Consolidated QR Question Bank

Unit-1

1. Find the smallest number divisible by both 21 and 5.
2. Evaluate 107×107+93×93.
3. The H.C.F. of two numbers is 11 and their L.C.M. is 7700. If one of these numbers is 275 then find the other number.
4. (2/5 ÷ 3/4) * 5/6
5. 1164 × 128 ÷ 8.008 + 969.007 = ?
6. Is 5457 divisible by 7?
7. The number of prime numbers between 0 and 50 is_____

Unit-2

1. The first term of an AP is denoted by _____.
2. Sum of first 100 terms for the given A.P 2, 4, 6, 8, ... is
3. Which term of the A.P 10, 20, ... is 100?
4. If the first term of a GP is 2 and the common ratio is 3, then the fourth term is ____.
5. The average of runs of a cricket player of 10 innings was 32. How many runs must he make in his next innings so as to increase his average of runs by 4?
6. The average age of the group of 30 boys is 16 years. A boy of age 19 leaves the group and a new boy joins the group. If the new average age of the group is 15.8 years then find the age of the new boy.
7. Which term of the A.P. 5, 13, 21, ... is 181?

Unit-3

1. Ayesha's father was 38 years of age when she was born while her mother was 36 years old when her brother four years younger to her was born. What is the difference between the ages of her parents?

2. A father is twice as old as his daughter. If 20 years ago, the age of the father was 10 times the age of the daughter, what is the present age of the father?.
3. If the price of a book is first decreased by 25% and then increased by 20%, then find the net change in the price.
4. If a father is 30 years older than his son and the sum of their ages is 50, then the age of the son is _____.
5. The ratio of boys to girls in a class is 3:2. If there are 15 boys, there are ____ girls.
6. Salaries of Ravi and Sumit are in the ratio 2:3. If the salary of each is increased by Rs. 4000, the new ratio becomes 40:57. What is Sumit's salary?
7. If A:B = 7:5 and B:C = 9:11, then A:B:C is equal to_____

Unit-4

1. At what rate of compound interest per annum will a sum of Rs. 1200 become Rs. 1348.32 in 2 years?
2. The percentage profit earned by selling an article for Rs. 1920 is equal to the percentage loss incurred by selling the same article for Rs. 1280. At what price should the article be sold to make 25% profit?
3. A sum of money was invested at Simple Interest at a certain rate for 3 years. Had it been invested at a 4% higher rate. It would have fetched Rs 480 more. Find the Principal? What is the difference between Simple Interest and Compound Interest?
4. The sum of two numbers is 24 and their product is 143. Find the sum of their squares.
5. A and B start a business by investing Rs. 2000 and Rs. 3000 respectively. What is the ratio of their profits?
6. A and B enter into a partnership with Rs.50000 and Rs.75000 respectively in a company for a year. After 7 months, C gets into a partnership with them with Rs.30000 and A withdraws his contribution after 9 months. How would they share their profit of Rs.2600 at the end of the year?
7. A dishonest shopkeeper professes to sell cloth at the cost price, but he uses faulty meter rod. His meter rod measures 95 cm only. Find his gain per cent.

Unit-5

1. The speed of the boat in still water is 5 km/hr. If the speed of the boat against the stream is 3 km/hr, what is the speed of the stream?
2. Two pipes A and B can fill a tank in 20 and 30 minutes respectively. If both pipes are opened together, how long will it take to fill the tank?
3. A boat covers a distance downstream in 1 hour, while it comes back in 1 ½ hours. If the speed of the stream is 3 kmph, what is the speed of the boat in still water?
4. A can do a piece of work in 20 days. He works at it for 5 days and then B finishes it in 10 days. How long will they take to complete the work if they work together?
5. If a man covers 10.2 km in 3 hours then find the distance covered by him in 5 hours.
6. A alone can do a piece of work in 6 days and B alone in 8 days. A and B undertook to do it for Rs. 3200. With the help of C, they completed the work in 3 days. How much is to be paid to C?
7. In one hour, a boat goes 13 km/hr in the direction of the stream and 7 km/hr against the direction of the stream. What will be the speed of the boat in still water?
8. A person travels from one place to another at 30 km/hr and returns at 120 km/hr. If the total time taken is 5 hours, then find the Distance
9. Anita and Veena are running in opposite directions. Speed of Anita and Veena is 8 km/hr and 10 km/hr respectively. Find out the distance between them after 2.5 hours.
10. A train is moving with a speed of 92.4 km/hr. How many meters will it cover in 10 minutes?

Unit-6

1. Find the probability of getting a sum of 7 in a simultaneous throw of two dice.
2. From a group of 7 men and 6 women, five persons are to be selected to form a committee so that at least 3 men are there on the committee. In how many ways can it be done?

3. Find the number of permutations and combinations if n = 12 and r = 2.
4. Two dice are rolled, find the probability that the sum is:
    A. equal to 1
    B. equal to 4
5. In how many ways a committee consisting of 5 men and 3 women, can be chosen from 9 men and 12 women?
6. What is the probability of getting two tails when two coins are tossed?
7. From a group of 7 men and 6 women, five persons are to be selected to form a committee so that at least 3 men are there on the committee. In how many ways can it be done?

