|  | $\begin{aligned} & \hline \text { INDIAN SCHOOL MUSCAT } \\ & \text { MIDDLE SECTION } \end{aligned}$ <br> HALF YEARLY EXAMINATION 2019-20 | (8Pb) |
| :---: | :---: | :---: |
|  | SUBJECT - MATHEMATICS | Code: MXM13 |
| CLASS 6 | SET B - ANSWER KEY | Time Allotted: $21 / 2 \mathrm{hrs}$. |
| 05. 03. 2020 |  | Max .Marks: 80 |
| General Instructions. <br> 1. The question paper comprises of four sections $A, B, C$ and $D$. You have to attempt all the sections. <br> 2. All the questions are compulsory. <br> 3. All the answers should be written in the answer sheet provided. |  |  |


| Q.NO1 | SECTION 'A' - ( 1 ' MARK EACH ) - TOTAL - 20 MARKS | Marks |
| :---: | :---: | :---: |
| (a) | The predecessor of 209999 is $\qquad$ a) 210000 <br> b) 209910 <br> c) 209100 <br> d) 209998 <br> Ans: 209998 <br> ..... (d) | 1 |
| (b) | The decimal for 248 hundredths is $\qquad$ a) 0.248 <br> b) 2.48 <br> c) 24.8 <br> d) 0.0248 <br> Ans: 2.48 <br> ..... <br> (b) | 1 |
| (c) | The ratio of 15 cm to 20 cm is $\qquad$ a) $3: 4$ <br> b) $4: 3$ <br> c) $5: 4$ <br> d) $3: 5$ <br> Ans: 3:4 $\qquad$ (a) | 1 |
| (d) | $23 \mathrm{Kg} 25 \mathrm{~g}=$ $\qquad$ Kg a) 23.250 <br> b) 23.025 <br> c) 23.205 <br> d) 2.3025 <br> Ans: 23.025 <br> (b) | 1 |
| (e) | The perimeter of a regular hexagon is 48 cm . The length of each of its side is $\qquad$ cm <br> a) 42 <br> b) 8 <br> c) 288 <br> d) 54 <br> Ans: 8 $\qquad$ (b) | 1 |
| (f) | The expression for the statement " $m$ ' subtracted from 15" is __ Ans: $\mathbf{1 5 - m}$ | 1 |
| (g) | What fraction of a litre is 700ml? Ans: 700 / 1000=7/10 [ 1/2 + 1/2] | 1 |
| (h) | The additive inverse of $(-47)$ is ___ Ans: 47 | 1 |
| (i) | The product $4 \times 278 \times 25=\ldots \quad$ Ans: $278 \times 100=27800 \quad$ [ $1 / 2$ + 1/2 ] | 1 |
| (j) | $(-13)+(-10)=\square$ Ans: (-23) | 1 |
| (k) | The mixed fraction for $2 \frac{5}{7}$ is $\qquad$ Ans: $\frac{19}{7}$ | 1 |
| (I) | Of the 2 integers (-19) and (-91) ___ lies on the right. Ans: (-19) | 1 |
| (m) | Radha is ' $y$ ' years old now. Her age after 8 years will be___ years. Ans: y + 8 | 1 |
| ( n ) | The perimeter of a square of each side 9 cm is _ Ans: $4 \times 9=36 \mathrm{~cm}[1 / 2+1 / 2]$ | 1 |
| (o) | 5:10: $4: 8$ is__ [True or False] Ans: 1:2 = 1:2 OR 40=40 [ $1 / \mathbf{2}$ + 1/2] | 1 |
| (p) | The length of rope required to fence a park 10 m long and 8 m wide is $\qquad$ <br> Ans: $2 \times 18=36 \mathrm{~m}$ <br> [ $1 / 2+1 / 2]$ | 1 |
| (q) | Out of 40 students in a class, 25 students are boys. The ratio of number of boys to the total number of students is $\qquad$ . <br> Ans: 25: $40=5: 8$ <br> [ $1 / 2+1 / 2$ ] | 1 |
| (r) | For a pictograph on flowers, if one symbol of $\Delta=5$ flowers, then $\qquad$ symbols will represent 100 flowers. <br> Ans: 20 symbols | 1 |


