Guru Gobind Singh College of Engineering & Research Centre, Nashik

Electrical Engineering [2022-23]

Course Outcome

Year : SECOND YEAR - SEM-4 : SEEE
Subject : 203146 -Electrical Machines-I(Theory | Regular)
Course Code : 203146

CO Id	Course Outcome
CO1	Evaluate performance parameters of transformer with experimentation and demonstrate construction along with specifications as per standards.
CO2	Distinguish between various types of transformer connections as per vector groups with application and to perform parallel operation of single/three phase transformers
CO3	Select and draft specifications of DC machines and Induction motors for various applications along with speed control methods.
CO4	Justify the need of starters in electrical machines with merits and demerits.
CO5	Test and evaluate performance of DC machines and Induction motors as per IS standard
CO6	Understand the Construction and Working Principle of DC machine and Induction motor

Guru Gobind Singh College of Engineering & Research Centre, Nashik

Electrical Engineering [2022-23]

CO PO Desired Mapping Report

Year : SECOND YEAR - SEM-4 : SEEE
Subject : 203146 -Electrical Machines-I - Theory
Faculty : Prasad Phad
Course Code : 203146

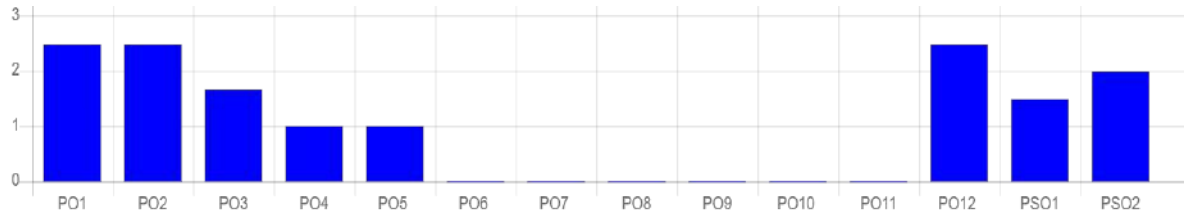
Course Outcome Details

#	Course Outcome	Description
1	CO1	Evaluate performance parameters of transformer with experimentation and demonstrate construction along with specifications as per standards.
2	CO2	Distinguish between various types of transformer connections as per vector groups with application and to perform parallel operation of single/three phase transformers
3	CO3	Select and draft specifications of DC machines and Induction motors for various applications along with speed control methods.
4	CO4	Justify the need of starters in electrical machines with merits and demerits.
5	CO5	Test and evaluate performance of DC machines and Induction motors as per IS standard
6	CO6	Understand the Construction and Working Principle of DC machine and Induction motor

Desired Attainment Details

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	3	3	2	1								3	2	
CO2	2	2	2	1								2	1	
CO3	3	3	2	1								3		3
CO4	2	2	2	1	1							2		1
CO5	3	3	1	1	1							3		2
CO6	2	2	1	1								2		2
Average	2.50	2.50	1.67	1.00	1.00							2.50	1.50	2.00

Desired Attainment Average : 1.83



Guru Gobind Singh College of Engineering & Research Centre, Nashik

Electrical Engineering [2022-23]

Justification Report for CO-PO/PSO Desired Mapping

Year : SECOND YEAR - SEM-4 : SEEE
Subject : 203146 -Electrical Machines-I - Theory
Faculty : Prasad Phad
Course Code : 203146

Justification

Course Outcome	Program Outcome	Level	Justification
CO1	PO1	3	In transformer Mathematical Equations, electrical Engineering fundamental are use to find solutions of Engineering problem
CO1	PO2	3	In Transformer Identification and analysis of different problems in Electrical Engineering.
CO1	PO3	2	In transformer Design of solutions of various problem related is carried out by the students
CO1	PO4	1	In transformer student conducts Design of Experiment and analysis of data.
CO1	PO12	3	Transformer is the long life Engineering knowledge for electrical Engineering students.
CO1	PSO1	2	Transformers are use in T & D of generated Electricity by Renewable energy.
CO2	PO1	2	In types of transformer Mathematical Equations, electrical Engineering fundamental are use to find solutions of Engineering problem
CO2	PO2	2	In types of transformer Identification and analysis of different problems in Electrical Engineering.
CO2	PO3	2	In types of transformer Design of solutions of various problem related is carried out by the students
CO2	PO4	1	In types of transformer student conducts Design of Experiment and analysis of data.

