DATE: 27.08.18

| S.NO | MCQ |  |  |  | ANSWER |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (a) | The multiplicative inverse of $\left[1-\frac{3}{2}\right]$ is | a) $-\frac{1}{2} \quad$ b) $\frac{1}{2}$ | c) 2 | d) -2 |  |
| (b) | The cube root of $\mathbf{7 2 9 0 0 0} 000$ is | a)90 b)9 | c) 900 | d)9000 |  |
| (c) | The number of sides of a regular polygon having interior angle $135^{\circ}$ is __ a)5 b)6 c)7 d)8 |  |  |  |  |
| (d) | The value of $[\sqrt[3]{125} \times \sqrt[3]{8}]^{2}$ is | a)10 b)100 | c)1000 | d)10000 |  |
| (e) | $A B C D$ is a parallelogram in which $A B=B C=C D=A D ; A C \neq B D$ then $A B C D$ is a $\qquad$ <br> a)Trapezium <br> b)Kite <br> C) Rectangle <br> d)Rhombus |  |  |  |  |


| S.NO | FILL IN THE BLANKS | ANSWER |
| :---: | :---: | :---: |
| (f) | There are $\qquad$ rational numbers between $\frac{-1}{2}$ and $\frac{-5}{2}$ |  |
| (g) | The number of digits in the square root of 9922500 is |  |
| (h) | Number of diagonals of a 15 sided polygon is |  |
| (i) | The least number to be subtracted from 132 to make it a perfect square is |  |
| (j) | If ' $m$ ' and ' $n$ ' are two quantities which are in direct proportion then ___ = a constant |  |


| S.NO | ANSWER THE FOLLOWING QUESTIONS |
| :---: | :--- |
| 2 | Find the other members of a Pythagorean triplet if one member is 24 |
| 3 | The adjacent angles of a parallelogram are $(2 x-9)^{0}$ and $(3 x+4)^{0}$. Find all angles of the parallelogram |
| 4 | Find the cube root of 21952 by prime factorization method |
| 5 | Simplify by using suitable properties. $\left(\frac{-1}{2} \times \frac{3}{4}\right)+\left(\frac{2}{3} \times \frac{-1}{2}\right)$ |
| 6 | Construct a quadrilateral $\quad A B C D \quad$ if $A B=5.5 \mathrm{~cm} \quad \mathrm{BC}=5.8 \mathrm{~cm} \quad \mathrm{AD}=4 \mathrm{~cm} \quad \mathrm{~B}=105^{\circ} \quad$ LA $=60^{\circ}$ |
| 7 | Find the least number to be added to 4392 to make it a perfect square |
| 8 | 1200 people in a camp had enough food for 28 days. After 4 days few people were transferred to another <br> camp and thus the food lasted for 32 days. Find the number of people transferred to the other camp |
| 9 | Find the least number by which 6912 must be divided to obtain a perfect cube |


| 10 | Construct a rhombus with side 7.2 cm and one angle is $120^{\circ}$ |
| :---: | :---: |
| 11 | A motor car uses 40 litres of petrol to run for 8 hours. (i) Calculate the amount of petrol needed for a 12hour journey (ii) How long will 150 litres of petrol last? |
| 12 | Find the greatest 4 - digit number that is a perfect square |
| 13 | List 4 rational numbers between $\frac{-2}{3}$ and $\frac{2}{3}$ |
| 14 | Evaluate : (i) $\sqrt{2 \frac{1}{4}}-\sqrt{\frac{1}{4}}$ <br> (ii) $\left(-1 \frac{2}{9}\right)^{3}$ <br> (iii) $\sqrt[3]{0.008} \times \sqrt[3]{125}$ |
| 15 | Find the smallest square number which is divisible by 4,6 and 15 |
| 16 | Construct a square of diagonal 6.4 cm |
| 17 | Find the cost of fencing a square plot of area $\mathbf{3 9 6 9}$ sq.m at the rate of ₹ 50 per metre |
| 18 | Find the measure of ' $x$ ' in the given rectangle. |
| 19 | Find the square root of 5 correct to two decimal places |
| 20 | The angles of a quadrilateral are in the ratio 3:4:5:6 Find the measures of all the angles |
| 21 | At a camp, there is enough food for $\mathbf{5 0 0}$ scouts for $\mathbf{2 1}$ days. If $\mathbf{2 5 0}$ more scouts join the camp, how long would the food last? |
| 22 | A swimming pool can be filled in 8 hours by 4 equal pumps. How many such pumps are required if the pool is to be filled in $5 \frac{1}{3}$ hours? |
| 23 | The sides of a rectangle are ( $3 x+2 y$ ) units and ( $4 y-3 x$ ) units. Find it's perimeter. |
| 24 | Add : $3 \mathrm{a}(\mathrm{c}-\mathrm{a}-\mathrm{b})$ and $3 \mathrm{~b}(\mathrm{c}-\mathrm{b}-\mathrm{a}$ ) |
| 25 | Simplify: $(2 a+3)(b-2)+(5 a+3)(b-3)$ |


| INDIAN SCHOOL MUSCAT - MIDDLE SECTION - DEPARTMENT OF MATHEMATICS (2018-19) |  |  |
| :---: | :--- | :--- |
| CLASS: 07 | PORTION FOR THE FIRST TERM EXAMINATION |  |
| S.NO |  |  |
| 1 | RATIONAL NUMBERS |  |
| 2 | UNDERSTANDING QUADRILATERALS |  |
| 3 | PRACTICAL GEOMETRY |  |
| 4 | SQUARES AND SQUARE ROOTS |  |
| 5 | CUBES AND CUBES ROOTS |  |
| 6 | DIRECT AND INVERSE PROPORTIONS |  |
| 7 | ALGEBRAIC EXPRESSIONS AND IDENTITIES ( UP TO EX NO: 9.4 ) |  |

