



B.A./B.Com./B.Sc.

Learning Outcomes

SKILL ENHANCEMENT COURSES

SEMESTER-I

PAPER: BIOINOCULANTS FOR AGRICULTURE AND SUSTAINABLE DEVELOPMENT

Learning Objectives

The Learning Objectives of this course are as follows:

- To make students aware of the role of microorganisms in sustainable development and remediation.
- To develop their own biofertilizers and other kinds of bio-inoculants for use in agriculture and environment.
- Skill development in initiating a bioinoculant-based low cost startup.

Learning outcomes

After studying this course, the students will be:

- Able to identify the role of microbes in sustainable development and how microbes can be used in remediation of damaged environments.
- Skilled in isolating microorganisms from a variety of different sites. Will learn Selection, purification and preservation of useful cultures.
- Skilled in formulating bioinoculants and test its efficacy.



PAPER: ESSENTIAL FOOD NUTRIENTS

Learning Objectives

- To develop a basic understanding of the components of food, their source, properties and interactions as well as changes that occur during processing, storage, and utilization

Learning Outcomes

- After studying this course, the student will be able to:
- Account for chemistry of foods: composition of food, role of each component
- Recognize some of the reactions and changes in individual food components which occur during processing, handling and storage

PAPER: CHEMISTRY LAB OPERATIONS AND SAFETY MEASURES

Learning Objectives

- To cultivate efficient working skills among the students to work in a chemistry laboratory
- To create a trained workforce which can responsibly learn imbibe and explore verticals on structured knowledge safely.
- To make students aware of different chemicals and their properties being used in the chemistry laboratory.

Learning Outcomes

After studying this course, the student will be:

- Able to design and implement safe working practices in chemistry laboratory.
- Able to safely handle different glass apparatus
- Able to handle the chemicals and equipment safely and properly.
- Able to design working protocols related to various methods and instruments in chemistry laboratory.



PAPER: PROGRAMMING USING PYTHON

Learning Objectives

The Learning Objectives of this course are as follows:

- To provide exposure to basic problem-solving techniques with computers
- To develop logical thinking abilities and to propose novel solutions for real-world problems through programming language constructs.
- To deepen the empirical knowledge on applying programming in business domains.

Learning Outcomes

The Learning Outcomes of this course are as follows:

- After studying this course, students will be able to interpret the basic representation of the data structures and sequential programming
- After studying this course, students will be able to gain knowledge of, and ability to use control framework terminologies.
- After studying this course, students will be able to work out using the core data structures as lists, dictionaries, tuples, and sets.
- After studying this course, students will be able to choose appropriate programming paradigms, interrupt and handle data using files to propose solutions through reusable modules
- After studying this course, students will be able to propose possible error-handling constructs for unanticipated states/inputs.
- After studying this course, students will be able to implements exemplary applications on real-world problems.



PAPER: DIGITAL MARKETING

Learning Objectives

The Learning Objectives of this course are as follows:

- To acquaint the students with the knowledge of growing integration between the traditional and digital marketing concepts and practices in the digital era.
- To familiarize the students with the tools and techniques used by the digital marketers for driving the marketing decisions to attain marketing objectives.

Learning outcomes

The Learning Outcomes of this course are as follows:

- After studying this course, students will be able to understand the concept of digital marketing and its integration with traditional marketing.
- After studying this course, students will be able to understand customer value journey in digital context and behaviour of online consumers.
- After studying this course, students will be able to understand email, content and social media marketing and apply the learnings to create digital media campaigns.
- After studying this course, students will be able to examine various tactics for enhancing a website's position and ranking with search engines.
- After studying this course, students will be able to leverage the digital strategies to gain competitive advantage for business and career.

PAPER: COMMUNICATION IN PROFESSIONAL LIFE

Learning Objectives

The Learning Objectives of this course are as follows:

- To prepare the students for their upcoming professional fields.
- To inculcate the fundamentals of professional and business communication.
- To learn aspects of global communication.



- To enhance employability skills of the learners by enabling them to write effective resumes and face interviews with confidence

Learning Outcomes

The Learning Outcomes of this course are as follows:

- After studying this course, students will be able to improve presentation skills to be learnt by effective use of verbal and non-verbal communication for the professional field.
- After studying this course, students will be able to acquire practical employability skills to be disseminated through focussed sessions on practical employable knowledge.
- After studying this course, students will be able to enhance professional communication.
- After studying this course, students will be able to improve persuasion and negotiation skills which will be useful for the professional field.

PAPER: MUSEUM AND MUSEOLOGY

Learning Objectives

- The objective of this paper is to introduce and provide basic understanding about Museum and Museology as a discipline.
- Through this paper the students will be exposed to various aspects of museum history- (museum movement in India, particularly), its functioning, types and purpose.
- It will highlight the role of the museum as an important centre for preservation and dissemination of knowledge.
- This paper is of particular value to those who are seeking careers as curators, art collectors, researchers and conservators.

