AC: 25/07/2023
Item No. :2.4

SIES (Nerul) College of Arts, Science and Commerce (Autonomous)

Syllabus for Approval

B.Sc. Packaging Technology

Sr. No.	Heading	Particulars
1	Title of the course	B.Sc (Packaging Technology)
2	Eligibility for admission	Eligibility for admission First year: HSC Science or HSC Vocational Sciences Eligibility for admission Second year: Post SSC Diploma Engg. or Tech / Vocation Sciences
3	Minimum Percentage for admission	40%
4	Passing Marks	40%
5	Semesters	I
6	Level	UG
7	Pattern	3-4 years & 6-8 semesters Choice Based Grading System
8	Status	New
9	To be implemented from	From Academic year 2023-24 in a progressive manner

Date: 25th July, 2023.

Signature:

Dr. Koel Roychoudhury
AC Chairperson

Dr. Trupti Wani
Head of the Department

Sri Chandrasekarendra Saraswati Vidyapuram,, Plot I-C, Sector V,
Nerul, Navi Mumbai – 400706 India
Tel No: 61196409, 61196410, 61196402, 61196413, 61196414, 61196415, 27708371
Fax No: 022-27713356, **Email:** ascnsies@sies.edu.in / siesascn@yahoo.in **Website:** www.siesascn.edu.in

Programme Objectives:

1. To learn about packaging materials, technologies, design, sustainability and quality control.
2. To gain practical skills in packaging design, testing, and production processes, as well as a deep understanding of industry regulations and standards.
3. To understand the packaging industry trends and work towards sustainable solutions.
4. To pursue higher education in packaging in India and abroad.

Programme Outcomes:

1. At the end of the program, students are able to gain thorough knowledge in key areas in the subjects offered.
2. At the end of the program, students will be able to identify, formulate and analyze scientific problems and reach concrete solutions using various principles of mathematics and sciences.
3. At the end of the program, learners will be able to design solutions for complex problems and design a process/ processes that can meet specific needs. (Attainment of this is through projects at the final year level).
4. Learners will be able to communicate effectively on scientific issues with the scientific community and society at large in writing effective reports and designing documentation, make effective presentations and give and receive instructions.
5. At the end of this programme, students will be able to hone the soft-skills required in positively enhancing their academic, professional and personal pursuits towards self and societal advancement.

.

Preamble

As lifestyles change, materials evolve and the race for branding and marketing continues, the Packaging Industry adapts & benefits. It is a very dynamic, fast-paced marketplace. Anyone working within the packaging industry should expect constant evolution and growth. For capable employees seeking to work in Packaging Industry, the possibilities are endless. This industry is innovative, stable, and creative. This being a specialized field requires special education and training.

The B.Sc. in Packaging Technology specializing in Packaging Materials, Designing, Quality & Testing is designed to impart advanced knowledge and skills that are practical-oriented, career and community oriented. Packaging is usually taught as an interdisciplinary field, bringing together elements from a variety of scientific realms. It has special relevance to industry application with hands-on laboratory training sessions.

The core philosophy of overall syllabus is to -

a. Form strong foundation of Packaging Science,

b. Introduce Packaging technologies to the students in a gradual way,

c. Groom the students for the challenges of Packaging Industry

The curriculum is designed as per the NEP Credit Framework for 4-year UG degree programme.

SIES (Nerul) College of Arts, Science and Commerce (Autonomous)

B.Sc. Packaging Technology Programme

(To be implemented from Academic Year- 2023-24)

No. of Courses	Course Code	Semester I	Credits
1	***Major***		
1	U23PT1MJ01	**Introduction To Packaging**	**02**
2	U23PT1MJ02	**Paper Based Packaging**	**03**
3	U23PT1MJP02	**Paper Based Packaging Laboratory**	**01**
2	***Minor***		
1	U23PT1MI01	**Basic Chemistry - I**	**03**
2	U23PT1MIP01	**Basic Chemistry – I Practicals**	**01**
3	***Open Electives (OE)***		
1	U23PT1E01	**Environment and Society**	**04**
4	***VSC/SEC***		
1	U23PT1VSC01	**Basics of Computers**	**02**
2	U23PT1SEC01	**Introduction to Good Laboratory Practices**	**02**
5	***AEC/VEC/IKS***		
1	U23PT1AEC01	**Effective Communication Skills – I**	**02**
2	U23PT1VEC01	**Understanding Indian Society and Constitutional Values**	**02**
6	***OJT, FP, RP, CEP, CC***		
		Total Credits	**22**

