DIPLOMA WING

RAJIV GANDHI PROUDYOGIKI VISHWAVIDYALAYA,BHOPAL

SCHEME OF STUDIES & EXAMINATIONS (IMPLEMENTED FROM SESSION : JULY 2023)

SCHEME	NAME OF BRANCH	BRANCH CODE	SEMESTER
OCBC JULY 2022/2023	CHEMICAL ENGINEERING	C02	SIXTH (VI)

S.N.	PAPER CODE	SUBJECT CODE	SUBJECT NAME	THEORY COMPONENT								PRACTICAL COMPONENT					TOTAL CREDITS	TOTAL MARKS
				HRS PER WEEK	CREDITS	TERM WORK				THEORY PAPER		HRS PER WEEK	CREDITS	LAB WORK	PRACTICAL EXAM/VIVA			
						QUIZ/ASSIGNMENT	MID TERM TEST*		TOTAL	MARKS	DURATION				MARKS	DURATION		
							I	II										
1	7386	601	ENTREPRENEURSHIP & START-UPS	4	4	10	10	10	30	70	03 Hrs.	0	0	0	0	0	4	100
2	7530	602	PROJECT ENGINEERING	7	7	10	10	10	30	70	03 Hrs.	0	0	0	0	0	7	100
3	7531	611	WASTE MANAGEMENT OR	3	3	10	10	10	30	70	03 Hrs.	0	0	0	0	0	3	100
	7532	612	COMP.APP.IN CHEMICAL ENGG.															
4	7603	621	DISASTER MANAGEMENT OR	3	3	10	10	10	30	70	03 Hrs.	0	0	0	0	0	3	100
	7604	622	PROJECT MANAGEMENT															
5	7605	631	ARTIFICIAL INTELLIGENCE OR	3	3	10	10	10	30	70	03 Hrs.	0	0	0	0	0	3	100
	7606	632	ENGG.ECO. & ACCOUNTANCY															
6			INDIAN CONSTITUTION	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7			MAJOR PROJECT **	0	0	0	0	0	0	0	0	6	4	100	50	03 Hrs.	4	150
8			SEMINAR***	3	1	50	0	0	50	0	0	0	0	0	0	0	1	50
9			LIBERARY/VISITS etc.	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0
TOTAL				25	21				200	350		11	4	100	50		25	700

NOTE - (1)* Two Best, out of Three Mid Term Tests (Progressive Tests) Marks should be entered here.

(2)** One Credit is carried forward from the Vth semester major project evaluation.

(3)*** One Hour Time duration for each student.

GRAND TOTAL OF CREDITS	GRAND TOTAL OF MARKS
25	700

DIPLOMA WING
RAJIV GANDHI PROUDYOGIKI VISHWAVIDYALAYA, BHOPAL
DIPLOMA IN CHEMICAL ENGINEERING (C02)
SEMESTER VI

COURSE TITLE	:	ENTREPRENEURSHIP AND START-UPS
PAPER CODE	:	7386
SUBJECT CODE	:	601
TREORY CREDITS	:	04
PRACTICAL CREDITS	:	00

Course Learning Objectives:

1. Acquiring Entrepreneurial spirit and resourcefulness.
2. Familiarization with various uses of human resource for earning dignified means of living.
3. Understanding the concept and process of entrepreneurship - its contribution and role in the growth and development of individual and the nation.
4. Acquiring entrepreneurial quality, competency, and motivation.
5. Learning the process and skills of creation and management of entrepreneurial venture.

Course Content:

Unit 1 - Introduction to Entrepreneurship and Start – Ups

- Definitions, Traits of an entrepreneur, Intrapreneurship, Motivation
- Types of Business Structures, Similarities/differences between entrepreneurs and managers.

Unit 2 – Business Ideas and their implementation

- Discovering ideas and visualizing the business
- Activity map
- Business Plan

Unit 3 – Idea to Start-up

- Market Analysis – Identifying the target market,
- Competition evaluation and Strategy Development,
- Marketing and accounting,
- Risk analysis

Unit 4 – Management

- Company's Organization Structure,
- Recruitment and management of talent.
- Financial organization and management

Unit 5 - Financing and Protection of Ideas

- Financing methods available for start-ups in India
- Communication of Ideas to potential investors – Investor Pitch
- Patenting and Licenses

Unit 6: Exit strategies for entrepreneurs, bankruptcy, and succession and harvesting strategy