Learning Outcomes

Upon completion of this course the student shall be able to:

- Understand museum as a resource center.



शिवजी कॉलेज
(दिल्ली विश्वविद्यालय)
Shivaji College
(University of Delhi)



NAAC ACCREDITED "A" GRADE COLLEGE

- Understand the historical process of institutionalization of archaeology and culture through museums.
- Develop an insight into the various roles of museum as an organizer, preserver and manager of artifacts.
- And how museum is an effective center for dissemination of knowledge and information, and space for dialogue and interaction.
- Also develop some understanding about new museums.
- A student having studied this course will be skilled in culture and tourism based industries: possible employment includes tour guides, archaeology assistants, archivist, jobs in art galleries, museums, auction houses, researchers in NGOs and other institutions, culture and art based writing and journalism and on social media.

PAPER: IT SKILLS AND DATA ANALYSIS – I

Learning Objectives

The primary objectives of the course will be to:

- Familiarise the student with the quantitative skills required for representing and interpreting data for the purpose of decision making.
- Equip the student with some fundamental concepts, which play a critical role in understanding and visualizing real world data.
- Enable the student to analyze data and problem situations using relevant IT tools.

Learning Outcomes

By the end of the course students will be able to

- Represent and interpret data in tabular and graphical forms
- Understand and interpret the measures of central tendency and dispersion.
- Use IT tools such as spreadsheets to visualise and analyse data.



PAPER: POLITICAL LEADERSHIP AND COMMUNICATION

Learning Objectives

- The Learning Objectives of this course are as follows:
- To understand the cross-cutting multi-disciplinary linkage of the subject.
- To gain a basic understanding of specific concepts and critical review of political communication and election campaign studies.
- To be able to construct a linkage between political communication and leadership.
- To learn conceptual frameworks and qualitative research skills for the analysis of modes and techniques of political communication and leadership.

Learning Outcomes

- The Learning Outcome of this course is as follows:
- After studying this course, students will be able to have a professional/career-oriented insight by facilitating their journey as Media managers, policy makers, political analysts, Journalists, Public relations officers in government agencies, political parties and higher education.

PAPER: ESSENTIALS OF PYTHON

Learning Objectives

- The Learning Objectives of this course are as follows:
- To introduce programming concepts using python
- To use python programming to solve problems of different domains

Learning Outcomes

- The Learning Outcomes of this course are as follows:
- After studying this course, students will be able to understand the basics of programming language



- After studying this course, students will be able to develop, document and debug modular python programs
- After studying this course, students will be able to apply suitable programming constructs and built in data structures to solve a problem

PAPER: YOGA IN PRACTICE

Learning Objectives:

- Students will be able to discern real significance of yogic operations from original sources and will be prone to practicing in their day to day life.

Learning Outcomes:

- Student will form an understanding of the concept of yoga.
- Students will learn various aspects of the science of yoga.
- Theoretical and practical knowledge of Aasanas and pranayams to lead a balanced life.

PAPER: BASIC IT TOOLS

Learning Objectives

The Learning Objectives of this course are as follows:

- To enable students develop IT skills that are a pre-requisite in today's work environment.
- To equip them with basic computing skills that will enhance their employability in general.
- To enable the student to analyse and present information in a meaningful manner.

Learning Outcomes

The Learning Outcomes of this course are as follows:

- By studying this course, students will be able to use word-processor to generate documents with appropriate formatting, layout, review and referencing.
- By studying this course, students will be able to manage data in worksheets and workbooks and analyze it using spreadsheet functions and inbuilt formulas.



- By studying this course, students will be able to draw analysis on data using spreadsheets to make decisions.
- By studying this course, students will be able to make meaningful representations of data in the form of charts and pivot tables.
- By studying this course, students will be able to manage data in database tables and use the same for generating queries, forms and reports.

PAPER: PERSONAL FINANCIAL PLANNING

Learning Objectives

The Learning Objectives of this course are as follows:

- To familiarize students with different aspects of personal financial planning like savings, investment, taxation, insurance, and retirement planning
- To develop the necessary knowledge and skills for effective financial planning.

Learning Outcomes

- The Learning Outcomes of this course are as follows:
- After studying this course, students will be able to understand the meaning and appreciate the relevance of financial planning.
- After studying this course, students will be able to understand the concept of investment planning and its methods.
- After studying this course, students will be able to examine the scope and ways of personal tax planning.
- After studying this course, students will be able to analyse insurance planning and its relevance.
- After studying this course, students will be able to develop insight into retirement planning and its relevance.



