CA.S.D. GOVERNMENT DEGREE COLLEGE FOR WOMEN (A), KAKINADA

DEPARTMENT OF COMPUTER SCIENCE & COMPUTER APPLICATIONS

Curriculum and its Relevance to Local/Regional/ National/ Global Needs

ACADEMIC YEAR 2023 – 2024

No of Programmes offered by the Dept: 1

Total No. of courses across all programs offered by the department: 7

B.Com.(Computer Applications)

| Course Code | Course Title | Local/Regional /National/Global | Relevance of the Course |
|----------------|-------------------------------|------------------------------------|---|
| BCOM23101 | Fundamentals of Commerce | Global | This curriculum aligns with the growing demand for professionals who can blend traditional business knowledge with modern digital tools , enabling them to contribute effectively to both national economies and global markets . |
| BCOM23102 | Business Organisation | Global | The syllabus is relevant to national needs by equipping students with essential knowledge to foster entrepreneurial growth, optimize industrial setups, and enhance economic development. On a global scale, it prepares students to understand business organization, global markets, and digital transformation, ensuring businesses can compete securely and efficiently in the interconnected world. |
| OAT23202 | Office Automation Tools | Global | The course encompasses instruction on various software applications designed to streamline administrative tasks, including word processing, spreadsheets, presentations, and email management. Its relevance extends from local to global needs, empowering individuals, businesses, and organizations to enhance productivity, communication, and efficiency in a digital work environment. Understanding these tools is crucial for individuals and economies to adapt to the demands of modern workplaces and compete effectively in the global market |
| M-CA23201 | Office Automation Tools | Global | The course encompasses instruction on various software applications designed to streamline administrative tasks, including word processing, |

| | | | spreadsheets, presentations, and email management. Its relevance extends from local to global needs, empowering individuals, businesses, and organizations to enhance productivity, communication, and efficiency in a digital work environment. Understanding these tools is crucial for individuals and economies to adapt to the demands of modern workplaces and compete effectively in the global market |
|------------------|--|--------|---|
| PC203204 | Programming with C & C++ | Global | The course is designed for providing basic knowledge of C & C++. It aims at enabling the students to formulate simple algorithms for arithmetic and logical problems. Translate the algorithms to programs in C and C++ language. |
| DBMS224207 | Database Management Systems | Global | This course presents an introduction to database management systems, with an emphasis on how to organize, maintain and retrieve - efficiently, and effectively - information from a database. Helps in mastering the basics of SQL and construct queries using SQL. It also focuses on the relational database design principles. |
| MAD205207- 6C | Mobile Application Development | Global | This curriculum is highly relevant both nationally and globally, as it equips students with the skills needed to develop mobile applications for one of the world's most widely used platforms. It supports economic growth by fostering job-ready expertise in mobile app development, benefiting emerging markets and mature economies alike. |
| CMA2052087C | Cyber Security and Malware Analysis | Global | This course aims to equip students with the essential skills to secure digital infrastructure and protect against increasing cyber threats. With the rise in cybercrime and the rapid growth of interconnected networks worldwide, understanding frameworks like NIST, OWASP vulnerabilities, and malware analysis is crucial for defending against attacks and ensuring privacy. |

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Signature of the HOD
DEP! OF COMPUTER SCIENCE
ASSOCIATION ON THE SCIENCE
KAKINADA

Signature of the Principal
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A.S.D.GOVT.DEGREE COLLEC
AUTONOMOUS
KAKINADA

A.S.D.GOVERNMENT DEGREE COLLEGE FOR WOMEN (A), KAKINADA.

Curriculum and its Relevance to Local/Regional/ National/ Global Needs 2023-2024

DEPARTMENT OF COMMERCE

No of Programmes offered by the Department: 02

Total No. of courses across all programs offered by the department: 21

| Course Code | Course Title | Local/Regional/ National/ Global | Relevance of the Course |
|-------------|--|-------------------------------------|---|
| BCOM23101 | COURSE – 1: FUNDAMENTA LS OF COMMERCE | GLOBAL | Accounting Principles, Objectives of Accounting, Accounting Cycle - Branches of Accounting - Financial Accounting, Cost Accounting, Management Accounting. Corporate Taxation, GS Measurements of National Income, Concepts of National Income. Web Design - Word Press Basics, Developing a Simple Website. Digital Marketing - Social Media Marketing |
| BCOM23102 | COURSE 2: BUSINESS ORGANIZ ATION | GLOBAL | Trade, Industry, Commerce, Joint Stock Companies, Co-operatives, Plant Location. Plant Layout, Size of Business Unit, Optimum Size, Forms and Kinds of Business Combination. Rationalization, Internet, IP, Domain Name Services, applications, Malware, Firewalls. |
| CFA23201 | COURSE 3: FINANCIA L ACCOUNT ING | GLOBAL/NATIONAL | Book-Keeping, Journal, Accounting, Cash Book, Final Accounts, Depreciation, Methods of Depreciation: Straight Line – Written Down Value –Annuity and Depletion Method, Consignment Accounts, Account Sales, Joint Venture Accounts. |
| CBM23202 | COURSE 4: BUSINESS MANAGE MENT | GLOBAL | Business Management helps to Firms, Industries to manage the Firms Management, Planning, Organization Directing and Controlling. |
| AA203201 | COURSE 5: ADVANCED ACCOUNTING | GLOBAL/NATIONAL | Advanced Accounting Using For Non-profit entities, Accounting Process, Accounting Records, Payment Account, Income & Expenditure Account, Balance Sheet, Double Entry, Single Entry, Instalment Purchase System, Goodwill |

| BS203202 | COURSE 7: BUSINESS STATISTICS | NATIONAL/GLOBAL | Calculation of Data, Schedule Frequency, Standard Deviation, Range, Calculation of Correlation. | |
|------------------|---|---|--|--|
| MRK203203 | COURSE 8: MARKETING | NATIONAL/GLOBAL | Selling, Marketing Concepts, Life Cycle, Mix Product, Public Relations & Online Marketing. | |
| CA23401 | COURSE 9: CORPORATE ACCOUNTING | GLOBAL | Understanding of Kinds of Shares, Issues, Premium, Debentures, Issue of Bonus Shares, Payback of Shares, Average Profit Method, Need for Valuation, Net Asset Method, Companies Act, 2013, Final Accounts, Balance Sheet | |
| CMA23402 | COURSE -10: COST AND MANAGEMENT ACCOUNTING | GLOBAL | Cost Accounting is used in Factories and Industries for Features, Advantages, Preparation of Cost Sheet, Inventory Control, LIFO FIFO Method, Method of Payment Wages, Incentives Scheme, Job Costing, Cost Sheet, and Financial Statement Analysis. | |
| IT23404 | COURSE -11: INCOME TAX | GLOBAL | Income Tax Used for computation of taxable income. Tax Law, Assessment Year, Agriculture Income Salaries, Annual Value, Long-term Capital & Income. | |
| BL23403 | COURSE-12: BUSINESS LAWS | NATIONAL/GLOBAL | Definition of Contract - Valid, Indian Contract Act, 1872, Acceptance, Offer, Valid Elements, Minor Contract, Contract Rules, Branch Contract, Conditions, Agreement, Goods & Service, Consumer Disputes. | |
| AUD23405 | COURSE-13: AUDITING | NATIONAL/GLOBAL | Importance of Auditing, Role of Auditor, Internal Audit, External Audit, Audit Control, Investigation Audit, Report, Qualification Audit. | |
| GST23406 | COURSE 14: GOODS AND SERVICES TAX | GLOBAL | GST is Used for Calculation of GST for all Industries and Firms. GST Concepts, Advanges of GST, Components of GST, Committee, Remuneration, Tax and Tax Service, Bill of Supply, Invoice Scheme, Mixed Supply, Tax Credit | |
| DM235205- 16C | COURSE-16: DIGITAL MARKETING | GLOBAL/ NATIONAL / REGIONAL AND LOCAL | Local digital marketing strategies help businesses effectively reach and engage the local target audience in the digital landscape. Learn that Local service marketing tactics are essential for promoting services and attracting customers within the local market. | |
| SM235206- 17C | COURSE – 17: SERVICE MARKETING | GLOBAL/ NATIONAL / REGIONAL AND LOCAL | Global service marketing practices and strategies are critical for multinational service-based companies to effectively promote and sell services in diverse international markets. | |

| MAP205201- 18A | COURSE 18A: MANAGEMENT ACCOUNTING AND PRACTICE | GLOBAL/ NATIONAL / REGIONAL LOCAL | Facilitates international business transactions through standardized financial reporting. |
|-------------------|---|---------------------------------------|---|
| CCT235202- 19A | COURSE: 19: COST CONTROL TECHNIQUES | NATIONAL / REGIONAL/LOCAL | Facilitates knowledge on cost ing and pricing through standardized financial reporting. |
| LIP235204- 21B | COURSE -20B: LIFE INSURANCE WITH PRACTICE | NATIONAL / REGIONAL/LOCAL | Local cost control techniques are essential for managing expenses and ensuring cost-effective operations within the local market. Regional cost control methods may be influenced by factors like regional economic conditions, affecting cost management practices within a specific region. National cost optimization strategies help businesses streamline operations and remain competitive while complying with national regulatory requirements. Global cost efficiency strategies and best practices enable businesses to optimize operations across borders, minimize costs, and enhance competitiveness in the global market. |
| GIP235203- 20A | COURSE- 21B: GENERAL INSURANCE PROCEDURE AND PRACTICE | GLOBAL/ NATIONAL / REGIONAL/ LOCAL | Understanding local insurance operations and procedures is crucial for providing insurance services that meet the specific needs of the local community. |

