

Q.1 What least number must be added to 859622, to get a number exactly divisible by 456?

- [A] 485
- [B] 394
- [C] 467
- [D] 387

(Answer: B; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Easy)

Q.2 The ratio between two numbers is 4:5 and their sum is 540. The greater of the two numbers is?

- [A] 360
- [B] 240
- [C] 300
- [D] 700

(Answer: C; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Easy)

Q.3 $\frac{1}{4}$ of a number subtracted from $\frac{1}{3}$ of the number gives 12. The Number is :

- [A] 144
- [B] 188
- [C] 196
- [D] 225

(Answer: A; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Easy)

Q.4 Three fifth of one fourth of a number is 90. The number is?

- [A] 400
- [B] 600
- [C] 800
- [D] 500

(Answer: B; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Easy)

Q.5 The sum of two numbers is 60 and their difference is 43 .The difference of there square is?

- [A] 2580
- [B] 2860
- [C] 3210
- [D] 2210

(Answer: A; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Easy)

Q.6 The ratio between the present ages of P and Q is 6 : 7. If Q is 4 years old than P. What will be the ratio of the ages of P and Q after 4 years?

- [A] 3 : 4
- [B] 3 : 5
- [C] 4 : 3
- [D] None of these

(Answer: D; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Moderate)

Q.7 The Average age of a class of 22 students in 21 years. The average increases by 1 when the teacher's age also included. What is the age of the teacher?

- [A] 44
- [B] 43
- [C] 41
- [D] 40

(Answer: A; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Easy)

Q.8 At present, the ratio between the ages of Arun and Deepak is 4 : 3. After 6 years, Arun's age will be 26 years. What is the age of Deepak at present?

- [A] 12 years
- [B] 15 years
- [C] 19.5 years
- [D] 21 years

(Answer: B; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Easy)

Q.9 A father is twice as old as his son. 20 years ago, the age of the father was 12 times the age of the son. The present age of the father (in years) is

- [A] 44
- [B] 32
- [C] 22
- [D] 45

(Answer: A; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Easy)

Q.10 Ten years ago, Kumar was thrice as old as Selva was but 10 years hence, he will be only twice as old. Find Kumar's present age.

- [A] 60 years
- [B] 80 years
- [C] 70 years
- [D] 76 years

(Answer: C; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Easy)

Q.11 The ratio between the length and the breadth of a rectangular field is 3 : 2. If only the length is increased by 5 metres, the new area of the field will be 2600 sq. metres. What is the breadth of the rectangular field?

- [A] 40 metres
- [B] 60 metres
- [C] 65 metres
- [D] Cannot be determined

(Answer: A; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Diff)

Q.12 If the area of a rectangular plot increases by 30% while its breadth remains same, what will be the ratio of the areas of new and old figures?

- [A] 1 : 3
- [B] 3 : 1
- [C] 4 : 7
- [D] 10 : 13

(Answer: B; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Difficult)

Q.13. The ratio between the length and the breadth of a rectangular park is 3 : 2. If a man cycling along the boundary of the park at the speed of 12 km/hr completes one round in 8 minutes, then the area of the park (in sq. m) is:

- [A] 15360
- [B] 153600
- [C] 30720
- [D] 307200

(Answer: B; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Difficult)

Q.14 In what ratio must water be mixed with milk to gain 16.66% on selling the mixture at cost price?

- [A] 1 : 6
- [B] 6 : 1

[C] 2 : 3

[D] 4 : 3

(Answer: A; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Easy)

Q.15 In what ratio must tea Rs. 62 per kg be mixed with tea at Rs. 72 per kg so that the mixture must be worth Rs. 64.50 per kg?

[A] 3 : 1

[B] 3 : 2

[C] 4 : 3

[D] 5 : 3

(Answer: A; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Easy)

Q.16 Two friends A and B run around a circular track of length 510 metres, starting from the same point, simultaneously and in the same direction. A who runs faster laps B in the middle of the 5th round. If A and B were to run a 3 km race long race, how much start, in terms of distance, should A give B so that they finish the race in a dead heat?