SEMESTER-II

PAPER: BIOFERTILIZERS

Learning Objectives:

To help the students understand:

- The concept of biofertilizers and develop the skills for handling microbial inoculants.
- The growth and multiplication conditions of useful microbes and their role in mineral cycling and nutrition to plants.
- Various methods of decomposition of biodegradable waste and their conversion to compost.

Learning Outcomes:

After completion of this course, the learners will be able to:

- Describe the different methods of composting.
- Assess quality of compost and its role in soil nutrition.
- Apply methods of bio-control
- Develop a composting unit for production of biofertilizers (generate employment)

PAPER: FRONT END WEB DESIGN AND DEVELOPMENT

Learning Objectives:

- The Learning Objectives of this course are as follows:
- To introduce the basic concepts and techniques of client-side web programming.
- To enable the students to develop simple, interactive, and stylish websites using HTML, CSS and JavaScript.

Learning Outcomes



- The Learning Outcomes of this course are as follows:
- After studying this course, students will be able to build websites using the elements of HTML.
- After studying this course, students will be able to build interactive and stylish websites using client-side programming techniques with CSS and Javascript.
- After studying this course, students will be able to learn to validate client-side data.
- After studying this course, students will be able to define the structure and contents of the website using different features of CSS.

PAPER: BASIC ANALYTICAL TECHNIQUES

Learning Objectives

To make students aware of the importance and the concepts of chemical analysis of

- water and soil samples collected from different sources
- To make them learn few techniques like chromatography, analytical techniques and
- instrumentation techniques, for example: spectrophotometry and flame photometry.

Learning Outcomes

After studying this course, the student will able to:

- Handle analytical data
- Determine the pH and conductance of soil samples, which can be useful in agriculture sector
- Do quantitative analysis of metal ions in water samples
- Separate ions using chromatographic techniques
- Estimate macronutrients using Flame photometry.



PAPER: DIGITAL MARKETING

Learning Objectives

The Learning Objectives of this course are as follows:

- To acquaint the students with the knowledge of growing integration between the traditional and digital marketing concepts and practices in the digital era.
- To familiarize the students with the tools and techniques used by the digital marketers for driving the marketing decisions to attain marketing objectives.

Learning outcomes

The Learning Outcomes of this course are as follows:

- After studying this course, students will be able to understand the concept of digital marketing and its integration with traditional marketing.
- After studying this course, students will be able to understand customer value journey in digital context and behaviour of online consumers.
- After studying this course, students will be able to understand email, content and social media marketing and apply the learnings to create digital media campaigns.
- After studying this course, students will be able to examine various tactics for enhancing a website's position and ranking with search engines.
- After studying this course, students will be able to leverage the digital strategies to gain competitive advantage for business and career.

PAPER: IT SKILLS AND DATA ANALYSIS – I

Learning Objectives

The primary objectives of the course will be to:

- Familiarise the student with the quantitative skills required for representing and interpreting data for the purpose of decision making.
- Equip the student with some fundamental concepts, which play a critical role in understanding and visualizing real world data.
- Enable the student to analyze data and problem situations using relevant IT tools.



Learning Outcomes

By the end of the course students will be able to

- Represent and interpret data in tabular and graphical forms
- Understand and interpret the measures of central tendency and dispersion.
- Use IT tools such as spreadsheets to visualise and analyse data.

PAPER: PUBLIC SPEAKING IN ENGLISH LANGUAGE AND LEADERSHIP

Learning Objectives

The Learning Objectives of this course are as follows:

- To impart leadership skills to students along with adequate communication skills to curate strong leaders in the emerging social, political and corporate world.
- To create leaders with ethics and resilience in industry based fields as well as social fields.
- To allow students to realise their leadership skills and curate them through a hand-on practical approach which will be helpful in generating employable skills for them.

Learning Outcomes

The Learning Outcomes of this course are as follows:

- After studying this course, students will be able to learn effective communication through Public Speaking will instil leadership development among students.
- After studying this course, students will be able to lead in different fields at the undergraduate level, be responsible citizens and employ leadership skills in their future endeavours, too.
- After studying this course, students will be able to strengthen their critical mindset, help them being assertive and put forward constructive viewpoints employing the skills learnt in the practice sessions.



PAPER: READING THE ARCHIVE

Learning Objectives

- This course seeks to develop skills and methods of historical research through the critical evaluation of primary sources.
- The first unit of the course will emphasize that the historical archive cannot be treated as mere "information" and that issues of authorship, representation and access are crucial to any understanding of primary sources.
- At the core of the course are three carefully designed basic research projects that will introduce students to a wide variety of primary sources that range from colonial ethnographic and legal texts to visual photographic archives.
- The student will focus on one kind of archive in each project along with an important text that will illuminate the reading of this kind of archive by a historian.