Course Outcome	Program Outcome	Level	Justification
CO2	PO12	2	Types of Transformer is the long life Engineering knowledge for electrical Engineering students.
CO2	PSO1	1	Transformers are use in T & D of generated Electricity by Renewable energy.
CO3	PO1	3	In DC and Induction machine Mathematical Equations, electrical Engineering fundamental are use to find solutions of Engineering problem
CO3	PO2	3	In DC and Induction machine Identification and analysis of different problems in Electrical Engineering.
CO3	PO3	2	In DC and Induction machine Design of solutions of various problem related is carried out by the students
CO3	PO4	1	In DC and Induction machine student conducts Design of Experiment and analysis of data.
CO3	PO12	3	DC and Induction machine is the long life Engineering knowledge for electrical Engineering students.
CO3	PSO2	3	DC and Induction machine are use as drive in Automation
CO4	PO1	2	In starters of Motors Mathematical Equations, electrical Engineering fundamental are use to find solutions of Engineering problem
CO4	PO2	2	In starters of Motors Identification and analysis of different problems in Electrical Engineering.
CO4	PO3	2	In starters of Motors Design of solutions of various problem related is carried out by the students
CO4	PO4	1	In starters of Motors student conducts Design of Experiment and analysis of data.
CO4	PO5	1	starter is use to start motors smoothly
CO4	PO12	2	starters of Motors is the long life Engineering knowledge for electrical Engineering students.
CO4	PSO2	1	DC and Induction machine are use as drive in Automation
CO5	PO1	3	In testing of Motors Mathematical Equations, electrical Engineering fundamental are use to find solutions of Engineering problem

Course Outcome	Program Outcome	Level	Justification
CO5	PO2	3	In testing of Motors Identification and analysis of different problems in Electrical Engineering.
CO5	PO3	1	In testing of Motors Design of solutions of various problem related is carried out by the students
CO5	PO4	1	In testing of Motors student conducts Design of Experiment and analysis of data.
CO5	PO5	1	while testing of motors students are use modern tools line non contact type tachometer
CO5	PO12	3	testing of motors is the long life Engineering knowledge for electrical Engineering students.
CO5	PSO2	2	DC and Induction machine are use as drive in Automation
CO6	PO1	2	In Construction and Working Principal Mathematical Equations, electrical Engineering fundamental are use to find solutions of Engineering problem
CO6	PO2	2	In Construction and Working Principal Identification and analysis of different problems in Electrical Engineering.
CO6	PO3	1	In Construction and Working Principal Design of solutions of various problem related is carried out by the students
CO6	PO4	1	In Construction and Working Principal student conducts Design of Experiment and analysis of data.
CO6	PO12	2	Construction and Working Principal is the long life Engineering knowledge for electrical Engineering students.
CO6	PSO2	2	DC and Induction machine are use as drive in Automation

Guru Gobind Singh College of Engineering & Research Centre, Nashik

Electrical Engineering [2022-23]

Course Outcome

Year : SECOND YEAR - SEM-4 : SEEE
Subject : 203146 -Electrical Machines-I(Practical | Regular)
Course Code : 203146-PR

CO Id	Course Outcome
CO1	Perform Polarity test on transformer
CO2	Perform parallel operation and load sharing of transformer
CO3	Perform Different test on DC and Induction Motor
CO4	Demonstrate Load characteristics and speed control of DC and Induction Motor

Guru Gobind Singh College of Engineering & Research Centre, Nashik

Electrical Engineering [2022-23]