| Q.NO1 | SECTION 'A' - ( 1 ' MARK EACH ) - TOTAL - 20 MARKS |  | Marks |
| :---: | :---: | :---: | :---: |
| (s) | Fill in the blanks: $\frac{28}{35}=\frac{4}{---}=\frac{---}{45} \quad$ Ans: Dr. $=5$; Nr. $=36$ | [ $1 / 2+1 / 2]$ | 1 |
| (t) | In the given data of marks scored by 15 students which is as follows: $10,9,9,8,5,7,7,9,9,10,8,8,9,6,6$, the frequency of ' 9 ' is $\qquad$ | Ans: 5 | 1 |



| Q.NO | SECTION ' $C$ '- ( '3' MARKS EACH ) - TOTAL - 24 MARKS | Marks |
| :---: | :---: | :---: |
| (8) |  | 3 |
| (9) | Ankita bought 5 Kg 75 g of fruits, 3 Kg 475 g of vegetables and some pulses. If the total weight of the things she bought is 10 Kg , find the weight of pulses. Express your answer in decimals. <br> Ans: Statements $\qquad$ [1/2] <br> $5 \mathrm{Kg} 075 \mathrm{~g}+3 \mathrm{Kg} 475 \mathrm{~g}=8 \mathrm{Kg} 550 \mathrm{~g}$ $\qquad$ [1] <br> $10 \mathrm{Kg} 000 \mathrm{~g}-8 \mathrm{Kg} 550 \mathrm{~g}=1 \mathrm{Kg} 450 \mathrm{~g} \ldots .$. [1] $\quad=1.450 \mathrm{Kg}$ of Pulses $\ldots$. [1/2] <br> Either all values can be converted to decimal and calculate or only the final Ans can be converted to decimal. | 3 |


| Q.NO | SECTION ' $C$ '- ( '3' MARKS EACH ) - TOTAL - 24 MARKS | Marks |
| :---: | :---: | :---: |
| (10) | Find: <br> a) $2 \frac{3}{4}+\frac{7}{8}$ Ans: $=11 / 4+7 / 8$ $\qquad$ $=(22+7) / 8 \ldots \ldots \quad[1 / 2]$ $=29 / 8=3 \frac{5}{8} \ldots[1 / 2]$ $\begin{aligned} \text { b) } 6-1 \frac{1}{3} & \\ =6-4 / 3 & \ldots .[1 / 2] \\ =(18-4) / 3 & \ldots .[1 / 2] \\ =14 / 3=4 \frac{2}{3} & \ldots \ldots[1 / 2] \end{aligned}$ | 3 |
| (11) | "The sum of Twice a number ' $x$ ' and 9 is 19". Write an equation for the given statement and check if ' $x$ ' $=6$ is the solution for that equation. <br> Ans: Equation .... $2 x+9=19$..... [1] <br> For $x=6:$ LHS $=2 x+9=2 \times 6+9=12+9=21 \neq$ RHS $\ldots .$. [ 1 1/2] <br> Hence $x=6$ is NOT the solution. ..... [1/2] | 3 |
| (12) | (a) Find: <br> $(-48)+119$ <br> Ans: <br> $=+71$ $\qquad$ [1] $\begin{aligned} & \text { (b) Subtract }(-59) \text { from }(-99) \\ & =(-99)-(-59) \\ & =(-99)+59=(-40) \\ & =\ldots . .[1 / 2+1 / 2] \end{aligned}$ | 3 |
| (13) | A granite tile measures 20 cm long and 10 cm wide. How many tiles will be required to cover a floor $5 m$ long and $4 m$ broad? ```Ans: 5m=500cm ; 4m=400cm .... [1] No. of tiles required =[ 500\times400]\div[ 20\times10] .....[1/2]+[1] for cancelling = 1,000 tiles ..... [ 1/2 ]``` | 3 |
| (14) | Draw Seg. AB = 9cm and construct its perpendicular bisector. <br> Ans: Drawing Seg. $A B=9 \mathrm{~cm}$ using compasses $\qquad$ [1] Constructing perpendicular bisector ..... [1 1/2] Labeling ..... [1/2] | 3 |
| (15) | Shanta bought 72 Kg of wheat for Rs324. How much wheat can she buy for Rs144? <br> Ans: $\begin{aligned} & x: 72:: 144: 324 \quad \ldots . .[1] \\ & x=[144 \times 72] \div 324=32 \mathrm{Kg} \text { of Wheat } \quad \ldots . .[11 / 2+1 / 2] \end{aligned}$ | 3 |