Learning Outcomes

- To expose students to a wide variety of archives used in historical work.
- To introduce students to scholarship that has critically and creatively used different kinds of primary sources.
- To develop skills to access, contextualize, and analyze primary sources and carry out research.
- A student having studied this course will be skilled in culture and tourism based industries: possible employment includes tour guides, archaeology assistants, archivist, jobs in art galleries, museums, auction houses, researchers in NGOs and other institutions, culture and art based writing and journalism and on social media

PAPER: IT SKILLS AND DATA ANALYSIS - II

Learning Objectives

The primary objectives of the course will be to

- Familiarise the student with the quantitative skills required for correlating the data for the purpose of decision making.



- Equip the student to visualise functions which play a critical role in understanding and visualizing real world data.
- Enable the student to analyze data and problem situations using relevant IT tools.

Learning Outcomes

By the end of the course students will be able to

- Establish relationships between variables using correlation and regression analysis.
- Visualize functions and differentiate between linear and nonlinear functions.
- Use IT tools such as spreadsheets to visualise and analyse data.

PAPER: POLITICAL LEADERSHIP AND COMMUNICATION

Learning Objectives

- The Learning Objectives of this course are as follows:
- To understand the cross-cutting multi-disciplinary linkage of the subject.
- To gain a basic understanding of specific concepts and critical review of political communication and election campaign studies.
- To be able to construct a linkage between political communication and leadership.
- To learn conceptual frameworks and qualitative research skills for the analysis of modes and techniques of political communication and leadership.

Learning Outcomes

- The Learning Outcome of this course is as follows:
- After studying this course, students will be able to have a professional/career-oriented insight by facilitating their journey as Media managers, policy makers, political analysts, Journalists, Public relations officers in government agencies, political parties and higher education.



PAPER: DOCUMENT PREPARATION & PRESENTATION SOFTWARE

Learning Objectives:

- To develop proficiency in the use of document preparation software such as document LaTeX, LibreOffice.
- To make a presentation using LaTeX, LibreOffice.
- To serve as a tool for conveying/communicating one's ideas, views, and observations.

Learning Outcomes

On completion of the course, a student will be able to

- Create a text document using LaTeX using a standard template.
- Incorporate well-formatted mathematical equations, algorithms, figures, tables and references in a document.
- Use Zotero for reference management.
- Format text, including alignment, emphasis and fonts.
- Handle basic aspects of document structure, including sections, subsections, paragraphs, and bulleted and enumerated lists.
- Page set a document including header, footer, and page numbering. Make a presentation.

PAPER: YOGA IN PRACTICE

Learning Objectives:

- Students will be able to discern real significance of yogic operations from original sources and will be prone to practicing in their day to day life.

Learning Outcomes:

- Student will form an understanding of the concept of yoga.
- Students will learn various aspects of the science of yoga.
- Theoretical and practical knowledge of Aasanas and pranayams to lead a balanced life.



PAPER: APICULTURE

Learning Objectives

The Learning Objectives of this course are as follows:

- To help the student to become familiar with the significance of beekeeping as an economically viable industry.
- To help the student to understand the different species of honeybees, their biology, behaviour and role in pollination.
- To train the students to learn the techniques of honey bee rearing, optimization of techniques based on climate and geographical regions, and various measures to be taken to maximize the benefits.
- To understand the significance of beekeeping in the diversification of agriculture for the rural communities to increase their income and create employment opportunities and at the same time to develop entrepreneurial skills required for self-employment in the beekeeping sector.

Learning Outcomes

After studying this course, the students will be able to:

- Comprehend the various species of honey bees in India, their social organization and its importance.
- Appreciate the opportunities and employment in apiculture – in public, private and government sector.
- Gain thorough knowledge about the techniques involved in bee keeping and honey production.
- Make various products and by-products obtained from beekeeping sector and their importance.
- Develop entrepreneurial skills necessary for self-employment in beekeeping sector.
- Enhance collaborative learning and communication skills through practical sessions, teamwork, group discussions, assignments and projects.



PAPER: पटकथा लेखन

Learning Objectives

- पटकथा लेखन का परिचय कराना।
- विद्यार्थी की लेखन क्षमता और भाषा-कौशल को बढ़ावा देना।
- विद्यार्थी को लेखन में रोजगार सम्बन्धी क्षेत्रों के लिए तैयार करना।

Learning Outcomes:

- पटकथा लेखन तथा उसके तकनीकी शब्दों से विद्यार्थी अवगत हो सकेगा।
- पटकथा लेखन की जानकारी मिलने के उपरान्त विद्यार्थी के लिए रोजगार की संभावनाएँ बनेंगी।
- विद्यार्थी भाषायी सम्प्रेषण को समझते हुए लेखन से सम्बन्धित विभिन्न पक्षों से अवगत हो सकेगा।
- विद्यार्थी में अभिव्यक्ति कौशल का विकास हो सकेगा।

SEMESTER-III

PAPER: EXPLORING MEDICINAL PLANTS: FROM CULTIVATION TO APPLICATIONS

Learning Objectives:

The learning objectives of this course are as follows:

- To learn various methods of propagating medicinal plants, such as seed germination, stem cuttings, and division.
- To develop the ability to observe and document macroscopic characteristics of herbal materials.
- To learn the microscopic techniques for examination of plant materials.
- To learn the different methods used in extracting bioactive compounds from medicinal plants and the factors to be considered in choosing the appropriate method.
- To conduct phytochemical screening tests to detect the presence of various compounds in medicinal plant extracts.