CO PO Desired Mapping Report

Year : SECOND YEAR - SEM-4 : SEEE
Subject : 203146 -Electrical Machines-I - Practical
Faculty : Bhimrao Dabhade,Prasad Phad
Course Code : 203146-PR

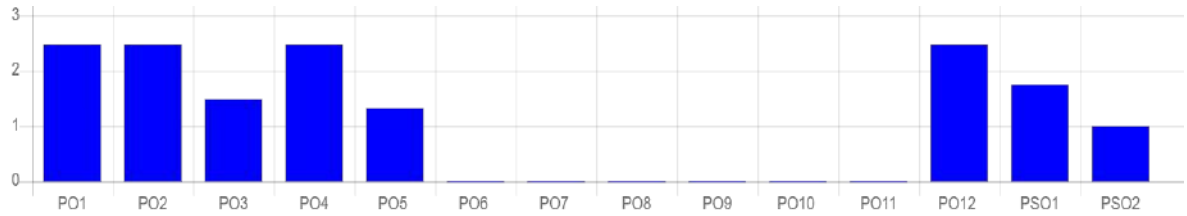
Course Outcome Details

#	Course Outcome	Description
1	CO1	Perform Polarity test on transformer
2	CO2	Perform parallel operation and load sharing of transformer
3	CO3	Perform Different test on DC and Induction Motor
4	CO4	Demonstrate Load characteristics and speed control of DC and Induction Motor

Desired Attainment Details

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	2	2	1	2								2	1	
CO2	3	3	2	3	1							3	2	1
CO3	3	3	2	3	1							3	2	1
CO4	2	2	1	2	2							2	2	1
Average	2.50	2.50	1.50	2.50	1.33							2.50	1.75	1.00

Desired Attainment Average : 1.95



Guru Gobind Singh College of Engineering & Research Centre, Nashik

Electrical Engineering [2022-23]

Course Outcome

Year : THIRD YEAR - SEM-6 : TEEE
Subject : 303148-Power System-II(Theory | Regular)
Course Code : 303148-TH

CO Id	Course Outcome
CO1	Solve problems involving modelling, design and performance evaluation of HVDC power transmission lines.
CO2	Solve problems involving modelling, design and performance evaluation of HVDC Systems.
CO3	Calculate per unit values and develop Y bus for solution power flow equations in power transmission networks.
CO4	Calculate currents and voltages in a faulted power system under symmetrical faults, and relate fault currents to circuit breaker ratings.
CO5	Calculate currents and voltages in a faulted power system under asymmetrical faults, and relate fault currents to circuit breaker ratings.

Guru Gobind Singh College of Engineering & Research Centre, Nashik

Electrical Engineering [2022-23]

CO PO Desired Mapping Report

Year : THIRD YEAR - SEM-6 : TEEE
Subject : 303148-Power System-II - Theory
Faculty : Nilima Bhamare
Course Code : 303148-TH

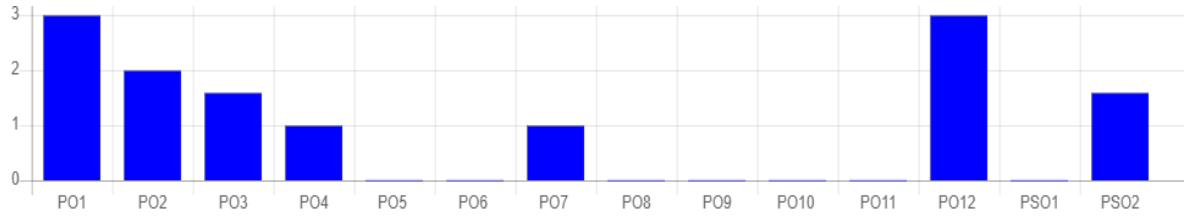
Course Outcome Details

#	Course Outcome	Description
1	CO1	Solve problems involving modelling, design and performance evaluation of HVDC power transmission lines.
2	CO2	Solve problems involving modelling, design and performance evaluation of HVDC Systems.
3	CO3	Calculate per unit values and develop Y bus for solution power flow equations in power transmission networks.
4	CO4	Calculate currents and voltages in a faulted power system under symmetrical faults, and relate fault currents to circuit breaker ratings.
5	CO5	Calculate currents and voltages in a faulted power system under asymmetrical faults, and relate fault currents to circuit breaker ratings.