COURSE NAME: INTRODUCTION TO PACKAGING

COURSE CODE: U23PT1MJ01 **COURSE CREDIT: 02**

1 credit - 15 lectures **1 lecture is 60 minutes**

Course Objectives:

- Study the basic concepts of packaging technology.
- Study the overall perspective of the packaging industry.
- Recognize the importance of product-package interaction & its quality aspects in packaging.
- Understand marketing as an integral tool to packaging.

Course Outcomes:

Learners will be able to:

- Classify & evaluate the various types of packaging existing in the market.
- Analyse the product-packaging compatibility parameters.
- Explain the importance of packaging in the context of present scenario.

Sr. No.	Syllabus	No. of Lectures
01	**Unit I: Introduction & Product-Package Compatibility Studies:** • Packaging – History, Need & Evolution; Packaging Functions – Contain, Preserve, Protect, Inform, Identify, Sell; Packaging Hazards – Storage, Transportation, Chemical, Climatic, Biological; Packaging Classifications – Primary / Secondary / Tertiary, Unit / intermediate / Bulk, Flexible & Rigid. • Product Characteristics: Physical (nature, shape, size, texture, Centre of gravity, etc.), Chemical (Acidic, basic, reactivity etc.), Biological (Effect of micro-organisms) and Effect of moisture, oxygen and other gases; Package Characteristics: Material (Plastic, paper, wood, etc.), Physical (tensile, breaking load, burst, molecular/fibre direction, etc.), Chemical (Unreacted chemicals present, pH, etc.), Biological (sensitivity to micro-organisms), Permeability (Barrier properties – Absorption/Diffusion of moisture and gases). Live Problems / Case Studies.	**15**
02	**Unit II: Packaging – Marketing, Quality, Environment, Cost** • Market Considerations – Importance of Demography & Psychography, Retail Market (POP), Equity & Brand Name; Package Embellishment – Graphic Design Elements – Significance of Shape, Size, Colour, Font, Texture, Lines, Balance & Unity, Symmetry & Harmony; Shelf Appeal Studies - Recall Questioning, Focus Group, Eye-Tracking, S-scope studies. • Quality Control – Need for and importance of packaging; Significance of specifications; Significance of Testing; Introduction to Standards, Conditioning, Sampling; Examples of testing according to standards. • Packaging Costs; Packaging – Environmental considerations & waste management; Introduction to Packaging Laws & Regulations; Packaging Scenario – World & India – Comparison, Scope & Growth in India.	**15**

References:

1. Soroka W., “Fundamentals of Packaging Technology”, 3rd Ed, IoPP, 2002.
2. Paine F. A., “The Packaging User’s Handbook”, 1st Ed, Blackie Academic & Professional, 1991.
3. Byett J. et al., “Packaging Technology”, 2nd Ed, The Institute of Packaging (SA), 2001.
4. Selke, S. E. M., Culter, J. D. and Hernandez, R. J., “Plastics Packaging: Properties, processing,Applications and Regulation”, Carl HanserVerlag, USA, 2004.
5. Joseph F. H, Robert J. K, Hallie F, “Handbook of Package Engineering”, Third Edition,Technomic Publishing, 1998.
6. Yam K. L., “The Wiley Encyclopedia of Packaging Technology”, Third Edition, Wiley, 2009.

COURSE NAME: PAPER BASED PACKAGING

COURSE CODE: U23PT1MJ02 **COURSE CREDIT: 03**

1 credit - 15 lectures **1 lecture is 60 minutes**

Course objectives:

- Gain the basic knowledge of pulping and paper making process.
- Study various types of papers, boards and paper-based packages along with their manufacturing processes
- Understand the properties of paper & paperboard w.r.t. to packaging applications.
- Study the various types of CFB, their types & Properties.

