



GRADE: VIII Date: 03/10/2023	TERM 1 (2023-24) MATHEMATICS	Marks: 40 Time: 2 Hours
---	---	--

Q.No.	Questions	Mark
	MULTIPLE CHOICE QUESTIONS (Choose the correct answer)	
1	In a rational number $\frac{a}{b}$ which of the following is correct? a. $b = 0$ b. $a \neq 0$ c. $b \neq 0$ d. $a \neq b$	1
2	The absolute value of $\frac{-11}{-17}$ is a. $\frac{-17}{-11}$ b. $\frac{-11}{17}$ c. $\frac{17}{11}$ d. $\frac{11}{17}$	1
3	Which of the following is the solution of $3x - 12 = 0$ a. $x = 3$ b. $x = 4$ c. $x = 9$ d. $x = 15$	1
4	Linear equations are of which degree? a. Degree 0 b. Degree 1 c. Degree 2 d. Any degree	1
5	Rhombus with equal diagonals become a a. Parallelogram b. Rectangle c. Square d. Kite	1
6	Which quadrilateral gives two isosceles triangles when cut along the shorter diagonal?	1

	<ul style="list-style-type: none"> a. Parallelogram b. Rhombus c. Trapezium d. Kite 	
7	<p>What is the minimum number of measurements required to draw a rectangle?</p> <ul style="list-style-type: none"> a. 1 b. 2 c. 3 d. 4 	1
8	<p>Which of the following quadrilateral have four equal sides?</p> <ul style="list-style-type: none"> a. Trapezium b. Parallelogram c. Rectangle d. Rhombus 	1
9	<p>The frequency of 5 in the data 1,2,5,7,8,5,7,2,8,5,1,2 is</p> <ul style="list-style-type: none"> a. 1 b. 2 c. 3 d. 4 	1
10	<p>The sum of the observations divided by the number of observations gives the</p> <ul style="list-style-type: none"> a. Mean b. Range c. Frequency d. Class mark 	1
FILL IN THE BLANKS		
11	<p>Fill in the blank with <, > or =</p> $\frac{3}{7} \text{ ----- } \frac{4}{9}$	1
12	<p>The solution of the equation $2x - 5 = 3$ is -----</p>	1
13	<p>The four angles of a quadrilateral add up to -----</p>	1
14	<p>To draw a unique quadrilateral we need ----- measurements.</p>	1
15	<p>The class size of the continuous intervals 25-30, 30-35 and son on is -----</p>	1
TRUE OR FALSE		
16	<p>The standard form of the rational number $\frac{9}{-12}$ is $\frac{-3}{4}$.</p>	1

17	The solution of an equation is the highest power of the terms in the equation.	1																					
18	Rhombus is a kind of parallelogram.	1																					
19	A quadrilateral can have one of its angles equal to 180° .	1																					
20	The mean of first 5 natural numbers is 3.	1																					
VERY SHORT ANSWER TYPE QUESTIONS																							
21	All integers are rational numbers. Is the converse true? Justify your answer.	2																					
22	Three consecutive even numbers add up to 24. Find them.	2																					
23	The angles of a quadrilateral are in the ratio 1:2:2:4. Find all the angles.	2																					
24	Write any four features of a parallelogram.	2																					
25	Observe the following frequency distribution table and answer the questions. <table border="1" style="margin: 10px auto;"> <thead> <tr> <th>Intervals</th> <th>Tally Marks</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>0 - 5</td> <td> </td> <td>2</td> </tr> <tr> <td>5 - 10</td> <td> </td> <td>2</td> </tr> <tr> <td>10 - 15</td> <td> </td> <td>5</td> </tr> <tr> <td>15 - 20</td> <td> </td> <td>5</td> </tr> <tr> <td>20 - 25</td> <td> </td> <td>3</td> </tr> <tr> <td>25 - 30</td> <td> </td> <td>3</td> </tr> </tbody> </table> <p>(i) What is the class size of the intervals? (ii) What is the class mark of the interval 20-25?</p>	Intervals	Tally Marks	Frequency	0 - 5		2	5 - 10		2	10 - 15		5	15 - 20		5	20 - 25		3	25 - 30		3	2
Intervals	Tally Marks	Frequency																					
0 - 5		2																					
5 - 10		2																					
10 - 15		5																					
15 - 20		5																					
20 - 25		3																					
25 - 30		3																					
SHORT ANSWER TYPE QUESTIONS																							
26	The length of a rectangle is 2cm more than its breadth. If the perimeter of this rectangle is 28cm, find the length and breadth.	3																					
27	The weight of 20 students in a class is given as follows. Draw a frequency distribution table and answer the following questions. 45, 46, 50, 45, 47, 51, 46, 56, 65, 60, 45, 42, 47, 50, 50, 60, 65, 51, 47, 56. (i) Find the range. (ii) Find the arithmetic mean.	3																					
LONG ANSWER TYPE QUESTIONS																							
28	Construct a square of diagonal 6cm.	4																					