Learning Outcome:

Upon completion of the course, the student will be able to demonstrate knowledge of the following topics:

1. Understanding the dynamic role of entrepreneurship and small businesses
2. Organizing and Managing a Small Business
3. Financial Planning and Control
4. Forms of Ownership for Small Business
5. Strategic Marketing Planning
6. New Product or Service Development
7. Business Plan Creation

SUGGESTED LEARNING RESOURCES:

S. No.	Title of Book	Author	Publication
1.	The Startup Owner's Manual: The Step-by-Step Guide for Building a Great Company	Steve Blank and Bob Dorf	K & S Ranch ISBN – 978-0984999392
2.	The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses	Eric Ries	Penguin UK ISBN – 978-0670921607
3.	Demand: Creating What People Love Before They Know They Want It	Adrian J. Slywotzky with Karl Weber	Headline Book Publishing ISBN – 978-0755388974
4.	The Innovator's Dilemma: The Revolutionary Book That Will Change the Way You Do Business	Clayton M. Christensen	Harvard business ISBN: 978-142219602

SUGGESTED SOFTWARE/LEARNING WEBSITES:

a. https://www.fundable.com/learn/resources/guides/startup

b. https://corporatefinanceinstitute.com/resources/knowledge/finance/corporate-structure/

c. https://www.finder.com/small-business-finance-tips

d. https://www.profitbooks.net/funding-options-to-raise-startup-capital-for-your-business/

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DIPLOMA IN CHEMICAL ENGINEERING (C02)

SEMESTER VI

COURSE TITLE	:	PROJECT ENGINEERING
PAPER CODE	:	7530
SUBJECT CODE	:	602
TREORY CREDITS	:	07
PRACTICAL CREDITS	:	00

COURSE LEARNING OBJECTIVES:

- To enable the students to gain experience in organization and implementation of a small project and thus acquire the necessary confidence to carry out the main project in the final year.
- To make the students gain all the knowledge in terms of financial analysis for starting up a new chemical industry.
- To gain knowledge on cost analysis when it comes to start up a new industry after undergoing all major subjects of chemical engineering.
- To give a clear linkage between technical knowledge and commercial aspects of the major chemical engineering unit operations and design.

COURSE CONTENT:

UNIT-I: Plant location and site selection, CCOE Clearance, MoEF Clearance, plant layout, factors affecting plant location, project planning and scheduling of projects, project financing, Flow sheeting, Selection of Process Equipment. Process utilities, process water, boiler feed water, steam distribution including appropriate mechanical valves and instrumentation, process pumps, compressors, Refrigeration plant.

UNIT-II: Piping design and piping, Connecting pipes to process equipment, layout, Support for piping insulation, plant constructions, star-up and commissioning.

UNIT-III: Value of money, Equations for economic studies and equivalence. Amortization, Capital recovery and Depreciation. Project implementation steps, Feasibility studies, Capital requirements for process plants, Cost indices, Equipment cost, Service facilities.

UNIT-IV: Balance sheet, Variable cost, Fixed cost, Income statement, Economic production charts. Capacity factors, Taxes and Insurance, Cash flow analysis.

UNIT-V: Economics of Selecting Alternates: Annual cost method, Present worth method, Equivalent alternates, Rate of return and Pay out time. Overall Cost Analysis and Economic Trade Offs: Economic balance: Economic balance in batch operations, Overall cost analysis for the plant, Economic trade-offs.

REFERENCE BOOKS:

1. J.M. Coulson, JF Richardson, RK Sinnott Butterworth Heinman, Chemical Engineering

Volume 6, Revised Second Edition, Butterworth-Heinemann.

2. M. S. Peters & K. D. Timmerhaus, 'Plant design & Economics for Chemical Engg.' McGraw-Hill Science/ Engineering/Math 5th Ed.

3. Industrial Boilers, and Heat recovery Steam Generators Design, Applications and calculations by V.Ganapathy, Marcel Dekker, Inc,.

4. Sivasubramanian V, "Process Economics and Industrial Management", Galgotia Publications Pvt Ltd..

COURSE OUTCOMES:

On completion of the course, the student can

1. understand how a project has to be started, their pre-requirements, flow chart preparation, economic calculation and so on.
2. work out the balance sheet and Income statement for a particular concern.
3. gain a good knowledge on when to run an industry in a profitable or without loss/gain of a particular concern.
4. choose between the equipment/instruments of the same function based on both technical and commercial point of view.
5. draw a complete flowchart of a plant with cost analysis.