Course Outcomes:

Learners will be able to:

- Identify various types of paper & paperboards
- Testing the various properties of paper-based packaging materials
- Analyse & evaluate the different types of paper-based packaging materials based on their properties & applications

Sr. No.	Syllabus	No. of Lectures
01	**Unit I: Raw Materials, Pulping & Papermaking** • Fibrous raw materials –Soft and Hard Wood, Wood structure and morphology, non-wood fibers and recycled paper, Non fibrous Additives, Sizing Agents, Binders, Fillers and Additives, Wood harvesting, logging, sorting, Debarking, Chipping, Screening & Storage. • Pulping: Types- Mechanical, Chemical and Semi-chemical - Pulp properties – Processing of pulp for paper making. • Paper Making: Preparation of pulp – Repulping/dispersion, Beating and Refining, Bleaching, Recycled paper – Deinking, Washing and Flotation Fourdrinier Paper Machine- Dry and Wet end operations- Surface treatments- Sizing, Coating and Super calendaring.	**15**
02	**Unit II: Paper Types & Properties** • Types of papers: Printing grades-uncoated papers, coated papers, Newsprint, office paper-Packaging paper grades, properties and applications - Tissue, Parchment, greaseproof, glassine, wet strength paper, stretchable paper, coated paper • Paper properties: Optical properties – Colour, brightness, smoothness, gloss, opacity and rub resistance, Strength properties–thickness, grammage, tensile, tear, bursting strength, stiffness, Grain direction, Wire and Felt sides.	**15**

03	**Unit III: Paper based Boards & Packaging** • Paperboard – Folding box board, white lined chipboard, solid bleached board, solid unbleached board, Liquid packaging board, Duplex / grey Board, Solid Fibre Boards, Container boards / Specialty boards. Board making: Sources and Paperboard Manufacturing process, Multiply Board, Cylinder Forming machine, Vat types - Pressure and suction forming. Pressing, drying and finishing, Paper board Coating. • Corrugated Board construction - Flutes/Single, Double, Triple Wall, Board grades, Manufacture, Adhesive Bond, Specifications, Box Layout • Paper-based packaging: Paper bags & Sacks–Manufacturing & Applications-Types of bags- Multiwall Paper bags -Regenerated Cellulosic films.	**15**

References:

1. Handbook of Paper and Board, Herbert Holik, Wiley-VCH, 2006.

2. Paper and paperboard Packaging Technology, Mark J. Kirwan, Blackwell Publishing, 2005.

3. Handbook of Pulp Vol.1, Herbert Sixta, Wiley-VCH, 2005.

4. Handbook for pulp and paper technologists, G.A. Smook, Angus Wilde Publications, 2001.

5. "The Wiley Encyclopedia of Packaging Technology", 2nd Edition, Wiley,
New York, USA, 1995

6. R. E. Mark, C. C. Habeger, Jr., J. Borch and M. B. Lyne, "Handbook of Physical Testing of Paper",
2nd Edition, Marcel Dekker, 2002

7. Twede, D. and Selke, S. E. M., "Cartons, Crates and Corrugated Board – Handbook of Paper and
Wood Packaging Technology", DEStech Publications, 2005.

COURSE NAME: PAPER BASED PACKAGING LABORATORY

COURSE CODE: U23PT1MJP02 **COURSE CREDIT: 01**

1 credit - 15 lectures **1 lecture is 120 minutes**

List of Practicals:

1. To find Grammage for a given sample of paper / paperboard / individual plies & overall CFB
2. To find thickness for a given sample of paper / paperboard
3. To identify grain direction and top / wire-side of paper.
4. To find water absorption / COBB value of paper / paperboard / CFB
5. To find Bursting strength and burst factor of paper
6. To find Tearing Strength of paper and grain direction
7. To find the tensile strength of a given paper sample.
8. To find Grammage for a given sample of paperboard,
9. To identify the type of flute of a given CFB Sample.
10. To find the ECT and RCT of a given CFB Sample.
11. To find the puncture resistance of a given CFB Sample.
12. To measure Ash Content in a given paper sample
13. To measure optical properties: Colour, Brightness, Whiteness Index & Gloss

COURSE NAME: BASIC CHEMISTRY-I

COURSE CODE: U23PT1MI01 **COURSE CREDIT: 03**

1 credit - 15 lectures **1 lecture is 60 minutes**

Course Objectives:

- To acquaint the students with basic concepts of chemistry viz., nomenclature chemical bonding and stereochemistry.

