.  
 a) 30 sq.cm                b) 15 sq.cm  
 c) 29.34 sq.cm          d) 17.84 sq.cm  
 e) None of these
510. 25% of water is evaporated from 10 litres of water containing 300 gm of salt. The percentage of salt in the remaining solution is  
 a) 40%                      b) 30%  
 c) 4%                        d) 3%  
 e) None of these
511. The area of a circular garden is 2464 m<sup>2</sup>. How much distance will have to be covered if you like to cross the garden along its diameter?  
 a) 58 m                      b) 56 m  
 c) 59 m                      d) 51 m  
 e) None of these
512. Two pipes can fill a tank separately in 20 minutes and 30 minutes respectively. If both the pipes are opened simultaneously, then the tank will be filled in  
 a) 10 minutes              b) 12 minutes  
 c) 14 minutes              d) 20 minutes  
 e) None of these
513. A and B, working separately, can do a piece of

work in 10 and 15 days respectively. If they work on alternate days beginning with A, then in how many days will the work be completed?

- a) 12 days                      b) 13 days  
 c) 18 days                      d) 9 days  
 e) None of these

*Directions (Qns. 514-523): Find the value of question mark (?) in each question.*

514.  $56\% \text{ of } 75 + 9\% \text{ of } 125 = ?$

- a) 53.25                      b) 63.25  
 c) 55.25                      d) 51.25  
 e) None of these

515.  $\sqrt{?} + 66.4 = 2000 \div 25$

- a) 184.96                      b) 192  
 c) 182.10                      d) 193  
 e) None of these

516.  $? \times 6 = 1920 - 960 = 960$

- a) 166                        b) 164  
 c) 162                        d) 160  
 e) None of these

517.  $\sqrt{\frac{361 \times 324}{19 \times 19}} = ?$

- a) 18                            b) 17  
 c) 324                        d) 19  
 e) None of these

518.  $2^{\frac{1}{3}} \times 2^{\frac{1}{2}} \times 3^{\frac{1}{3}} \times 3^{\frac{1}{2}} = ?$

- a) 6                            b)  $\frac{5}{6}$   
 c)  $6^{\frac{5}{6}}$                         d)  $6^{\frac{5}{5}}$   
 e) None of these

519.  $10\% \text{ of } 4698 + 134 + 129.6 = ?$

- a) 49.616                      b) 4961.6  
 c) 496.16                      d) 4964.9  
 e) None of these

520.  $\frac{9 - 4.399}{4 + 4.399} \times 100 = ?$

- a) 225                        b) 2.25  
 c) 22.5                        d) 23.5  
 e) None of these

521.  $1 + \frac{1}{1 + \frac{4}{3}} = ?$

- a) 14.28                      b) 1.428  
c) 142.8                      d) 14.9  
e) None of these

522.  $\frac{0.3000}{75} \times 100 \times 9.32 = ?$

- a) 374.9                      b) 3.749  
c) 37.49                      d) 3.728  
e) None of these

523.  $\sqrt{\frac{0.361}{0.00169}} \times \sqrt{\frac{361}{1.69}} = ?$

- a) 231.45                      b) 2.314  
c) 23.45                      d) 213.45  
e) None of these

524. Find the value of 'x' in the following equation.

$$\frac{2x^2 - 2x - 4x + 4 - 2x - 4}{x^2 - 4}$$

- a) x = 6                      b) x = 4  
c) x = 3                      d) x = 1  
e) None of these

525. A man swim downstream 12 kmph and upstream 4 kmph; his speed in still water is

- a) 4 kmph                      b) 5 kmph  
c) 7 kmph                      d) 8 kmph  
e) None of these

526. A train 120 m long takes 30 seconds to cross a platform 330 m long. Calculate the speed of the train in m/sec.

- a) 15 m/sec                      b) 14 m/sec  
c) 40 m/sec                      d) 30 m/sec  
e) None of these

527. Naresh travels to a place 300 km away at an average speed of 50 kms/hr and returns at 60 kms/hr. Find the approximate average speed of the whole journey.

