



**INDIAN SCHOOL MUSCAT
MIDDLE SECTION
FINAL EXAMINATION 2017-18**



MATHEMATICS – KEY CUM MARKING SCHEME Code: MWM0102

SECTION A

Qns	FILL IN THE BLANKS	Marks
1a)	The reciprocal of $\frac{5}{7}$ is _____. Ans) $\frac{7}{5}$	1
b)	The decimal number for $6 + \frac{4}{10} + \frac{3}{1000}$ is _____. Ans) 6.403	1
c)	The perimeter of a square of side 12 cm is _____ cm. Ans) 48	1
d)	2kg 135g = _____ kg Ans) 2.135	1
e)	2 minutes 30 seconds = _____ sec Ans) 150 sec	1
MATCH THE FOLLOWING		
f)	The fraction equivalent to $\frac{4}{8}$ is _____ v) $\frac{1}{2}$	1
g)	$3.98 \times 1000 =$ _____ iii) 3980	1
h)	2m 5cm = _____ m iv) 2.05	1
i)	Area of rectangle, its length = 5cm and breadth = 1.1cm is _____ sq.cm ii) 5.5	1
j)	$1 \div \frac{1}{2} =$ _____ i) 2	1

SECTION B

2.	Subtract : 10 h 15 min – 4 h 55 min $\begin{array}{r} 9\text{h } 75\text{ min} \\ - 4\text{h } 55\text{ min} \\ \hline 5\text{h } 20\text{ min} \end{array}$ _____ (1)	
3.	Convert into km and add: 365m and 1230m $\begin{array}{r} 365\text{ m} = 0.365\text{ km} \\ 1230\text{ m} = 1.230\text{ km} \\ \hline 0.365\text{ km} \\ + 1.230\text{ km} \\ \hline 1.595\text{ km} \end{array}$ _____ (1)each	
4.	Multiply 345 by 1.2 $\begin{array}{r} 345 \\ \times 1.2 \\ \hline 690 \\ + 3450 \\ \hline 4140 \end{array}$ _____ (1)each $345 \times 1.2 = 414$	

5.	Find the length of a rectangle whose area is 42sq.cm and breadth is 6cm. Length = $42 \div 6 \longrightarrow$ $= 7 \text{ cm} \longrightarrow (1) \text{ each}$													
6.	Multiply and write the answer in lowest form : $\frac{3}{5} \times \frac{15}{9}$ $\frac{3}{5} \times \frac{15}{9} = \frac{3}{3} = 1$	$\frac{1}{2}$ $\frac{1}{2}$ 1												
SECTION C														
7.	Find the perimeter of a rectangular plot of length 50 m and breadth 35 m $P = (l + b) \times 2$ (1Mark) $= (50 + 35) \times 2$ (1Mark) $= 85 \times 2 = 170 \text{ m}$ (1Mark)													
8.	a) Find the sum of 345, 23.06, 1.567 b) write the place value of 6 in 240.065 (a) $345 + 23.06 + 1.567 = 345.000 + 23.060 + 1.567$ $\begin{array}{r} 345.000 \\ 23.060 \\ + 1.567 \\ \hline 369.627 \end{array} \longrightarrow (1)$ (b) Place value of 6 = 0.06 (Or any form) $\longrightarrow (1)$													
9.	a) Add $\frac{1}{3}$ and $\frac{2}{5}$ b) Divide $\frac{3}{8} \div \frac{1}{2}$ (a) $\frac{2}{5} + \frac{1}{3} = \frac{6}{15} + \frac{5}{15} \longrightarrow (1)$ $= \frac{11}{15} \longrightarrow (\frac{1}{2})$ (b) $\frac{3}{8} \div \frac{1}{2} = \frac{3}{8} \times \frac{2}{1} \longrightarrow (1)$ $= \frac{3}{4} \longrightarrow (\frac{1}{2})$													
10.	Adarsh studies 1 hour 15 min in the morning and 1 hour 45 min in the evening . Find the total time he spent for studies in a day <table> <tr> <td>hr</td> <td>min</td> <td></td> </tr> <tr> <td>1</td> <td>15</td> <td></td> </tr> <tr> <td>+1</td> <td>45</td> <td>(2)</td> </tr> <tr> <td>2 hrs</td> <td>60 min</td> <td></td> </tr> </table> Total time taken by Adarsh = 3 hrs (1)	hr	min		1	15		+1	45	(2)	2 hrs	60 min		3
hr	min													
1	15													
+1	45	(2)												
2 hrs	60 min													
11.	A packet contains 8 pencil boxes. The weight of the packet is 12.128kg, what is the weight of one pencil box? Weight of one pencil box = $12.128 \div 8$ (1) $= 1.516 \text{ kg}$ (Division 2 marks)													
12.	The perimeter of a square park is 200 m . Find the area of the park Side = $\frac{P}{4} = \frac{200}{4} = 50 \text{ m}$ (1 ½) therefore area = side x side = $50 \times 50 = 2500 \text{ sq .m}$ (1 ½)													