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A.S.D. GOVERNMENT DEGREE COLLEGE FOR WOMEN(A), KAKINADA

DEPARTMENT OF COMPUTER SCIENCE

Curriculum and its Relevance to Local/Regional/ National/ Global Needs

ACADEMIC YEAR 2023 – 24

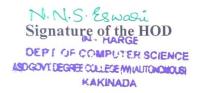
No of Programmes offered by the Dept.: 3

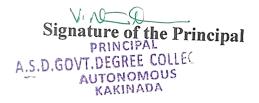
Total No. of courses across all programs offered by the department: 9

B.Sc. (CS), B.Sc.(MPCS) & B.Sc.(MSCS)

| Course Code | Course Title | Local/Regional /National/Global | Relevance of the Course |
|----------------|---|------------------------------------|---|
| BSCM23101 | Essentials and applications of Mathematical, Physical and Chemical Sciences | Global | This course is an amalgamation of Mathematics, Physics, Chemistry, and Computer Science which addresses essential skills that are foundational for solving global challenges such as technological innovation, sustainability, and public health and prepares students to contribute to economic development and address complex, real-world problems across different sectors. |
| BSCM23102 | Advances in Mathematical, Physical and Chemical Sciences | Global | This course addresses cutting-edge technologies and methodologies that are essential for solving contemporary global challenges and equips students with the skills to contribute to fields like smart grids, biophysics, and environmental remediation, supporting both industrial progress and environmental sustainability. |
| CS23201 | Problem Solving in C | Global | This course is aimed at enabling the students to formulate simple algorithms for arithmetic and logical problems. Translate the algorithms to programs in C language. Understand and use various constructs of the programming language such as conditionals, iteration, and recursion. |
| CS23202 | Digital Logic Design | Global | The concepts in this course are integral to the development of efficient, reliable, and scalable technology, supporting both national technological advancements and global innovations in fields like telecommunications, computing, and automation. |
| M-CS23201 | Problem Solving in C | Global | This course is aimed at enabling the students to formulate simple algorithms for arithmetic |

| | | | and logical problems. Translate the algorithms to programs in C language. Understand and use various constructs of the programming language such as conditionals, iteration, and recursion. This course presents an introduction to database management systems, with an |
|-------------|--|--------|---|
| CS203304 | Data Base Management System | Global | emphasis on how to organize, maintain and retrieve - efficiently, and effectively - information from a database. Helps in mastering the basics of SQL and construct queries using SQL. It also focuses on the relational database design principles. |
| CS224307 | Object Oriented Programming Through Java | Global | Uses an integrated development environment to write, compile, run, and test object- oriented Java programs. It aids in developing interactive programs using Applets and Swings. |
| CS224308 | Operating Systems | Global | This course introduces the core concepts of operating systems, such as processes and threads, scheduling, synchronization, memory management, file systems, input and output device management and security. |
| CS205307-6A | Web Interface Designing Technologies | Global | It introduces the fundamentals of Internet, and the principles of web design. This course aids to construct basic websites using HTML and Cascading Style Sheets. Also helps to build dynamic web pages with validation using Java Script objects and by applying different event handling mechanisms. It is also used to develop Websites using Wordpress. |
| CS205308-7A | Web Applications Development Using PHP & MYSQL | Global | This course aims at the process of changing a static website into a dynamic website run from a database using PHP and MySQL. Used to analyze the basic structure of a PHP web application. |





ASD GOVERNMENT DEGREE COLLEGE FOR WOMEN (A), KAKINADA

DEPARTMENT OF PHYSICS



Curriculum and its Relevance to Local/Regional/ National/ Global Developmental Needs

BSC(PHYSICS)

Curriculum and its Relevance to Local/Regional/ National/ Global Developmental Needs 2023-24

No of Programmes offered by the Dept: $\underline{02}$

Total No. of courses across all programs offered by the department: 07

| COURSE CODE | COURSE TITLE | Local/Region al/National/ Global | Relevance of the Course |
|----------------|---|--|---|
| BSCM24101 | Course-1 Essentials and applications of mathematical, Physical andchemical sciences | Global | This helps us understand the basic principles that govern the physical universe, behaviour of matter and energy to the forces that shape the cosmos, the motion of objects to the operation of Electrical devices. Understanding physical science principles is essential in addressing major global challenges like climate change, energy sustainability, and environmental protection. solutions for reducing pollution, conserving resources, and mitigating the effects of global warming. A well-rounded understanding of physical science principles helps bridge knowledge gaps between disciplines, fostering innovation in areas such as bioengineering, robotics, and renewable energy. The study of the essentials of Physical sciences is not only crucial for understanding the natural world but also for making informed decisions in technology, Policy, and society. |
| BSCM24102 | Course-2 Advances In Mathematical, Physical and Chemical Sciences | Global | The study of advances in physical impact every aspect of modern life, from healthcare to energy, space exploration, and environmental protection. The development of quantum mechanics paved the way for innovations in computing, materials science, and cryptography. Research in materials science has led to the creation of stronger, lighter, and more efficient materials, which have impacted industries from aerospace to electronics. Advances in energy physics (nuclear fusion, solar energy, wind energy) hold the potential to provide clean, sustainable energy solutions. The application of Physics in medical imaging, radiation therapy, and diagnostics has revolutionized healthcare, |

| | | | improving diagnosis, treatment, and patient outcomes. Physical sciences research in nanotechnology leads to new materials and devices that improve drug delivery, tissue regeneration, and medical diagnostics. |
|------------|---|--------|---|
| PHY23201 | Course-3,MAJOR Mechanics and Properties of Matter | Global | The study of mechanics and the properties of matter is fundamental to understanding the physical world and has a wide range of applications in science, engineering, and daily life. Mechanics deals with the behaviour of objects under forces and motion, while the properties of matter focus on the characteristics and behaviours of different materials. Mechanics helps explain how objects move, why they move, and how forces like gravity, friction, and tension affect them. Properties of Matter help explain the physical characteristics of different substances. Mechanics explains the motion of vehicles, the forces involved in stopping and starting, and the friction between tires and roads. Mechanics and material properties are fundamental to experimental physics, where understanding the behaviour of matter under various conditions is key to scientific progress. |
| M-PHY23201 | Course-3,MINOR Mechanics and Properties of Matter | Global | The study of mechanics and the properties of matter is fundamental to understanding the physical world and has a wide range of applications in science, engineering, and daily life. Mechanics deals with the behaviour of objects under forces and motion, while the properties of matter focus on the characteristics and behaviours of different materials. Mechanics helps explain how objects move, why they move, and how forces like gravity, friction, and tension affect them. Properties of Matter help explain the physical characteristics of different substances. Mechanics explains the motion of vehicles, the forces involved in stopping and starting, and the friction between tires and roads. Mechanics and material properties are fundamental to experimental physics, where understanding the behaviour of matter under various conditions is key to scientific progress. |
| PHY23202 | Course-4,MAJOR Waves and Oscillations | Global | The study of waves and oscillations is crucial for understanding many fundamental phenomena in physics and for applications across various fields. Waves and oscillations describe how energy and information propagate through different media, and they are integral to both the natural world and technological systems. Knowledge of wave behaviour allows engineers to design spaces with optimal acoustics. The |

| PHY203302 | Heat & Thermodynamics | Global | study of waves and oscillations is central to understanding a vast array of natural and technological phenomena. Waves and oscillations form the foundation of many of the most exciting developments in both science and technology today. Will develop a solid understanding of the fundamental principles of thermodynamics, including concepts such as energy, entropy, temperature, heat, and work. Students will explore the application of thermodynamics principles to a wide range of systems and processes, including heat engines, refrigeration systems, power plants, and chemical reactions. |
|--------------|---|--------|--|
| PHY204303 | Electricity, Magnetism & Electronics | Global | Studying electricity, magnetism, and electronics in physics provides students with a fundamental understanding of the behaviour of electric and magnetic fields, as well as their applications in electronic devices. Students will learn about the of electric circuits and electronic devices. study the principles of digital electronics, including binary number systems, logic gates, Boolean algebra, and digital circuits. They will learn how to design and analyse digital circuits. |
| PHY204304 | Modern Physics | Global | Students will gain a deep understanding of the principles of quantum mechanics, which describe the behaviour of particles at the atomic and subatomic levels. Students will learn about Albert Einstein's theories of special relativity and general relativity, which revolutionized our understanding of space, time, and gravity. Students will learn about the structure and properties of atomic nuclei, including nuclear stability, radioactive decay, and nuclear reactions. They will understand the different types of radioactive decay (alpha, beta, gamma) and the processes of nuclear fission and fusion. |
| РНҮ205303-6В | Low temperature Physics and Refrigeration | Global | Studying low-temperature physics and refrigeration provides students with specialized knowledge and skills related to the behaviour of matter at extremely low temperatures and the principles of refrigeration technology. Students will study cryogenic technologies for achieving and maintaining low temperatures. This includes techniques such as adiabatic demagnetization, dilution refrigeration, and Joule-Thomson expansion. |

| | | | Students will understand the thermodynamic principles underlying refrigeration cycles and heat pump systems. They will learn about the components of refrigeration systems, such as compressors, condensers, evaporators, and expansion valves, and how they work together. Students will learn about safety considerations and risk management practices associated with low-temperature physics and refrigeration systems. |
|--------------|-------------------------------|--------|--|
| PHY205304-7B | Solar energy and applications | Global | Studying solar thermal and photovoltaic aspects provides students with specialized knowledge and skills related to harnessing solar energy for electricity generation and thermal applications. Students will learn about solar thermal technologies for capturing and converting solar energy into usable heat. This includes flat-plate collectors, concentrating collectors, solar ponds, and solar thermal power plants. Students will understand the principles of operation, design considerations, performance analysis, and applications of solar thermal systems for heating, cooling, and power generation. photovoltaic technologies for converting solar energy directly into electricity. This includes crystalline silicon solar cells, thin-film solar cells, concentrator photovoltaics, and emerging PV technologies, fabrication processes, and performance characteristics of PV cells and modules. |





