KENDRIYA VIDYALAYA SANGATHAN ,REGIONAL OFFICE, LUCKNOW
MID TERM EXAMINATION 2023-24

SUBJECT : MATHEMATICS **MAX. MARKS : 60**
CLASS:VIII **TIME: 2 Hr.30 Min**

Marking Scheme

Que	Solution	Marks
	SECTION-A	
1	(b) 0	1
2	(a) the identity for addition of rational numbers.	1
3	(d) 3(x + 3)	1
4	(a) Transposition	1
5	(b) 360°	1
6	(b) 135°	1
7	(c) 41	1
8	(b) 360°	1
9	(b) 10	1
10	(d) m^2-1 , m^2+1	1
11	(b) 36, 49	1
12	(a) m^3	1
13	(b)8	1
14	(a) 350 km	1
15	(b) 16	1
	SECTION-B	
16	For correct simplification Ans = ½	1 1
17	No. of sides= $\frac{360}{Exterior\ Angle}$ $= \frac{360}{24}$ = 15 OR i) Four sided polygon ii) opposite sides are parallel/equal	1 ½ ½ 1,1
18	Total no. of outcomes=3+1+1 Probability= $\frac{Favourable\ Outcomes}{Total\ no.of\ outcomes}$ Probability of green sector= 3/5 Probability of non-blue sector = 4/5	½ ½ ½ ½
19	LCM=90 smallest square number which is divisible by each of the numbers 6, 9 and 15 is = $90\times 2\times 5 = 900$ **OR** Correct $\sqrt{31.36}$ =5.6	1 1 2
20	Discount=840-714=126 Discount%= $\frac{126}{840}\times 100 = 15$	1 1
	SECTION-C	
21	$\frac{2m-m+1}{2} = \frac{3-m+2}{3}$ 5m=7 m = 7/5 **OR** $\frac{9t-6-8t-12+12}{12} = \frac{2}{3}$ $\frac{3t-18}{12} = \frac{2}{3}$ t =2	1 1 1 1 1 1
22	x =110 (using appropriate property) y = 40 (using appropriate property)	1 1

	z = 30 (using appropriate property)	1
23	least number which must be added to 525 so as to get a perfect square is 4 square root of the perfect square so obtained is 23	1.5 1.5
24	We have, 68600 = 2 × 2 × 2 × 5 × 5 × 7 × 7 × 7. In this factorisation, we find that there is no triplet of 5. So, 68600 is not a perfect cube. To make it a perfect cube we multiply it by 5. Thus, 68600 × 5 = 2 × 2 × 2 × 5 × 5 × 5 × 7 × 7 × 7 = 343000, which is a perfect cube. $\sqrt[3]{343000} = 70$	1 1 1
25	Let the money with Meena be x. The % of money left with her = 100-75= 25% Now, 25% of x = 600 x = Rs. 2400 **OR** Percentage of the people who like other games = 100%-(60+30)% = 10% Hence, 10% of people like other game. Number of people who like cricket = 60% of 50,00,000 = 60/100 × 50,00,000 = 30,00,000 Number of people who like football = 30% of 50,00,000 = 30/100 × 50,00,000 = 15,00,000 Number of people who like other games = 50,00,000 – (30,00,000 + 15,00,000) = 50,00,000 – 45,00,000 = 5,00,000	 1 1 1 1/2 1 1 1/2
	SECTION-D	
26	Total money spent = $14\frac{2}{3} + 30\frac{2}{3}$ $= 45\frac{1}{3}$ Money saved = $100 - 45\frac{1}{3}$ $= 54\frac{2}{3}$	1 1 1 1
27	f- 0.75 = 0.5f- 0.45 0.5f = 0.30 f =0.6 **OR** 15z-21-18z+22=32z-52-17 -3z+1=32z-69 35z=70 z =2	1.5 1.5 1 1 1 1 1
28	a) For correct figure b) 108 and 72	2 1+1
29	A = P $(1 - \frac{r}{100})^n$ A = 42000 $(1 - \frac{8}{100})^1$ A = 42000 × $\frac{23}{25}$ A = Rs. 38,640 **OR** A = P $(1 + \frac{r}{100})^n$ A = 320000 $(1 + \frac{2.5}{100})^2$ A = 320000 × $\frac{41}{40} \times \frac{41}{40}$ A = 3,36,200	1 1 1 1 1 1 1 1
30	i) B. Rs.22500 ii) A. Rs.9600 iii) D. 1:2 iv) A. Food	1 1 1 1