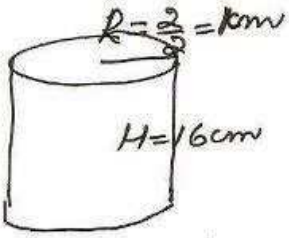
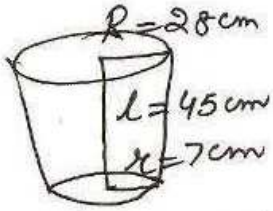
(11) no of bricks
$= \frac{\text{vol. of wall}}{\text{vol. of a brick}}$
$= \frac{270 \times 300 \times 350 \times 100000}{225 \times 1125 \times 875}$
$= 112000$ (B)

(12)


$\frac{1}{2}$ vol. of 1 Sphere = vol of cyl.
$\frac{1}{2} \times \frac{4}{3}\pi r^3 = \pi R^2 H$
$16 r^3 = 1 \times 1 \times 16$
$r = 1$ cm
$\therefore d = 2r = 2$ cm (C)

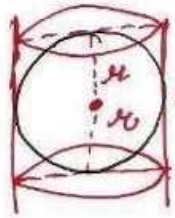
(13)


$CSA = \pi l (R+r)$
$= \frac{22}{7} \times 45 (28+7)$
$= \frac{22 \times 45 \times 35}{7}$
$= 4950 \text{ cm}^2$ (A)

(14)


capacity $= 2 \times \frac{2}{3}\pi r^3 + \pi r^2 h$
$= \pi r^2 \left(\frac{4r}{3} + h\right)$
$= \frac{22}{7} \times 0.5^2 \left(1.5 + \frac{4}{3} \times \frac{0.5}{2}\right)$
$= \frac{11 \times 0.5^2}{7 \times 2} (1.5 + \frac{1}{3})$
$= \frac{11 \times 0.5^2}{7 \times 2} \left(\frac{5.5}{3}\right)$
$= \frac{15.125}{42}$
$= 0.36 \text{ cm}^3$ (A)

(15) CSA $= 4\pi r^2$ (A)

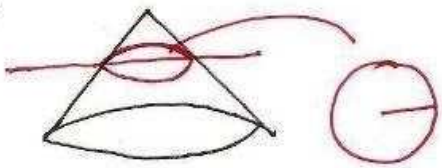
(16)


2r cm (B)

(17) (C) remain unaltered

(18)


capacity $= \frac{1}{3}\pi h (R^2 + r^2 + Rr)$
$= \frac{1}{3} \times \frac{22}{7} \times 35 (22^2 + 12^2 + 22 \times 12)$
$= \frac{110}{3} \times 4 (121 + 36 + 66)$
$= \frac{110 \times 4}{3} \times 223$
$= 32706.67 \text{ cm}^3$
$= 32.7 \text{ l.}$ (A)

(19)

circle (A)