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SEMESTER VI

COURSE TITLE	:	WASTE MANAGEMENT
PAPER CODE	:	7531
SUBJECT CODE	:	611
TREORY CREDITS	:	03
PRACTICAL CREDITS	:	00

COURSE LEARNING OBJECTIVES:

- To recognize and learn about waste management, waste treatment and recycling
- To understand the impacts on our environment.
- To learn about pollution, pollutants, waste disposal processes

COURSE CONTENT:

UNIT- I: Types and Sources of Solid and Hazardous Wastes - Need for Solid and Hazardous Waste Management, Waste Generation Rates - Composition – Hazardous Characteristics,
UNIT-II: Waste Sampling - Source Reduction of Wastes - Recycling and Reuse - Handling and Segregation of Wastes at Source - Storage and Collection of Municipal Solid Wastes - Analysis of Collection Systems - Need for Transfer and Transport - Transfer Stations - Labelling and Handling of Hazardous Wastes.
UNIT-III: Waste Processing - Processing Technologies - Biological and Chemical Conversion Technologies - Composting - Thermal Conversion Technologies - Energy Recovery - Incineration - Solidification and Stabilization of Hazardous Wastes - Treatment of Biomedical Wastes -
UNIT-IV: Disposal in Landfills - Site Selection - Design and Operation of Sanitary Landfills - Secure Landfills and Landfill Bioreactors - Leachate and Landfill Gas Management - Landfill Closure and Environmental Monitoring - Closure of Landfills - Landfill Remediation –
UNIT-V: Legislations on Management and Handling of Municipal Solid Wastes, Hazardous Wastes, and Biomedical Wastes - Elements of Integrated Waste Management.

REFERENCE BOOKS:

1. *O.P. Gupta, "Elements of Solid Waste Hazardous Management", Khanna Publishing House, New Delhi, 2018*
2. *George Tchobanoglous, Hilary Theisen and Samuel A, Vigil, Integrated Solid Waste Management, McGraw-Hill, New York, 19932.*
3. *CPHEEO, Manual on Municipal Solid waste management, Central Public Health and Environmental Engineering Organization, Government of India, New Delhi.*

COURSE OUTCOMES:

At the end of the course student will be able

- To explain the various functional elements involved in waste management system
- To quantify and categorize solid wastes for any region
- To prepare concept design for the common functional elements of the waste management systems.
- To select suitable waste processing technologies and disposal methods

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DIPLOMA WING
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DIPLOMA IN CHEMICAL ENGINEERING (C02)

SEMESTER VI

COURSE TITLE	:	COMPUTER APPLICATIONS IN CHEMICAL ENGINEERING
PAPER CODE	:	7532
SUBJECT CODE	:	612
TREORY CREDITS	:	03
PRACTICAL CREDITS	:	00

COURSE LEARNING OBJECTIVES:

To impart the students, the knowledge of computer and its application in chemical engineering.

COURSE CONTENT:

UNIT-I: INTRODUCTION: Review on Programming languages, Basic, Fortran, Review on operating system commands.

UNIT-II: SPREAD SHEETS: Application in Density, molecular weight, mole and percentage compositions, Empirical and Molecular formula calculations, Heat of mixing, Gas laws, Vapour pressure, Chemical Kinetics calculations.

UNIT-III: SPREAD SHEETS: Application in data processing, Statistical analysis of data, Regression. Analysis of variance, Interpolation, Graphical representations of various Chemical Engineering problem both in laboratory exercise and core subjects such as Mechanical operation, Reaction Engineering, Distillation etc.,

UNIT-IV: DATABASE: Design and developments of simple databases on Chemical and Physical properties of substances. Retrieval and Database in report, query and other formats, Interfacing with other software. Preparation of Material and energy Balances preparation of plant layout.

UNIT-V: MATHEMATICAL PROGRAMMING: Linear Programming, Transportation, Assignment, Dynamic Programming in Chemical Engineering, Formulation and solution through PC based programmes.

REFERENCE BOOKS:

1. Finlayson, B.A., "Introduction to Chemical Engineering Computing", 1st Edition, University of Washington.

2. S. Swapna Kumar and S. V. B. Lenina, "MATLAB: Easy Way of Learning", PHI Learning..

3. Singh, "Matlab Programming" Prentice Hall India Learning Private Limited.

COURSE OUTCOMES:

On completion of the course the students will be able to know the importance of software to control the process in industries and applications related to mathematical modelling.