A.S.D.GOVERNMENT DEGREE COLLEGE FOR WOMEN (AUTONOMOUS): KAKINADA

Curriculum and its Relevance to Local/Regional/ National/ Global Needs

Name of the Department: English A.Y 2023-24

Total No. of courses across all programs offered by the department: U.G 03

| Academic Year | COURSE CODE | COURSE TITLE | Local/Regional/National/ Global | Relevance of the Course |
|---------------|----------------|---|------------------------------------|---|
| 2023-24 | ENG 23101 | A COURSE IN COMMUNICATION AND SOFT SKILLS Listening & Speaking Skills | Global | The course enables the learners to recognise the importance of English in day-to-day situations, academics and professions at local and global levels and further use the language fluently and confidently |
| 2023-24 | ENG 23201 | A COURSE IN COMMUNICATION AND SOFT SKILLS Reading and Writing Skills | Global | The course also helps the learners to build a repository of active vocabulary and relate them to meet the purpose. |
| 2023-24 | ENG 20301 | A COURSE IN CONVERSATION SKILLS | Global | The course enables the learners to use English in social interactions, in speeches or responses in academic, social and professional presentations, interviews and discussions accurately and fluently. |

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A.S.D.GOVT.DEGREE COLLEGE (M)

A.S.D. GOVT.DEGREE COLLEGE FOR (W) (A), KAKINADA DEPARTMENT OF HISTORY

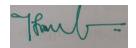
CURRICULUM AND ITS RELEVANCE TO LOCAL / Regional / NATIONAL / GLOBAL DEVELOPMENTAL NEEDS

2023-24

No. Of courses offered:07

| COURSE CODE | COURSE TITILE | LOCAL / NATIONA L /GLOBAL | RELAVANCE |
|------------------|---|------------------------------------|---|
| HIS205101- 6B | Semester – V (Skill Enhancement Course – Elective 6B - Tourism and Hospitality Services | National & Local / Regional | Tourism–Definition–Nature and Scope; National Institute of Tourism and Hospitality Management; Relationship between history and tourism; Major tourist spots in AP; Characteristics of Hospitality Industry; Types of hotels in India; Duties, responsibilities &skills of front office staff; duties, responsibilities and skills of housekeeping -staff; Different types of services offered in selected Hotels/Motels/Restaurants Room Service |
| HIS205102- 7B | Semester – V (Skill Enhancement Course- Elective) Tourism Guidance and Operating Skills | National & Local / Regional | Types of tour guide; duties and responsibilities of guides; Guiding techniques: leadership skills, social skills, presentation skills, communication skills; Guest Relationship Management; Conducting Tours: Conducting various types of tours; Difference between Travel Agent and Tour operator; APTDC, Southern Travels etc. |
| MDC23103 | MDC Indian History | National & Local / Regional | Ancient Indian History and Culture: Evolution of Man-Science and Technology in Harappan Civilisation-Vedic Literature- Difference between Jainism and Buddhism Philosophy-Ashoka Dhamma Policy-Science and Technology in Guptha Period- Chronology of Various Dynasties that ruled India (6th Century BC to 1206 CE). History and Culture of Medieval India: Delhi SultanateGreater Mughals (Brief) History of Modern India: European SettlementsSocio-Religious Reform Movements-Causes for 1857 Revolt-Indian Freedom Struggle: -Partition of India |
| M- HIS23201 | SEMESTER - II Minor History Science and Human Past | National & Local / Regional | Facts, Interpretations-Relation with other Social Sciences-Sources of Indian History: Hunting Gathering to the Food Production Society: Palaeolithic, Mesolithic, Neolithic and Chalcolithic Phases in India- First Urbanization in India: The Indus Valley Civilization Vedic& Later Vedic Period:: Iron Age Cultures in the subcontinent-Impact |

| | | | of Iron technology- Urban Occupations, Crafts, Guilds-Trade and Commerce |
|-----------|---|-----------------------------------|--|
| HIS203101 | Semester –III Modern Indian History & Culture (1764-1947 A. D) | National | Policies of Expansion - Subsidiary Alliance & Doctrine of Lapse - Causes & Results of 1857 Revolt-Social, Religious & Self-Respect MovementsCauses for the growth of Nationalism - Freedom Struggle from 1885 to 1920 Freedom Struggle from 1920 to 1947: Revolutionary Movement - Partition of India - Integration of Princely States into Indian Union. |
| HIS224101 | Semester-IV History & Culture Of Andhra (From 1512 To 1956 Ad) | National & Local / Regional | Andhra through 16th & 19th Centuries AD: Advent of European and settlements in Andhra. Andhra Under British rule: Impact of Industrial revolution on economy- Social Reforms &New literary Movements: Freedom Movement in Andhra (1885-1947): Movement for separate Andhra State (1953) Movement for formation of Andhra Pradesh (1956): |
| HIS224102 | Semester-IV History Of Modern World (From 15th Cent. AD to1945 AD) | | Transformation from Medieval to Modern Era – Chief Characteristics; Glorious Revolution (1688) Origin of Parliament Bill of Rights – American Revolution (1776); French Revolution (1789) –Unification of Italy; Unification of Germany. Communist Revolution in Russia; World War I: League of Nations. World War II:, Fascism & Nazism – The United Nations Organization: |



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Signature of the Principal
PRINCIPAL

A.S.D.GOVT.DEGREE COLLEGE (W)
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KAKINADA



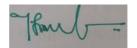
A.S.D. GOVT.DEGREE COLLEGE FOR (W) (A), KAKINADA DEPARTMENT OF HISTORY CURRICULUM AND ITS RELEVANCE TO LOCAL / Regional / NATIONAL / GLOBAL DEVELOPMENTAL NEEDS

2023-24

No. Of courses offered:07

| COLIDG | COURSE TITILE | I OCAI / | |
|-------------------|--------------------------|----------------|--|
| COURS | COURSE IIILE | LOCAL / | RELAVANCE |
| E CODE | ! | NATION | RELAVAINCE |
| | ! | A L /GLOBAL | |
| HIS205101 | Semester – V (Skill | National | This course offers the Nature and Scope of |
| - 6B | Enhancement Course – | & Local / | _ |
| - OD | Elective 6B - Tourism | Regional | Tourism subject and learn the different skills of Tourism and Hospitality Management. It |
| | | Regional | also helps to learn the Relationship between |
| | and Hospitality Services | | history and tourism and Major tourist spots in |
| | Services | | AP in National, Regional and local levels. |
| | | | Ar in National, Regional and local levels. |
| HIS205102- | Semester – V (Skill | National | This course offers different Types of skills and |
| 7B | Enhancement Course- | & Local / | the duties and responsibilities of tour guides |
| | Elective) Tourism | Regional | and Guiding techniques; Conducting various |
| | Guidance and Operating | regional | types of tours in National & Local / Regional |
| | Skills | | levels. |
| | | | To know the Difference between Travel Agent |
| | | | and Tour operator; APTDC, Southern Travels |
| | | | etc. |
| MDC23103 | MDC | National | This course helps to learn the Ancient Indian |
| | Indian History | & Local / | History and Culture, Evolution of Man- |
| | | Regional | Science and Technology in Harappan |
| | ! | regional | Civilization -Vedic Literature- Jainism and |
| | ! | | Buddhism Philosophy-Ashoka Dhamma |
| | | | Policy-Science and Technology in Gupta |
| | ! | | Period. It explores the History and Culture of |
| | | | Medieval India and History of Modern India |
| | | | from the European Settlements-Socio- |
| | | | Religious Reform Movements-the freedom |
| | | | struggle and post -Independence milestones |
| | | | like the Partition of India. |
| M- | | National | This course offers the Facts, Interpretations- |
| HIS23201 | SEMESTER - II | & Local / | Relation with other Social Sciences-Sources of |
| | Minor History | Regional | Indian History from the Hunting Gathering to |
| | Science and | | the Food Production Society stage. It explores |
| | Human Past | | the Palaeolithic, Mesolithic, Neolithic and |
| | | | Chalcolithic Phases in India. This course |
| | | | informed the importance of the Indus Valley |
| | | | Civilization Vedic& Later Vedic Period of |
| | | | Iron technology- Urban Occupations, |
| ШІСЭ 02101 | Samastar III Madam | National | Crafts, Guilds-Trade and Commerce. This course offers a holistic understanding of |
| HIS203101 | | National | the policies of the British, the freedom struggle |
| | Indian History & Culture | | the policies of the bitush, the freedom struggle |

| HIS224101 | (1764-1947 A. D) Semester-IV History & Culture Of Andhra (From 1512 To 1956 Ad) | National & Local / Regional | and post-independence milestones like Integration of Princely states into Indian Union. This course offers the History of Andhra from 16th & 19th Centuries AD. It explores the Andhra Under British rule and its impact on Freedom Movement in Andhra (1885-1947) and understanding the Movement for separate Andhra State (1953) Movement and for formation of Andhra Pradesh (1956) in local and Regional Level. |
|-----------|--|-----------------------------------|--|
| HIS224102 | Semester-IV History Of Modern World (From 15th Cent. AD to1945 AD) | National & Global | This course offers the importance of Transformation from Medieval to Modern Era and various types of Revolutions and Two world wars held in the world and the importance of United Nations Organization. |





