

# Electrical Machines-II

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*B.Tech. (EE/EEE), 4<sup>th</sup> Semester, VSSUT Burla*

## *Lesson Plan*

SL. NO.	Topic	No of Classes
<b>Module-1</b>		
1	Fundamental Principles	1
2	Construction of Synchronous Generators	1
3	Winding details	2
4	Armature Reaction	1
5	Cylindrical rotor theory	2
6	Voltage Regulation	2
7	Power angle characteristics	1
<b>Module-2</b>		
8	Salient pole machine details	1
9	Two reaction theory and slip test	1
10	Power angle characteristics	1
11	Parallel Operation	1
12	Synchronous motor principle	1
13	Torque and power relations	1
14	V and inverted V curves	1
15	Effect of change of excitation	1
16	Synchronous Condensers	1
17	Synchronous Induction Motor	1
<b>Module-3</b>		
18	3-ph IM principle of operation	1
19	Equivalent circuit and phasor diagram	2
20	Power and torque relations	1
21	Torque speed characteristics	1
22	Circle diagram	2
23	Methods of starting	1
24	Methods of speed control	1
25	Miscellaneous topics in IM	1
<b>Module-4</b>		
21	1-ph IM construction and principle	1
22	Double Revolving Field Theory	1
23	Equivalent circuit	2
24	Methods of starting	2
25	1-ph series motor	2
26	Schrage motor	1
27	Universal motor	1