

AMP-27 ELECTRICAL MACHINE DESIGN

1. Basic principles of magnetic circuit, Magnetic circuit calculation ,Iron loss,
2. Magnetic leakage calculations, magnetic current, unbalanced magnetic pull,
3. Field form, armature winding,
4. Integrated approach for windings, production of Emf in windings,
5. Emf distribution of armature winding,
6. Eddy current losses in conductors, transformers,
7. Design, operating characteristics,
8. Design of small single phase transformers,
9. General concept and constraints of design of rotating machines,
10. D.C machine design, armature reaction armature design,
11. Design of field system, commutation, design of interpoles,
12. Design of interpoles and brushes, losses and efficiency,
13. Three phase induction motor ,
14. Design, rotor design, design of squirrel cage rotor,
15. Operating characteristics ,single phase induction motor,
16. Design, operating characteristics

Reference Book:

1. Industrial Engineering and Organizational Management, Publisher Katsons, Writer S K Sharma