13.	<p>Mohan baked a cake weighing $3\frac{3}{4}$ kg. He divided the cake into 3 equal parts.</p> <p>Find the weight of each part.</p> <p>Weight of each part $= 3\frac{3}{4} \div 3 \longrightarrow (1)$</p> <p>$= \frac{15}{4} \div 3 \longrightarrow (\frac{1}{2})$</p> <p>$= \frac{15}{4} \times \frac{1}{3} \longrightarrow (\frac{1}{2})$</p> <p>$= \frac{5}{4} \longrightarrow (\frac{1}{2})$</p> <p>$= 1\frac{1}{4} \text{ kg} \longrightarrow (\frac{1}{2})$</p>													
14.	<p>Gita had ₹ 100 with her. She bought a story book for ₹ 45.50 . How much money is left with her?</p> <p>Amount Gita had = ₹ 100 - ½ mark</p> <p>Amount spent = ₹ 45.50 – ½ mark</p> <p>Therefore amount left with her = ₹100 - ₹45.50 – ½ mark</p> $\begin{array}{r} 100.00 \\ - 45.50 \\ \hline 54.50 \end{array}$ <p>1 mark</p> <p>Conclusion : She has ₹ 54.50 left with her - ½ mark</p>													
SECTION D														
15.	<p>Add 6 hours 40 min + 2 hours 30 min</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td>hrs</td><td>min</td><td></td></tr> <tr> <td>6</td><td>40</td><td></td></tr> <tr> <td>+</td><td>2</td><td>30</td></tr> <tr> <td></td><td>8</td><td>70</td></tr> </table> <p>8 hrs 70 min = 9 hrs 10 min (2)</p>	hrs	min		6	40		+	2	30		8	70	
hrs	min													
6	40													
+	2	30												
	8	70												
16.	<p>Find the first 4 equivalent fractions of $\frac{7}{8}$</p> <p>$\frac{7}{8} \times \frac{2}{2} = \frac{14}{16}$ $\frac{7}{8} \times \frac{3}{3} = \frac{21}{24}$ $\frac{7}{8} \times \frac{4}{4} = \frac{28}{32}$ $\frac{7}{8} \times \frac{5}{5} = \frac{35}{40}$</p> <p>each equivalent fraction – (1mark)</p>													
17.	<p>The area of a rectangular garden is 300sq.m and its length is 30m. Find its breadth ,cost of fencing it at ₹100 per metre.</p> <p>$b = 300 \div 30 \longrightarrow (1)$</p> <p>$= 10\text{m} \longrightarrow (\frac{1}{2})$</p> <p>Perimeter = $2 \times (l + b) \longrightarrow (\frac{1}{2})$</p> <p>$= 2 \times 40 \longrightarrow (\frac{1}{2})$</p> <p>$= 80 \text{ m} \longrightarrow (\frac{1}{2})$</p> <p>Total cost = $80 \times 100 \longrightarrow (\frac{1}{2})$</p> <p>$= ₹ 8000 \longrightarrow (\frac{1}{2})$</p>													
18.	<p>The price of a packet of 6 pens is ₹30.60. Find the cost of 4 pens</p> <p>Cost of one pen = ₹ 30.60 ÷ 6 = ₹ 5.10 (2)</p> <p>Cost of 4 pens = ₹ 5.10 × 4 = ₹ 20.40 (2)</p>													

