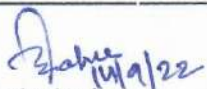


The Lesson Plan

Discipline: EE	Semester: 5/5 (EE)	Name of the Teaching Faculty: En. D. D. Sahu
Subject: EC-II	No of Days/per week class allotted:	Semester from Date: 15/9/22 to Date: 22/12/22 . No of Weeks:
Week	Class Day	Theory/Practical Topics
1st	1st 3/X/22	Method of starting of Sy. Motor.
	2nd 1/XI/22	Application of Sy. Motor
	3rd 2/11/22	Introduction of the motor & production of rotating magnetic field.
	4th 3/11/22	construction of I/M. Csq. cage & slip ring working principle.
	5th	
2nd	1st 5/11/22	Definition of slip, slip speed, relation of slip with rotor quantities.
	2nd 7/11/22	Derivation of torque, at starting & running condition.
	3rd 9/11/22	Derivation of Max torque, solving problem
	4th 10/11/22	Torque slip characteristics.
	5th	
3rd	1st 12/11/22	Relation between full load torque & starting torque, solving problem.
	2nd 14/11/22	Establishment of relationship between rotor Cu loss, rotor ω_p & gross torque.
	3rd 15/11/22	Gross Torque. Relationship of slip with rotor Cu loss, problem solving.
	4th 16/11/22	Method of starting of different types of starter for 3- ϕ I/M.
	5th	
4th	1st 17/11/22	Speed control by voltage control, Rotor resistance control.
	2nd 21/11/22	Pole changing, frequency control method
	3rd 22/11/22	Plugging of 3- ϕ I/M.
	4th 23/11/22	different types of motor encoder principle of Induction Gen & its application
	5th	
5th	1st 24/11/22	Explanation of Ferraris's principle, double revolving field Theory & cross field theory used for starting of 1- ϕ I/M.
	2nd 26/11/22	
	3rd 28/11/22	Explanation of working principle, Torque-Speed characteristic, performance
	4th 29/11/22	characteristic & application of split phase motor, Capacitor start motor
	5th	

Sign of Faculty

HOD


 15/9/22
 Principal

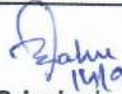
SYNERGY POLYTECHNIC, BBSR ³

The Lesson Plan

Discipline:		Semester:	Name of the Teaching Faculty: Er. D.D. Sahu
Subject:		No of Days/per week class allotted:	Semester from Date: 15/9/22 to Date: 22/12/22 No of Weeks:
Week	Class Day	Theory/Practical Topics	
1st	1st 30/11/22	Capacitor start, capacitor run motor - Permanent capacitor type motor.	
	2nd 01/12/22	Shaded pole motor: method to change direction of rotation.	
	3rd 03/12/22	Construction, working principle & application of 1- ϕ Series motor.	
	4th 5/12/22	Construction, working principle & application of 1- ϕ Universal Motor.	
	5th		
2nd	1st 6/12/22	Working principle of Repulsion start motor, Repulsion start induction run motor, Repulsion M.	
	2nd 7/12/22		
	3rd 8/12/22	Principle of stepper motor, classification	
	4th 12/12/22	Principle of variable reluctance stepper motor " " Permanent magnet stepper motor	
	5th		
3rd	1st 13/12/22	Principle of hybrid stepper motor	
	2nd 14/12/22	Application of stepper motor.	
	3rd 15/12/22	Parallel operation of 3- ϕ transformer	
	4th 19/12/22	Phase grouping of 3- ϕ transformer & its advantages.	
	5th 20/12/22	its advantages	
4th	1st 21/12/22	Explain Tap changer (on/off load tap	
	2nd 22/12/22	changing); Maintenance schedule of power	
	3rd 26/12/22	Revision of 3- ϕ I/M.	
	4th 27/12/22	Revision of Alternator	
	5th 28/12/22	Revision of Syn motor.	
5th	1st		
	2nd		
	3rd		
	4th		
	5th		

Sign of Faculty

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 14/12/22
 Principal

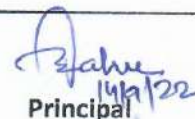
SYNERGY POLYTECHNIC, BBSR ①

The Lesson Plan

Discipline: Electrical Engg		Semester: 5th Sem.	Name of the Teaching Faculty: Ex. D. D. Sahu.
Subject: EC-II		No of Days/per week class allotted: 04.	Semester from Date: 15/9/22 to Date: 22/12/22 No of Weeks: 14
Week	Class Day	Theory/Practical Topics	
1st	1st 19/9/22	Introduction, constructional details of Alt. types of alternator.	
	2nd 20/9/22	Basic working principle of alternator & relation between speed & frequency	
	3rd 21/9/22	Voltage generation.	
	4th 22/9/22	Armature winding, chording of arm	
	5th 23/9/22	Advantages of fractional pitch winding.	
2nd	1st 26/9/22	Distribution factor, solving problems.	
	2nd 27/9/22	Derivation of EMF equation & solving of Numerical problems.	
	3rd 28/9/22	Explanation of Arm. reaction & its	
	4th 29/9/22	effect on emf at different p.f of load.	
	5th		
3rd	1st 10/X/22	Drawing of Vector diagram of loaded am alternator & solving problem.	
	2nd 11/X/22	Explain Open circuit test & short circuit test	
	3rd 12/X/22	Determination of voltage regulation of Alternator by direct loading & solving problem	
	4th 13/X/22	By synchronous impedance method & to solve numerical problem	
	5th		
4th	1st 14/X/22	Parallel operation of alternator by synchro-scope method dark & bright lamp method.	
	2nd 17/X/22	Distribution of load by 11 th connected Alt.	
	3rd 18/X/22	construction & working principle of Syn. motor concept of load angle	
	4th 19/X/22	Derivation of Torque & power developed.	
	5th 20/X/22	Effect of varying load with constant excitation.	
5th	1st 25/X/22	Effect of varying excitation with const. load.	
	2nd 26/X/22	Power angle characteristic of cylindrical rotor motor.	
	3rd 27/X/22	Explanation of effect of excitation on Arm. ct & power factor.	
	4th 28/X/22	Hunting in syn. machine & function of Dampor Bars.	
	5th		

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 14/12/22
 Principal