VIII- Mathematics Assignment No. -05- Mensuration

Q1. Find the Volume, C.S.A. and T.S.A of a right circular cylinder whose height and radius of the base are 20cm and 14cm respectively.

Q2. Find the cost of digging a well 2m in radius and 14m deep at the rate of Rs 1.20 per cubic metre.

Q3. The circumference of the base of a right circular cylinder is 88cm. If the height is 42cm, find the Volume of the cylinder.

Q4. 10 cylindrical pillers of a building have to be painted. If the diameter of each piller is 50cm and the height is 4m. What will be the cost of painting them at the rate of 50 paisa per square metre. (Take $\pi = 3.14$)

Q5. A rectangular sheet of paper 44cm long and 33cm broad is rolled in two different ways to form two different cylinders. Find the Volumes of the cylinders in each case.

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Q6. A powder tin has a square base with side 8cm and height 13cm. Another is cylindrical with the radius of its base 7cm. and its height 15cm. Find the difference in their capacities.

Q7. Fill the gaps in the following table.

Cylinder →	r (cm)	h (cm)	CSA (cm)	Vol (cm)
A	7	—	—	1540
B	—	14	308	—
C	—	10.5	—	6468
D	7	—	616	—

Q8. The diameter of a road roller, 1m 40cm long is 80cm. If it takes 600 revolutions to level a playground, find the cost of levelling the ground at 75 paisa per square metre.

ANSWERS:-

(Q1) Vol = 12320 cm^3
CSA = 3520 cm^2
TSA = 4752 cm^2

(Q2) Rs 211.20

(Q3) 25872 cm^3

(Q4) Rs 31.20.

(Q5) (i) 3811.5 cm^3
(ii) 5082 cm^3

(Q6) 1478 cm^3

(Q7) (A) h = 10cm
CSA = 440 cm^2

(B) r = 3.5cm
Vol = 539 cm^3

(C) r = 14cm
CSA = 924 cm^2

(D) h = 14cm
Vol = 2156 cm^3

(Q8) Rs 1584.