	INDIAN SCHOOL MUSCAT MIDDLE SECTION HALF YEARLY EXAMINATION 2019 – 20	NADET
	<u>SUBJECT – MATHEMATICS</u>	Code: MXM13
CLASS 6	SET B – ANSWER KEY	Time Allotted: 2 1/2 hrs.
05. 03. 2020		Max .Marks: 80
Conoral Instructions		•

General Instructions.

The question paper comprises of four sections A, B, C and D. You have to attempt all the sections.
 All the questions are compulsory.
 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 2 09 999 is       a) 2 10 000 b) 2 09 910 c) 2 09 100 d) 2 09 998         Ans: 2 09 998 (d)	1
(b)	The decimal for 248 hundredths isa)         0.248         b) 2.48         c)         24.8         d)         0.0248	1
(c)	The ratio of 15cm to 20cm is a) 3:4 b) 4:3 c) 5:4 d) 3:5	1
(d)	Ans:       3 : 4        (a)         23 Kg 25 g = Kg       a)       23.250       b)       23.025       c)       23.205       d)       2.3025         Ans:       23.025        (b)	1
(e)	The perimeter of a regular hexagon is 48cm. The length of each of its side is cma) 42b) 8c) 288d) 54Ans: 8(b)	1
(f)	The expression for the statement " 'm' subtracted from 15" is Ans: 15 – 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 x 278 x 25 =       Ans: 278 x 100 = 27 800 [1/2 + 1/2]	1
(j)	(-13) + (-10) = <b>Ans:</b> (-23)	1
(k)	The mixed fraction for $2\frac{5}{7}$ is 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: $4 \times 9 = 36$ cm $[1/2 + 1/2]$	1
(0)	5:10:: 4:8 is [True or False] Ans: 1:2 = 1:2 OR 40 = 40 [1/2 + 1/2]	1
(p)	The length of rope required to fence a park 10 m long and 8 m wide is         Ans: 2 x 18 = 36m       [ 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 totalnumber of students isAns: 25:40 = 5:8[ 1/2 + 1/2 ]	1
(r)	For a pictograph on flowers, if one symbol of $\Delta$ = 5 flowers, then symbols will represent 100 flowers. Ans: 20 symbols	1

Q.NO1	SECTION 'A' – ( '1' MARK EACH ) – TOTAL – 20 MARKS	
(s)	Fill in the blanks: $\frac{28}{35} = \frac{4}{} = {45}$ 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 Ans: 5	1

Q.NO	SECTION 'B' – ( '2' MARKS EACH ) – TOTAL – 12 MARKS	Marks
(2)	Add using number line:(-5) + (+7)Ans:Correct number line with zero marked [1]Answer = (+2) [1]	
(3)	The cost of a note book is Rs 'n' and the cost of a pen is Rs 'p'. Express the total cost of 10 note books and 15 pens algebraically. Ans: Cost of 10 N. Bks = 10n;Cost of 15 pens = 15p; Total Cost = 10n + 15p [1/2 + 1/2 + 1]	
(4)	Construct angle ABC = 90 <sup>°</sup> Ans: Base ray [1/2] ; 3 arcs [1] ; Completing and label [1/2]	2
(5)	A table cloth 9m long and 7m wide has to be stitched with 3 rounds of border. Find the length of the border required.         Ans:       Length of border required for 3 rounds = 3 x Perimeter         = 3 x 2 x [9 + 7] = 6 x 16 = 96m       [1/2 x 4]	
(6)	<ul> <li>Armaan divides Rs1200 as gift for his two children in the ratio 5 : 3. Find the amount each one gets.</li> <li>Ans: Share of 1<sup>st</sup> child = 5 / 8 x 1200 = 5 x 150 = Rs750 [1] Share of 2<sup>nd</sup> child = 3 / 8 x 1200 = 3 x 150 = Rs450 [1]</li> </ul>	
(7)	The number of children in 25 families of a colony is as given below:         2, 1, 2, 4, 2, 1, 3, 3, 1, 4, 2, 3, 4, 3, 1, 1, 1, 2, 2, 2, 2, 2, 1, 4, 4         Make a table and enter the data using tally marks.         Ans:       Each Frequency         [1/2]         No. of Children       1       2       3         Frequency       7       9       4       5         Total       25	

