

KENDRIYA VIDYALAYA SANGHATHAN
BENGALURU REGION
SUMMATIVE ASSESSMENT -II (MARCH 2014)

CLASS : VII

MARKING SCHEME

SET -1

Section A

1)0 2)3 (3) AB=PQ (4) 10:1 (5) πd cm (6) 3 (7) scalene triangle (8) pyramid

Section B

9) Identifying the 3 congruent parts---- (1 ½) RHS congruence rule (1/2)

10) Drawing the number line(1)

Marking the points(1)

11) $2+3=5$

$$\frac{2}{5} \times 100 = 40 \% \text{ ----- (1)} \quad \frac{3}{5} \times 100 = 60\% \text{ ----- (1)}$$

12) $1000 = (2 \times 2 \times 2) \times (5 \times 5 \times 5) = 2^3 \times 5^3$ (1+1)

13) (a) order- 4 ,angle of rotation- 9 (b) order- 6 , ,angle of rotation- 60(1+1)

14) $a^2 + ab + b^2$; a =3 , b = (-2)

Substitution ----- (1) , calculation & arriving at the answer =7 ----- (1)

Section C

15) cost price = Rs 3,50,000 selling price = Rs 3,70,000

$$\text{Profit} = \text{S.P} - \text{C.P} \text{(1/2)}$$

$$= 3,70,000 - 3,50,000 = \text{Rs } 20000 \text{(1/2)}$$

$$\text{Profit \%} = \frac{\text{profit}}{\text{original price}} \times 100 \text{(1/2)}$$

$$= \frac{20000}{350000} \times 100 \text{(1/2)}$$

$$= \frac{40}{7} = 5\frac{5}{7} \% \text{(1)}$$

$$16) \quad \left(-2\frac{1}{3}\right) + 4\frac{3}{5} = \left(-\frac{7}{3}\right) + \frac{23}{5} \dots\dots\dots(1)$$

$$\text{LCM} = 15 \quad \text{-----}(1)$$

$$= \frac{-35+69}{15} = \frac{34}{15} = \dots\dots\dots(1)$$

$$17) \quad 3x - y + 11 + (-y + 11) = 3x - 2y + 22 \dots\dots\dots(1)$$

$$\left(3x - 2y + 22\right) - \left(3x - y - 11\right) \text{ ----- } (1/2)$$

$$= 3x - 2y + 22 - 3x + y + 11 \dots(1/2)$$

$$= -2y + 33 \dots\dots\dots(1)$$

$$18) \quad 4(2x - 1) + 3x + 10 = 8x - 4 + 3x + 10 = 11x + 6 \dots\dots\dots(2)$$

$$11 \times 2 + 6 = 22 + 6 = 28 \dots\dots\dots(1)$$

$$19) \quad \frac{3 \times 7^2 \times 11^8}{21 \times 11^3} = \frac{3 \times 7^2 \times 11^8}{3 \times 7 \times 11^3} \dots\dots\dots(1)$$

simplifying \dots\dots\dots(1)

$$\text{Ans} = 7 \times 11^5 \dots\dots\dots(1)$$

20) (a) circle (b) square (c) triangle

21) (a)

(i) AB=AC (Given) (ii) BD= CD (D is the mid-point) (iii) AD=AD (common side) $\left(1\frac{1}{2}\right)$

(b) yes, \dots(1/2) SSS congruence rule

22) diameter = 9.8 m , radius = $9.8/2 = 4.9$ m \dots\dots\dots(1)

$$\text{Area of a circle} = \pi r^2 \dots\dots\dots(1)$$

$$= \frac{22}{7} \times 4.9 \times 4.9 = 75.46 \text{ m}^2 \dots(1)$$

Section D

23) money borrowed= Rs 9500

Time = 4years , rate of interest = 7%(1/2)

$$I = P \times R \times T / 100 \dots\dots (1)$$

$$= \frac{9500 \times 7 \times 4}{100} = \text{Rs } 2660 \dots\dots(1) \text{ Amount} = \text{principal} + \text{interest} \dots(1)$$

$$A = 9500 + 2660 = \text{Rs } 12160 \dots\dots(1/2)$$

24) Area of square ABCD = S x S = 100 x 100 = 10000 m²

$$PQ = 100 - (5 + 5) = 100 - 10 = 90 \text{ m}$$

$$\text{Area of square PQRS} = S \times S = 90 \times 90 = 8100 \text{ m}^2$$

$$\therefore \text{Area of the path} = (10000 - 8100) \text{ m}^2 = 1900 \text{ m}^2$$

Cost of fencing 1 m² = Rs 250 / 10

∴ Cost of fencing 1900 m² = Rs 250 x 1900 = Rs 47,500

25)

Area of shaded portion = area of ABCD - area of (ΔEBC + ΔAEF) (1)
 Area of ABCD = 180 cm² (1)
 Area of ΔAEF = 30 cm² ΔEBC = 40 cm² (1)
 Area of shaded portion = 180 - 70 = 110 cm²

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(a) $\frac{5^6 \times 5^4}{5^7}$ (1) (b) $\frac{2^8 \times a^5}{2^6 \times a^3}$ (1)
 $= \frac{5^{10}}{5^7} = 5^3$ (1) $= 2^2 \times a^2$ (1)