शिवाजी कॉलेज
(दिल्ली विश्वविद्यालय)
Shivaji College
(University of Delhi)



NAAC ACCREDITED "A" GRADE COLLEGE

- To analyze the separated compounds from medicinal plant extracts using Thin Layer Chromatography (TLC).

Learning Outcomes:

By studying this course, students will be able to:

- Acquire knowledge of proper care and maintenance of medicinal plants during cultivation.
- Learn to identify and describe variations in size, color, odor, and surface texture among different plant specimens.
- Acquire the skills to observe and count stomata, the tiny openings on leaf surfaces.
- Perform commonly used phytochemical screening methods such as the alkaloid test, glycoside test, steroid and triterpenoid test, tannin test, flavonoid test, and phenol test and interpret the results
- Use Thin Layer Chromatography (TLC) to separate compounds from a medicinal plant extract and analyze the separated compounds.
- Evaluate the current research and developments in the field of medicinal plants

PAPER: CHEMISTRY OF COSMETICS AND HYGIENE PRODUCTS

Learning Objectives

- To introduce the concept of cosmetics in terms of chemistry and their formulation.
- To make students understand the role of each ingredients in the preparation of the cosmetic products.
- To give an idea about the role of herbal ingredients in the making of any cosmetic product.

Learning Outcomes

- After studying this course, the student will:
- Be familiar with the basic principles of various cosmetic formulations



- Be aware of different ingredients and their roles in cosmetic products.
- Appreciate the role of herbal ingredients in various cosmetic products
- Use safe, economic and body-friendly cosmetics
- Prepare new innovative formulations to achieve the aimed efficacies and effects

PAPER: BASIC IT TOOLS

Learning Objectives

The Learning Objectives of this course are as follows:

- To enable students develop IT skills that are a pre-requisite in today's work environment.
- To equip them with basic computing skills that will enhance their employability in general.
- To enable the student to analyse and present information in a meaningful manner.

Learning Outcomes

The Learning Outcomes of this course are as follows:

- By studying this course, students will be able to use word-processor to generate documents with appropriate formatting, layout, review and referencing.
- By studying this course, students will be able to manage data in worksheets and workbooks and analyze it using spreadsheet functions and inbuilt formulas.
- By studying this course, students will be able to draw analysis on data using spreadsheets to make decisions.
- By studying this course, students will be able to make meaningful representations of data in the form of charts and pivot tables.

By studying this course, students will be able to manage data in database tables and use the same for generating queries, forms and reports.



PAPER: SOCIAL MEDIA MARKETING

Learning Objectives

- To provide basic knowledge of social media marketing concepts
- To enhance skills as social media marketer and start a career in social media marketing.

Learning Outcomes

- After completion of the course, learners will be able to:
- Evaluate the role of social media in marketing, advertising and public relations.
- Assess the optimal use of various social media platforms for social media marketing.
- Analyse the importance of social media for developing an effective marketing plan, and assess ways to measure its performance.
- Describe practical skills required for creating and sharing content through online communities and social networks.
- Demonstrate and appreciate social media ethics to use social media spaces effectively

PAPER: IT SKILLS AND DATA ANALYSIS - II

Learning Objectives

The primary objectives of the course will be to

- Familiarise the student with the quantitative skills required for correlating the data for the purpose of decision making.
- Equip the student to visualise functions which play a critical role in understanding and visualizing real world data.
- Enable the student to analyze data and problem situations using relevant IT tools.

Learning Outcomes

By the end of the course students will be able to

- Establish relationships between variables using correlation and regression analysis.
- Visualize functions and differentiate between linear and nonlinear functions.



- Use IT tools such as spreadsheets to visualise and analyse data.

PAPER: BUSINESS COMMUNICATION

Learning Objectives

- The Learning Objectives of this course are as follows:
- To train students to enhance written as well as oral communication in the corporate world.
- To help students in understanding the principles and techniques of business communication.
- To understand the use of electronic media for communication.

Learning Outcomes

- The Learning Outcomes of this course are as follows:
- After studying this course, students will be able to explain the need for communication in management.
- After studying this course, students will be able to appreciate the need of effective writing for communication.
- After studying this course, students will be able to demonstrate the skill of effective report writing and summarizing annual reports.
- After studying this course, students will be able to analyse business correspondence and e-correspondence.
- After studying this course, students will be able to appreciate oral presentations.