- a) 54 km/hr                      b) 50 km/hr  
c) 60 km/hr                      d) 42 km/hr  
e) None of these

528. A tree 8m in height cast its shadow 5 m long, another tree cast its shadow 25 m long. Find the height of the tree.

- a) 25 m                      b) 30 m  
c) 35 m                      d) 40 m  
e) None of these

529. In a Boxing club, the average weight of 45 Boxers is increased by one kg when a Boxer who weighs 55 kg is replaced by a new Boxer. Find the weight of the new Boxer.

- a) 50 kg                      b) 75 kg  
c) 85 kg                      d) 100 kg  
e) None of these

530. A man rows upstream in 10 minutes and downstream in 15 minutes. Find the velocity of the stream.

- a) 2 kms                      b) 4 kms  
c) 6 kms                      d) 3 kms  
e) None of these

531. The sum of money, that will give Re. 1 as interest per day at the rate of 5% per annum for simple interest is

- a) Rs. 7350  
b) Rs. 7300  
c) Rs. 7356  
d) Rs. 7200  
e) None of these

532. If  $7^x = \frac{1}{343}$  then the value of x is

- a)  $\frac{1}{7}$                       b) 3  
c) -3                      d) -7  
e) None of these

533. The average of runs scored by a player in 10 innings is 50. How many runs should he score in the 11th innings, so that his average is increased by 2 runs?

- a) 54                      b) 60  
c) 68                      d) 72  
e) None of these

534. The average daily wages of workers of a factory is Rs. 92. There are 300 male and 200 female workers working in the factory. How much money is required for the payment of their salary?

- a) 46,000  
b) 73,600  
c) 92  
d) 92,300  
e) None of these

535. Each side of a regular hexagon is 1 cm. The area of the hexagon is \_\_\_\_\_

- a)  $3\frac{\sqrt{3}}{2}$  cm<sup>2</sup>      b)  $\frac{\sqrt{3}}{2}$  cm<sup>2</sup>  
c)  $\sqrt{3}$  cm<sup>2</sup>      d) 1 cm<sup>2</sup>  
e) None of these

536. The volume of a perfect circular cylinder is 9πh metre. When h is its height in metres, then the diameter of the base of the cylinder is equal to

- a) 2 m      b) 2 m  
c) 6 m      d) 8 m  
e) None of these

537. 25% of the candidates who appeared in an examination failed to qualify and only 450 candidates were qualified. The number of candidates, who appeared in the examination was

- a) 500      b) 370  
c) 575      d) 600  
e) None of these

538. A worker suffers a 10% cut in his wages. He may regain his original wages by obtaining a rise of

- a) 10%      b) 10.10%  
c) 11%      d) 11.11%  
e) None of these

*Directions (Qns. 539-543): Find the value of question mark (?) in each question.*

539.  $0.628 \times ? = \frac{0.314}{0.2}$

- a) 2.0      b) 2.5  
c) 2.4      d) 2.5  
e) None of these

540.  $(0.75)^2 + (0.5)^2 = ?^2 + (0.05)^2$

- a)  $\frac{8}{9}$       b)  $\frac{10}{11}$   
c)  $\frac{13}{14}$       d)  $\frac{9}{10}$   
e) None of these

541. 43% of 20 + 65% of 30 = ?

- a) 29.1      b) 28.2  
c) 28.1      d) 18.1  
e) None of these

542.  $63.126 + 36.39 - 42.58 + 1.008 - 36.631 = ?$

- a) 22.312      b) 21.313  
c) 20.313      d) 21.323  
e) None of these

543.  $2\frac{1}{5} + 1\frac{3}{5} + 3\frac{2}{5} = 1 \div ?$

- a) 55 / 136      b) 126 / 55  
c) 136 / 55      d) 55 / 146  
e) None of these

544. When the square of a smaller number and the cube of a larger number are added, the answer is 778. If the square of the bigger number is greater than the smaller number by 74, what is the sum of these numbers ?

