

KENDRIYA VIDYALAYA SANGATHAN, RAIPUR REGION  
SESSION ENDING EXAM (2024-25)  
SUBJECT – MATHEMATICS (Marking Scheme)

CLASS VII

|     | <b><u>SECTION-A</u></b>                                                          |                                 |
|-----|----------------------------------------------------------------------------------|---------------------------------|
|     | <b>Q1 – 10 are MCQs</b>                                                          |                                 |
| 1.  | (b) $\frac{4}{6}$                                                                | 1                               |
| 2.  | (a) 1                                                                            | 1                               |
| 3.  | (d) $12 \text{ cm}^2$                                                            | 1                               |
| 4.  | c) $\frac{\text{circumference}}{\text{diameter}}$                                | 1                               |
| 5.  | (c) $-5 \times x \times x \times y \times y \times z$                            | 1                               |
| 6.  | (c) 3                                                                            | 1                               |
| 7.  | (b) $3^3 = 9$                                                                    | 1                               |
| 8.  | (a) Cylinder                                                                     | 1                               |
| 9.  | (a) Rectangle                                                                    | 1                               |
| 10. | (d) 9                                                                            | 1                               |
|     | <b>Q 11 – 15 are fill in the blanks type.</b>                                    |                                 |
| 11. | $2/9$                                                                            | 1                               |
| 12. | $3 \text{ cm}^2$                                                                 | 1                               |
| 13. | $15xy$                                                                           | 1                               |
| 14. | 1                                                                                | 1                               |
| 15. | 4                                                                                | 1                               |
|     | <b><u>SECTION-B</u></b>                                                          |                                 |
| 16. | Correct representation<br>OR<br>$5 \div 25/8$<br>$5 \times 8/25 = 8/5$           | 1+1<br>1<br>1                   |
| 17. | circumference of a circle $= \pi d$<br>$= \frac{22}{7} \times 28 = 88\text{cm.}$ | 1<br>1                          |
| 18. | $(-10)^2 - 2(-10) - 100 = 100 + 20 - 100 = 20$                                   | $\frac{1}{2} + 1 + \frac{1}{2}$ |
| 19. | $2 \times 2 \times 2 \times 3 \times 3 \times 3 \times 3 = 2^3 \times 3^4.$      | 1+1                             |
| 20. | (i) 12      (ii) No                                                              | 1+1                             |

|     |                                                                                                                                                                                                                                                                                                                                                                                                                    |                                             |
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|     |                                                                                                                                                                                                                                                                                                                                                                                                                    |                                             |
|     | <b>SECTION-C</b>                                                                                                                                                                                                                                                                                                                                                                                                   |                                             |
| 21. | For each correct rational number – 1 mark                                                                                                                                                                                                                                                                                                                                                                          | 1+1+1                                       |
| 22. | <p>(a) area of the parallelogram PQRS = 12 cm x 7.6 cm = 91.2 cm<sup>2</sup></p> <p>(b) PS x QN = 91.2 or QN = 91.2/8 = 11.4 cm</p> <p>Or</p> <p>Diameter = 1.6 cm Radius = 1.6 / 2 = 0.8 cm</p> <p>Area of circle = <math>\pi r^2</math></p> <p>Area of circular table top = 3.14 × 0.8 × 0.8</p> <p>= 2.0096 cm<sup>2</sup></p> <p>Cost of polishing the table top = 2.0096 × 15</p> <p>= Rs. 30.14 (approx)</p> | <p>1 ½ + 1 ½</p> <p>1</p> <p>1</p> <p>1</p> |
| 23. | (i) $z^2$ (ii) $3mn + 5$ (iii) $ab - (a + b)$ .                                                                                                                                                                                                                                                                                                                                                                    | 1+1+1                                       |
| 24. | $\frac{3^5 \times 10^5 \times 25}{5^7 \times 6^5} = \frac{3^5 \times (2 \times 5)^5 \times 5^2}{5^7 \times (2 \times 3)^5} = \frac{3^5 \times 2^5 \times 5^5 \times 5^2}{5^7 \times 2^5 \times 3^5} = 1$                                                                                                                                                                                                           | 1+1+1                                       |
| 25. | (i) 3 (ii) 5 (iii) 2                                                                                                                                                                                                                                                                                                                                                                                               | 1+1+1                                       |
|     | <b>SECTION-D</b>                                                                                                                                                                                                                                                                                                                                                                                                   |                                             |
| 26. | <p>(i) <math>2a^2 + 2ab + 3 - ab = 2a^2 + ab + 3</math></p> <p>The given expression is a Trinomial</p> <p>(ii) For finding the correct value of the expression for given value of a and b. Correct answer: 38</p>                                                                                                                                                                                                  | <p>1</p> <p>1</p> <p>2</p>                  |
| 27. | <p>(i) (a) 86045 (b) 900230</p> <p>(ii) (a) <math>7 \times 10^6</math> (b) <math>3.90878 \times 10^4</math></p>                                                                                                                                                                                                                                                                                                    | <p>1+1</p> <p>1+1</p>                       |
| 28. | <p>(a) 3 (b) 2 (c) 6 (d) infinite (e) 0 (f) 0 (g) 2 (h) 1</p> <p>OR</p> <p>a. Square or any correct answer</p> <p>b. (i) Regular Hexagon</p> <p>(ii) 120°, 180°, 240°, 300°, 360°</p>                                                                                                                                                                                                                              | <p>½ x 8</p> <p>1</p> <p>1</p> <p>2</p>     |
| 29. | <p>(i) Area of 2 small circles = <math>2 \times \frac{22}{7} \times 3.5 \times 3.5 = 77 \text{ cm}^2</math></p> <p>(ii) Area of bigger circle = <math>\frac{22}{7} \times 14 \times 14 = 616 \text{ cm}^2</math></p> <p>Area of rectangle = 3 cm<sup>2</sup></p> <p>Area of the remaining sheet = 616 – 77 - 3 = 536 cm<sup>2</sup></p>                                                                            | <p>1</p> <p>1</p> <p>1</p> <p>1</p>         |
| 30. | <p>(i) For each correct view 1 mark</p> <p>(ii) rectangle</p> <p>(iii) 4cm, 2 cm, 2 cm</p>                                                                                                                                                                                                                                                                                                                         | <p>3</p> <p>½</p> <p>½</p>                  |