Q.NO	SECTION 'C'- ( '3' MARKS EACH ) - TOTAL - 24 MARKS	Marks
(8)	Find using Distributive Property:       375 x 38 + 375 x 61 + 375         Ans:       = 375 x 38 + 375 x 61 + 375 x 1         = 375 x [38 + 61 + 1]       = 375 500          [1 + 1 + 1/2]	3
(9)	Ankita bought 5Kg 75g of fruits, 3Kg 475g of vegetables and some pulses. If the total weight of the things she bought is 10Kg, find the weight of pulses. Express your answer in decimals. Ans: Statements [1/2] 5Kg 075g + 3Kg 475g = 8Kg 550g [1] 10Kg 000g – 8Kg 550g = 1Kg 450g [1] = 1.450Kg of Pulses [1/2] 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: a) $2\frac{3}{4} + \frac{7}{8}$ b) $6 - 1\frac{1}{3}$ Ans: = 11/4 + 7/8 [1/2]       = 6 - 4/3 [1/2]         = (22+7)/8 [1/2]       = (18 - 4)/3 [1/2]         = 29/8 = $3\frac{5}{8}$ [1/2]       = 14/3 = $4\frac{2}{3}$ [1/2]	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. Ans: Equation $2x + 9 = 19$ [1] <u>For x = 6</u> : LHS = $2x + 9 = 2 \times 6 + 9 = 12 + 9 = 21 \neq$ RHS [1 1/2] Hence x = 6 is NOT the solution [1/2]	3
(12)	(a) Find: $(-48) + 119$ (b) Subtract $(-59)$ from $(-99)$ Ans:= +71[1]= (-99) - (-59)[1]= (-99) + 59 = (-40)[1/2 + 1/2]	3
(13)	A granite tile measures 20cm long and 10cm wide. How many tiles will be required to cover a floor 5m long and 4m broad? Ans: 5m = 500cm ; 4m = 400cm [1] No. of tiles required = [ 500 x 400 ] ÷ [ 20 x 10 ] [1/2] + [1] for cancelling = 1,000 tiles [ 1/2 ]	3
(14)	Draw Seg. AB = 9cm and construct its perpendicular bisector. Ans: Drawing Seg. AB = 9cm using compasses [1] Constructing perpendicular bisector [1 1/2] Labeling [1/2]	
(15)	Shanta bought 72Kg of wheat for Rs324. How much wheat can she buy for Rs144? Ans: x : 72 : : 144 : 324 [1] x = [144 x 72] ÷ 324 = 32Kg of Wheat [1 1/2 + 1/2]	3

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

Q.NO	<u>SECTION 'D' – ( '4' MARKS EAC</u>	CH) – TOTAL – 24 MARKS	Marks
(18)	Simplify: (-500) - (-380) + (-222) + 620 Ans: = -500 + 380 - 222 + 620 [1] = -722 + 1000 [1 + 1] = + 278 [1]		
(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: a. Amt. spent on rent to Amt. spent on foodAns: $= 8000 : 15000 = 8 : 15$ $[1/2 + 1/2]$ b. Amt. spent on other expenses to his incomeAns: $= 6000 : 40000 = 6 : 40 = 3 : 20$ $[1/2 + 1/2]$ c. His savings to his incomeAns:His Savings = 40000 - [8000 + 15000 + 6000] = 40000 - 29000 = 11000 [1] Ratio = 11000 : 40000 = 11 : 40Draw Seg. PQ = 5cm and Seg. RS = 4.5cm. Construct Seg. MN = 2PQ - RS		
(20)	Ans: Drawing Seg. PQ = 5cm and Seg. RS = 4.5cm [1 + 1] Constructing 2PQ – RS [1 + 1/2] Labeling [1/2]		
(21)	The following table shows the number of pastries so particular week:         Day       Mon	WedThursFriSatSun70506090100king scale of 1 unit = 10 pastries.	4