PAPER: READING THE ARCHIVE

Learning Objectives

- This course seeks to develop skills and methods of historical research through the critical evaluation of primary sources.



शिवाजी कॉलेज
(दिल्ली विश्वविद्यालय)
Shivaji College
(University of Delhi)



NAAC ACCREDITED "A" GRADE COLLEGE

- The first unit of the course will emphasize that the historical archive cannot be treated as mere “information” and that issues of authorship, representation and access are crucial to any understanding of primary sources.
- At the core of the course are three carefully designed basic research projects that will introduce students to a wide variety of primary sources that range from colonial ethnographic and legal texts to visual photographic archives.
- The student will focus on one kind of archive in each project along with an important text that will illuminate the reading of this kind of archive by a historian.

Learning Outcomes

- To expose students to a wide variety of archives used in historical work.
- To introduce students to scholarship that has critically and creatively used different kinds of primary sources.
- To develop skills to access, contextualize, and analyze primary sources and carry out research.
- A student having studied this course will be skilled in culture and tourism based industries: possible employment includes tour guides, archaeology assistants, archivist, jobs in art galleries, museums, auction houses, researchers in NGOs and other institutions, culture and art based writing and journalism and on social media

PAPER: IT SKILLS AND DATA ANALYSIS – I

Learning Objectives

The primary objectives of the course will be to:

- Familiarise the student with the quantitative skills required for representing and interpreting data for the purpose of decision making.
- Equip the student with some fundamental concepts, which play a critical role in understanding and visualizing real world data.
- Enable the student to analyze data and problem situations using relevant IT tools.



Learning Outcomes

By the end of the course students will be able to

- Represent and interpret data in tabular and graphical forms
- Understand and interpret the measures of central tendency and dispersion.
- Use IT tools such as spreadsheets to visualise and analyse data.

PAPER: DOCUMENT PREPARATION & PRESENTATION SOFTWARE

Learning Objectives:

- To develop proficiency in the use of document preparation software such as document LaTeX, LibreOffice.
- To make a presentation using LaTeX, LibreOffice.
- To serve as a tool for conveying/communicating one's ideas, views, and observations.

Learning Outcomes

- On completion of the course, a student will be able to
- Create a text document using LaTeX using a standard template.
- Incorporate well-formatted mathematical equations, algorithms, figures, tables and references in a document.
- Use Zotero for reference management.
- Format text, including alignment, emphasis and fonts.
- Handle basic aspects of document structure, including sections, subsections, paragraphs, and bulleted and enumerated lists.
- Page set a document including header, footer, and page numbering.
- Make a presentation.



PAPER: YOGA IN PRACTICE

Learning Objectives:

- Students will be able to discern real significance of yogic operations from original sources and will be prone to practicing in their day to day life.

Learning Outcomes:

- Student will form an understanding of the concept of yoga.
- Students will learn various aspects of the science of yoga.
- Theoretical and practical knowledge of Aasanas and pranayams to lead a balanced life.

SEMESTER-IV

PAPER: PLANT TISSUE CULTURE

Learning Objectives

The learning objectives of this course are as follows:

- To discuss the principle of Plant Tissue Culture
- To understand the importance of Plant Tissue Culture and its applications
- To impart hands-on training on various aspects of Tissue Culture
- To understand the importance of aseptic culturing techniques
- To equip the learner to effectively utilize the techniques in various areas like basic research, genetic transformation studies, secondary metabolite production, pharmaceuticals etc

Learning Outcomes

By the end of this course, students will

- Get familiarized with aseptic culture techniques
- Be able to prepare stock solutions and media for experimental purposes
- Comprehend different modes of regeneration
- Have understood the micro propagation mechanism and its intricacies.



- Be able to establish a regeneration protocol using different explant material
- Students will be able to appreciate the applications of plant tissue culture in various domains.
- An industrial visit will give them the required exposure for their holistic understanding of the commercial applications and entrepreneurship avenues in this field of plant tissue culture.

PAPER: BASIC IT TOOLS

Learning Objectives

The Learning Objectives of this course are as follows:

- To enable students develop IT skills that are a pre-requisite in today's work environment.
- To equip them with basic computing skills that will enhance their employability in general.
- To enable the student to analyse and present information in a meaningful manner.

Learning Outcomes

The Learning Outcomes of this course are as follows:

- By studying this course, students will be able to use word-processor to generate documents with appropriate formatting, layout, review and referencing.
- By studying this course, students will be able to manage data in worksheets and workbooks and analyze it using spreadsheet functions and inbuilt formulas.
- By studying this course, students will be able to draw analysis on data using spreadsheets to make decisions.
- By studying this course, students will be able to make meaningful representations of data in the form of charts and pivot tables.
- By studying this course, students will be able to manage data in database tables and use the same for generating queries, forms and reports.