Signature of the Principal

PRINCIPAL

A.S.D.GOVT.DEGREE COLLEGE (W)

AUTONOMOUS

KAKINADA



A.S.D.Govt.DEGREE COLLEGE FOR WOMEN (A), KAKINAD

Curriculum and its Relevance to Local / Regional / National / Global Needs 2023-2024

Name of the Department : Mathematics

No. of Programmes offered by the Department: 5

Total No. of courses across all programs offered by the department: 10

B.Sc (M.P.C, M.P.Cs, M.S.Cs), MAJOR & MINOR

| COURSE CODE | COURSE TITLE | Local /Regional /National / Global | Relevance of the Course |
|-------------|----------------------|---|---|
| AS20303L | ANALYTICAL SKILLS | LOCAL &GLOBAL | Analytical Skills are relevant at various levels from local to global contexts locally, they help solve community specific problems regionally, they contribute to understanding and addressing broader challenges nationally, analytical skills aid in policy making an addressing country wide issues. Globally these skills are crucial for Navigating complex International Issus and collaboration on a large scale |
| MAT203301 | ABSTRACT ALGEBRA | GLOBAL | Abstract algebra, as a branch of mathematics, has significant relevance to global needs in various ways: Abstract algebra concepts are fundamental in computer science and information technology. Algebraic structures like groups, rings, and fields are used in data structures, coding theory, and algorithm design. Abstract algebra provides a foundation for advanced mathematics education. It helps students develop abstract thinking and problem-solving skills, which are essential for various STEM (Science, Technology, Engineering, and Mathematics) disciplines. Mathematical modelling and statistical analysis, which often involve algebraic concepts, are used in social sciences and policy analysis to address global issues such as poverty, inequality, and public health. |
| MAT224301 | REAL ANALYSIS | GLOBAL | Real analysis is a fundamental branch of mathematics that plays a crucial role in addressing various global needs, both in theoretical and practical contexts. In the era of big data, real analysis techniques are essential for processing, analysing, and extracting meaningful information from vast datasets. Real analysis underpins the theory of probability and statistics, which is essential for drawing meaningful conclusions from data. This has applications in fields ranging from public health to social sciences. |
| MAT224302 | LINEAR ALGEBRA | LOCAL | Linear algebra is a branch of mathematics that deals with vector spaces and linear mappings between these spaces. Local universities, research institutions, and industries related to the physical sciences (e.g., chemistry, physics) often require linear algebra for tasks such as solving differential equations, analysing experimental data, and simulating physical processes. Architects and designers can use linear algebra in tasks related to structural analysis, geometric modelling, and computer-aided design (CAD). |

| MAT205301- 6A | NUMERICAL ANALYSIS | REGIONAL | Numerical analysis is a field of mathematics and computer science that focuses on developing algorithms and computational methods to solve mathematical problems. In regions heavily reliant on agriculture, numerical analysis can aid in crop modelling, weather prediction, and optimizing irrigation systems. This contributes to improved food security and resource management. Regions may require custom software solutions that cater to their specific needs. Numerical analysis expertise can help in developing software tools and applications tailored to regional requirements. |
|------------------|-----------------------|----------|---|
| MAT205302- 7A | SPECIAL FUNCTIONS | REGIONAL | Special functions in mathematics, such as Bessel functions, Legendre functions, and hypergeometric functions, have a wide range of applications across various fields, including physics, engineering, and science. special functions can play a role in modelling and solving problems related to energy production and distribution. Regions with a focus on renewable energy or traditional energy sources could benefit from these techniques. Emerging start-ups and innovative companies in various fields may find special functions relevant for solving unique challenges or developing novel technologies, contributing to regional innovation. |

Signature of the Principal

A.S.D.GOVT.DEGREE COLLEGE (W)

AUTONOMOUS
KAKINADA

SINGLE MAJOR COURSES 2023-24

| COURSE | COURSE | Local | |
|---------------------------------|--|------------------------------------|---|
| CODE | TITLE | /Regional /National / Global | Relevance of the Course |
| AS23102SC | Anaytical skill | LOCAL &GLOBAL | Analytical Skills are relevant at various levels from local to global contexts locally, they help solve community specific problems regionally, they contribute to understanding and addressing broader challenges nationally, analytical skills aid in policy making an addressing country wide issues. Globally these skills are crucial for Navigating complex International Issus and collaboration on a large scale |
| BSCM23101 | Essential and applications of mathematical ,physical and chemical sciences | LOCAL &GLOBAL | Complex Numbers Used in electrical engineering for local power systems, such as wiring in buildings and appliances. Statistics Used in local business analytics, public health tracking, and school performance evaluations. Trigonometry Applied in carpentry, construction, and navigation for small-scale projects. Vectors Used in physics problems like force analysis in mechanical systems and small-scale engineering. |
| BSCM23102 | Advances in Mathematical ,physical and chemical sciences | GLOBAL | Straight Lines Used in small-scale projects like designing roads, buildings, and furniture. Limits Foundational in solving small-scale engineering problems or machine design. Differentiation Helps analyze rates of change, such as water flow in pipes or vehicle acceleration. Integration Applied in calculating areas, volumes, and resource utilization in local engineering projects. Matrices Used in computer graphics for animations or local app development. |
| MAT23201 & M- MAT23201 | MATHS- I(Differential equations) | LOCAL | Differential equations are fundamental in scientific research and education. Local universities and research institutions can use them to advance knowledge, train the workforce, and address specific research challenges relevant to the region. Differential equations are applied to model economic and financial systems, which can help address regional economic challenges. These equations can be used to analyse market trends, forecast economic growth ,and design monetary policies tailored to local conditions |
| MAT23202 | MATHS-II(solid geometry) | GLOBAL | Solid geometry, a branch of mathematics that deals with three- dimensional shapes and their properties, is relevant to global needs in various ways. Architects and urban planners use solid geometry principles to design buildings, infrastructure, and city layouts. Efficient use of space, structural stability, and aesthetic considerations are all critical aspects of creating sustainable and functional urban environments. Solid geometry is the foundation for creating 3D computer graphics and animations, which are used in |

| | | various industries, including entertainment, education, and |
|--|--|---|
| | | virtual simulations. |

A.S.D. GOVT.DEGREE COLLEGE FOR (W) (A), KAKINADA DEPARTMENT OF POLITICAL SCIENCE

CURRICULUM AND ITS RELEVENT TO LOCAL / Regional / NATIONAL / GLOBAL DEVELOPMENTAL NEEDS

2023-24

| COURSE | COURSE TITILE | LOCAL / | |
|-------------|--------------------------|------------|--|
| CODE | | NATIONA L | RELEVANCE OF THE COURSE |
| | | /GLOBAL | |
| POL24201) | Semester II | National & | Definition Nature. Scope and Importance of |
| | Fundamentals of | Local / | Political Science |
| | Political Science | Regional | Relations with allied disciplines: History and |
| | | | Economics Philosophy and Sociology. |
| | | | Approaches to the study of Political Science: |
| | | | Traditional Approaches: Philosophical, |
| | | | Historical. Modern Approaches: Behavioural |
| | | | and Post-Behaviourism System Approach and |
| | | | Structural – Functional. Definition Nature, |
| | | | Elements of the State Theories of Origin of the |
| | | | State: Divine Origin Theories of Origin of the |
| | | | State: Force and Evolutionary. Social Contract |
| | | | Theory: Origin of the theory Thomas Hobbes |
| | | | John Locke Jean Jacques Rousseau. Concepts of |
| | | | Modern State: Meaning, Origin Nature of |
| | | | Modern State Welfare State: Origin |
| (DOI 24202) | Composton II | National & | Nature of Welfare State. |
| (POL24202) | Semester II | Local / | Law: Meaning, Definition, And Nature Types of |
| | Concepts & Ideologies of | Regional | Law - Sources of Law Liberty: Meaning, Definition, Nature Types of Liberty Equality: |
| | Political Science | Regional | Meaning, Definition, Nature Types of Equality |
| | 1 Ontical Science | | Power: Meaning, Definition, Nature Authority |
| | | | and Legitimacy: Meaning, Definition, Nature. |
| | | | Rights: Meaning, Nature Classification of |
| | | | Rights Theories of Rights: Natural, Legal, |
| | | | Historical Idealistic, Social&Welfare.Liberalism |
| | | | Individualism Anarchism Fascism Socialism |
| | | | Marxism, Multiculturalism, Nationalism |
| POL203103 | Semester - III | National & | Constitutional Development in India during British |
| | Indian | Local / | Rule-A Historical Perspective with reference to |
| | Government And | Regional | Government of India Acts, 1909, 1919 and 1935. |
| | Politics | | Constituent Assembly-Nature, Composition, Socio- |
| | | | Economic, Philosophical Dimensions and Salient Features of the Indian Constitution. Fundamental |
| | | | Rights, Directive Principles of State Policy and |
| | | | Fundamental Duties-Differences between |
| | | | Fundamental Rights and Directive Principles of |
| | | | State Policy. The 'Doctrine of Basic Structure of the |
| | | | Constitution' with reference to Judicial |
| | | | Interpretations and Socio-Political Realities. |
| | | | President of India-Mode of Election, Powers and |