- a) 18      b) 12  
c) 14      d) 16  
e) None of these

545. Meena is 24 years old today. Eight years ago, Anju was half the age of that of Meena then. How old is Anju today ?

- a) 20 years      b) 18 years  
c) 16 years      d) 14 years  
e) None of these

546. When 8% of 630 is added to 12% of 315, what would be the sum ?

- a) 68.2      b) 44.1  
c) 126      d) 88.2  
e) None of these

547. Which of the following fractions is the largest in value ?

$\frac{2}{3}, \frac{3}{5}, \frac{5}{7}, \frac{7}{9}, \frac{9}{11}$

- a)  $\frac{7}{9}$       b)  $\frac{2}{3}$   
c)  $\frac{3}{5}$       d)  $\frac{5}{7}$   
e)  $\frac{9}{11}$

548. If the average age of mother and her daughter is 34.5 years while the age of the daughter is half of that of the mother, what is mother's age ?

- a) 48 years      b) 69 years  
c) 56 years      d) 46 years  
e) None of these

549. If 30% of A = 0.25 of B =  $\frac{1}{5}$  of C, then A:B:C is

- a) 12:15:10      b) 10:12:15  
c) 10:15:12      d) 15:12:10  
e) None of these



550. If Rs. 1,440 is divided into two parts in which one part is  $\frac{7}{9}$  of second, then smallest part is
- a) Rs. 810                      b) Rs. 630  
c) Rs. 405                      d) Rs. 1,035  
e) None of these
551. The sum of the present ages of father and his son is 60 years. 6 years ago, father's age was five times the age of the son. After six years son's age will be
- a) 20 years                      b) 14 years  
c) 12 years                      d) 18 years  
e) None of these
552. An article was sold at a loss of 29%. Had it been sold for Rs. 84 more, 11% would have been gained; the cost price of that article is
- a) Rs.210                      b) Rs.200  
c) Rs.180                      d) Rs.170  
e) None of these
553. A train travels from one station X to another station Y at the rate of 20 km/hr and returns at the rate of 30 km/hr. The average speed of the total journey is
- a) 25 km/hr                      b) 24 km/hr  
c) 35 km/hr                      d) 40 km/hr  
e) None of these
554. A wholesaler sells his goods at a profit of 20 % to a retailer. A retailer sells goods at a profit of 25 % on Rs. 3,375. The cost price of goods for the wholesaler was
- a) Rs.2,700                      b) Rs.2,250  
c) Rs.2,400                      d) Rs.2,475  
e) None of these
555. The approximate value of  $\frac{2}{3} + 7\frac{1}{2}$  of  $\frac{4}{9} + 99\frac{48}{49} \times 245$  is
- a)  $99\frac{1}{5}$                       b) 2,450  
c) 24,500                      d) 245  
e) None of these
556. A can do a piece of work in 9 days and B in 18 days. They began the work together but 3 days before the completion of work, A leaves. The time taken to complete the work is
- a) 7 days                      b) 5 days  
c) 8 days                      d) 11 days  
e) None of these

