## **Tuition Test (Mathematics) 2022**

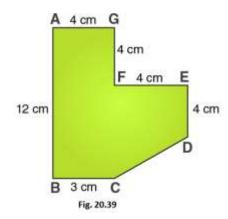
## 8 Class

Date = 24-12-2022 Chapter = Mensuration

MM = 30

Note: All the Questions are mandatory

- Q1. The difference between outside and inside surfaces of a cylindrical metallic pipe 14cm long is 44 cm2. If the pipe is made of 99 cm3 of metal, find the outer and inner radii of the pipe.
- Q2. A cylindrical vessel open at the top has a base diameter 21 cm and height 14 cm. Find the cost of tin plating its inner part at the rate of Rs.5 per 100 cm<sup>2</sup>.
- Q3. Find the area of the field shown in Fig. 20.39 by dividing it into a square, a rectangle and a trapezium.



- Q4. The dimensions of a rectangular box are in the ratio of 2: 3: 4 and the difference between the cost of covering it with sheet of paper at the rates of Rs 8 and Rs 9.50 per m<sup>2</sup> is Rs 1248. Find the dimensions of the box.
- Q5. A rectangular sheet of paper 30 cm  $\times$  18 cm be transformed into the curved surface of a right circular cylinder in two ways i.e., either by rolling the paper along its length or by rolling it along its breadth. Find the ratio of the volumes of the two cylinders thus formed.
- Q6. The difference between inside and outside surfaces of a cylindrical tube 14 cm long is 88 sq. cm. If the volume of the tube is 176 cubic cm, find the inner and outer radii of the tube.