Unit-7

1. Siva, Sathish, Amar and Praveen are playing cards. Amar is to the right of Sathish, who is to the right of Siva. Who is to the right of Amar ?
2. Rasik walked 20 m towards the north. Then he turned right and walked 30 m. Then he turns right and walks 35 m. Then he turns left and walks 15 m. Finally he turns left and walks 15 m. In which direction and how many meters is he from the starting position?
3. One morning after sunrise, Nandita and Ravi were sitting in a lawn with their backs towards each other. Nandita's shadow fell exactly towards her left-hand side. Which direction was Ravi facing?
4. J,K,L,M,N,O,P and R are eight huts. L is 2 km east of K. J is 1 km north of K and Q is 2 km south of J. P is 1 km west of Q while M is 3 km east of P and O is 2 km north of P. R is situated right in the middle of K and L while N is just in the middle of Q and M.
    A. Distance between K and P is_____
    B. Distance between K and R is_____
5. Mr Deepak Mohan walks 5 km towards the south and then turns to the right. After walking 3 km he turns to the left and walks 5 km. What direction is he facing right now?
6. In a Coaching Institute, seven students (both girls and boys) sit on three different benches, Bench@, Bench * and Bench #

Each bench must have at least two students sitting on it

At Least one girl must be sitting on each bench

X, who is a girl, does not sit with Y, Z and T.

S is a boy student and sits only with M.

Y sits on the Bench @ with his best friends.

H sits on Bench #. Z is the brother of X.

    A. Which of the following pair of students form the correct set of students sitting on the bench *

    B. H sits on Bench # along with _____

    C. M sits along with S on which bench?

    D. Of the three benched @, * and #, which bench has 3 students sitting on it?

    E. Which of the given sets represents the students sitting on Bench @?

Unit-8

1. Minute hand moves __°(degrees) in 5 min.
2. At what time between 3 and 4 o'clock, the hands make an angle of 10 degrees?
3. What is the angle between the two hands of a clock when the time shown by the clock is 6.30 p.m. ?
4. Today is Monday. After 61 days, it will be:
5. What was the day of the week on 17th June, 1998?
6. If 17th march 2008 was Monday, what was 1st April 2012?
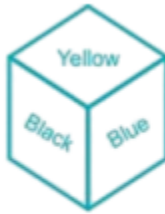7. Which year in the future will have the same calendar exactly as 2009?

Unit-9

1. Four usual dice are thrown on the ground. The total of numbers on the top faces of these four dice is 13 as the top faces showed 4, 3, 1 and 5 respectively. What is the total of the faces touching the ground?

2. What number will be opposite to 2?

3. What is the opposite face of "Red"?
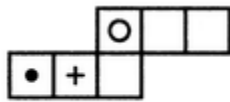

(A)   (B)

4. Choose the box that is similar to the box formed from the given sheet of paper (X).

(X)   (1)   (2)   (3)   (4)

DIRECTIONS for questions 5 – 7: In each of the questions below are given three statements, followed by conclusions: I, II, III, IV. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

5. Statements: Some Cats are Rats. All bats are tables. All Rats are Bats.

Conclusion:
I. Some Cats are bats   II. All bats are rats

III. All tables are cats.   IV. All bats are cats

6. Statements: All the locks are keys. All the keys are bats. Some watches are bats.

Conclusions: Some bats are locks.

Some watches are keys .

All the keys are locks.

7. Statements: Some keys are staplers. Some staplers are stickers. All the stickers are pens.

Conclusions : Some pens are staplers.   Some stickers are keys.

No sticker is key.   Some staplers are keys.

Unit-10

1. If A is the brother of B; B is the sister of C; and C is the father of D, how is D related to A?
2. If D is the brother of B, how is B related to C? To answer this question, which of the statements is/are necessary?
   A. The son of D is the grandson of C.
   B. B is the sister of D.
3. Anupam said to a lady sitting in a car, "The only daughter of the brother of my wife is the sister-in-law of the brother of your sister." How is the husband of the lady related to Anupam?
4. If A is the sister of B, B is the daughter of C, C is the wife of D, and D is the brother of E, how is E related to C?
5. If A + B means A is the mother of B; A - B means A is the brother B; A % B means A is the father of B and A x B means A is the sister of B, which of the following shows that P is the maternal uncle of Q?

A. Q - N + M x P   B. P + S x N - Q

C. P - M + N x Q   D. Q - S % P

6. If A + B means A is the brother of B; A - B means A is the sister of B and A x B   means A is the father of B. Which of the following means that C is the son of M?

A. M - N x C + F   B. F - C + N x M

C. N + M - F x C   D. M x N - C + F

7. If X + Y means X is the daughter of Y; X - Y means X is the brother of Y; X % Y means X is the father of Y and X x Y means X is the sister of Y. Which of the following means I is the niece of J?

A. J - N % C x I   B. I x C - N % J

C. J + M x C % I   D. I x C + N - J

Unit-11

1. Look at this series: 664, 332, 340, 170, _____, 89, ... What number should fill the blank?
2. Look at this series: 72, 76, 73, 77, 74, __, 75, ... What number should fill the blank?
3. Look at this series: 53, 53, 40, 40, 27, 27, ... What number should come next?
4. Find the odd man out : 396, 462, 572, 427, 671, 264
5. Insert the missing number : 8, 7, 11, 12, 14, 17, 17, 22, (....)
6. If CALM is written as LKZB, YEAR may be written as …..
7. If 'MEANDER' is coded as '4515459', then 'MATHEMATICS' is coded as ….…..