

Assignment Questions:

- 1- If the flux in a machine does not vary with time, should the core of that machine be laminated?
- 2- Why do we have to worry about the leakage flux in magnetic calculations?
- 3- Is it possible to have a flux of 0.5 Wb in a magnetic circuit without having a flux density of 0.5 T?
- 4- When a steady current through a coil can establish a certain magnetic field, why do we need permanent magnets?
- 5- After magnetic saturation is reached, is it possible to increase further the flux density by increasing the applied mmf ? Explain.
- 6- Why do hard magnetic materials tend to retain high residual flux density?
- 7- Can you think of any useful application of hysteresis?
- 8- Mention some names of permanent magnet materials.
- 9- Why is permanent magnet material we concentrate our attention on its demagnetization characteristics, (the magnetic behavior of a material in the second quadrant of the hysteresis loop)?
- 10- What is meant by fringing?