A. 545.45 metres

B. 666.67 metres

C. 857.14 metres

D. Cannot be determined

(Answer: B; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Difficult)

Q.17 Yana and Gupta leave points x and y towards y and x respectively simultaneously and travel in the same route. After meeting each other on the way, Yana takes 4 hours to reach her destination, while Gupta takes 9 hours to reach his destination. If the speed of Yana is 48 km/hr, what is the speed of Gupta?

A.72 kmph

B.32 mph

C.20 mph

D.None of these

(Answer: C; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Difficult)

Q.18 Twenty six men - 1,2,3,...,25 and 26 participate in 10km running race on a circular track of length 100m. All of them start at the same time, from the same point and run in the same direction. Their speeds, taken in the order, are in increasing AP. The time taken by 26 to meet 1, for the first time after they start is 20 sec and the time taken by 13 to complete the race is 52 minutes and 5 seconds. Find the time taken (in seconds), for all the twenty six men to meet for the first time at the starting point.

A.1000

B.500

C.625

D.400

(Answer: B; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Difficult)

Q.19 A man driving his bike at 24 kmph reaches his office 5 minutes late. Had he driven 25% faster on an average he would have reached 4 minutes earlier than the scheduled time. How far is his office?

A.24 km

B.72 km

C.18 km

D.Data Insufficient

(Answer: C; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Difficult)

Q.20 Two motorists Anil and Sunil are practicing with two different sports car; Ferrari and Maclarun, on the circular racing track, for the car racing tournament to be held next month. Both Anil and Sunil start from the same point on the circular track. Anil

completes one round of the track in 1 min and Sunil takes 2 min to complete a round. While Anil maintains speed for all the rounds, Sunil halves his speed after the completion of each round. How many times Anil and Sunil will meet between 6th round and 9th round of Sunil (6th and 9th round is excluded)? Assume that the speed of Sunil remains steady throughout each round and changes only after the completion of that round.

A.382

B.347

C.260

D.None of these

(Answer: A; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Difficult)

Q.21 How many combinations of students are possible if the group is to consist of exactly 3 freshmen?

A.5000

B.4550

C.4000

D.3550

(Answer: B; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Easy)

Q.22 How many combinations of students are possible if the group is to consist of all members of the same class?

A.20

B.25

C.30

D.35

(Answer: D; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Easy)

Q.23 Six boxes are numbered 1,2,3,4,5 and 6. Each box must contain either a white ball or a black ball. At least one box must contain a black ball and boxes containing black balls must be consecutively numbered. find the total number of ways of placing the balls.

A.15

B.20

C.21

D.36

(Answer: C; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Moderate)

Q.24 In how many ways can 6 green toys and 6 red toys be arranged, such that 2 particular red toys are never together whereas 2 particular green toys are always together?

A. $11! \times 2!$

B. $9! \times 90$

C. $4 \times 10!$

D. $18 \times 10!$

(Answer: D; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Moderate)

Q.25 The number of ways of arranging n students in a row such that no two boys sit together and no two girls sit together is $m(m > 100)$. If one more student is added, then number of ways of arranging as above increases by 200%. The value of n is

A.12

B.8

C.9

D.10

(Answer: D; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Difficult)

Q.26 There are 10 seats around a circular table. If 8 men and 2 women have to be seated around a circular table, such that no two women have to be separated by at least one man. If P and Q denote the respective number of ways of seating these people around a table when seats are numbered and unnumbered, then $P : Q$ equals

A.9 : 1

B.72 : 1

C.10 : 1

D.8 : 1

(Answer: C; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Difficult)

Q.27 A number X is chosen at random from the numbers -3, -2, -1, 0, 1, 2, 3. What is the probability that $|X| < 2$

A.5/7

B.3/7

C.3/5

D.1/3

(Answer: B; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Easy)

Q.28 Two brothers X and Y appeared for an exam. The probability of selection of X is $1/7$ and that of B is $2/9$. Find the probability that both of them are selected.

A.1/63

B.2/35

C.2/63

D.9/14

(Answer: C; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Easy)

Q.29 What is the probability of getting at least one six in a single throw of three unbiased dice?