Desired Attainment Details

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	3	2	1	1			1					3		2
CO2	3	2	1	1			1					3		2
CO3	3	2	2	1								3		1
CO4	3	2	2	1								3		1
CO5	3	2	2	1			1					3		2
Average	3.00	2.00	1.60	1.00			1.00					3.00		1.60

Desired Attainment Average : 1.89



Guru Gobind Singh College of Engineering & Research Centre, Nashik

Electrical Engineering [2022-23]

CO PO Desired Mapping Report with Justification

Justification

Course Outcome	Program Outcome	Level	Justification
CO1	PO1	3	design and performance evaluation of HVDC and EHVAC power transmission lines is best engineering knowledge
CO1	PO2	2	In design and performance evaluation of HVDC and EHVAC power transmission lines are many problem and their analysis.
CO1	PO3	1	Design and development are the major factor in design and performance evaluation of HVDC and EHVAC power transmission lines
CO1	PO4	1	In design and performance evaluation of HVDC and EHVAC power transmission lines many complex problem and their solution.
CO1	PO7	1	Environmental aspect also considered in design and performance evaluation of HVDC and EHVAC power transmission lines.
CO1	PO12	3	In the field of Electrical engineering design and performance evaluation of HVDC and EHVAC power transmission lines is long-life learning concept.
CO1	PSO2	2	In the field of Automation design and performance evaluation of HVDC and EHVAC power transmission lines is major aspect.
CO2	PO1	3	Engineering Knowledge is know for the problems solved and involving modelling, design and performance evaluation of HVDC Systems
CO2	PO2	2	Analyze different Electrical Engineering problems involving modelling, design and performance evaluation of HVDC Systems
CO2	PO3	1	Solutions for different electrical engineering problems, components problems involving modelling, design and performance evaluation of HVDC Systems
CO2	PO4	1	knowledge of Electrical Engineering is must for problems involving modelling, design and performance evaluation of HVDC Systems
CO2	PO7	1	Professional engineering solution in social and environmental context and demonstrate the knowledge for solve problems involving modelling, design and performance evaluation of HVDC Systems
CO2	PO12	3	Problems involving modelling, design and performance evaluation of HVDC Systems is Life-long learning.
CO2	PSO2	2	Knowledge in the field of automation is important for the problems involving modelling, design and performance evaluation of HVDC Systems
CO3	PO1	3	Calculate per unit values and develop Y bus for solution power flow equations in power transmission networks.