PAPER: GREEN METHODS IN CHEMISTRY

Learning Objectives:

The learning objectives of this course are as follows:

- To create awareness about the chemistry that is good for human health and the environment.
- To provide thorough knowledge of the green chemistry principles, and new remediation technologies for the cleaning up of hazardous substances.
- To develop basic skills to be able to design, develop and run chemical processes in a sustainable way.

Learning Outcomes:

After studying this course, the student will be able to:

- Design and develop materials/ processes that reduce the use and generation of hazardous substances in industry.
- Describe how injudicious use of chemicals can have an adverse/potentially damaging effect on humans and the environment.
- Propose ideas for innovative approaches to environmental and societal challenges.
- Critically analyse the existing traditional chemical pathways/processes and creatively think about bringing environmentally benign reformations in these protocols.
- Convert biomass into valuable chemicals through green technologies.

PAPER: PERSONAL FINANCIAL PLANNING

Learning Objectives

The Learning Objectives of this course are as follows:

- To familiarize students with different aspects of personal financial planning like savings, investment, taxation, insurance, and retirement planning
- To develop the necessary knowledge and skills for effective financial planning.



Learning Outcomes

- The Learning Outcomes of this course are as follows:
- After studying this course, students will be able to understand the meaning and appreciate the relevance of financial planning.
- After studying this course, students will be able to understand the concept of investment planning and its methods.
- After studying this course, students will be able to examine the scope and ways of personal tax planning.
- After studying this course, students will be able to analyse insurance planning and its relevance.
- After studying this course, students will be able to develop insight into retirement planning and its relevance.

PAPER: FINANCE FOR EVERYONE

Learning Objectives

The Learning Objectives of this course are as follows:

- To offer an integrated approach to the understanding of concepts and applications of financial planning.
- To help the students in their financial planning.

Learning Outcomes

The Learning Outcomes of this course are as follows:

- After studying this course, students will be able to understand the importance of financial literacy and the institutions providing financial services.
- After studying this course, students will be able to prepare a financial plan, budget and manage personal finances.



- After studying this course, students will be able to open, avail and manage services offered by banks.
- After studying this course, students will be able to open, avail and manage services offered by post offices.
- After studying this course, students will be able to plan for life insurance and property insurance.
- After studying this course, students will be able to choose instruments for investment in shares.

PAPER: CREATIVE WRITING

Learning Objectives

The Learning Objectives of this course are as follows:

- To build creative writing skills of students in the main modes of creative writing viz poetry, fiction (novel, short stories), non-fiction (life narratives, autobiographies and biographies) and drama.
- To inculcate practical skills in students by mapping their creative talent which be beneficial for employability too.
- To perform hands-on-activities to students to develop their creative skills through practical sessions.

Learning Outcomes

The Learning Outcomes of this course are as follows:

- After studying this course, students will be able to be sensitive to the texture of literary language.
- After studying this course, students will be able to develop craft in creative writing.
- After studying this course, students will be able to develop sense of expressing themselves through poetry/short story/biography.



शिवाजी कॉलेज
(दिल्ली विश्वविद्यालय)
Shivaji College
(University of Delhi)



NAAC ACCREDITED "A" GRADE COLLEGE

- After studying this course, students will be able to induce an understanding of the relationship between an individual and society.
- After studying this course, students will be able to get into different fields and pursue versatile career opportunities.
- After studying this course, students will be able to develop an understanding of theatre and performance through drama will also help them to develop observatory and behavioural skills.
- After studying this course, students will be able to develop a critical thought process and a knack in putting it in words. Students may also utilise the learnings of proofreading and editing for their academic and professional growth.
- After studying this course, students will be able to go for publishing their own work.
- After studying this course, students will be able to write a book and submit to professional bodies & academic organisations.

PAPER: PERSONALITY DEVELOPMENT AND COMMUNICATION

Learning Objectives

The Learning Objectives of this course are as follows:

- To develop inter personal and effective communication skills.
- To develop problem solving skills and understand its influence on behaviour and attitudes of individuals.

Learning Outcomes

The Learning Outcomes of this course are as follows:

- After studying this course, students will be able to understand the importance of oral and written communication in day-to-day working of the organisation.
- After studying this course, students will be able to develop inter personal skills and problem-solving skills.



शिवाजी कॉलेज
(दिल्ली विश्वविद्यालय)
Shivaji College
(University of Delhi)



NAAC ACCREDITED "A" GRADE COLLEGE

- After studying this course, students will be able to understand the role of body language in effective communication.