Learning Outcome:

- The students will learn elaborate concepts of nomenclature of solutions,classification and buffers.
- They will also be able to elaborate the chemical bonding types in different compounds along with gaining insight into stereochemistry.

Sr. No	Syllabus	No. of lectures
01	**Module-1- Nomenclature, Classification and Solutions, Buffers** **Nomenclature and Classification of:** ● **Inorganic Compounds:** Oxides, Salts, Acids, Bases, Ionic, Molecular and Coordination Compounds ● **Organic Compounds:** Alkanes, Alkenes, Alkynes, Cyclic Hydrocarbons, Aromatic Compounds, Alcohols and Ethers, Aldehydes and Ketones, Carboxylic Acids and its derivatives, Amines, Amides, Alkyl Halides and Heterocyclic Compounds **Solutions:** Normality, Molarity, Mole fraction, ppb, ppm, millimoles, milliequivalents (Numericals expected). ● **Buffer:** Concept of Buffers, Types of Buffers, Derivation of Henderson equation for Acidic and Basic buffers, Buffer action, Buffer capacity (Numericals expected) pH of Buffer Solution.	**15**
02	**Module II- Chemical Bonding** ● Bond length, Bond order Ionic Bond- Nature of Ionic Bond, Structure of NaCl, KCl and CsCl, Factors influencing the formation of ionic bond. ● Covalent Bond- Nature of covalent bond, Structure of	**15**

	CH_4, NH_3, H_2O, Shapes of $BeCl_2$, BF_3. ● Coordinate Bond- Nature of Coordinate Bond. ● Non-Covalent Bonds: Van De Waal's forces: dipole - dipole, dipole – induced dipole, Hydrogen Bond.	
03	**Module 3-Stereochemistry** **Stereochemistry:** Isomerism, Racemic mixtures Cis-Trans, Threo, Erythro and Meso isomers. Conformation: Conformations of Ethane, Difference between Configuration and Conformation. ● Configuration: Asymmetric Carbon Atom, Stereogenic/ Chiral Centers, Chirality ● Projection formulae – Fischer, Newman and Sawhorse, The Interconversion of the Formulae	**15**

References:

1. Ahluwalia, V. K., 2010 TEXTBOOK OF ORGANIC CHEMISTRY, VOL.III, S. Chand
2. Publishers, Ane Books Pvt. Ltd.
3. Arun Bahl and B. S. Bahl: Advanced Organic Chemistry, S. Chand
4. Atkins P.W. and Paula J.de, Atkin's Physical Chemistry, 10th Ed., Oxford University 12Press (2014).
5. Ball D.W., Physical Chemistry, Thomson Press, India (2007).Castellan G.W., Physical Chemistry, 4th Ed., Narosa (2004).
6. Mortimer R.G., Physical Chemistry, 3rd Ed., Elsevier: NOIDA, UP (2009).
7. Kalsi, P. S. Stereochemistry Conformation and Mechanism, New Age International, 2005
8. Garland C. W., Nibler J.W. and Shoemaker D.P., Experiments in Physical Chemistry, 8thEd., McGraw-Hill, New York (2003).
9. Halpern A.M. and McBane G.C., Experimental Physical Chemistry, 3rd Ed., W.H.Freeman and Co., New York (2003).

COURSE NAME: BASIC CHEMISTRY-I PRACTICALS

COURSE CODE: U23PT1MIP01 **COURSE CREDIT: 01**

1 credit - 15 lectures **1 lecture is 120 minutes**

List of Practicals
1. Spot test for compounds belonging to Carboxylic Acid, Phenol, Aldehyde/Ketone, Ester, Alcohol, Amine, Nitro Compounds, Haloalkane, Haloarene. 2. To prepare 0.1 N succinic acid and standardize sodium hydroxide of two different concentrations. 3. Study of neutralization reaction by titration. 4. Estimation of Alcohol by Dichromate method. 5. Preparation of buffers.