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DIPLOMA IN CHEMICAL ENGINEERING (C02)

SEMESTER VI

COURSE TITLE	:	DISASTER MANAGEMENT
PAPER CODE	:	7603
SUBJECT CODE	:	621
TREORY CREDITS	:	03
PRACTICAL CREDITS	:	00

Course Learning Objectives:

Following are the objectives of this course:

- To learn about various types of natural and man-made disasters.
- To know pre- and post-disaster management for some of the disasters.
- To know about various information and organisations in disaster management in India.
- To get exposed to technological tools and their role in disaster management.

Course Content:

Unit – I: Understanding Disaster

Understanding the Concepts and definitions of Disaster, Hazard, Vulnerability, Risk, Capacity – Disaster and Development, and disaster management.

Unit – II: Types, Trends, Causes, Consequences and Control of Disasters

Geological Disasters (earthquakes, landslides, tsunami, mining); Hydro-Meteorological Disasters (floods, cyclones, lightning, thunder-storms, hail storms, avalanches, droughts, cold and heat waves) Biological Disasters (epidemics, pest attacks, forest fire);

Technological Disasters (chemical, industrial, radiological, nuclear) and Manmade Disasters (building collapse, rural and urban fire, road and rail accidents, nuclear, radiological, chemicals and biological disasters) Global Disaster Trends – Emerging Risks of Disasters – Climate Change and Urban Disasters.

Unit- III: Disaster Management Cycle and Framework

Disaster Management Cycle – Paradigm Shift in Disaster Management.

Pre-Disaster – Risk Assessment and Analysis, Risk Mapping, zonation and Microzonation, Prevention and Mitigation of Disasters, Early Warning System; Preparedness, Capacity Development; Awareness.

During Disaster – Evacuation – Disaster Communication – Search and Rescue – Emergency Operation Centre – Incident Command System – Relief and Rehabilitation –

Post-disaster – Damage and Needs Assessment, Restoration of Critical Infrastructure – Early Recovery – Reconstruction and Redevelopment; IDNDR, Yokohama Stretegy, Hyogo Framework of Action.

Unit– IV: Disaster Management in India

Disaster Profile of India – Mega Disasters of India and Lessons Learnt.

Disaster Management Act 2005 – Institutional and Financial Mechanism,

National Policy on Disaster Management, National Guidelines and Plans on Disaster Management; Role of Government (local, state and national),Non-Government and Inter Governmental Agencies

Unit– V: Applications of Science and Technology for Disaster Management

Geo-informatics in Disaster Management (RS, GIS, GPS and RS).

Disaster Communication System (Early Warning and Its Dissemination).

Land Use Planning and Development Regulations, Disaster Safe Designs and Constructions, Structural and Non Structural Mitigation of Disasters

S&T Institutions for Disaster Management in India

References

1. Publications of National Disaster Management Authority (NDMA) on Various Templates and Guidelines for Disaster Management
2. Bhandani, R. K., An overview on natural & man-made disasters and their reduction, CSIR, New Delhi
3. Srivastava, H. N., and Gupta G. D., Management of Natural Disasters in developing countries, Daya Publishers, Delhi
4. Alexander, David, Natural Disasters, Kluwer Academic London
5. Ghosh, G. K., Disaster Management, A P H Publishing Corporation
6. Murthy, D. B. N., Disaster Management: Text & Case Studies, Deep & Deep Pvt. Ltd.

Course outcomes:

After competing this course, student will be:

- Acquainted with basic information on various types of disasters
- Knowing the precautions and awareness regarding various disasters
- Decide first action to be taken under various disasters
- Familiarised with organisation in India which are dealing with disasters
- Able to select IT tools to help in disaster management

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SEMESTER VI

COURSE TITLE	:	PROJECT MANAGEMENT
PAPER CODE	:	7604
SUBJECT CODE	:	622
TREORY CREDITS	:	03
PRACTICAL CREDITS	:	00

Course Learning Objectives:

- To develop the idea of project plan, from defining and confirming the project goals and objectives, identifying tasks and how goals will be achieved.
- To develop an understanding of key project management skills and strategies.

Course Content:

UNIT-I: Concept of a project: Classification of projects- importance of project management- The project life cycle- establishing project priorities (scope-cost-time)project priority matrix- work break down structure.