| Q.NO | SECTION 'D' - ( '4' MARKS EACH ) - TOTAL - 24 MARKS | Marks |
| :---: | :---: | :---: |
| (16) | A square plot of each side 10 m has a pool 8 m long and 7 m wide in it. <br> a. Find the area of the remaining plot. <br> Ans: $\begin{align*} \text { Area of the remaining plot } & =[10 \times 10]-[8 \times 7]  \tag{1}\\ & =100-56 \ldots .[1] \\ & =44 \mathrm{sq} . \mathrm{m} \ldots \ldots[1] \end{align*}$ <br> b. Find the cost of tiling the remaining area at the rate of Rs20 per sq. m. <br> Ans: <br> Cost of tiling the remaining area $=44 \times 20=$ Rs880 $\quad[1 / 2+1 / 2]$ | 4 |
| (17) | a) Add using suitable rearrangement: $501+388+499+112$ <br> Ans: $\begin{aligned} =501+499+388+112 \quad & \cdots . \text { Rearranging } \ldots . . \\ =1000+500 \ldots \ldots[1 / 2+1 / 2] \quad & =1500 \ldots[1 / 2] \end{aligned}$ <br> b) Find the product using suitable rearrangement: $16 \times 4 \times 5 \times 25$ <br> Ans: $\begin{aligned} & 16 \times 5 \times 4 \times 25 \quad \ldots \ldots \text { Rearranging } & \ldots . . & {[1 / 2] } \\ =80 \times 100 & \ldots . .[1 / 2+1 / 2] \quad=8000 & \ldots . . & {[1 / 2] } \end{aligned}$ | 4 |


| Q.NO | SECTION 'D' - ( 4 ' MARKS EACH ) - TOTAL - 24 MARKS |  |  |  |  |  |  |  | Marks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (18) | $\begin{aligned} \text { Simplify: } & (-500)-(-380)+(-222)+620 \\ \text { Ans: } & =-500+380-222+620 \quad \ldots . .[1] \\ & =-722+1000 \quad \ldots . .[1+1] \end{aligned}$ |  |  | = + 278 ..... [1] |  |  |  |  | 4 |
| (19) | Amit earns Rs40 000 a month. He spends Rs8 000 on rent, Rs15 000 on food and Rs6 000 on other expenses. Find the following ratios: <br> a. Amt. spent on rent to Amt. spent on food <br> Ans: $=8000: 15000=8: 15 \quad \cdots \cdots[1 / 2+1 / 2]$ <br> b. Amt. spent on other expenses to his income <br> Ans: $=6000: 40000=6: 40=3: 20 \quad \ldots . .[1 / 2+1 / 2]$ <br> c. His savings to his income $\text { His Savings }=40000-[8000+15000+6000]=40000-29000=11000 \ldots \ldots \text { [1] }$ $\text { Ratio }=11000: 40000=11: 40 \quad \ldots . .[1 / 2+1 / 2]$ |  |  |  |  |  |  |  | 4 |
| (20) | Draw Seg. PQ = 5cm and Seg. RS = 4.5cm. Construct Seg. MN = 2PQ - RS Ans: Drawing Seg. $\mathrm{PQ}=5 \mathrm{~cm}$ and Seg. $\mathrm{RS}=4.5 \mathrm{~cm} \quad \ldots . . \quad[1+1]$ Constructing 2PQ - RS ...... [1 + 1/2] Labeling ...... [1/2] |  |  |  |  |  |  |  | 4 |
| (21) | The following table shows the n particular week: <br> Represent the above informatio <br> Ans: Given scale 1 unit = 1 <br> Each Bar drawn corre |  | pastrie <br> Tues <br> 65 <br> graph <br> $\ldots 1 / 2 x$ | old by <br> Wed <br> 70 <br> aking arked | baker <br> Thurs <br> 50 <br> ale of rrectly | durin <br> Fri <br> 60 <br> uit $=$ ..... | $\begin{aligned} & \text { he } 7 \\ & \hline \text { Sat } \\ & \hline 90 \\ & \hline \begin{array}{l} \text { pas } \\ \text { 2] } \end{array} \end{aligned}$ | Sun $100$ <br> es. | 4 |