| | | | Functions. Parliament-Composition, Powers and |
|-------------|-------------------|------------|---|
| | | | Functions, Legislative Committees, Prime Minister |
| | | | and Council of Ministers-Powers and Functions, |
| | | | Role in Coalition Politics. Governor-Mode of |
| | | | Appointment, Powers and Functions. |
| | | | |
| | | | Legislature-Composition, Powers and Functions, |
| | | | Chief Minister and Council of Ministers-Powers and |
| | | | Functions. Supreme Court-Composition and |
| | | | Appointments, Powers and Functions or Jurisdiction |
| | | | of the Supreme Court, Judicial Review, Judicial |
| | | | Activism. |
| | | | High Court-Composition, Powers and Functions, |
| | | | Debates on the mode of appointment of Judges- |
| | | | National Judicial Appointments Commission and |
| | | | Judicial Reforms. |
| POL224105 | Semester - IV | National & | Features of Indian Federal System- Centre-State |
| | Indian Political | Local / | Relations Legislative, Administrative and Financial - |
| | Process | Regional | Recommendations of Sark aria Commission, |
| | | | M.M.Punchi Commission. The Election |
| | | | Commission of India, Powers and Functions. Issues |
| | | | of Electoral Reforms, Voting Behaviour- |
| | | | Determinants and Problems of Defections. |
| | | | Panchayat Raj system-Local and Urban |
| | | | Governments-Structure, Powers and Functions. |
| | | | Democratic Decentralization-Rural Development |
| | | | and Poverty alleviation with reference to 73rd and |
| | | | 74th Constitutional Amendment Acts, Challenges |
| | | | and Prospects. Role of Caste, Religion, Language |
| | | | and Regionalism in India. Politics of Reservation, |
| | | | Criminalization of Politics and Internal threats to |
| | | | Security. NITI Ayog, Finance Commission, |
| | | | Comptroller and Auditor General of India. |
| | | | Central Vigilance Commission, Central Information |
| | | | Commission, Lokpal and Lokayukta |
| POL224106 | Semester – IV | National | Plato-Rule of Philosopher Kings-Theory of Justice- |
| | Western Political | | Ideal State and Education |
| | Thought | | Aristotle-Theory of State-Classification of |
| | | | Governments-Citizenship, Slavery and Theory of |
| | | | Revolutions. Thomas Hobbes- Social Contract and |
| | | | Absolute Sovereignty. John Locke- Human Nature, |
| | | | State of Nature, Social Contract, Natural Rights and |
| | | | Limited Government 19 |
| | | | Jean Jacques Rousseau- Human Nature, State of |
| | | | Nature, Social Contract, General Will and Popular |
| | | | Sovereignty. Jermy Bentham-Theory of Utility, Law |
| | | | and Reforms J.S.Mill-Theory of Liberty and |
| | | | Representative Government. Karl Marx-Dialectical |
| | | | Materialism, Theory of Surplus Value and Class |
| | | | Struggle. Antonio Gramsci-Hegemony and Civil |
| | | | Society. |
| POL225105- | Semester – V | National & | Brief Introduction to Governance-E-Governance – |
| (D) | E Governance | Local / | Meaning, Definition, Nature, Scope, Objectives and |
| 6B) | | Regional | Significance. E-Governance in India National E- |
| | | | Governance Plan (NeGP)-National Informatics |
| | | | Centre-Strategies for E-Governance-E-Governance |

| | | 1 | , |
|-------------|----------------|----------|---|
| | | | Implementations: Required infrastructure of |
| | | | Network, Computing, Cloud Governance, Data |
| | | | system, Human resources, Legal and Technological |
| | | | infrastructure- Major E-Governance Projects and |
| | | | Initiatives: Gyandoot, E-choupal, E-Bhoomi, E- |
| | | | Seva, CARD, E-Panchayat, and Real Time |
| | | | Governance (RTG) etc. E-Governance under |
| | | | Information Technology Act-Legal status for digital |
| | | | transactions-PublicPrivate Partnership and |
| | | | expansion of E-Governance. E-Governance under |
| | | | Information Technology Act-Legal status for digital |
| | | | transactions-PublicPrivate Partnership and |
| | | | expansion of E-Governance |
| POL225106- | Semester-V | Local / | Local Government: Meaning, Nature and |
| 5 D) | Local | Regional | Importance, Thoughts on Local Governments by |
| 7B) | Administration | | M.K.Gandhi, Jawaharlal Nehru and |
| | | | Dr.B.R.Ambedkar, Important Committees: Balwant |
| | | | RaiMehta (1957), Ashok Mehta (1978), |
| | | | L.M.Singhvi (1986). 73rd and 74thConstitutional |
| | | | Amendment Acts, Role of District Collector in |
| | | | Strengthening LGIs. (MGNREGS),(SGSY), (IAY) |
| | | | and (PURA). Preparation of Reports-Minutes and |
| | | | Documentation-Types of Reports, Content of |
| | | | Minutes-Methods of Documentation-Best practices |
| | | | of Reporting on functioning of Local |
| | | | Administration-Use of ICT in documentation. |

V. Anarta lathuj

Signature of the Principal
PRINCIPAL

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A.S.D. GOVT.DEGREE COLLEGE FOR (W) (A), KAKINADA DEPARTMENT OF POLITICAL SCIENCE

CURRICULUM AND ITS RELEVENT TO LOCAL / Regional / NATIONAL / GLOBAL DEVELOPMENTAL NEEDS 2023-24

| COURS E CODE | COURSE TITILE | LOCAL / NATIO NA L /GLOBAL | RELEVANCE OF THE COURSE |
|-----------------|---|---|--|
| BA2310 1 | Semester- I Fundamentals of Social Sciences | Local/ Regional/ National/ Global Needs | This foundation fosters informed citizenry engaged in community development and cultivates an appreciation for cultural diversity, leading to more inclusive communities. By providing the tools to understand and address local challenges, it promotes well-being within societies. Furthermore, it encourages a sense of global citizenship, emphasizing the interconnectedness of societies and the global implications of local actions. Understanding diverse cultures and perspectives facilitates effective communication and cooperation on a global scale. Ultimately, this course empowers individuals to become informed, engaged, and responsible members of their communities and the world, contributing to a more just and sustainable future for all. |
| BA2310 2 | Perspectives of Indian Society | Local/ Regional/ National/ Global Needs | This course offers a holistic understanding of India's social fabric, from individual behavior to national identity. It explores cultural heritage, the freedom struggle, and post-independence milestones like the Constitution and economic reforms. Students analyze the Indian economy, the impact of technology, and the role of social media. This course fosters critical thinking about India's social complexities, empowering informed and engaged citizens to contribute to the nation's progress. |
| POL24201) | Semester II Fundamentals of Political Science | Nation al & Global | This course offers the Definition Nature. Scope and Importance of Political Science and Relations with History and Economics Philosophy and Sociology. It explores the importance of the study of Political Science, Understanding the Theories of Origin of the State: Divine Origin Theories of Origin of the State: Force and Evolutionary. Social Contract Theory of the State: Force and Evolutionary. Social Contract Theory at National and Global levels. |

| (POL24202) | Semester II Concepts & Ideologies of Political Science | Nation al & Local / Region al | This course offers a holistic understanding of India's social fabric, from individual behavior to national identity. It explores cultural heritage, the freedom struggle, and post-independence milestones like the Constitution and economic reforms. Students analyze the Indian economy, the impact of technology, and the role of social media. This course fosters critical thinking about India's social complexities, empowering informed and engaged citizens to contribute to the nation's progress. |
|-------------------|--|---|---|
| POL203103 | Semester - III Indian Government And Politics | National & Local / Regional | This Course equips students for the Composition, Powers and Functions of Parliament and Legislative Assembly and Composition and Appointments, Powers and Functions or Jurisdiction of the Supreme Court and High Court in National and Regional levels. |
| POL224105 | Semester - IV Indian Political Process | Nation al & Local / Region al | This course offers the Features of Indian Federal System- Centre-State Relations Legislative, Administrative and Financial - Recommendations of Sark aria Commission, M. M. Punchi Commission and also the Election Commission of India, Powers and Functions in National and Regional levels. It explores various committes like NITI Ayog, Finance Commission, Comptroller and Auditor General of India and Central Vigilance Commission, Central Information Commission, Lokpal and Lokayukta in National level. |
| POL224106 | Semester – IV Western Political Thought | National | This course offers Plato-Rule of Philosopher Kings- Theory of Justice- Ideal State and Education and the Theory of Aristotle-Theory of State-Classification of Governments-Citizenship, Slavery and Theory of Revolutions in various aspects in National level. |
| POL225105- 6B) | Semester – V E Governance | Nation al & Local / Region al | This course offers Introduction to Governance-E-Governance – Meaning, Definition, Nature, Scope, Objectives and Significance in India. It extends the required infrastructure of Network, Computing, Cloud Governance, Data system, Human resources, Legal and Technological infrastructure and Major E-Governance Projects and Initiatives: Gyandoot, E-choupal, E-Bhoomi, E- Seva, CARD, E-Panchayat, and Real Time Governance (RTG) etc in National and Regional and local levels. |
| POL225106- 7B) | Semester – V Local Administration | National / Regional | This course offers Meaning of Local Government and Nature and Importance. It explores the Thoughts on Local Governments by M.K.Gandhi, Jawaharlal Nehru etc and 73rd and 74thConstitutional Amendment Acts and importance of Use of ICT in documentation in National and regional levels. |

