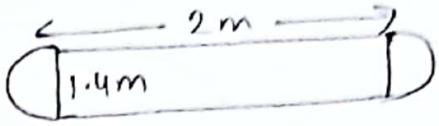
(Exercise :- 15C)

Q2 Find the area

- Area of circle $= \pi r^2$

$\pi = \frac{22}{7}$ or 3.14



(a) Area of figure = Area of Rectangle + Area of circle

$= l \times b + \pi r^2$

$= (2 \times 1.4) + \left(\frac{22}{7_1} \times \frac{0.1}{0.7} \times 0.7\right) \left[\because r = \frac{d}{2} = 0.7\right]$

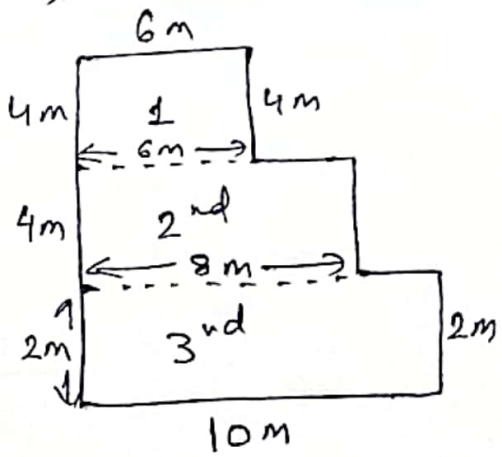
$= 2.8 + 1.54$

$= 4.34 m^2$.

(b). length of Rectangle 1st = 6m

Breadth = 4m

Area $= 6 \times 4 = 24 m^2$



length of Rectangle II = 10m − 2m

= 8m

Breadth = 4m

Area $= 8 \times 4 = 32 m^2$.

length of Rectangle III = 10m

Breadth of Rectangle = 2m.

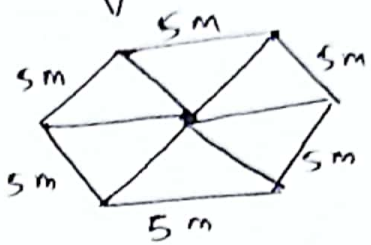
Area $= 10 \times 2 = 20 m^2$.

Total Area = 24 + 32 + 20

$= 76 m^2$

(c) Area of fig = Area of 6 equilateral triangle

Side = 5m.



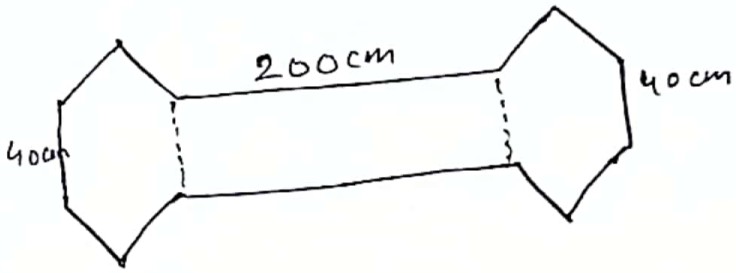
$= 6 \times \frac{\sqrt{3}}{4} a^2$

$= 6 \times \frac{0.433}{1.732} \times 5 \times 5$

$= 64.95 \text{ m}^2$

(d) $l = 200 \text{ cm}$

$b = 40 \text{ cm}$



Area $= l \times b$

$= 200 \times 40$

$= 8000 \text{ cm}^2$

Area of 6 equilateral $\Delta = 2 \times 6 \times \frac{\sqrt{3}}{4} a^2$

$= 2 \times 6 \times \frac{1.732}{4} \times 40 \times 40$

$= 4800 \times 1732$

$= 8313.600$

Area of figure $= 8000 + 8313.600$

$= 16313.600 \text{ cm}^2$.

(e) Area of trapezium I $= \frac{1}{2} \times$ sum of ||el sides $\times h$

$= \frac{1}{2} \times (12+12) \times 6$

$= \frac{1}{2} \times 24 \times 6$

$= 72\ m^2$

Area of trapezium II $= \frac{1}{2} \times (16+12) \times 6$

$= \frac{1}{2_1} \times \overset{14}{\cancel{28}} \times 6$

$= 84\ m^2$

Area of trapezium III $= \frac{1}{2} \times (12+12) \times 6$

$= \frac{1}{2} \times 24 \times 6$

$= 72 m^2$

Area of Total figure $= 72 + 84 + 72$

$= 228\ m^2$

(f) Area of equivalateral $\Delta = \frac{\sqrt{3}}{4} a^2$

$= \frac{1.732}{\cancel{4}} \times \cancel{4} \times 4$

$= 6.928\ m^2$.

Area of 12 Δ equilateral $= 6.928 \times 12$

$= 83.136\ m^2$.

(g). Area of Rectangle = $l \times b$

$= 10 \times 5$

$= 50 m^2$

Area of Square = Side × side

$= 10 \times 10$

$= 100 m^2$

Area of trapezium = $\frac{1}{2} \times$ (sum of ||el sides) × h.

$= \frac{1}{2} \times (16 + 10) \times 5$

$= \frac{1}{2} \times 26^{13} \times 5$

$= 65.$

Area of figure = $50 + 100 + 65 = 215 m^2$.

Sol 3. Area of hexagon = 6 × Area of equivalateral △

$= 6 \times \frac{\sqrt{3}}{4} \times 3 \times 3$ (0.866 × 3 = 2.598)

$= 23.382 m^2$

Sol 4 (a) Area of Rectangle = 50×30

$= 1500 cm^2$

Area of 2 Triangle = $2 \times \frac{1}{2} \times 30 \times 10$

$= 300 cm^2$

Total Area = Area of Rect + Area of △'s

$= 1500 + 300$

$= 1800 cm^2$.

(b). Area of trapezium $= \frac{1}{2} \times h \times$ sum of Parallel Sides

$= \frac{1}{2} \times 7 \times \cancel{20}^{10} = 70cm^2$

Area of square = side x side

$= 8 \times 8 = 64cm^2$.

Total Area = Area of trapeziums + Area of square

$= 70 + 64$

$= 134cm^2$.