

Q1-

Sol- Lateral surface area of cuboid =  $2h(l+b)$

$$= 2 \times 6.5 (26+14)$$

$$= 13 \times 40 \text{ m}^2$$

$$= 520 \text{ m}^2$$

Q2-

Sol- Total surface area of cuboid =  $2(lb+bh+lh)$

$$\text{L.S.A of cube} = 6a^2$$

$$= 6 \times 6 \times 6$$

$$= 216$$

$$2(6 \times 6 + 6 \times 6 \times 6 \times 6)$$

$$= 2(36 + 36 + 36)$$

$$= 2 \times 108$$

$$= 216 \text{ cm}^2$$

Q3-

Sol-

$$l = \sqrt{r^2 + h^2}$$

Q4-  
b) Sol- C.S.A of cone =  $2\pi r l = 4070$

$d = 70 \text{ cm}$

$r = \frac{70}{2} \text{ cm} = 35$

$4070 = 2 \times \underbrace{22}_{\nearrow} \times \overset{5}{35} \times l$

$4070 = 44 \times 110 \times l$

$4070 = 4840 \times l$

~~$\frac{4070}{4840}$~~

$l = \frac{4840}{4070}$

Q5-

Sol- C.S.A of cylinder =  $2\pi r h$

$r \quad R^2 \quad A \quad H$

Ratio =  $\frac{2\pi R^2 H}{2\pi r h}$

=  $\frac{r \times R^2 \times H}{r \times h} = R^2$

Q6-  
Sol-

$$C.S.A \text{ of } = 2\pi rh$$

$$= 2 \times \frac{22}{7} \times 1.75 \times 2.5$$

$$= 44 \times 0.625$$

$$= 27.5$$

Q7-  
Sol-

$$C.S.A \text{ of cone} = 2\pi rl$$

$$= 2 \times \frac{22}{7} \times \sqrt{\quad} \times 25$$

$$l = \sqrt{r^2 + h^2}$$

$$l = \sqrt{7^2 + 24^2}$$

$$l = \sqrt{49 + 576}$$

$$l = \sqrt{625}$$

$$l = \sqrt{25 \times 25}$$

$$l = 25$$

$$= 44 \times 25$$

$$= 1100$$

$$= 1100 \times 2.5$$

$$= 2750 \text{ m}^2$$

Q 8-

Sol -  $D = 16$      $R = \frac{d}{2} = \frac{16}{2} = 8$

$d = 12$      $r = \frac{d}{2} = \frac{12}{2} = 6$

C.S.A of hemisphere =  $2\pi r^2$

~~$= 2 \times 22 \times 8 \times 8$~~      ~~$2\pi R \times 2\pi r^2$~~

$= \frac{R^2}{r^2} = \frac{4^2 \times 4^2}{6 \times 6}$   
 $= \frac{16}{3}$

$= \frac{16}{3} \approx 5.33$

$1.77 \text{ cm}^2$

Cost = Rate  $\times$  area

$= 2 \times 1.77$

$= 3.54$

Q9-  
Sol-

$$\text{T.S.A of cuboid} = 2(Lb + bh + la)$$

$$\text{Bigger} = 2(25 \times 30 + 20 \times 5 + 25 \times 5)$$

$$= 2(500 + 100 + 125)$$

$$= 2 \times 725$$

$$= 1450 \text{ cm}^2$$

$$\text{Smaller} = 2(15 \times 12 + 12 \times 5 + 15 \times 5)$$

$$= 2(180 + 60 + 75)$$

$$= 2 \times 315$$

$$= 630 \text{ cm}^2$$

$$\text{Overlap} = \frac{\cancel{1450} \times \cancel{5}}{\cancel{100} \times 2}$$

$$= \frac{145}{2} = 72.5$$

$$31.5$$

$$\text{Overlap} = \frac{\cancel{630} \times \cancel{9}}{\cancel{100} \times 2}$$

$$= 31.5$$

Cost = Rate  $\times$  area

$$\text{Cost} = 4 \text{ per } 1000 \times 72.5$$

$$= \frac{29000}{1000}$$

$$= 29 \times 250$$

$$= 725$$

$$\text{Cost} = 4 \text{ per } 1000 \times 31.5$$

$$= \frac{1260}{1000}$$

$$= 1.26 \times 250$$

$$= 126 \times 250$$

$$= 3150$$