COURSE NAME : ENVIRONMENT AND SOCIETY

COURSE CODE: U23PT1E01 **COURSE CREDIT: 04**

1 credit - 15 lectures **1 lecture is 60 minutes**

Course Objective:

- To orient the students with various movements for the environment.

Learning Outcome:

- The students will be encouraged to participate in activities that promote environmentalconservation and are also made aware of the role of society in environmental management.

Sr. No	Syllabus	No. of lectures
01	**Module -1- Introduction to Environment and Society** ● Concept of environment, Environment and man relationship ● Scope and Multidisciplinary nature of Environmental Studies ● Environment education and public awareness ● Environmental ethics.	15
02	**Module-2 - Impact of anthropogenic activities on Environment and Society** Impact of the following anthropogenic activities on the environment and society: • Pollution • Industrialization • Urbanization • Deforestation • Mining • Developmental projects • Reclamation • Tourism	15
03	**Module-3 - Man and Environment Management** • Concept and strategies for sustainable development • The Sustainable Development Goals (SDG) 2030 Agenda • Resource utilization and sustainability	15

	• Strategies for environmental protection based on consumerism	
04	**Module-4- Environmental Movements and Society** • Concept of Social and Environmental Movements • Origin of Environmental movements in India • Case studies of environmental movements (Bishnoi movement, Chipko Movement, Appiko Movement, Narmada Bachao Andolan, Silent Valley movement) • Ideological trends in Environmental Movement	15

References:

1. A Textbook of Environmental Studies, D. K. Asthana, S Chand & Co Ltd
2. A Textbook of Environmental Chemistry and Pollution Control, S. S. Dara, S Chand & Co Ltd
3. Essential Environmental Studies, S P Misra & S N Pandey, Ane Books Pvt. Ltd.
4. Understanding Environment, Chokkan, K.B., Pandya, H. & Raghunathan, H. (eds). 2004 Sagar Publication India Pvt. Ltd., New Delhi.
5. Pandit, M.K. 2013. Chipko: Failure of a Successful Conservation Movement. In: Sodhi, N.S., Gibson, L. & Raven, P.H. Conservation Biology: Voices from the Tropics. pp. 126- 127. Wiley Blackwell, Oxford, UK.

COURSE NAME : BASICS OF COMPUTERS

COURSE CODE : U23PT1VSC01 **COURSE CREDIT: 02**

1 credit - 15 lectures **1 lecture is 60 minutes**

Course Objective:

- To acquaint the students with Microsoft office and its various tools.

Learning outcomes:

- Students will learn the basics of computers and to use various toolbars in Microsoft Word,Microsoft Excel and Microsoft PowerPoint.

Sr. No	Syllabus	No. of lectures
01	**Module 1- Basics of Computers** ● **Microsoft Word** – Creating new documents; Page Layout; Styles and Themes; Columns and Ordering; Working with Text; Format Text; Text boxes; Listing of Text; Use of various shapes; Use of Tables; SmartArt Graphics; Saving documents. **Microsoft Excel –** Starting a workbook; Modifying columns rows and cells; Formatting cells; Creating formulas; Formatting Tables; Aligning Texts; Working with Worksheets; Freezing worksheet panes; Use of Charts; Conditional Formatting. ● **Microsoft PowerPoint –** Uses of PowerPoint presentations; Basics of Presentation slides; Text Basics; Themes and Background styles; Pictures and Clip Art; Viewing and Printing slides; Animating Texts and Objects; Use of Slide Transitions; Slide Show options.	**15**
02	**Module 2- Tutorials** • **Tutorials based on Basics of Computers**	**15**

References:

1. Maluth, J. (2016). Basic Computer Knowledge. (n.p.): Amazon Digital Services LLC - Kdp.
2. Wempen, F. (2014). Computing Fundamentals: Introduction to Computers. Germany: Wiley.
3. Thareja, R. (2019). Fundamentals of Computers. India: Oxford University Press.
4. Foulkes, L. (2020). Learn Microsoft Office 2019: A Comprehensive Guide to Getting Started with Word, PowerPoint, Excel, Access, and Outlook. United Kingdom: Packt Publishing.
5. Habraken, J. (2022). Microsoft Office Inside Out (Office 2021 and Microsoft 365). United States: Microsoft Press.

