## Grovt. Polytechnic, Bhadriak Faculty Name: Nibedita Ho Important questions

Branch: Electrical Engg. Semester -5<sup>th</sup>

SUB: Energy Conversion - II

- Q.1 Define Pitch factor.
- Q.2 Define Distribution factor.
- Q.3 Derive emf equation of an alternator.
- Q.4 Explain 3 dark & 2 bright 1 dark lamp method of synchronization of 3 phase alternators.
- Q.5 Explain synchronous impedance method or emf method to determine voltage regulation of an alternator.
- Q.6 Define voltage regulation of an alternator.
- Q.7 What are the essential conditions for parallel operation of 3phase alternators?
- Q.8 Describe the working principle of synchronous motor.
- Q.9 Define hunting.
- Q.10 Write 2 no. of sources of harmonics.
- Q.11 Write 4 no. of applications of synchronous motor.
- Q.12 What are the starting methods for starting of 3 phase induction motor?
- Q.13 What are the starting methods for starting of synchronous motor?
- Q.14 State Ferrari's principle.
- Q.15 Explain Double field revolving theory.
- Q.17 Define Cogging.
- Q.18 Define Crawling.

- Q.19 Define slip & slip speed of induction motor.
- Q.20 Define Synchronous speed.
- Q,21 Describe the working principle and the torque-speed characteristic of capacitor start capacitor run induction motor.
- Q.22 Describe the working principle and the torque-speed characteristic of Shaded pole induction motor.
- Q.23 Describe the working principle, running characteristic and application of single phase series motor.
- Q.24 Explain the working principle and application of Universal motor.
- Q.25 Explain the working principle and application of Stepper motor.
- Q.26 What are the essential conditions for parallel operation of 3phase Transformers?
- Q.27 Write the maintenance schedule of power transformer.
- Q.28 Describe the working principle and the torque-speed characteristic of permanent capacitor motor.
- Q.29 Explain the O.C and S.C. test of an alternator.
- Q.30 Define armature reaction and Explain its effect at different p.f of load in an alternator.

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