

ELECTRICAL MACHINES – II

1. Determine the performance characteristics of an alternator in which the actual load need not be connected and suitable for high capacity alternators. *EMF method*

2. Determine the performance characteristics of an alternator in which the internal power of the machine is directly proportional to  $\sin \delta$ . *MMP method*

3. Determine the performance characteristics by considering the synchronous reactance of an alternator by conducting suitable test. *ZpF method*

4. Determine the performance characteristics of an alternator which gives the analysis of distribution effect caused by salient pole construction. *slip Test*

5. Determine the performance characteristics of a motor in which back emf in the motor depend on the excitation given to the field winding and not on the speed. *load test on 3 $\phi$  induction motor*  
*V.A Syn motor*

6. Determine the performance characteristics of a three phase rotating transformer in which rotor must be wound for same number of poles as that of stator. *load test on 3 $\phi$  indu. motor*

7. Determine the performance characteristics of a three phase induction motor which produces moderate starting torque which cannot be controlled. *NO, Blocked rotor test*  
*load slip ring*

8. Determine the performance parameters and maximum quantities of a three phase induction motor by conducting suitable test. *equ. circuit of NO blocked rotor test 3 $\phi$  Ind.*

9. Determine the performance parameters of an induction motor with core loss by determining the values of both the fields clockwise and anti clockwise at any given slip. *No load blocked rotor 1 $\phi$  Induction motor*

10. Determine the performance parameters of a single phase machine at a load condition as the resistance of the entire rotor is very small. *Load Test 1 $\phi$  slip ring induction motor.*

11. Determine the performance parameters and conduct a suitable test for the separation of no load losses of a three phase rotating transformer. *eq. circuit diagram of 1 $\phi$  2w. motor.*