| S.NO | MCQ ('1' MARK EACH ) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| (a) | The value of $\sqrt{1.21} \times \sqrt{0.09}=$ a) 0.033 | b) 33 | c) 3.3 | d) 0.33 |
| (b) | The number of diagonals of a heptagon is ___ a) 14 | b)7 | c) 10 | d) 21 |
| (c) | The probability of getting multiple of 2 , when a die is thrown __ a) $\frac{1}{3}$ |  | b) $\frac{1}{2}$ | d) $\frac{1}{4}$ |
| (d) | The digit at the ones place in the cube of 78 is___ a) 6 | b) 8 |  | d)2 |
| (e) | The sum of $\frac{2}{5}$ and its additive inverse is $\qquad$ a) $\frac{2}{5}$ | b) $\frac{-2}{5}$ | c) 0 | d) $\frac{4}{5}$ |
| (f) | The marked price of a shirt is ₹ 1500 , its selling price at a discount of $20 \%$ is ₹ |  |  | d) 1100 |
| (g) | The least number by which ( $3 \times 3 \times 5 \times 5 \times 5$ ) must be divided to make it a perfect cube is <br> a) 9 <br> b) 3 <br> c) 5 |  |  | d) 125 |


| S.NO | FILL IN THE BLANKS ('1' MARK EACH ) |
| :---: | :---: |
| (h) | The number of digits in the square root of 5499025 is |
| (i) | If an angle of a rhombus is $95^{\circ}$, then the measure of its adjacent angle is |
| (j) | The distance covered by a train of length 200 m when it crosses a pole with speed of $70 \mathrm{~km} / \mathrm{hr}$ is |
| (k) | Actual price of a watch is ₹3500 and sold for ₹ 3570 including VAT. The VAT amount is ₹ |
| (1) | There are ___ numbers between (30) ${ }^{2}$ and (31) ${ }^{2}$ |
| (m) | The multiplicative inverse of $\left(\frac{1}{3}+\frac{1}{6}\right)$ is $\qquad$ |
| ( n ) | Two quantities ' $u$ ' and ' $v$ ' are in direct proportion, then constant is |


| S.NO | Q.NO ( ' 2 ' TO '12' - ' 2 ' MARKS EACH ) |
| :---: | :--- |
| 2 | Find the square root of 24,336 by division method. |
| 3 | Two opposite angles of a parallelogram are $(5 y-2)^{0}$ and $(40-y)^{0}$. Find the angles of the <br> parallelogram. |


| S.NO | Q.NO ( '2' TO '12' - '2' MARKS EACH ) |
| :---: | :--- |
| 4 | The area of a square field is 1764 sq.m, find the length of one side |
| 5 | Find each interior angle of a regular polygon with 18 sides |
| 6 | The price of an article increased from ₹7500 to ₹7750. Find the rate of increase. |
| 7 | A group of 100 men has a provision of food for 30 days. If 20 more men join in the same group, how <br> long will the food last ? |
| 8 | Find the least number by which 432 be multiplied to make it as a perfect cube. |
| 9 | An item was purchased in a sale for Rs 2400 after getting a discount of $20 \%$ \% Find M.P of the item? |
| 10 | In a box containing 40 mangoes, 6 mangoes are rotten. Find the probability of <br> a)picking a rotten mango |
| 11 | Calculate the compound amount on Rs. 8000 for 1 year at $8 \%$ per annum. <br> (interest being compounded half yearly ) |
| 12 | Radha scored 80\% marks in an examination. If she scored 560 marks, find the maximum marks. |


| S.NO | Q.NO ( '13' TO '20' - '3' MARKS EACH ) |
| :---: | :---: |
| 13 | Find the least number to be added to 5619 to make it a perfect square. |
| 14 | The ratio of the sides of a parallelogram is 3: 4. If its perimeter is 70 cm , find the sides |
| 15 | Arun sold a scooter for ₹ 49000 and made a loss of $2 \%$ on it. At what price should he sell to make a profit of 5\%? |
| 16 | Sanjay alone can complete the painting of a house in 10 days and Rajiv alone can complete the same work in 15 days. How many days will it take to finish the work if both work together? |
| 17 | Find 3 rational numbers between $\frac{5}{6}$ and $\frac{6}{7}$. |
| 18 | Ram purchased a boat for Rs 16000.If the cost of the boat is depreciated at the rate of 5\% annum, calculate its value after $\mathbf{2} \mathbf{y r s}$. |
| 19 | Simplify using suitable property: $\left(\frac{-3}{7} \times \frac{5}{14}\right)+\left(\frac{-8}{7} \times \frac{-3}{7}\right)+\left(\frac{-3}{7} \times \frac{3}{14}\right)$ |
| 20 | Find the cube root of 91125 by prime factorization method |