COURSE NAME :INTRODUCTION TO GOOD LABORATORY PRACTICES

COURSE CODE: U23PT1SEC01 **COURSE CREDIT: 02**

1 credit - 15 lectures **1 lecture is 60 minutes**

Course Objective:

- To acquaint the students with basic rules, etiquettes and handling of chemicals in laboratory.

Learning outcomes:

- Students will be able to work in the laboratory with confidence and professional diligencerequired at the industrial level.

Sr. No	Syllabus	No. of lectures
01	**Module 1- Good Laboratory Practices** ● Basic rules and etiquettes to be followed in a laboratory. ● Types of glassware used. ● Storage and labeling of chemicals. ● Handling of chemicals. ● Transfer of chemicals; Use of pipettes. ● Disposal of chemicals and housekeeping practices. ● Measures to follow in case of accidents and injuries. ● Laboratory safety ● Personal Protective Equipments	**15**
02	**Module 2- Tutorials** • **Tutorials based on Good laboratory practices**	**15**

References:

1. Seiler, J. P. (2012). Good Laboratory Practice: The Why and the How. Germany: Springer Berlin Heidelberg.
2. Good Laboratory Practice Regulations, Revised and Expanded. (2002). United States: CRC Press.
3. Good Laboratory Practice Regulations. (1989). Switzerland: M. Dekker.
4. Anderson, M. A. (2002). GLP Essentials: A Concise Guide to Good Laboratory Practice. United Kingdom: Interpharm Press.

COURSE NAME: EFFECTIVE COMMUNICATION SKILLS-1

COURSE CODE: U23PT1AEC01 **COURSE CREDIT: 02**

1 credit - 15 lectures **1 lecture is 60 minutes.**

Course Objectives:

- To develop an awareness among learners about the complexity of the communication process.
- To develop effective letter writing skills among students with reference to prescribed layouts and formats.
- To demonstrate the effective use of communication skills applicable for employability in the present situation.

Course Outcomes:

- Learner will be aware about the general nature of the Communication process.
- Learner will be able to write business letters in prescribed layouts and formats.
- Learner will be able to use different types of oral and written skills to face employability conditions.

Sr. No	Syllabus	No. of lectures
01	**Module-1. Theory of Communication** Introduction and Process of Communication, Channels of Communication: Formal /Informal, Vertical, Downward, Upward, Horizontal, Grapevine, Methods of Communication: Verbal/Nonverbal, Barriers in Communication: Physical, Linguistic, Psychological, Sociocultural, Mechanical, Modern Modes of Communication	**10**
02	**Module-2.Business Correspondence -1** Theory of Business Letter Writing,7 Cs of Writing, Format of Letter Writing, Full Block Format, Modified Block Format, Parts of Letter : Major Parts/Minor Parts, Personnel Correspondence: Job Application Letter, Resume, Job Acceptance Letter, Resignation Letter, Recommendation Letter. Professional E mail Writing: Format, Principles of E-mail writing	**10**
03	**B) Tutorial Activities:** 1. Listening Comprehension 2. Speaking Skills: Public Speech 3.Barriers to Communication-case study 4. ICT Enabled Communication 5. Non-Verbal Communication 6. Job Application Letter 7. Resume Writing 8. Job Acceptance Letter 9. Recommendation Letter 10. E-Mail Writing	**10**

Reference Books:

1. A Handbook of Commercial Correspondence by Ashley, A, Oxford University Press, 1992.
2. Business Communication by D Chaturvedi and Mukesh Chaturvedi,Third Edition, Pearson Publications Ltd,2013.
3. Business Communication by Meenakshi Raman and Prakash Singh, Oxford University Press,2007.
4. Business Communication Strategies by Monippally, Matthukutty, M,Tata Mc Graw Hill New Delhi,2001.
5. Effective Business Communication by Herta Murphy, Herbert Hildebrandt,Jane Thomas, Mc Graw Hill Education,2009.
6. Effective Communication by Balan K.R. and Rayadu C.S. Beacon Publication, New Delhi, 1996.
7. Effective Technical Communication by M.Ashraf, Rizvi,Mc Graw Hill Publications,2006.