UNIT-II: Capital budgeting process: Planning- Analysis-Selection-Financing-Implementation-Review. Generation and screening of project ideas- market and demand analysis- Demand forecasting techniques. Market planning and marketing research process- Technical analysis

UNIT-III: Financial estimates and projections: Cost of projects-means of financing-estimates of sales and production-cost of production-working capital requirement and its financing-profitability projected cash flow statement and balance sheet. Break even analysis.

UNIT-IV: Basic techniques in capital budgeting: Non discounting and discounting methods- pay-back period- Accounting rate of return-net present value-Benefit cost ratio-internal rate of return. Project risk. Social cost benefit analysis and economic rate of return. Non-financial justification of projects**.**

UNIT-V: Project administration: progress payments, expenditure planning, project scheduling and network planning, use of Critical Path Method (CPM), schedule of payments and physical progress, time-cost trade off.

Concepts and uses of PERT cost as a function of time, Project Evaluation and Review Techniques/cost mechanisms. Determination of least cost duration. Post project evaluation. Introduction to various Project management softwares.

Reference Books:

1. Project planning, analysis, selection, implementation and review – Prasannachandra – Tata McGraw Hill
2. Project Management – the Managerial Process – Clifford F. Gray & Erik W. Larson - McGraw Hill
3. Project management - David I Cleland - Mcgraw Hill International Edition, 1999
4. Project Management – Gopala krishnan – Mcmillan India Ltd.
5. Project Management-Harry-Maylor-Peason Publication

Course outcomes:

At the end of the course, the student will be able to:

CO1	Understand the importance of projects and its phases.
CO2	Analyze projects from marketing, operational and financial perspectives.
CO3	Evaluate projects based on discount and non-discount methods.
CO4	Develop network diagrams for planning and execution of a given project.
CO5	Apply crashing procedures for time and cost optimization.

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DIPLOMA IN CHEMICAL ENGINEERING (C02)

SEMESTER VI

COURSE TITLE	:	ARTIFICIAL INTELLIGENCE
PAPER CODE	:	7605
SUBJECT CODE	:	631
TREORY CREDITS	:	03
PRACTICAL CREDITS	:	00

Course Content:

Unit 1 – Introduction to Artificial Intelligence

- Artificial Intelligence (AI) definition
- Goals of AI
- History of AI
- Applications of AI

Unit 2 – Agents and Environments

- Agent Terminology, Types of Agents – Simple Reflex Agents, Model Based Reflex Agents, Goal Based Agents
- Nature of Environments, Properties of Environments

Unit 3 – Search Algorithms

Terminology

- Brute Force Search Strategies – Breadth First Search, Depth First Search.
- Heuristic Search Strategies, Local Search Algorithms.

Unit 4 – Fuzzy Logic Systems

Introduction to Fuzzy Logic and Fuzzy systems,

- Membership functions,
- Fuzzification/Defuzzification

Unit 5 – Neural Networks

Basic structure of Neural Networks

- Perceptron
- Back-propagation

Suggested Learning Resources:

S. No.	Title of Book	Author	Publication
1	Artificial Intelligence By Example: Develop machine intelligence from scratch using real artificial intelligence use cases	Denis Rothman	Packt Publishing ISBN – 978-1788990547

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DIPLOMA IN CHEMICAL ENGINEERING (C02)

SEMESTER VI

COURSE TITLE	:	ENGINEERING ECONOMICS & ACCOUNTANCY
PAPER CODE	:	7606
SUBJECT CODE	:	632
TREORY CREDITS	:	03
PRACTICAL CREDITS	:	00

Course Learning Objectives:

- To acquire knowledge of basic economics to facilitate the process of economic decision making.
- To acquire knowledge on basic financial management aspects.
- To develop the basic skills to analyze financial statements.

Course Content:

UNIT-I: Introduction: Managerial Economics; Relationship with other disciplines; Firms: Types, objectives and goals; Managerial decisions; Decision analysis.

Unit-II: Demand & Supply Analysis: Demand; Types of demand; Determinants of demand; Demand function; Demand elasticity; Demand forecasting; Supply; Determinants of supply; Supply function; Supply elasticity.

Unit-III: Production and Cost Analysis: Production function; Returns to scale; Production optimization; Least cost input; Isoquants; Managerial uses of production function; Cost Concepts; Cost function; Types of Cost; Determinants of cost; Short run and Long run cost curves; Cost Output Decision; Estimation of Cost.