A.1/6

B.125/216

C.1/36

D. 91/216

(Mod) (Answer: D; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Moderate)

Q.30 A bag contains 3 white balls and 2 black balls. Another bag contains 2 white and 4 black balls. A bag and a ball are picked random. The probability that the ball will be white is:

A.7/11

B.7/30

C.5/11

D.7/15

(Answer: D; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Moderate)

Part B

1. There are two sections A and B of a class, consisting of 36 and 44 students' respectively. If the average weight of section A is 40kg and that of section B is 35kg, find the average weight of the whole class.

A.30 kg

- B.35 kg
- C.42.5 kg
- D.37.25 kg

(Answer: D; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Easy)

2. Distance between two stations A and B is 778km. A train covers the journey from A to B at 84km per hour and returns back to A with a uniform speed of 56km per hour. Find the average speed of train during the whole journey.

- A.60 km/hr
- B.30.5 km/hr
- C.57 km/hr
- D.67.2 km/hr

(Answer: D; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Easy)

3. The average of 50 numbers is 30. If two numbers, 35 and 40 are discarded, then the average of the remaining numbers is nearly:

- A.28.32
- B.29.68
- C.28.78
- D.29.27

(Answer: B; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Easy)

4. The average wages of a worker during a fortnight comprising 15 consecutive working days was Rs.90 per day. During the first 7 days, his average wages was Rs.87/day and the average wages during the last 7 days was Rs.92 /day. What was his wage on the 8th day?

- A.83
- B.92
- C.90
- D.97

(Answer: D; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Moderate)

5. The average temperature on Wednesday, Thursday and Friday was 25o. The average temperature on Thursday, Friday and Saturday was 24o. If the temperature on Saturday was 27o, what was the temperature on Wednesday?

- A.24
- B.21
- C.27
- D.30

(Answer: D; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Moderate)

6. The difference between two angles of a triangle is 24o. The average of the same two angles is 54o. Which one of the following is the value of the greatest angle of the triangle?

- A.45
- B.60
- C.66
- D.72

(Answer: D; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Moderate)

7. The average age of a family of 5 members is 20 years. If the age of the youngest member be 10 years then what was the average age of the family at the time of the birth of the youngest member?

- A.13.5
- B.14
- C.15
- D.12.5

(Answer: D; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Moderate)

8. 40% of the employees in a factory are workers. All the remaining employees are executives. The annual income of each worker is Rs. 390. The annual income of each executive is Rs. 420. What is the average annual income of all the employees in the factory together?

- A.390
- B.405
- C.408
- D.415

(Answer: C; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Difficult)

9. The average price of 10 books is Rs.12 while the average price of 8 of these books is Rs.11.75. Of the remaining two books, if the price of one book is 60% more than the price of the other, what is the price of each of these two books?

- A.Rs. 5, Rs.7.50
- B.Rs. 8, Rs. 12
- C.Rs. 10, Rs. 16
- D.Rs. 12, Rs. 14

(Answer: C; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Difficult)

10. Of the three numbers, the first is twice the second and the second is twice the third. The average of the reciprocal of the numbers is $\frac{7}{72}$. The numbers are:

- A. 16, 8, 4
- B. 20, 10, 5
- C. 24, 12, 6
- D. 36, 18, 9

(Answer: C; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Difficult)

11. The average monthly salary of 12 workers and 3 managers in a factory was Rs. 600. When one of the manager whose salary was Rs. 720, was replaced with a new manager, then the average salary of the team went down to 580. What is the salary of the new manager?

- A.570
- B.420
- C.690
- D.640

(Answer: B; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Difficult)

12. In an acoustics class, 120 students are male and 100 students are female. 25% of the male students and 20% of the female students are engineering students. 20% of the male engineering students and 25% of the female engineering students passed the final exam. What percentage of engineering students passed the exam?

- A.5%
- B.10%
- C.16%
- D.22%

(Answer: D; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Easy)

13. If b equals 10% of a and c equals 20% of b, then which one of the following equals 30% of c?

- A.0%

- B.5%
- C.10%
- D.40%

(Answer: D; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Easy)

14. Two students appeared at an examination. One of them secured 9 marks more than the other and his marks was 56% of the sum of their marks. The marks obtained by them are:

- A.39, 30
- B.41, 32
- C.42, 33
- D.43, 34

(Answer: C; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Easy)

15. In an election contested by two parties, Party D secured 12% of the total votes more than Party R. If party R got 132,000 votes, by how many votes did it lose the election?