Course Name: Understanding Indian Society and Constitutional Values

COURSE CODE: U23PT1VEC01 **COURSE CREDIT: 02**

1 credit - 15 lectures **1 lecture is 60 minutes**

Course Objectives:

1. To introduce students to the overview of the Indian Society.
2. To help them understand the constitution of India.
3. To acquaint them with the socio-political problems of India.
4. To introduce students to a basic understanding of the Indian Political System.
5.

Learning Outcome:

1. Students will understand Indian Social conditions.
2. Students will be acquainted with features of Indian Constitutions.
3. Learners will be aware of the measures to tackle societal problems
4. Learners will understand the intricacies of Indian political system.

UNIT	TOPICS	LECTURES
Unit-I Salient features of Indian Society	1. Understand the multi-cultural diversity of Indian society through its demographic composition: Population distribution according to religion, caste, geographical location and gender and age. (3) 2. Co-existence of traditionalism and Modernism in Indian Society (1) 3. Values emerging from the diversity in Indian Society (1)	5 Lectures
Unit-II Challenges of Diversity to Unity	Disparity Arising out of- 1. Regionalism and Linguism-Meaning, causes and Impact (2) 2. Casteism and Communalism - Meaning, History, measures to solve these problems. (2) 3. Social Inequalities: Meaning, Causes and Effects, (1) 4. Gender Inequalities- Treatment and exclusiveness of Women and Other Genders in the society (2) 5. Economic/ Wealth Inequalities-Class System and Economic Segregation of the Society (2) 6. Measures to improve Equality and Social Justice in	10 Lectures

	the society (1)	
Unit-III Constitutional Values	7. Philosophy of the Constitution as set out in the Preamble (2) 8. Features of the Constitution (2) 9. Fundamental Rights (2) 10. Fundamental Duties (1) 11. Directive Principles of State Policy (1) 12. Federal structure (2)	10 Lectures
Unit-IV Significant Aspects of Political Processes	13. The party system in Indian politics; (2) 14. Local self -government in urban and rural areas; the 73rd and 74th Amendments and their implications for inclusive politics (2) 15. Role and significance of women in politics (1)	5 Lectures

References-

1. Social and Economic Problems in India, Naseem Azad, R Gupta Pub (2011)
2. Indian Society and Culture, Vinita Padey, Rawat Pub (2016)
3. Urbanisation in India: Challenges, Opportunities & the way forward, I J Ahluwalia, Ravi Kanbur, P K Mohanty, SAGE Pub (2014)
4. Regional Inequilities in India Bhat L SSSRD- New Delhi
5. The Problems of Linguistic States in India, Krishna Kodesia Sterling Pub
6. Problems of Communilism in india, Ravindra Kumar Mittal Pub
7. Combating Communalism in India: Key to National Integration, KawalKishor Bhardwaj, Mittal Pub
8. Khare, R. S. (1998). Cultural diversity and social discontent: Anthropological studies on contemporary India.
9. Ganesh, K., & Thakkar, U. (Eds.). (2005). Culture and the making of identity in contemporary India. SAGE Publications India.
10. Das, B., & Khawas, V. (2009). Gender issues in development: concerns for the 21st century. (No Title).
11. Mandal, B. P. (2011). Cultural Sociology. Centrum Press.
12. Rapport, N. (2014). Social and cultural anthropology: The key concepts. Routle
13. Oxford Concise Dictionary of Politics, Iain Mclean / Alistair McMillan, Oxford University Press
14. Politics, 2nd Edition, Andrew Heywood, Ane Books.
15. Dictionary of Politics, D. Robertson, Penguin Books India.
16. An Introduction to Political Theory, Gauba, O. P., Macmillan
17. Political ideas and concepts : An introduction, Heywood Andrew, Macmillan, Houndmills
18. Political ideologies : An introduction, Heywood Andrew, Macmillan, Houndmills
19. Oxford Companion to Politics of the World, Krieger Joel Joseph William A Kahler Miles Nzongola – Ntalaja Georges Stallings Barbara B. Weir Margaret, Oxford University Press New York.
20. Political Theory, Das Hari Hara and Chaudhari B. C., National Publishing House.
21. Introduction to the Indian Constitution, Basu D.D., Wadhwa Publications.

