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

SUBJECT : MATHEMATICS
CLASS: VII

MAX. MARKS : 60
TIME: 2 Hr.30 Min

### **Marking Scheme**

Q.No.	Section A	marks
1	d	1
2	b	1
3	c	1
4	b	1
5	b	1
6	b	1
7	b	1
8	a	1
9	a	1
10	c	1
11	c	1
12	c	1
13	d	1
14	a	1
15	b	1

#### **Section: B**

16	Percentage of voters who didn't vote = 40%	1
	No. of voters who didn't vote =6000	1
	Or	
	Profit = Rs. 2000	1
	S.P of $TV = Rs. 12000$	1
17	Fall in temperature in 6 minutes = $4^{\circ}$ C × 6= 24 $^{\circ}$ C (-24)	1
	Final temperature of room = $45^{\circ}$ C - $24^{\circ}$ C = $21^{\circ}$ C	1
18	$\frac{12}{2} \times \frac{5}{2} = 4$ or	1+1
	5 3 25 3 15	1+1
	$\frac{1}{7} \times \frac{1}{5} = \frac{1}{7}$	
19	Let Raju's present age be x	0.5
	His father's age = $3x + 5$	0.5
	Equation $(3x+5=44)$	1
20	$x + 2x = 180^0$	1
	$x = 60^{0}$	1

#### **SECTION:** C

21	Students who like English = 8 Students who like Mathematics = 16	1 1
	Fraction of students who like Science = $\frac{2}{5}$	1
22	(i)Team B	1
	(ii)fourth over	1
	(iii) Third over	1
23	Let Parmit have x marbles	0.5
	Irfan has $5x + 7$ marbles	1
	5x + 7 = 37	0.5
	5x = 30	0.5
	x = 6	0.5

	Or	
	(i)10p = 90	1
	p=9	0.5
	$(ii)^2q = 6$	1
	q = 3	0.5
24	Checking the sum of 2 sides (all 3 pairs) of the triangle is greater than the 3 <sup>rd</sup> side,	2
	Triangle is possible	1
	Or	
	6+8=14 and $8-6=2$	1+1
	3 <sup>rd</sup> side will lie between 2cm and 14cm.	1
25	$I = \frac{PRT}{T}$	0.5
	100 3500×7×2	0.5
	$=\frac{3666000}{100}$	1
	= Rs. 490	1
	A = P + I = 3500 + 490 = Rs.3990	

## **SECTION:** D

(ii) $E = (-6)$ , $K = 6$ (iii) $-12$ (B) (iv) $-8$ Or Imark for each correct answer  27 (a)Mean $= \frac{840}{7} = 120$ (b) 5 days (c) arranging data in increasing order and finding median = 106 (d)Thursday and Sunday  28 (a) $\angle 4 = 110^{\circ}$ (b) Alternate interior angles (c) $\angle 2$ (d) $180^{\circ}$ 10  29 (a) $120^{\circ} + y = 180^{\circ}$ (linear pair) $y = 60^{\circ}$ $x + 50^{\circ} = 120^{\circ}$ (exterior angle property of triangle) $x = 70^{\circ}$ (b) $x + x + 50^{\circ} = 180^{\circ}$ $2x + 50^{\circ} = 180^{\circ}$ $2x + 50^{\circ} = 180^{\circ}$ (i)Number of children liked playing football = 25% of 40 = 10  Number of children who didn't like playing football = 30 (ii) $12\%$ of $x = 1080$	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1
	1
Or Imark for each correct answer 1  27 (a)Mean = $\frac{840}{7}$ = 120 (b) 5 days (c) arranging data in increasing order and finding median = 106 (d)Thursday and Sunday  28 (a) $\angle 4$ = 110° (b) Alternate interior angles (c) $\angle 2$ (d) 180° 12  29 (a)120° + y = 180° (linear pair) y = 60° x + 50° = 120° (exterior angle property of triangle) x = 70° (b) x + x + 50° = 180° 2x + 50° = 180° 2x = 130° x = 65°  30 (i)Number of children liked playing football = 25% of 40 = 10 Number of children who didn't like playing football = 30 (ii)12% of x = 1080 x = 9000	1
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(d)Thursday and Sunday  28   (a) $\angle 4 = 110^{\circ}$	1
28	1
(b) Alternate interior angles (c) $\angle 2$ (d) $180^{0}$ 29 (a) $120^{0} + y = 180^{0}$ (linear pair) $y = 60^{0}$ $x + 50^{0} = 120^{0}$ (exterior angle property of triangle) $x = 70^{0}$ (b) $x + x + 50^{0} = 180^{0}$ $2x + 50^{0} = 180^{0}$ $2x + 50^{0} = 180^{0}$ $2x = 130^{0}$ $x = 65^{0}$ 30 (i) Number of children liked playing football = 25% of 40 = 10 Number of children who didn't like playing football = 30 (ii) $12\%$ of $x = 1080$ $x = 9000$	1
$(c) \angle 2 \\ (d) 180^{0}$ $29 \qquad (a)120^{0} + y = 180^{0} \text{ (linear pair)} \\ y = 60^{0} \\ x + 50^{0} = 120^{0} \text{ (exterior angle property of triangle)} \\ x = 70^{0} \qquad 1$ $(b) x + x + 50^{0} = 180^{0} \\ 2x + 50^{0} = 180^{0} \qquad 0$ $2x + 50^{0} = 180^{0} \qquad 0$ $2x = 130^{0} \qquad 0$ $x = 65^{0} \qquad 0$ 30 (i)Number of children liked playing football = 25% of 40 = 10  Number of children who didn't like playing football = 30 $(ii)12\% \text{ of } x = 1080$ $x = 9000 \qquad 1$	
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Number of children who didn't like playing football = 30 (ii)12% of $x = 1080$ x = 9000	1
(ii) 12% of $x = 1080$ x = 9000	1
$\mathbf{x} = 9000$	1
or	1
(i) Let C.P of toy car = $Rs x$	0.5
	1
L CV	1
$  = $ $\times = 450$	0.5
(ii) 0.40 (decimal), $\frac{2}{5}$ (fraction)	1