19.	<p>a) Subtract 21kg 345g - 5kg 265g</p> <p>b) Ravi travelled 4km25m by car and 1km 350m by rickshaw. How many kilometers did he travel in all?</p> <p>a) $\begin{array}{r} 21\text{ kg } 345\text{ g} \\ - 5\text{ kg } 265\text{ g} \\ \hline 16\text{ kg } 080\text{ g} \end{array} \longrightarrow (1)$</p> <p>b) Total distance = $\begin{array}{r} 4\text{ km } 025\text{ m} \\ + 1\text{ km } 350\text{ m} \\ \hline 5\text{ km } 375\text{ m} \end{array} \longrightarrow \left(\frac{1}{2}\right)$ $= 5.375\text{ km} \longrightarrow \left(\frac{1}{2}\right)$</p>	
20.	<p>Which one has greater volume ?</p> <p>A cuboid of length 8 cm, breadth 6 cm and height 4 cm OR a cube of each edge 7 cm</p> <p>Volume of cuboid = $l \times b \times h$ $\left(\frac{1}{2}\right)$ $= 8 \times 6 \times 4$ $\left(\frac{1}{2}\right)$ $= 192\text{ cu.cm}$ $\left(\frac{1}{2}\right)$</p> <p>Volume of cube = $a \times a \times a$ $=$ $\left(\frac{1}{2}\right)$ $7 \times 7 \times 7$ $\left(\frac{1}{2}\right)$ $= 343\text{ cu.cm}$ $\left(\frac{1}{2}\right)$</p> <p>$343 > 192$ $\left(\frac{1}{2}\right)$</p> <p>Therefore cube has greater volume $\left(\frac{1}{2}\right)$</p>	4
21.	<p>Arrange these fractions in ascending order:</p> <p>$\frac{1}{2}, \frac{2}{5}, \frac{1}{3}, \frac{5}{6}$ LCM = 30 $\left(\frac{1}{2}\right)$</p> <p>$\frac{1}{2} = \frac{15}{30}, \frac{2}{5} = \frac{12}{30},$</p> <p>$\frac{1}{3} = \frac{10}{30}, \frac{5}{6} = \frac{25}{30} \longrightarrow \left(\frac{1}{2}\right)\text{each}$</p> <p>$\frac{10}{30} < \frac{12}{30} < \frac{15}{30} < \frac{25}{30}$ $\left(\frac{1}{2}\right)$</p> <p>$= \frac{1}{3} < \frac{2}{5} < \frac{1}{2} < \frac{5}{6} \longrightarrow \left(\frac{1}{2}\right)$</p>	4
22.	<p>a) Divide 8.92 by 8</p> <p>b) Which is greater: 7.907 OR 17.077</p> <p>a) $8.92 \div 8 = 1.115$</p> <p>First division $-(1)$</p> <p>Each step $\left(\frac{1}{2}\right)$</p> <p>Answer - $\left(\frac{1}{2}\right)$</p> <p>Total -3 marks for division</p> <p>b) Greater = 17.077 (1)</p>	4
23.	<p>A bucket had 15 litres 750ml of water. To water the plants Rama poured out 3 litres 450ml in the morning and 2 litres 300ml in the evening. How much water is left in the bucket?</p> <p>Total quantity of water poured out = 3 litres 450 ml + 2 litres 300ml $\longrightarrow (1)$</p> <p>$= 5\text{ litres } 750\text{ ml} \longrightarrow (1)$</p> <p>Quantity of water left in the bottle = 15 litres 750ml - 5 litres 750 ml $\longrightarrow 1$</p> <p>$= 10\text{ litres} (1)$</p>	

