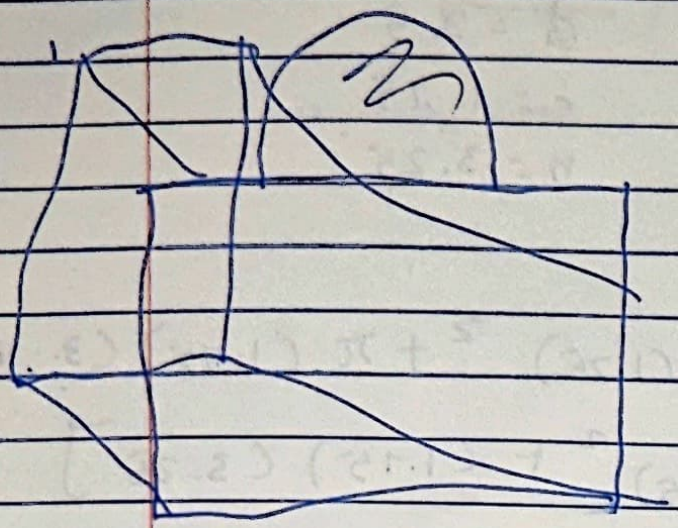
Session - 2



$S_1 = R_1 + R_2$

$= (a^2 - \pi r^2) + (2\pi r^2)$

$= a^2 + \pi r^2$

$S = 5^2 + \pi (2.1)^2$

$S = 25 + \frac{22}{7}\left(\frac{21}{10}\right)\left(\frac{21}{10}\right)$

$S = 25 + \frac{22(63)}{100}$

$S = 25 + 13.86$

$S = 38.86 cm^2$

$S = 25$

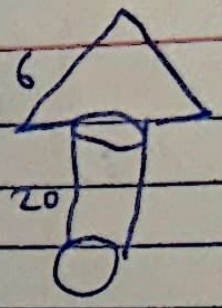
$5S = 5(25$

$= 125$

$TSA = S_1 + 5S$

$= 38.86 + 125$

$= 163.86 cm^2$



2. $\ell^2 = \sqrt{6^2 + 2.5^2}$

$\ell = 6.5$

$\Rightarrow \pi r l + (\pi r_2^2 - \pi r_1^2)$

$\Rightarrow \frac{22}{7} \times 6.5 \times 2.5 + \left(\frac{22}{7}\right)(2.5^2 - 1.5^2)$

$= \frac{22}{7}\left(\frac{65}{10} \times \frac{25}{10} + \frac{22}{7} \times \frac{25}{10} \times \frac{25}{10} \times \frac{15}{10} \times \frac{15}{10}\right)$

$= \frac{22}{7}\left[\frac{65(25)}{100} + \frac{625 - 225}{100}\right]$

$= \frac{22}{7}\left[\frac{1625 + 400}{100}\right]$

$= \frac{22}{7}\left(\frac{2025}{100}\right)$

$=$

625
225
400

8.89
7 | 62.25
56
62
56
65
63
2

Yellow $\Rightarrow 2\pi(1.5)(20) + \pi(1.5)^2$

$= \pi\left[2 \times 1.5 \times 20 + 1.5 \times 1.5\right]$

$= \pi\left[60 + 2.25\right)$

$= \frac{22}{7} \times 62.25$

8.