

KENDRIYA VIDYALAYA SANGATHAN LUCKNOW REGION

SESSION ENDING EXAMINATION 2023-2024

CLASS-VIII


SUBJECT-MATHEMATICS

MARKING SCHEME

Time Allowed: 2Hrs. 30 Mins.

Maximum Marks: 60

Q.No.		Marks
Q.1	b) 1	1
Q.2	a) 3, 4, 5	1
Q.3	b) 3	1
Q.4	b) 3	1
Q.5	c) 0	1
Q.6	b) $24ab^3$	1
Q.7	d) 10 cm	1
Q.8	c) 52 cm	1
Q.9	b) 1	1
Q.10	c) $\frac{3}{5}$	1
Q.11	b) Speed and time taken	1
Q.12	a) $6pqr$	1
Q.13	c) $14pq$	1
Q.14	a) (0,0)	1
Q.15	d) (6, 3)	1
Q.16	$5x - 3x = 5 - 9$ $x = -2$	1 1
Q.17	square root of the decimal number $51.84 = 7.2$ OR Prime Factorisation = $2 \times 2 \times 2 \times 2 \times 17 \times 17$ Square root = $2 \times 2 \times 17 = 68$	2 1 1

Q.18	Area = 0.88 m^2 OR Area of rhombus = 45.0 cm^2	2
Q.19	Expanded Form = $1 \times 1000 + 4 \times 100 + 2 \times 10 + 5 \times 1 + 3 \times \frac{1}{10} + 6 \times \frac{1}{100}$	2
Q.20	$5^m \div 5^{-3} = 5^5$ $5^{m-(-3)} = 5^5$ $5^{m+3} = 5^5$ $m + 3 = 5$ $m = 2$	$\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$
Q.21	$8x + 4 = 3(x - 1) + 7$; $8x + 4 = 3x - 3 + 7$; $8x - 3x = 0$; $x = 0$ For Checking:	2 1
Q.22	(i) Winter (ii) Winter - 150° , Rainy - 120° , Summer - 90° . (iii) 	1 1 1
Q.23	$3l(l - 4m + 5n)$ from $4l(10n - 3m + 2l)$ $(40ln - 12lm + 8l^2) - (3l^2 - 12lm + 15ln)$ $40ln - 12lm + 8l^2 - 3l^2 + 12lm - 15ln$ $25ln + 5l^2$ OR $12x^2 - 15x + 3$ values for $x = 3$ is 66	1 1 1 2 1
Q.24	Area of the four walls of the room = Perimeter of the base \times Height of the room $= 2(l + b) \times h = 2(12 + 8) \times 4$ $= 2 \times 20 \times 4 = 160 \text{ m}^2$ total cost of white washing = Rs1280	2 1
Q.25	The train will cover a distance of 25 km in 20 minutes. 200 minutes or 3 hours 20 minutes will be required to cover a distance of 250 kilometres.	$1\frac{1}{2}$ $1\frac{1}{2}$

Q.26	(i) Light (ii) Classical (iii) 200 (iv) 300	1 1 1 1														
Q.27	(i) $p^4 - 81 = (p^2)^2 - (3^2)^2$ $(p^2 + 3^2)(p^2 - 3^2) = (p^2 + 3^2)(p + 3)(p - 3)$ (ii) $p^2 + 6p + 8 = (p + 2)(p + 4) =$	2 2														
Q. 28	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Number of spokes</td> <td style="width: 12.5%;">4</td> <td style="width: 12.5%;">6</td> <td style="width: 12.5%;">8</td> <td style="width: 12.5%;">10</td> <td style="width: 12.5%;">12</td> <td style="width: 12.5%;">15</td> </tr> <tr> <td>Angle between a pair of consecutive spokes</td> <td>90°</td> <td>60°</td> <td>45°</td> <td>36°</td> <td>30°</td> <td>24°</td> </tr> </table>	Number of spokes	4	6	8	10	12	15	Angle between a pair of consecutive spokes	90°	60°	45°	36°	30°	24°	
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Angle between a pair of consecutive spokes	90°	60°	45°	36°	30°	24°										
Q. 29	Diameter of cylindrical container = 14 cm Radius of cylindrical container r = 7 cm Height of cylindrical container = 20 cm Height of the label h = 20 - 2 - 2 = 16 cm Curved surface area of label = $2\pi rh = 2 \times 22/7 \times 7 \times 16 = 704 \text{ cm}^2$ Hence the area of the label of 704 cm ²	1 2 1														
Q.30	For correct graph	4														