Q.NO:01

S.NO	MCQ ('1' MARK EACH)
(a)	The smallest number that can be multiplied to 2 x 2 x 2 x 7 x 7 to make it a perfect cube is _____ . a) 49 b) 2 c) 7 d) 14
(b)	The product of $\dfrac{3}{7}$ and its additive inverse is _____ a)1 b) $\dfrac{-9}{49}$ c) 0 d) $\dfrac{-9}{7}$
(c)	The probability of getting prime number, when a die is thrown ___a) $\dfrac{1}{3}$ b) $\dfrac{1}{2}$ c) $\dfrac{1}{6}$ d) $\dfrac{1}{4}$
(d)	Which of the following is a Pythagorean Triple. a)(7,8,9) b)(6,8,10) c)(10,12,15) d)(4,9,16)
(e)	The value of $\sqrt[3]{125} - \sqrt{81}$ is _____ a) 4 b) –4 c)45 d)14
(f)	If CP =Rs 300, Profit =10% then S.P of the article is _____ a) 310 b) 270 c) 290 d) 330
(g)	The number of diagonals of a hexagon is _____ a)12 b)9 c) 8 d) 6

S.NO	FILL IN THE BLANKS ('1' MARK EACH)
(h)	The non-square numbers lie between 24^2 and 25^2 are _____
(i)	If an angle of a parallelogram is 105˚, then the measure of its opposite angle is _____.
(j)	Two quantities 'm' and 'n' are in direct variation and if m = 50 and n = 10 , then constant is ____
(k)	If MP = Rs 600 and rate of discount is 15% then discount amount = Rs————
(l)	The time taken by a train of length 240m when it crosses a pole with speed of 40m/sec is ____
(m)	The multiplicative inverse of $\dfrac{5}{-13}$ is_____ .
(n)	The number of digits in the square root of 1225 is _____ .

S.NO	Q.NO ('2' TO '12' – '2' MARKS EACH)
2	A shopkeeper sold an item for Rs 8400 after allowing a Discount of 30 % . Find the Marked Price of the item.
3	Find the least number by which 108 must be multiplied to make it a perfect cube.

(PTO)

S.NO	Q.NO ('2' TO '12' – '2' MARKS EACH)
4	Find the square root of 2.4964.
5	Find the smallest number that can be subtracted from 93461 to make it a perfect square.
6	Renu bought a necklace for Rs 27,500 including VAT of 10% .Find the original price of the necklace.
7	If 60 people can do a job in 20 days, how many people will be needed to complete the same work in 15 days?
8	Chandni scored 90% marks in an examination. If the maximum mark is 600, find her score.
9	Find the Amount on ₹ 7000 at 10%p.a for 2 years compounded annually.
10	Find the probability that a card drawn from a pack of 52 cards is (i) a red card (ii) a face card.
11	The 2 adjacent angles of a parallelogram are in the ratio 2 :7. Find the measure of each angle.
12	Find the sum of interior angles of a polygon with 12 sides.

S.NO	Q.NO ('13' TO '20' – '3' MARKS EACH)
13	Find the cube root of 13824 by prime factorization method.
14	Ravi alone can complete a job in 30 days and Suraj alone can complete the same job in 20 days. How many days will it take to finish the job if both of them work together?
15	By selling a table for Rs. 1800 Mayank loses 10%. At what price must he sell it to gain 10%?
16	A machine costs ₹8000. If it depreciates at the rate of 5% per annum, what is its value after 2 years.
17	Find 3 rational numbers between $\dfrac{-3}{4}$ and $\dfrac{-4}{5}$.
18	By which least number 5292 should divide to make it a Perfect square.
19	The adjacent sides in a parallelogram shaped feild are in the ratio 1:9. If the cost of fencing the field once at Rs20 per metre is Rs 40000. Find the length of each side.
20	Represent $\dfrac{-8}{5}$ on a number line.