557. A sum of money is divided amongst A, B and C in the ratio of  $\frac{1}{2}$ ,  $\frac{1}{3}$  and  $\frac{1}{4}$ . A gets Rs.400 more than B. What is the total amount?
- a) Rs. 1560                      b) Rs. 1870  
c) Rs. 2700                      d) Rs. 2600  
e) None of these
558.  $\frac{1}{6}$  th of a pole is dipped in mud, half of the rest is in water and 5 m is above water. The length of pole is
- a) 7.5 m                      b) 8.5 m  
c) 10 m                      d) 12 m  
e) None of these
559. If a person walks at 14 km/hr instead of 10 km/hr, he would have walked 20 km more. The actual distance travelled by him is
- a) 50 km                      b) 56 km  
c) 70 km                      d) 80 km  
e) None of these
560. Simplification of  $\left(\sqrt{3} - \frac{1}{\sqrt{3}}\right)^2$  is
- a)  $\frac{4}{3}$                       b)  $\frac{4}{\sqrt{3}}$   
c)  $\frac{3}{4}$                       d)  $\frac{1}{\sqrt{3}}$   
e) None of these
561. What is the radius of a circle of area 616 cm<sup>2</sup>?
- a) 16 cm                      b) 12 cm  
c) 14 cm                      d) 13 cm  
e) None of these
562. Find the missing number: 1,4,7,10,.....
- a) 13                      b) 12  
c) 14                      d) 10  
e) None of these
563. Water boils at 212°F or 100°C and melts at 32°F or 0°C. If the temperature of a particular day is 35°C, it is equivalent to
- a) 95°F                      b) 85°F  
c) 99°F                      d) 90°F  
e) None of these
564. If  $\frac{x}{4} - \frac{x-3}{6} = 1$ , then x is equal to
- a) 12                      b) 6  
c) 3                      d) 4  
e) None of these

565. If  $x+2=0$ , then the value of  $\frac{3(x+3)(x+1)}{x-1}$  is
- a) 2                      b) 3  
c) 4                      d) 1  
e) None of these
566. If  $9x^2+kxy+16y^2$  be a perfect square, then  $k$ 's value is
- a) 20                      b) 24  
c) 28                      d) 32  
e) None of these
567. In a  $\Delta ABC$ ,  $AB = AC = 2.5$  cm,  $BC = 4$  cm. Find its height from A to the opposite base.
- a) 1.5 cm                b) 1 cm  
c) 2 cm                  d) 3 cm  
e) None of these
568. A rectangular field is 12 m x 16 m. Length of its diagonal is
- a) 25 m                  b) 30 m  
c) 20 m                  d) 35 m  
e) None of these
569. A 26 m long ladder rests against a vertical wall. If the base of ladder is 10 m away from that of wall, what is the height of the ladder from the ground?
- a) 20 m                  b) 24 m  
c) 26 m                  d) 30 m  
e) None of these
570. 35 students like Physics in a class of 50 students, 30 like Maths and 3 do not like any of them. How many students like only Physics?
- a) 18                      b) 15  
c) 16                      d) 17  
e) None of these
571. In an examination, 56% students fail in English and 48 % students fail in Science. If 18 % fail in English and Science both, find the percentage of students, who have been successful in both the subjects.
- a) 16 %                  b) 14 %  
c) 20 %                  d) 22 %  
e) None of these
572. Average of 6 numbers is 8. What number should be added to it to make the average 9?
- a) 15                      b) 16  
c) 17                      d) 18  
e) None of these

573. A number is first increased by 20 % and then reduced by 20 %. What would be the percentage change in the number?
- a) 0                      b) 2  
c) 4                      d) 6  
e) None of these
574. The average of 40 results is 60 and average of 60 results is 40. What is the average of all the results?
- a) 100                      b) 80  
c) 58                      d) 48  
e) None of these
575. If 5 men can cane 5 chairs in 5 hours, then 1 man shall cane 1 chair in how many hours?
- a) 1 hour                  b) 15 hours  
c) 5 hours                  d) 10 hours  
e) None of these
576. The average of 5 numbers is 6; The average of 3 numbers is 4; what is the average of remaining two numbers?
- a) 9                      b) 2  
c) 12                      d) 8  
e) None of these
577. If 81 be divided in proportion of  $\frac{1}{3}, \frac{1}{6}, \frac{1}{7}$ , then the first part is,
- a) 36                      b) 27  
c) 18                      d) 42  
e) None of these
578. Mr.Y gave some money at simple interest and at the end of 10 years, got back twice the sum. The percent per annum is
- a) 2%                      b) 4%  
c) 5%                      d) 10%  
e) None of these
579. In order to compute 0.15% of a number, it must be multiplied by
- a) 0.0015                  b) 0.015  
c) 0.15                      d) 1.5  
e) None of these
580.  $10\%$  of 60 +  $60\%$  of 100 = ?
- a) 90                      b) 46  
c) 66                      d) 70  
e) None of these
581. Which of the following is the same as  $40 \div 15$ ?
- a)  $5 (10 \div 3)$               b)  $(30 \div 15) 3$   
c)  $5 \div 15 \times 8$               d)  $40 \div 5 \times 3$   
e) None of these



