# KING FAHD UNIVERSITY OF PETROLEUM & MINERALS

## ELECTRICAL ENGINEERING DEPARTMENT

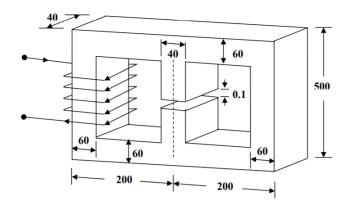
#### Dr. Ibrahim O. Habiballah

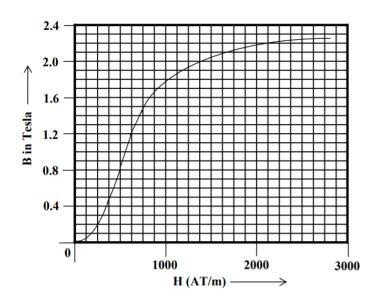
### **EE-306**

## **Key Solution**

Quiz 2 Sec.: 5 I.D.: Ser#: Name:

Consider the shell core shown below. Its *B-H* curve is as shown. The flux density in the air-gap is 0.8 Tesla. Ignore fringing effect.





- Q.1 The flux intensity of the air-gap is same as the flux intensity of the central leg. (3-points) a.True.
  - b. False.
- Q.2 The flux intensity of the central leg is 500 At/m.

(4-points)

- a. True.
- b. False.
- Q.3 The amount of flux flowing in the left leg is same as that flowing in the right leg of the core. (3-points)
  - a.True.
  - b.False.