

MARKING SCHEME
CLASS- VIII
SUBJECT – MATHEMATICS

Section- A

- Q.1. 0 (1)
- Q.2. 1/16 (1)
- Q.3. 2(lb+bh+hl) (1)
- Q.4. 15 (1)
- Q.5. 7(x-6) (1)
- Q.6. $\frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} \times \frac{1}{2}$ (1)
- Q.7. 6 (1)
- Q.8. 6 (1)

Section-B

- Q.9. $(a+b)^2 = a^2+2ab+b^2$ (1/2)
- $(102)^2 = (100+2)^2$ (1/2)
- $=10404$ (1)
- Q.10. $a^2-b^2 + b^2-c^2 + c^2-a^2$ (11/2)
- $a^2+b^2+c^2-a^2-b^2-c^2$ (1/2)
- Q.11. Euler's Formula $F+V-E = 2$ (1)
- $F = 8$ (1)
- Q.12. $\frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} = 1/2 \times \frac{1}{2} \times \frac{1}{2}$ (1/2)
- $\frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} = 45 \times \frac{1}{2}$ (11/2)

Q.13. एक घन का आयतन 27 घन मीटर है। इसका एक किनारा कितना लंबा है? (2)

Q.14. $x = 7$ (1)

$x = 6$ (1)

. Section- C

Q.15. $(4m + 5n)^2 = 16m^2 + 40mn + 25n^2 + 25m^2 + 40mn + 16n^2$ (2)

$= 41m^2 + 80mn + 41n^2$ (1)

Q.16. (i) No (1)

(ii) Yes (1)

(iii) Yes (1)

Q.17. TSA = $2\pi r(r + h)$ (1)

$= 2 \times 22 \times \frac{7}{7} (7+3)$ (1)

$= 440 \text{ m}^2$ (1)

Q.18.. Direct Proportion (1/2)

$\frac{6}{840} = \frac{5}{x}$ (1)

$x = 700$ bottles (1^{1/2})

Q.19. Inverse Proportion (1/2)

$20 \times 6 = 30 \times x$ (1)

$x = 4$ days (1/2)

value (1)

Q.20. $(a^2 - b^2)^2 = (a^2)^2 - (b^2)^2$ (1)

$= (a^2 + b^2)(a^2 - b^2)$ (1)

$= (a^2 + b^2)(a+b)(a-b)$ (1)

$$\square.21.. \quad 2 + 1 + y + 5 = 9 \quad (1)$$

$$y + 8 = 9 \quad (1)$$

$$y = 1 \quad (1)$$

$$\square.22. \quad \square - (-3) = 5 \quad (11/2)$$

$$\square = 2 \quad (11/2)$$

Section- D

$$\square.23. \quad \text{Volume of cuboid} = l b h \quad (1)$$

$$= 60 \times 54 \times 30 \text{ cm}^3 \quad (1)$$

$$\text{Volume of cube} = l^3 \quad (1)$$

$$= 6 \times 6 \times 6 \text{ cm}^3$$

$$\text{No. of cubes} = \frac{60 \times 54 \times 30}{6 \times 6 \times 6} \quad (1)$$

$$= 450$$

$$\square.24. \quad = [y^2 + 5y + 2y + 10] \div (y + 5) \quad (1)$$

$$= [(y + 5)(y + 2)] \div (y + 5) \quad (2)$$

$$= (y + 2) \quad (1)$$

25. draw the graph 2 marks

(i) 20km 1 mark

(ii) 7.30 a.m. 1 mark

$$\square.26. \quad = 5^2 \times t^4 \quad (1)$$

$$5^{-3} \times 5 \times 2 \times t^{-8}$$

$$= \frac{5^4 t^4}{2}$$

(2)

$$= \frac{625 t^4}{2} \quad (1)$$

