## T.E.(Electrical Engineering)

# COMPUTER AIDED DESIGN OF ELECTRICAL MACHINES

## (2019Pattern) (Semester-VI)

1. State and explain various types of oil cooled transformers.
2. Derive output equation with usual notation of three phase induction motor.
3. Explain in brief harmonic field effects on performance of three phase induction motor.
4. Write a note on production of mechanical forces developed in transformers.
5. Write short note on effect of various factors for deciding choice of average flux density in air gap.
6. Explain in brief clogging, crawling and unbalanced magnetic pull for three phase induction motor.
7. Write short note on
   1) Zigzag leakage reactance 2) Slot leakage reactance 3) Overhang leakage reactance
8. Write short note on generalized flow chart for design of transformer.
9. Explain Design of rotor slots, size of bars and end rings for cage rotor.
10. Explain effect of duct on calculation of magnetizing current in three phase induction motor.
11. Explain the method of calculation of magnetizing current of three phase induction motor.
12. Write short note on design of squirrel cage rotor.