582. If  $\sqrt{625}$  is 25, then the value of  $4 \div \sqrt{0.000625}$  will be  
 a) 16.0                      b) 0.160  
 c) 160                        d) 1600  
 e) None of these
583. At what percent per annum, simple interest will double a sum of money in 12 years?  
 a)  $8\frac{1}{3}\%$                       b) 24%  
 c)  $\frac{25}{4}\%$                         d) 8.25  
 e) None of these
584. If cost price of an article is Rs.10 and its selling price is Rs.15/- then profit % is  
 a) 5                              b) 10  
 c) 20                             d) 50  
 e) None of these
585. At simple interest a sum of money is doubled in 20 years. What is the rate of interest?  
 a) 20                             b) 4  
 c) 5                                d) 10  
 e) None of these
586. A certain sum is divided in the ratio of 4 : 7. Suppose the share of the first person is Rs. 80, then what is the total sum?  
 a) Rs.220                        b) Rs.240  
 c) Rs.260                        d) Rs.280  
 e) None of these
587. A certain sum of money is divided between A, B and C. B's share is twice as A's and thrice C's. If A's share is Rs.330, then what is the total sum?  
 a) Rs.1210                        b) Rs.1310  
 c) Rs.1110                        d) Rs.1410  
 e) None of these
588. The number of prime factors of the composite number 100 is  
 a) 3                                b) 5  
 c) 6                                d) 4  
 e) None of these
589.  $\frac{1}{2} \div \frac{1}{2} \times \frac{1}{2} + \frac{1}{2} = ?$   
 a) 1                                b)  $\frac{1}{2}$   
 c)  $\frac{1}{4}$                                 d)  $\frac{1}{8}$   
 e) None of these
590. The compound interest on Rs.3000 for 3 years at 10% per annum is  
 a) Rs.900                        b) Rs.933  
 c) Rs.963                        d) Rs.993  
 e) None of these
591. At what rate of simple interest per annum the sum of Rs. 800/- will become Rs.1200 in 10 years?  
 a) 5%                              b) 8%  
 c) 10%                             d) 12%  
 e) None of these
592. If 15 men do a job in 16 days, in how many days will 12 men do the same?  
 a) 10 days                        b) 20 days  
 c) 15 days                        d) 12 days  
 e) None of these
593. A, B and C can do a piece of work in 7 days, 14 days and 28 days respectively. If they work together, the work will be finished in  
 a) 2 days                         b) 3 days  
 c) 4 days                         d) 5 days  
 e) None of these
594. A sum of Rs. 600/- is lent at 5% simple interest per annum. The sum will be doubled in  
 a) 10 years                        b) 15 years  
 c) 20 years                        d) 25 years  
 e) None of these
595.  $x : 6 :: 32 : 24$ . What is the value of x?  
 a) 7                                b) 8  
 c) 6                                d) 5  
 e) None of these
596. A train of 300 metres length is running at a speed of 25 metres per second; it will cross a bridge of 200 metres length in  
 a) 5 seconds                        b) 10 seconds  
 c) 20 seconds                        d) 25 seconds  
 e) None of these
597. The average age of students in two classes of 40 students each is 10 years and 8 years respectively. The average of students in both classes taken together is  
 a) 8 years                        b) 9 years  
 c) 10 years                        d) 11 years  
 e) None of these
598. Mr. Z buys an article for Rs.70/- and sells it at a loss of 20%. Then the selling price will be  
 a) Rs.60                         b) Rs.58  
 c) Rs.56                         d) Rs.55  
 e) None of these

Directions (Qns. 599-613): Find the value of question mark (?) in each question.