V. Aranta lathuj

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AUTONOMOUS
KAKINADA



A. S. D. Govt. DEGREE COLLEGE FOR WOMEN (A), KAKINADA

Curriculum and its Relevance to Local / Regional / National / Global Needs 2023-2024

Name of the Department: Statistics

No. of Programs offered by the Department:1

Total No. of courses across all programs offered by the department: 3

B. Sc. (M.S.Cs)

| COURSE | Semester | COURSE | Local | |
|---------|----------|-----------------------|------------------------------------|---|
| CODE | | IIILE | /Regional /National / Global | Relevance of the Course |
| STC2233 | 310 | Statistical Inference | REGIONAL | Community Impact: Analyzing local trends (e.g., public health, education outcomes). Localized Data: Encouraging students to work with community-specific datasets. Employment: Preparing graduates for jobs in local industries, research centres, and NGOs. Regional Level Regional Challenges: Addressing specific concerns such as resource allocation, climate change, and urban development. Cross-Border Collaboration: Leveraging statistical inference to address issues that affect neighbouring areas (e.g., pollution, water management). Industry Needs: Equipping students to work with regional organizations in sectors like agriculture, manufacturing, and services. National Level Economic Policy: Using statistical methods to inform national economic policies, labour market studies, and tax planning. Public Health: Statistical training to address national healthcare challenges such as epidemics, disease mapping, and vaccine development. Education: Ensuring that graduates are equipped to contribute to national research and development. Census and Surveys: Training on large-scale data collection and analysis for government projects. Global Level Global Challenges: Equipping students to work on international issues such as pandemics, climate change, migration, and global supply chains. Global Standards: Aligning with international guidelines for data analysis (e.g., ISO standards, UN data practices). |

| | | | | Collaboration: Preparing graduates for work in multinational corporations, international organizations (e.g., WHO, IMF), and |
|-----------|----|------------------------|----------|--|
| | | | | academic collaborations. |
| | | | | Global Networks: Leveraging online and cross-border resources to create globally connected statisticians. |
| | IV | | | Local Level: |
| | | | | Public Policy and Services: Helps in understanding community needs through surveys. Small Businesses: Guides decisions based on customer feedback |
| STC224319 | | | | or product testing. |
| | | | | Regional Level: |
| | | Sampling Techniques | REGIONAL | Infrastructure Development: Surveys for regional planning and resources allocation. |
| | | and Design | | Agriculture: Field experiments for improving crop yields and sustainability. |
| | | of | | Market Research: Regional preferences and demand analysis. |
| | | Experiments | | National Level: |
| | | | | Government Programs: Used in national surveys like census and economic studies. |
| | | | | Healthcare and Public Health: Large-scale health studies and disease prevention strategies. |
| | | | | disease prevention strategies. Policy Making: Formulates evidence-based decisions in various |
| | | | | sectors. |
| | | | | Global Level: |
| | | | | Scientific Research: Used in global collaborations and large-scale experiments. |
| | | | | Environmental Studies: Climate change studies and biodiversity assessments. |
| | | | | Global Business and Trade: International market studies and |
| | | | | cross-cultural experiments. |
| STC224320 | | Applied | | Local Level |
| | | Statistics | | Community Development: |
| | | | | Identifying trends in local public health (e.g., disease outbreaks, vaccination coverage). |
| | | | | Evaluating the impact of local policies on education, |
| | | | | transportation, or housing. |
| | | | | Small-Scale Business Analytics: |
| | | | | Helping small businesses optimize resources, forecast |
| | | | | demand, and improve supply chains. |
| | | | | Environmental Monitoring: |
| | | | | Analyzing local pollution levels, water quality, and other environmental indicators. |
| | | | | Regional Level |
| | | | | Regional Economic Growth: |
| | | | | Studying employment patterns and industrial growth. |
| | | | | Assessing regional disparities in income, education, or healthcare. |
| | | | | Disaster Management: |
| | ı | 1 | l | <u> </u> |

 Predicting and mitigating the effects of regional disasters using statistical models.

Infrastructure Development:

• Planning efficient transport, communication networks, and resource allocation.

National Level

Policy Formulation:

- Designing and evaluating national policies in healthcare, education, and infrastructure.
- Leveraging census and demographic data for better governance.

Economic Analysis:

 Supporting central banks and financial institutions in inflation targeting, fiscal policy, and investment planning.

Healthcare and Epidemiology:

• Developing models to track national health metrics, disease trends, and resource needs.

Global Level

Global Challenges:

- Addressing issues like climate change, global pandemics, and migration patterns.
- Contributing to international initiatives such as the Sustainable Development Goals (SDGs).

International Trade and Economics:

• Analyzing trade patterns, foreign investments, and market behaviors.

Collaborative Research:

 Participating in multinational research projects and datasharing initiatives.

A.S.D. GOVT. DEGREE COLLEGE FOR WOMEN (A), KAKINADA DEPARTMENT OF ZOOLOGY & AQUACULTURE TECHNOLOGY

Curriculum and its Relevance to Local/Regional/ National/ Global Developmental Needs 2023-2024

No of Programmes offered by the Department: 05 (CBZ, CZAqT, Zoology Major, Zoology

Minor & Aquaculture Minor)

Total No. of courses across all programs offered by the Department: 12(Zoology) + 06 (Aquaculture Technology) = 18

BSc (Subject: ZOOLOGY)

| COURSE CODE | COURSE TITLE | Local/ Regional / National /Global | Relevance of the Course |
|----------------|--|---|--|
| BSCB23101 | Introduction to Classical Biology | Regional/ National/ Global | The concepts of essentials of Zoology, Cell biology, Genetics & Evolution has given global importance of living organisms, their functional aspects and origin of these things. |
| BSCB23102 | Introduction to Applied Biology | Regional/ National/ Global | The concepts of Biotechnology has global importance of researches. |
| ZOO23201 | Animal diversity - biology of non- chordates | Regional/ National/ Global | Study of the general characters and classification of non-chordates gives an overview of their diversity, distribution, Evolution, and significance in maintaining Ecological balance. This knowledge is very much important for protecting the biodiversity and understanding that man is an integral part of nature. The curriculum throws light on the economic importance of Invertebrates through topics like Parasitic life cycles, Preparation of vermicompost, Beneficial, and harmful insects, different kinds of animal associations etc. Practical imparts the skills such as identification of invertebrates by observing their morphological characters, for understanding feeding and reproductive habits etc. Global researches on different animals. |
| ZOO23202 | Cell & Molecular Biology | Regional/ National/ Global | The concepts of Cytology such as cell structure, types and functions are very important as the cells are the fundamental structural and functional units of any organism. Study of cell cycle reveals the life of cells & growth of cancers in globally. The basic concepts of Molecular Biology explain how a living organism continuing its life and its applications have brought revolutionary changes in human lives. |
| ZOO20306 | Cell Biology, Genetics, | Regional/ National/ | The concepts of Cell Biology such as cell structure, types and functions are very important as the cells are |

| | Molecular Biology and Evolution | Global | the fundamental structural and functional units of any organism. Genetics gives the knowledge of Mendel's laws of inheritance which became the foundation for various hybridization experiments and production of improved breeds of animals and plants. To understand the concepts like Gene Interaction, Polygenes, Sex determination, Sex linked inheritance, Chromosomal Disorders and human genetics is essential for the betterment of quality of life. This subject improves the problem-solving abilities among the students. The basic concepts of Molecular Biology and their application have brought revolutionary changes in human lives. This has Medical, Pharma, food, Industrial applications. This has application in the production of transgenic animals, reproductive manipulations, Genomics and proteomics etc. Evolution helps to understand the principles, theories and forces of evolution, various isolation mechanisms that lead to speciation etc. The better we understand the nature the better we progress in a sustainable manner. |
|-----------|---|----------------------------------|--|
| ZOO224311 | Physiology, Cellular Metabolism and Embryology | Regional/ National/ Global | Physiology helps to understand the functional aspects of body such as Digestion, Respiration, Circulation, Excretion, Muscle contraction etc. This knowledge can be applied to understand the malfunctioning of the body and remedial measures to be taken. Cellular Metabolism gives the understanding about various biochemical metabolic reactions that take place at cellular level. Embryology gives the knowledge of concepts like gametogenesis, fertilization, embryonic development etc. The above concepts are applicable globally for all |
| ZOO224312 | Immunology & Animal Biotechnology | Regional/ National/ Global | living organisms. Immunology gives the knowledge about the types of immunity, Antigen- Antibody reactions, Immune organs and cells, Hypersensitivity, Immune disorders etc. This branch of Zoology has wide applications in the field of medicine such as production and use of monoclonal antibodies, vaccines, stem cell Technology etc. Research in the field of Biotechnology has the potential to change the face of the world and fate of human beings. There is no area that is not touched by Biotechnology in the daily life. Provides placements at large scale in Pharma, medical diagnostics, and in research sectors. Both the concepts have global importance of |