Unit-IV: Pricing: Determinants of Price; Pricing under different objectives and different market structures; Price discrimination; Pricing methods in practice; Role of Government in pricing control.

Unit-V: Financial Accounting (Elementary Treatment): Balance sheet and related concepts; Profit & Loss Statement and related concepts; Financial Ratio Analysis; Cash flow analysis; Funds flow analysis; Comparative financial statements; Analysis & Interpretation of financial statements; Investments; Risks and return evaluation of investment decision; Average rate of return; Payback Period; Net Present Value; Internal rate of return,

Reference Books:

1. Premvir Kapoor, Sociology & Economics for Engineers, Khanna Publishing House, New Delhi, 2018
2. McGuigan, Moyer and Harris, 'Managerial Economics; Applications, Strategy and Tactics', Thomson South Western, 10th Edition, 2005.
3. Prasanna Chandra. 'Fundamentals of Financial Management', Tata Mcgraw Hill Publishing Ltd., 4th edition, 2005.
4. Samuelson. Paul A and Nordhaus W.D., 'Economics', Tata Mcgraw Hill Publishing Company Limited, New Delhi, 2004.
5. Paresh Shah, 'Basic Financial Accounting for Management', Oxford University Press, New Delhi, 2007. 3. Salvatore Dominick, 'Managerial Economics in a global economy'. Thomson South Western, 4th Edition, 2001.

Course outcomes:

At the end of the course, the student will be able to:

CO1	Understand the macro-economic environment of the business and its impact on enterprise
CO2	Understand cost elements of the product and its effect on decision making
CO3	Prepare accounting records and summarize and interpret the accounting data for managerial decisions
CO4	Understand accounting systems and analyze financial statements using ratio analysis
CO5	Understand the concepts of financial management and investment

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SEMESTER VI

COURSE TITLE	:	INDIAN CONSTITUTION
PAPER CODE	:	--
SUBJECT CODE	:	--
TREORY CREDITS	:	00
PRACTICAL CREDITS	:	00

Course Content

Unit 1 – The Constitution - Introduction

- The History of the Making of the Indian Constitution
- Preamble and the Basic Structure, and its interpretation
- Fundamental Rights and Duties and their interpretation
- State Policy Principles

Unit 2 – Union Government

- Structure of the Indian Union
- President – Role and Power
- Prime Minister and Council of Ministers
- Lok Sabha and Rajya Sabha

Unit 3 – State Government

- Governor – Role and Power
- Chief Minister and Council of Ministers
- State Secretariat

Unit 4 – Local Administration

- District Administration
- Municipal Corporation
- Zila Panchayat

Unit 5 – Election Commission

- Role and Functioning
- Chief Election Commissioner
- State Election Commission

Suggested Learning Resources:

S. No.	Title of Book	Author	Publication
1.	Ethics and Politics of the Indian Constitution	Rajeev Bhargava	Oxford University Press, New Delhi, 2008
2.	The Constitution of India	B.L. Fadia	Sahitya Bhawan; New edition (2017)
3.	Introduction to the Constitution of India	DD Basu	Lexis Nexis; Twenty-Third 2018 edition

Suggested Software/Learning Websites:

a. https://www.constitution.org/cons/india/const.html
b. http://www.legislative.gov.in/constitution-of-india
c. https://www.sci.gov.in/constitution
d. https://www.toppr.com/guides/civics/the-indian-constitution/the-constitution-of-india/

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DIPLOMA IN CHEMICAL ENGINEERING (C02)

SEMESTER - VI

COURSE TITLE	:	MAJOR PROJECT
PAPER CODE	:	--
COURSE CODE	:	--
TREORY CREDITS	:	00
PRACTICAL CREDITS	:	04 (03+01 Credit of the V Sem.)

MAJOR PROJECT

It should be based on real/live problems of the Industry/Govt./NGO/MSME/Rural Sector or an innovative idea having the potential of a Startup.

Evaluation is based on work done, quality of report, performance in vivavoce, presentation etc

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DIPLOMA IN CHEMICAL ENGINEERING (C02)

SEMESTER - VI

COURSE TITLE	:	SEMINAR
PAPER CODE	:	--
COURSE CODE	:	--
TREORY CREDITS	:	01
PRACTICAL CREDITS	:	00

SEMINAR

Evaluation is based on work done, quality of report, performance in Viva-voce, presentation etc .

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