- A.300,000
- B.168,000
- C.36,000
- D.24,000

(Answer: C; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Moderate)

16. A vendor sells 60 percent of apples he had and throws away 15 percent of the remainder. Next day he sells 50 percent of the remainder and throws away the rest. What percent of his apples does the vendor throw?

- A. 17
- B. 23
- C. 77
- D. None of these

(Answer: B; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Moderate)

17. When processing flower-nectar into honeybees' extract, a considerable amount of water gets reduced. How much flower-nectar must be processed to yield 1kg of honey, if nectar contains 50% water, and the honey obtained from this nectar contains 15% water?

- A.1.5 kgs
- B.1.7 kgs
- C.3.33 kgs
- D.None of these

(Answer: B; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Difficult)

18. 30% of the men are more than 25 years old and 80% of the men are less than or equal to 50 years old. 20% of all men play football. If 20% of the men above the age of 50 play football, what percentage of the football players are less than or equal to 50 years?

- A.15%
- B.20%
- C.80%
- D.70%

(Answer: C; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Difficult)

19. B as a percentage of A is equal to A as a percentage of (A + B). Find B as a percentage of A.

- A.62%
- B.73%
- C.41%
- D.57%

(Answer: A; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Difficult)

20. If the price of petrol increases by 25% and Raj intends to spend only an additional 15% on petrol, by how much % will he reduce the quantity of petrol purchased?

- A.10%
- B.12%
- C.8%
- D.6.67%

(Answer: C; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Difficult)

21. A candidate who gets 20% marks fails by 10 marks but another candidate who gets 42% marks gets 12% more than the passing marks. Find the maximum marks.

- A.50
- B.100
- C.150
- D.200

(Answer: B; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Difficult)

22. Peter got 30% of the maximum marks in an examination and failed by 10 marks. However, Paul who took the same examination got 40% of the total marks and got 15 marks more than the passing marks. What were the passing marks in the examination?

- A.35
- B.250
- C.75
- D.85

(Answer: D; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Difficult)

23. Each person in a group of 110 investors has investments in either equities or securities or both. Exactly 25% of the investors in equities have investments in securities, and exactly 40% of the investors in securities have investments in equities. How many have investments in equities?

- A.65
- B.80
- C.120
- D.135

(Answer: B; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Difficult)

24. Which of the following has most number of divisors?

- A.99
- B.101
- C.176
- D.182

(Answer: C; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Easy)

25. If each of the three nonzero numbers a , b , and c is divisible by 3, then abc must be divisible by which one of the following the numbers?

- A.8
- B.27
- C.81
- D.121

(Answer: B; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Easy)

26. A number when divided by a divisor leaves a remainder of 24. When twice the original number is divided by the same divisor, the remainder is 11. What is the value of the divisor?

- A.13
- B.59
- C.35
- D.37

(Answer: D; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Moderate)

27. The product of 4 consecutive even numbers is always divisible by:

- A. 600
- B.768
- C.864
- D.384

(Answer: D; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Moderate)

28. Let n be the number of different 5 digit numbers, divisible by 4 with the digits 1, 2, 3, 4, 5 and 6, no digit being repeated in the numbers. What is the value of n ?

- A.144
- B.168
- C.192
- D. None of these

(Answer: C; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Difficult)

29. Three gold coins of weight 780gm, 840gm and 960gm are cut into small pieces, all of which have the equal weight. Each piece must be heavy as possible. If one such piece is shared by two persons, then how many persons are needed to give all the pieces of gold coins?

- A.86
- B.70
- C.43
- D.35

(Answer: A; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Difficult)

30. Each of X alarm tolls at regular intervals. All of them toll together twelve times a day. No two alarm at equal intervals of time. If each alarm tolls after a whole number of minutes, what is the maximum possible value of X ?

- A.14
- B.16
- C.18
- D.20

(Answer: B; Experience: None; Taxonomy: None; Score: 1; Wscore: -0.25; Shuffle: Yes; Level: Difficult)