Course Outcome	Program Outcome	Level	Justification
CO3	PO2	2	Calculate per unit values and develop Y bus for solution power flow equations in power transmission networks.
CO3	PO3	2	Calculate per unit values and develop Y bus for solution power flow equations in power transmission networks.
CO3	PO4	1	Calculate per unit values and develop Y bus for solution power flow equations in power transmission networks.
CO3	PO12	3	Calculate per unit values and develop Y bus for solution power flow equations in power transmission networks.
CO3	PSO2	1	Calculate per unit values and develop Y bus for solution power flow equations in power transmission networks.
CO4	PO1	3	Engineering knowledge is must for Calculate currents and voltages in a faulted power system under symmetrical faults, and relate fault currents to circuit breaker ratings.
CO4	PO2	2	Problem analysis in the calculate currents and voltages in a faulted power system under symmetrical faults, and relate fault currents to circuit breaker ratings.
CO4	PO3	2	solutions for different electrical engineering is useful for calculate currents and voltages in a faulted power system under symmetrical faults, and relate fault currents to circuit breaker ratings.
CO4	PO4	1	knowledge of Electrical Engineering is must for calculate currents and voltages in a faulted power system under symmetrical faults, and relate fault currents to circuit breaker ratings.
CO4	PO12	3	Calculate currents and voltages in a faulted power system under symmetrical faults, and relate fault currents to circuit breaker ratings are prepare it for lifelong learning
CO4	PSO2	1	Knowledge in the field of automation is beneficial for the Calculate currents and voltages in a faulted power system under symmetrical faults, and relate fault currents to circuit breaker ratings.
CO5	PO1	3	Engineering knowledge is must for Calculate currents and voltages in a faulted power system under asymmetrical faults, and relate fault currents to circuit breaker ratings.
CO5	PO2	2	Problem analysis in the calculate currents and voltages in a faulted power system under asymmetrical faults, and relate fault currents to circuit breaker ratings.
CO5	PO3	2	solutions for different electrical engineering is useful for calculate currents and voltages in a faulted power system under asymmetrical faults, and relate fault currents to circuit breaker ratings.
CO5	PO4	1	knowledge of Electrical Engineering is must for calculate currents and voltages in a faulted power system under asymmetrical faults, and relate fault currents to circuit breaker ratings.
CO5	PO7	1	Professional engineering solution is important for calculate currents and voltages in a faulted power system under asymmetrical faults, and relate fault currents to circuit breaker ratings.
CO5	PO12	3	Calculate currents and voltages in a faulted power system under asymmetrical faults, and relate fault currents to circuit breaker ratings are prepare it for lifelong learning
CO5	PSO2	2	Knowledge in the field of automation is beneficial for the Calculate currents and voltages in a faulted power system under asymmetrical faults, and relate fault currents to circuit breaker ratings.

Guru Gobind Singh College of Engineering & Research Centre, Nashik

Electrical Engineering [2022-23]

Course Outcome

Year : THIRD YEAR - SEM-6 : TEEE
Subject : 303148-Power System-II(Practical | Regular)
Course Code : 303148-PR

CO Id	Course Outcome
PCO1	Demonstrate ABCD parameters of medium and long transmission line.
PCO2	Demonstrate compensation of transmission line.
PCO3	measurement of parameters of alternator.
PCO4	Simulation of symmetrical, asymmetrical faults.

Guru Gobind Singh College of Engineering & Research Centre, Nashik

Electrical Engineering [2022-23]

CO PO Desired Mapping Report

Year : THIRD YEAR - SEM-6 : TEEE
Subject : 303148-Power System-II - Practical
Faculty : Nilima Bhamare
Course Code : 303148-PR

Course Outcome Details

#	Course Outcome	Description
1	PCO1	Demonstrate ABCD parameters of medium and long transmission line.
2	PCO2	Demonstrate compensation of transmission line.
3	PCO3	measurement of parameters of alternator.
4	PCO4	Simulation of symmetrical, asymmetrical faults.

Desired Attainment Details

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
PCO1	3	2	2	1								3	1	
PCO2	3	2	2	1								3	1	
PCO3	3	2	2	1								3	1	
PCO4	3	2	2									3	1	
Average	3.00	2.00	2.00	1.00								3.00	1.00	

Desired Attainment Average : 2.00

Guru Gobind Singh College of Engineering & Research Centre, Nashik

Electrical Engineering [2022-23]

Justification Report for CO-PO/PSO Desired Mapping

Year : THIRD YEAR - SEM-6 : TEEE
Subject : 303148-Power System-II - Practical
Faculty : Nilima Bhamare
Course Code : 303148-PR

Justification

Course Outcome	Program Outcome	Level	Justification
PCO1	PO1	3	Measurement of ABCD parameters as the best engineering knowledge
PCO1	PO2	2	Analysis of problem and find out their solution related to ABCD parameters.
PCO1	PO3	2	Design and development of solution of ABCD parameters of transmission line.
PCO1	PO4	1	Conduction of investigation of complex problem related to ABCD parameter.
PCO1	PO12	3	Measurement of ABCD parameter is the long life learning.
PCO1	PSO1	1	In the field of renewable energy transmission line and ABCD parameter.
PCO2	PO1	3	
PCO2	PO2	2	
PCO2	PO3	2	
PCO2	PO4	1	
PCO2	PO12	3	
PCO2	PSO1	1	
PCO3	PO1	3	