| | | | researches. |
|------------------|---|---|--|
| ZOO205311 -6A | Sustainable Aquaculture Management | Regional/ National/ Global | This course facilitates the students to identify the locally available edible aquatic species and cultivate them scientifically in the natural and artificial aquatic environments. The curriculum has concepts like fish and shrimp hatchery management, Induced breeding, Pond preparation, Water quality, feed and disease management, Aquaculture economics, Marketing methods, production of genetically improved management of aqua farms through classroom instruction and field visits. Best management practices ensure the global food security, employment, and entrepreneurship opportunities along with increasing foreign exchange reserves by aqua trading. |
| ZOO205312 -7A | Post-Harvest Technology | Regional/ National/ Global | The curriculum of Post-Harvest Technology includes handling, preservation, processing, and preparation of fishery value added and by-products. These skills help the students to procure employment and entrepreneurial opportunities processing and export industries. The project work done by the students helps them to improve their practical knowledge of Aquaculture and researches for betterment of field. |
| ZOO205311 -6B | Live Stock Management-I (Biology of Dairy Animals) | Local, Regional, National & Global | This course facilitates the students to identify the Livestock and different types of breeds rearing in their vicinity. They can identify the features of a good breed for dairy farming and techniques used in the breeding process. Assess the global needs of dairy nutrient products, employability and become good entrepreneurs. |
| ZOO205312 -7B | Live Stock Management -II (Dairy Production and Management) | Local, Regional, National & Global | The curriculum has different Management methods of dairy animals as systems of housing, Management of different categories of animals in the farm. By this students can get employability and entrepreneur skills. They can also enhance their knowledge and skills in industrial activities like pasteurization, milk preservation and milk products preparation through classroom instruction and field visits to the dairy industry. With these skills they provide milk to global needs, employability and become entrepreneurs. |
| PF20303S | Poultry Farming | Regional/ National/ Global | This skill Development course gives the knowledge of different breeds of poultry birds, construction, and management of poultry farm. The skills learned in this course provide employment and entrepreneurship opportunities. |

BSc (Subject: AQUACULTURE TECHNOLOGY)

| COURSE CODE M-AQ23201 | COURSE TITLE Taxonomy and Functional Anatomy of Fin Fish and Shellfish | Local/ Regional/ National /Global Regional/ National /Global | Relevance of the Course Aquatic ecosystems are highly dynamic where a greater number of species are living compared to terrestrial environment. The students of aquaculture must understand and gain knowledge of Taxonomy, Anatomy & Physiology of shell and fin fishes. Thus, the curriculum provides knowledge to develop expertise in taxonomy, Anatomy and physiology of |
|-----------------------------|--|---|---|
| AQ203308 | Fish Nutrition and Feed Technology | Regional/ National/ Global | commercial importance having aquatic organisms. Successful culture practices in aquaculture depends upon the management of quality feed formulation and supply the fish in culture ponds. This course provides the deep knowledge and understanding of different aspects related to fish and nutrition and feed management. This is one of the potential areas of aquaculture which can provide plenty of employment as well as business opportunities. |
| AQ224315 | Freshwater and Brackish Water Aquaculture | Regional/ National/ Global | Fresh water and brackish water aquaculture practices have made many agrarian societies into premier aquaculture societies which reveals the fact that both the culture practices are highly potential sectors that can provide employment opportunities mainly in rural areas. Andhra Pradesh stands first for brackish water culture. The course freshwater and brackish water culture offers very good knowledge to students to learn the culture practices which is a very important component of aquaculture. |
| AQ224316 | Fish Health Management and Fisheries Economics | Regional/ National/ Global | Fish health management is a term used in aquaculture to describe management practices which are designed to prevent fish disease. Once fish get sick it can be difficult to salvage them. By the concepts of diseases, symptoms, diagnostic methods, treatments, prevention and control the student can become good entrepreneur and produce high yield. Prevention of fish disease is accomplished through good water quality management, nutrition, and sanitation. With out this foundation it is impossible to prevent outbreaks of opportunistic diseases. This course combines academics and economics in order to provide right kind of knowledge in fishery education and principles of economics to farmers, students, and entrepreneurs. This is a good paper that |

| | | | provides a platform to learn both fishery sciences and economics involved to develop aquaculture industry. |
|-----------------|---|----------------------------------|---|
| AQ205315- 6A | Soil and Water Quality Management | Regional/ National/ Global | The concepts of properties of soil, water quality parameters in different salinity and soil — water amendments can enhance the knowledge of students. The skills acquired in pond water management and pond treatments provide the employment and entrepreneurship opportunities. |
| AQ205316- 7A | Ornamental fish culture | Regional/ National/ Global | The concepts of types of ornamental fishes, aquarium Preparation, its management, breeding and rearing of aquarium fishes and their commercial production can give a scope of employability and entrepreneurship. |

V. Aranta lakhuj

Signature of the Principal

PRINCIPAL

A.S.D.GOVT.DEGREE COLLEGE (W)

AUTONOMOUS
KAKINADA



Signature of the Lecturer in charge

Signature of the Lecturer in charge

SEPARTMENT OF ZOOLOGY

SOVI. EGILEGE FOR WOME:

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A.S.D Government Degree College for Women (Autonomous):Kakinada

Department of Economics

Curriculum and Its Relevance to Local/Regional/ National/ Global Needs

2023-2024

No of Programs offered by the department: 2

Total No. Of courses across all Programs Offered by the Department: 11

| Progr am | Course code | Course | Local/ Regional/ National/ Global Needs | Relevance |
|-----------------------------------|-------------|--|---|--|
| BA Econ omics (Hons) | BA23101 | Fundamentals of Social Sciences | Local/ Regional/ National/ Global Needs | This foundation fosters informed citizenry engaged in community development and cultivates an appreciation for cultural diversity, leading to more inclusive communities. By providing the tools to understand and address local challenges, it promotes well-being within societies. Furthermore, it encourages a sense of global citizenship, emphasizing the interconnectedness of societies and the global implications of local actions. Understanding diverse cultures and perspectives facilitates effective communication and cooperation on a global scale. Ultimately, this course empowers individuals to become informed, engaged, and responsible members of their communities and the world, contributing to a more just and sustainable future for all. |
| | BA23102 | Perspectives of Indian Society | Local/ Regional/ National/ Global Needs | This course offers a holistic understanding of India's social fabric, from individual behavior to national identity. It explores cultural heritage, the freedom struggle, and post-independence milestones like the Constitution and economic reforms. Students analyze the Indian economy, the impact of technology, and the role of social media. This course fosters critical thinking about India's social complexities, empowering informed and engaged citizens to contribute to the nation's progress. |
| | ECO23202 | Mathematical Methods for Economics | Local/ Regional/ National/ | This Course equips students with essential quantitative tools for economic analysis, strengthening analytical and problem-solving skills applicable to diverse careers. |

| | | | Global Needs | This knowledge base supports informed economic policymaking and business decision-making at local and national levels. Furthermore, it enables students to analyze global economic forces, international trade, and financial markets. These skills are crucial for economic research, contributing to a deeper understanding of global economic challenges. Ultimately, this course empowers individuals to apply mathematical reasoning to economic issues, fostering informed decision-making and contributing to economic growth and stability at all levels. |
|-----------------|-----------|---|--|--|
| | ECO23201 | Microeconomic | Regional/ National/ Global | The concepts in microeconomics are the heart of economics which explain determinants demand and supply of goods and services, market conditions and factor price theories. This course assists in understanding local and regional market structures, competition, and consumer preferences. Microeconomics helps in analyzing consumer behavior, market competition, pricing strategies, and trade dynamics, contributing to effective global market entry and competitiveness. Price theory is relevant to understand any market be at global level, national, regional and local. |
| BA (HEP) | ECO203102 | Development Economics | Regional/ National/ Global | This course helps in understanding various concepts and definitions and indicators relating to economic growth and development. This further helps students to know various strategies for development and role of institutions in development. These concepts are important to understand factors that enable growth at global, national, regional, and local levels. |
| | ECO224103 | Economic Development- India And Andhra Pradesh | National | Concepts in economic development of India help students to know leading issues of Indian economic development with reference to potential for growth, obstacles and policy responses. |
| | | | Regional | Concepts in economic development of Andhra Pradesh help students to critically examine using data and figures (analysis and evaluation) leading issues of current importance relating to India and AP economy, major policies and programs |
| | | | Local | With the help of concepts and theories understood at national and regional level students should be able to apply and understand the local economic situations. |
| | ECO224104 | Statistical Methods For Economics | Local/ Regional/ National/ Global | This course in statistical methods for economics enriches the student's ability to analyze, interpret and present economic data. Analysis in Social Sciences is data driven. Statistical methods provide a foundation |