22. An Introduction to the Constitution of India, Pylee M V,Vikas Publishing House.
23. Introduction to the Constitution of India, Sharma, Brij Kishore, Prentice-Hall of India.
24. Our Constitution Kashyap Subhash, National Book Trust.
25. Indian Policy for Preliminary Examination, Lakshmikant, Tata McGraw Hill.
26. Indian Government and Politics, Narang A.S., Gitanjali Publishing House, New Delhi.
27. Introduction to Media and Politics, Sarah Oates, Sage publishers.
28. Principles of Modern Political Science, J.C. Johari, Sterling publishers

Reference Links for preparing Study Material-

1. https://lotusarise.com/salient-features-of-indian-society-upsc/
2. https://iasscore.in/upsc-syllabus/indian-society/indian-society-mains
3. https://lotusarise.com/upsc-notes/indian-society-upsc-notes/
4. https://asiasociety.org/education/indian-society-and-ways-living
5. https://www.drishtiias.com/to-the-points/Paper2/inequality-in-india

SCHEME OF EXAMINATION

For 4 Credits Subject

The scheme of examination shall be divided into two parts:

- **Internal assessment 40% i.e. 40 marks**
- **Semester end examination 60% i.e. 60 marks**

(A) Internal Assessment 40 marks

Description	Marks
Internal tests of 20 marks each Q.1 Multiple choice Questions/True or False - 10 Marks Q.2. Attempt 2 questions out of 3 questions (5 marks each)- 10 Marks	20
One Project and Viva voce/Presentation/Case studies/Assignments	15
Attendance and Class behavior	5
Total	40

B) Semester end examination 60 marks

PAPER PATTERN

Duration : 2 hours	
Total Marks: 60	
Q.1 12 marks OR 12 marks	12
Q.2 12 marks OR 12 marks	12
Q.3 12 marks OR 12 marks	12
Q.4 12 marks OR 12 marks	12
Q.5 12 marks OR 12 marks Three short notes of 4 marks each or Case study	12
Total	60
Note: 1. Q.1, 2, 3 and 4 - 12 marks question may be divided into sub questions if required. 2. Q.5 May include theory (short notes) /Case Study in one of the options.	

Passing criteria: Minimum 40% in Internal (16 out of 40) and 40% (24 out of 60) in semester end examination.

PRACTICAL EXAMINATION

Paper Pattern

1. **Major Experiment:** 20 Marks
2. **Minor Experiment:** 10 Marks
3. **Journal: 05 Marks**
4. **Viva Voce: 05 Marks**

NOTE:

1. Practical examination to be conducted as per the practical Syllabus enlisted.
2. Candidates are required to present certified journal on the day of practical examination.

SCHEME OF EXAMINATION

For 2 Credits Subject

The scheme of examination shall be divided into two parts:

- Internal assessment 40% i.e., 20 marks
- **Semester end examination 60% i.e., 30 marks**

(A) Internal Assessment 40 marks

Description	Marks
Internal tests of 10 marks each Q.1. Attempt 2 questions out of 3 questions (5 marks each)- 10 Marks	10
One Project and Viva voce/Presentation/Case studies/Assignments	10
Total	20

Periodical class test Question paper pattern

Sr. No.	Particulars	10 Marks
Q.1.	Match the column/ Fill in the blanks/ MCQ's/ Answer in one- or two-lines concept-based question (1 Mark / 2 Mark each)	05 Marks
Q.2.	Answer in Brief / Practical question (Attempt any 1 out of 3) - 5 marks each	05 Marks

B) Semester end examination 30 marks

PAPER PATTERN

Duration: 2 hours	
Total Marks: 60	
Q.1 10 marks OR 10 marks	10
Q.2 10 marks OR 10 marks	10
Q.3 10 marks OR 10 marks	10
Total	30
Note: 1. Q.1, 2, 3 - 10 marks question may be divided into sub questions if required.	

Passing criteria: Minimum 20% in Internal (4 out of 20) and 40% (12 out of 30) in semester end examination.