Course Outcome	Program Outcome	Level	Justification
PCO3	PO2	2	
PCO3	PO3	2	
PCO3	PO4	1	
PCO3	PO12	3	
PCO3	PSO1	1	
PCO4	PO1	3	
PCO4	PO2	2	
PCO4	PO3	2	
PCO4	PO12	3	
PCO4	PSO1	1	

Guru Gobind Singh College of Engineering & Research Centre, Nashik

Electrical Engineering [2022-23]

Course Outcome

Year : FINAL YEAR - SEM-7 : BEEE
Subject : 403141-Power System Operation and Control(Theory | Regular)
Course Code : 403141

CO Id	Course Outcome
CO1	Summarize angle, voltage and frequency stability in the power system control (UN).
CO3	Analyze stability and optimal load dispatch using different techniques (AN).
CO2	Illustrate various ways of interchange of power between interconnected utilities (AP).
CO5	Analyze steady state, dynamic response of AGC.
CO6	Evaluate the stability of the system and suggest the methods to improve it (EV)
CO4	Select appropriate FACTS devices for stable operation of the system (EV).

Guru Gobind Singh College of Engineering & Research Centre, Nashik

Electrical Engineering [2022-23]

CO PO Desired Mapping Report

Year : FINAL YEAR - SEM-7 : BEEE
Subject : 403141-Power System Operation and Control - Theory
Faculty : Rutika More
Course Code : 403141

Course Outcome Details

#	Course Outcome	Description
1	CO1	Summarize angle, voltage and frequency stability in the power system control (UN).
2	CO3	Analyze stability and optimal load dispatch using different techniques (AN).
3	CO2	Illustrate various ways of interchange of power between interconnected utilities (AP).
4	CO5	Analyze steady state, dynamic response of AGC.
5	CO6	Evaluate the stability of the system and suggest the methods to improve it (EV)
6	CO4	Select appropriate FACTS devices for stable operation of the system (EV).

Desired Attainment Details

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	3	3	3	3	1								3	1
CO3	3	3	3	2	2									
CO2	3	3	2	2	1								2	2
CO5	3	2	1											
CO6	3	3	1											
CO4	3	3	2	1	1		1						1	1
Average	3.00	2.83	2.00	2.00	1.25		1.00						2.00	1.33

Desired Attainment Average : 1.93

Guru Gobind Singh College of Engineering & Research Centre, Nashik

Electrical Engineering [2022-23]

Justification Report for CO-PO/PSO Desired Mapping

Year : FINAL YEAR - SEM-7 : BEEE
Subject : 403141-Power System Operation and Control - Theory
Faculty : Rutika More
Course Code : 403141

Justification

Course Outcome	Program Outcome	Level	Justification
CO1	PO1	3	Needs engineering knowledge to understand stability of system.
CO1	PO2	3	Need to analyze power angle equation for power system problems.
CO1	PO3	3	Because to design the solutions for different power system problems, components or processes that meet the specified needs.
CO1	PO4	3	It includes design, analysis and interpretation of of critical angle clearing time and synthesis of information to provide valid conclusions.
CO1	PO5	1	To design curve & recloser we want appropriate techniques, resources, modern engineering and IT tools
CO1	PSO1	3	Need to apply knowledge & skills in the field of power system which improve renewable energy solution.
CO1	PSO2	1	To understand effect on power system it required some of important automation system.
CO3	PO1	3	Required engineering knowledge to understand & to apply automatic generation control