599.  $5\frac{4}{9} + 35\% \text{ of } 25 + 9\frac{4}{5} = ?$

- a)  $22\frac{179}{180}$                       b)  $24\frac{169}{180}$   
 c)  $23\frac{169}{180}$                       d)  $23\frac{179}{180}$   
 e) None of these

600.  $\sqrt{?} + \frac{1}{3} = \frac{1}{2}$

- a)  $\frac{1}{25}$                                       b)  $\frac{1}{36}$   
 c)  $\frac{1}{49}$                                       d)  $\frac{1}{64}$   
 e) None of these

601.  $(3.48 \times 2.4 + 1.05 \times 0.03) \div ? = 0.1035$

- a) 27                                      b) 243  
 c) 81                                      d) 144  
 e) None of these

602.  $?% \text{ of } 268 - ?% \text{ of } 143 = 56.25$

- a) 45                                      b) 55  
 c) 35                                      d) 65  
 e) None of these

603.  $1.0437 - 0.9536 + 0.0083 - 0.1379 + ? = 0.0048$

- a) 0.0043                              b) 0.453  
 c) 0.0543                              d) 0.0443  
 e) None of these

604.  $2 * 6 5 8$

$-1 5 8 \$ * \text{ What is the value of } \$?$   
 $1 2 \$ * 0$

- a) 8  
 b) 9  
 c) 7  
 d) cannot be determined  
 e) None of these

605.  $14\frac{2}{3} - 8\frac{1}{4} + 6\frac{2}{5} - 9\frac{3}{4} = ?$

- a)  $3\frac{1}{15}$                                       b)  $3\frac{2}{15}$   
 c)  $2\frac{1}{15}$                                       d) 3  
 e) None of these

606.  $3000 \div 15 \times 114 - 3200 = ?$

- a) 20600                              b) 19600  
 c) 18600                              d) 19700  
 e) None of these

607.  $831296 - 92385 + 112354 - 469302 = ?$

- a) 381863                              b) 391963  
 c) 461963                              d) 381963  
 e) None of these

608.  $219.31 - 65.293 + 54.78 - 1.572 + 27.4 = ?$

- a) 243.625                              b) 234.525  
 c) 234.625                              d) 234.265  
 e) None of these

609.  $\frac{24}{x} = \frac{4}{5}$  implies that x equals

- a) 30                                      b) 20  
 c) 48                                      d) 96  
 e) None of these

610.  $\frac{5}{6} \times \frac{4}{7} \times \frac{14}{15} \times \frac{13}{25} \times \frac{15}{4} =$

- a)  $\frac{13}{15}$                                       b)  $\frac{15}{13}$   
 c)  $\frac{4}{17}$                                       d)  $\frac{17}{4}$   
 e) None of these

611.  $\sqrt{37001} \times \sqrt{0.001} = ?$

- a) 5.0828447  
 b) 6.082844611  
 c) 12.432  
 d) 5.147  
 e) None of these

612.  $63 \div \sqrt{0.0049} = ?$

- a) 1.285                                      b) 900  
 c) 90                                      d) 12.85  
 e) None of these

613.  $27^{\frac{1}{3}} \times 8^{\frac{1}{3}} = ?$

- a) 216                                      b) 6  
 c) 72                                      d) 54  
 e) None of these

614. A bag contains a number of 10 paise, 20 paise, 25 paise coins in the ratio of 7:4:3.

If the money value comes to be Rs.90, the number of 25 paise coins in the bag is

- a) 120                                      b) 160  
 c) 280                                      d) 30  
 e) None of these