PAPER: ANUVAD KALA

Learning Objectives:

- The course is committed to continue its pioneering work in defining new literary paradigms and fostering new directions for exploration in literary studies, including such areas as the relationship between translation and transnationalism.
- To develop a deeper appreciation of cultural diversity by introducing the technique of translation studies.
- To develop the creativity of the students and enhance their writing skills

Learning Outcomes:

Students will have an understanding of major approaches to the study of translation.

- They will be able to identify, analyse, interpret and describe the critical ideas, values, and themes that appear in literary texts and to understand the ways these ideas, values, and themes, inform and impact cultures and societies both in source language and its translated version.
- They will be able to improve their skill of translation.

PAPER: MUSEUM AND MUSEOLOGY

Learning Objectives

- The objective of this paper is to introduce and provide basic understanding about Museum and Museology as a discipline.
- Through this paper the students will be exposed to various aspects of museum history- (museum movement in India, particularly), its functioning, types and purpose.
- It will highlight the role of the museum as an important centre for preservation and dissemination of knowledge.



- This paper is of particular value to those who are seeking careers as curators, art collectors, researchers and conservators.

Learning Outcomes

Upon completion of this course the student shall be able to:

- Understand museum as a resource center.
- Understand the historical process of institutionalization of archaeology and culture through museums.
- Develop an insight into the various roles of museum as an organizer, preserver and manager of artifacts.
- And how museum is an effective center for dissemination of knowledge and information, and space for dialogue and interaction.
- Also develop some understanding about new museums.
- A student having studied this course will be skilled in culture and tourism based industries: possible employment includes tour guides, archaeology assistants, archivist, jobs in art galleries, museums, auction houses, researchers in NGOs and other institutions, culture and art based writing and journalism and on social media.

PAPER: IT SKILLS AND DATA ANALYSIS - II

Learning Objectives

The primary objectives of the course will be to

- Familiarise the student with the quantitative skills required for correlating the data for the purpose of decision making.
- Equip the student to visualise functions which play a critical role in understanding and visualizing real world data.
- Enable the student to analyze data and problem situations using relevant IT tools.

Learning Outcomes

By the end of the course students will be able to



- Establish relationships between variables using correlation and regression analysis.
- Visualize functions and differentiate between linear and nonlinear functions.
- Use IT tools such as spreadsheets to visualise and analyse data.

PAPER: PROGRAMMING USING PYTHON

Learning Objectives

The Learning Objectives of this course are as follows:

- To provide exposure to basic problem-solving techniques with computers
- To develop logical thinking abilities and to propose novel solutions for real-world problems through programming language constructs.
- To deepen the empirical knowledge on applying programming in business domains.

Learning Outcomes

The Learning Outcomes of this course are as follows:

- After studying this course, students will be able to interpret the basic representation of the data structures and sequential programming
- After studying this course, students will be able to gain knowledge of, and ability to use control framework terminologies.
- After studying this course, students will be able to work out using the core data structures as lists, dictionaries, tuples, and sets.
- After studying this course, students will be able to choose appropriate programming paradigms, interrupt and handle data using files to propose solutions through reusable modules
- After studying this course, students will be able to propose possible error-handling constructs for unanticipated states/inputs.
- After studying this course, students will be able to implements exemplary applications on real-world problems.



PAPER: NEGOTIATION AND LEADERSHIP

Learning Objectives

The Learning Objectives of this course are as follows:

- To introduce the students to the importance of negotiation skills
- To expose the students to diverse contexts and situations that require negotiation skills
- To learn about the management of critical and crisis situations
- To evolve relationship building skills

Learning Outcomes

The Learning Outcomes of this course are as follows:

- After studying this course, students will be able to apply negotiation skills to obtain desired results
- After studying this course, students will be able to understand the various aspects of a crisis situation for appropriate management.
- After studying this course, students will be able to learn how to manage complex negotiation situations.
- After studying this course, students will be able to understand the process of relationship building.
- After studying this course, students will be able to test and judge the legitimacy of the terms of negotiation.

PAPER: YOGA IN PRACTICE

Learning Objectives:

- Students will be able to discern real significance of yogic operations from original sources and will be prone to practicing in their day to day life.

Learning Outcomes:

- Student will form an understanding of the concept of yoga.
- Students will learn various aspects of the science of yoga.
- Theoretical and practical knowledge of Asanas and pranayams to lead a balanced life.



PAPER: HEALTHY AND SUSTAINABLE FOOD CHOICES

Learning Objectives

The Learning Objectives of this course are as follows:

- To identify healthier food options
- To understand portion control for foods
- To demonstrate skill for preparing healthy and nutritious dishes
- To link sustainability with healthy food choices

Learning Outcomes

After studying this course, the student will be able to:

- Select and prepare healthier food options
- Relate the influence of food environment on food choices
- Comprehend the importance of sustainable food choices