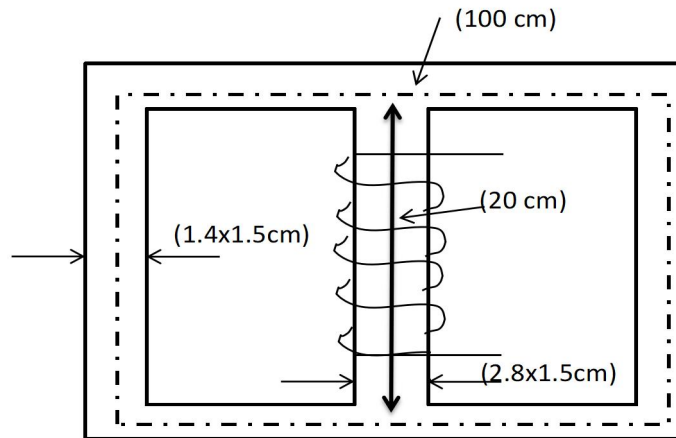


**PSG COLLEGE OF TECHNOLOGY, COIMBATORE - 641 004**  
**DEPARTMENT OF PHYSICS**  
**Tutorial Test - 2      Date: 02.12.2024**  
**23Z102 – Basics of Electrical and Electronic Systems**

**(2 x 5 mark = 10 mark)**

- 1). The magnetic circuit shown below has a cast steel core of relative permeability 1200. The dimensions are as marked in the figure. The centre limb has 250 turns of wire closely wound around. Find the current required to produce a flux of 1.4mWb in the middle limb.



- 2) Discuss the various loss occurs in the transformer and explain the methods to minimize it.