Course Outcome	Program Outcome	Level	Justification
CO3	PO2	3	Identify, formulate and analyze different response of frequency control problems and reaching sustained conclusions.
CO3	PO3	3	Design of two-area load-frequency control
CO3	PO4	2	Use of engineering knowledge for design analysis and interpretation of data for load frequency control of an isolated power system
CO3	PO5	2	To design line & block diagram of the alternator voltage regulator scheme need IT tools
CO2	PO1	3	Need engineering knowledge to understand necessity of reactive power control, production and absorption of reactive power
CO2	PO2	3	Need to analyze reactive power requirements for power factor control and voltage regulation
CO2	PO3	2	Designing the solution of the loading capability curve of a synchronous generator
CO2	PO4	2	To interpretant working of FACTS controller
CO2	PO5	1	To draw & understand VI characteristics of FACTS
CO2	PSO1	2	Because of FACTS it reduce reactive power which help to reduce use of renewable energy sources
CO2	PSO2	2	FATCS ia an automation circuit to control reactive power
CO5	PO1	3	Need engineering knowledge to understand different techniques of energy control
CO5	PO2	2	Because of identification analyzing of loss of energy during interchanging
CO5	PO3	1	Design the process and solution for energy loss
CO6	PO1	3	To understand voltage stability of power system need engineering knowledge
CO6	PO2	3	Analyze the load characteristics & stability techniques
CO6	PO3	1	Need to design the solution for voltage stability

Course Outcome	Program Outcome	Level	Justification
CO4	PO1	3	Need engineering knowledge for understanding of Economic Load Dispatch and Unit Commitment (Cost Control)
CO4	PO2	3	Identify, formulate and analyze different power generation in thermal, hydro power plant problems and reaching sustained conclusion using the principle of mathematics, natural sciences and engineering fundamentals.
CO4	PO3	2	Design the solutions for different load dispatch problems, using dynamic programming
CO4	PO4	1	Design of experiments, analysis and interpretation of load dispatch data and synthesis of information to provide valid conclusions.
CO4	PO5	1	A technique and IT tools required for revision of cost curve, incremental cost curve of thermal
CO4	PO7	1	Understand the impact of professional engineering solution for load dispatch for sustainable development.
CO4	PSO1	1	Understand the generation of power using water and coal.
CO4	PSO2	1	Load dispatch unit is automatic control unit to control power dispatch

Guru Gobind Singh College of Engineering & Research Centre, Nashik

Electrical Engineering [2022-23]

Course Outcome

Year : FINAL YEAR - SEM-7 : BEEE
Subject : 403141 Power System Operation & Control(Practical | Regular)
Course Code : 403141

CO Id	Course Outcome
CO1	Summarize angle, voltage and frequency stability in the power system control (UN).
CO2	Illustrate various ways of interchange of power between interconnected utilities (AP).
CO3	Analyze stability and optimal load dispatch using different techniques (AN).
CO4	Select appropriate FACTS devices for stable operation of the system (EV).
CO5	Evaluate the stability of the system and suggest the methods to improve it (EV)
CO6	Analyze steady state, dynamic response of AGC.(AN)

Guru Gobind Singh College of Engineering & Research Centre, Nashik

Electrical Engineering [2022-23]

CO PO Desired Mapping Report

Year : FINAL YEAR - SEM-7 : BEEE
Subject : 403141 Power System Operation - Practical
Faculty : Rutika More
Course Code : 403141

Course Outcome Details

#	Course Outcome	Description
1	CO1	Summarize angle, voltage and frequency stability in the power system control (UN).
2	CO2	Illustrate various ways of interchange of power between interconnected utilities (AP).
3	CO3	Analyze stability and optimal load dispatch using different techniques (AN).
4	CO4	Select appropriate FACTS devices for stable operation of the system (EV).
5	CO5	Evaluate the stability of the system and suggest the methods to improve it (EV)
6	CO6	Analyze steady state, dynamic response of AGC.(AN)

Desired Attainment Details

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	3	3	3	3	1								3	1
CO2	3	3	2	2	1								2	2
CO3	3	3	3	2	2									
CO4	3	3	2	1	1		1						1	1
CO5	3	2	1											
CO6	3	3	1											
Average	3.00	2.83	2.00	2.00	1.25		1.00						2.00	1.33

Desired Attainment Average : 1.93