## Badriprasad Institute of Technology, Sambalpur

Lesson plan for Theory -1,Energy Conversion -1
Semester & Branch : 4th Sem Electrical Engineering
Name of the faculty : Sachin Kumar Satpathy
No of period **Total Periods-75** No of periods /week-5

WEEK	CLASS DAY	THEORY
1ST	1ST	DC GENERATOR PRINCIPLE OF OPERATION
	2ND	CONSTRUCTIONAL FEATURES
	3RD	DIFFERENT PARTS OF DC MACHINE
	4TH	SIMPLE LAP WINDING
	5TH	SIMPLE WAVE WINDING
2ND	1ST	DIFFERENT TYPES OF DC MACHINE
	2ND	EMF EQUATION OF DC GENERATOR
	3RD	ARMATURE REACTION
	4TH	COMMUTATION
	5TH	METHODS OF IMPROVING COMMUTATION
3RD	1ST	ROLE OF INTER POLES & COMPENSATING WINDING
	2ND	CHARACTERSTICS OF DC GENERATOR
	3RD	EXTERNAL CHARACTERSTICS OF DC GENERATOR
	4TH	APPLICATION OF DIFFERENT TYPES OF DC GENERATORS
	5TH	CRITICAL RESISTANCE
4TH	1ST	LOSSES & EFFICIENCY OF DC GENERATOR
	2ND	PARELLEL OPERATION OF DC MACHINE
	3RD	NUMERICAL ON DC GENERATOR
	4TH	EXPALIN BASIC WORKING OF DC MOTOR
	5TH	BACK EMF OF DC MOTOR
5TH	1ST	VOLTAGE EQUATION OF MOTOR
	2ND	DERIVE TORQUE EQUATION
	3RD	CHARACTERSTICS OF DC SHUNT MOTOR
	4TH	CHARACTERSTICS OF DC SERIES MOTOR
	5TH	CHARACTERSTICS OF DC COMPOUND MOTOR
6TH	1ST	METHODS OF STARTING DIFFERENT TYPES OF MOTOR
	2ND	SPEED CONTROL OF DC SHUNT MOTORS
	3RD	SPEED CONTROL OF DC SERIES MOTORS
	4TH	SPEED CONTROL OF DC COMPOUND MOTORS
	5TH	EFFICIENCY DC MOTOR BY BREAK TEST METHOD
7TH	1ST	EFFICIENCY DC MOTOR BY SWINBURN'S TEST METHOD
	2ND	LOSSES & EFFICIENCY OF DC MOTOR
	3RD	NUMERICAL ON DC MOTOR
	4TH	CLASS TEST
	5TH	WORKING PRINCIPLE OF TRANSFORMER
8TH	1ST	EXPLAIN TRANSFORMER CONSTRUCTION
	2ND	DIFFERENT TYPES OF COOLING METHOD
	3RD	CARE & MAINTENANCE OF TRANSFORMER
	4TH	EMF EQUATION OF TRANSFORMER
	5TH	IDEAL TRANSFORMER VOLTAGE TRANSFORMATION RATIO

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1ST	TRANSFORMER ON NO LOAD WITH PHASOR DIAGRAM
2ND	TRANSFORMER ON LOAD WITH PHASOR DIAGRAM
3RD	EQUIVALENT RESISTANCE ,INDUCTANCE & IMPEDANCE
4TH	PHASOR DIAGRAM OF TRANSFORMER
5TH	NUMERICAL PROBLEM
1ST	REGULATION ON VARIOUS LOADS
2ND	LOSSES OF TRANSFORMER
3RD	OPEN CIRCUIT TEST OF TRANSFORMER
4TH	SHORT CIRCUIT TEST OF TRANSFORMER
5TH	EFFICIENCY OF TRANSFORMER AT VARIOUS LOAD
	ALL DAY EFFICIENCY OF TRANSFORMER
	PARELLEL OPERATION OF TRANSFORMER
	NUMERICAL ON TRANSFORMER
	CONSTRUCTIONAL FEATURES AUTO TRANSFORMER
	WORKING PRINCIPLE OF AUTO TRANSFORMER
	COMPARISION OF AUTO TRANSFORMER & ODINARY
1ST	TRANSFORMER
2ND	USES OF AUTO TRANSFORMER
	TAP CHANGER WITH TRANSFORMER
	TYPES & CONSTRUCTION OF 3-PHASE TRANSFORMER
	PARELLEL OPERATION OF 3-PHASE TRANSFORMER
	POWER TRANSFORMER
	MAINTENANCE SCHEDULE OF POWER TRANSFORMER
	PROBLEM ON ABOVE
	CLASS TEST
	CLASS TEST
	CLASS TEST
	REVISION OF DC MOTOR
	NUMERICAL ON DC MOTOR
	NUMERICAL ON DC MOTOR  NUMERICAL ON DC GENERATOR
	REVISION OF TRANSFORMER
	NUMERICAL ON TRANSFORMER
	OBJECTIVE TYPE QUESTION DISCUSSION
	DISCUSSION OF DC MOTOR STARTER
	OBJECTIVE TYPE QUESTION DISCUSSION
	DISCUSSION OF SEMESTER PATTERN EXAM
	2ND 3RD 4TH 5TH 1ST 2ND 3RD 4TH 5TH 1ST 2ND 3RD 4TH 5TH 1ST 2ND 3RD 4TH 5TH 5TH

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