| | FC0205402 | | Needs | for evidence-based decision-making and policy formulation across all levels of economics. They facilitate understanding economic trends, forecasting future scenarios, identifying areas for development, and evaluating the impact of policies, ultimately contributing to the economic well-being of individuals, businesses, regions, nations, and the global community. |
|--|------------------|--------------------------------------|---|--|
| | ECO205103- 6C | Insurance services | Local/ Regional/ National/ Global Needs | Insurance services course is essential for developing a workforce that understands the complexities of insurance and risk management. This course provides knowledge about regulatory frameworks and policy design, ensuring a well-functioning insurance sector for the country. Courses on insurance and risk management help local businesses identify potential risks, choose appropriate insurance coverage, and protect their assets. Understanding insurance principles and practices is crucial for a well-functioning and sustainable global economy. |
| | ECO205104- 7C | Banking and Financial Services | Local/ Regional/ National/ Global Needs | Banking and financial services courses play a critical role in producing a skilled workforce that is knowledgeable about the intricacies of banking, finance, investment, and economic management. This course empowers individuals to make informed financial decisions and utilize banking services effectively. The course provides knowledge on national financial laws and regulations, this knowledge is essential for fostering economic stability, supporting businesses, encouraging investment, and ensuring the efficient functioning of financial systems at local, regional, national, and global scales. |
| Skill Cours e | IP23202SC | Investment Planning | Local/ Regional/ National/ Global Needs | "Investment Planning" provides the tools for sound investment decisions, promoting financial literacy and responsible investing. Individuals learn to assess risk, evaluate options, and plan for their financial future, strengthening personal finances and contributing to broader economic stability. This knowledge supports local financial markets and national economic development. Globally, it fosters understanding of financial markets and efficient capital allocation, promoting economic growth. This course empowers individuals to become responsible investors, contributing to both personal and global financial well-being. |
| Skill Devel opme mt Cours e | FM20304S | Financial Markets | Local/ Regional/ National/ Global Needs | "Financial Markets" provides a comprehensive understanding of the financial landscape, equipping individuals to navigate financial systems and make informed decisions. This knowledge fosters financial stability and economic growth. Locally, it supports efficient capital allocation and the development of robust financial institutions, promoting economic growth and stability. Globally, it enables informed participation in international |

| | finance and understanding of global financial trends, fostering stability and resilience. This course empowers individuals to become informed participants in the financial world, contributing to both national and global economic |
|--|--|
| | world, contributing to both national and global economic well-being. |



A.S.D.GOVT.DEGREE COLLEGE (M)
Autonomous
Kakinada

Signature of Head of the Department.

Signature of the Principal

ASD GOVERNMENT DEGREE COLLEGE FOR WOMEN(AUTONOMOUS): KAKINADA

Curriculum and its Relevance to Local/Regional/ National/ Global Needs

Name of the Department : BOTANY

No of Programmes offered by the Dept: 04

Total No. of Courses across all programmes offered by the department: 09

BSC (BOTANY)

| COURSE CODE | COURSE TITLE | Local/Regional / National /Global | Relevance of the Course |
|----------------|--------------------------------------|---|--|
| BSCB23101 | Introduction to Classical Biology | Global | This course helps the Students In understanding the Principles of Nomenclature ,Classification of Plants ,and Conservation strategies of Biodiversity.It helps the students to understand the plant taxonomic, and reproductive processes and apply the knowledge of Economic Botany for enterpreneurship It enables the Students to understand and gain knowledge about the basic structure and functions of Cell Organelles,basic concepts of Molecular Biology and Origin of Life . This course makes the students to understand the animal Classification, Physiology. Embryonic development and apply the knowledge gained in Economic zoology to grow into Enterpreneurs |
| BSCB23102 | Introduction to Applied Biology | Global | This course helps the students to understand the history, ultra structure, diversity of microgranisms. It enables the students to acquire the knowledge on Biotechnology principles and its applications in food and medicine. It helps the Students to gain the knowledge about Bioinformatics and Statistical tools, in comprehending the Complex biological data. It helps the students to compare the techniques tools and their uses in diagonosis and therapy |

| BOT 23201 | Non- Vascular . Plants | National | This course makes the students to compile the general characterstics of Algae and their significance in nature. It makes the students to compare and contrast the characterstics of different groups of Algae, It makes the Students to summarize the important features of fungi and their economic values. It helps the Students to gain knowledge about the diversity among NonVascular plants |
|--------------|--|----------|---|
| BOT 23202 | Origin of Life and Diversity of Microbes | Global | This course helps students to get awareness on importance of microbes in nature and agriculture. It makes the students to gain knowledge about characterstics, classification, economic importance of special groups of Bacteria. It enables the students to evaluate the interactions among soil microbes It helps the students to compile the value and application of microbes in Agriculture |
| ВОТ20335 | Anatomy and Embryology of Angiosperms Plant ecology and Biodiversity | Global | This course helps students to understand about the details of Internal organization of shoot as well as Root Apical Meristem Importance of various kinds of Timbers, Embryology is the study of structure and development of embryo in plants It also helps the students to understand about the development of microsporangium Development of Kinds of Ovules and Embryogeny in Dicots and Monocots This course provides the insight into the genetic and environmental factors that effect the development of a plant Ecological Niche Biotic And Abiotic Factors and assess the Conservation strategies of Biodiversity |
| ВОТ22439 | Plant Physiology and Metabolism | Global | This course helps the students to understand about various phenomena like osmosis and water potential Students can study variation and structure of plants at molecular and cellular level resulting in Ecological physiological and biochemistry related aspects of plant exploration It emphasizes on different steps involved in Plant respiration It enables the students to be aware of the importance of nutrients in the growth of Plants It helps the students to interpret the role of Enzymes in Plant metabolism Students will be able to understand about the mechanism of Nitrogen Fixation and Role of Growth Regulators in the growth of the plant |

| BOT224310 | Cell Biology, Genetics and Plant Breeding | National | This Course helps the students to cellular organisation in Plant cells It emphasizes on the importance of Chromosomal aberrations and Mendelian Inheritance. This Course gives the students an idea of Somaclonal Variation in plants Importance of Genetic Markers, It enables the students to learn about the objectives of Plant breeding and breeding techniques to be followed in improvement of Crop yield |
|---------------|---|----------|---|
| BOT 205309 | Plant propagation | Global | It is a skill based course through which students can develop knowledge about how to improve crop yield of the plants This Course helps the students to gain knowledge on making use of different plant propagation structures used in the multiplication of plants It emphasizes on the importance of exploration of specialized asexual propagules for their proloferation. This Course gives the students to gain skills on micropropagation of plants through vegetative propagation techniques and different kinds of propagation Techniques such as Layering ,Grafting & different kinds of Stem cuttings etc |
| BOT 205310 | Seed Technology | National | This course enables the students to learn about the various causes of seed Dormancy and methods to break seed Dormancy, It helps the students to understand critical concepts of Seed processing & seed Storage Procedures. It enables the students to acquire skills related to various seed testing methods. It is a skill based course and helps the students to gain knowledge in identifying seed borne pathogens and prescribe methods to control them, It helps the students to understand the legislations on seed production and procedure of seed certification, This course makes the students to gain knowledge on estimation of seed moisture, seed germination percentage seed viability and vigour |

Signature of HOD

Lecturer
Department of wotany
Incharge in Botany
FD. Govi. Degree College for Work
KAK'NADA

Signature of Principal

A.S.D.GOVT.DEGREE COLLEGE (M. AUTONOMOUS

A.S.D. GOVERNMENT DEGREE COLLEGE FOR WOMEN (AUTONOMOUS), KAKINADA.

Curriculum and its Relevance to Local/Regional/ National/ Global Needs 2023-2024

Name of the Department: Chemistry

No of Programmes offered by the Dept: 06

Total No. of courses across all programs offered by the department: 16

| Course Code | Course Title | Local/Regional / National/ Global | Relevance of the Course |
|----------------|--|---|---|
| BSCM23101 | Course – 1: Essentials of Mathematics, Physics, Chemistry & Computer Science | Global | Chemistry is a relevent part of the curriculum because it helps us understand the world around us and make informed choices about the products we use. Chemistry is used in many aspects of our daily lives including-food, clothing, cleaning products, medicines, fuel, Air and water. Chemistry also serves as a foundation for other sciences, such as Physics, biology and geology. Chemistry has a broad impact on the national and global economy, the environment and human health. |
| BSCM23102 | Course – 2: Advances of Mathematics, Physics, Chemistry & Computer Science | Global | Computer-aided drug design (CADD) plays key role in modern drug discovery, can predict how a molecular structure relates to its activity and interacts with its target using structure-based and ligand-based methods. So, it speed ups drug discovery process and saves lives in pandemic's. Dyes removal in water body is one of the emerging need of environment. Dye removal by potocatalysis is promising green approach for degrading diverse toxic and organic pollutants present in waterbody. Impact of chemical pollutants on ecosystems and human health, Solid waste management, Water treatment knowledge in this course create awareness to students about DO's and Don'ts to save environment. |
| CHE23201 | General & Inorganic Chemistry | Global/National | Understanding atomic structure is fundamental to all aspects of chemistry, as it provides a foundation for understanding chemical reactions, properties of elements, and the behaviour of matter. The understanding of ionic, covalent and metallic bonds is important for students to learn about chemical bonds and how atoms bond together to form molecules. This knowledge can help students predict how |

| CHE23201P | Analysis of Simple Salt | | substances will behave, which is useful in chemistry labs. The student acquires skill on acids and bases which have numerous applications in agriculture production ,water treatment, laboratory testing and analysis Salt analysis develops an understanding of chemical compounds and also sharpens the minds of the students about thinking skills and problem solving techniques. |
|-----------|-------------------------------------|--------|---|
| CHE23202 | Inorganic Chemistry | Global | Chemistry of p block elements, d and f block elements gives thorough knowledge on Preparation, properties and structure of their compounds which enables to understand the changes that occur when these compounds subjected to chemical reactions at atomic and molecular levels. This knowledge in Inorganic chemistry is fundamental to develop new technologies including catalysis, new advanced materials and energy storage devices like lithium batteries etc. It leads better quality of life and sustainable world. In f block elements ion exchange resins addresses, global challenge environment pollution by providing access to clean water and radioactive elements answers another global society issue human health by playing crucial role in diagnosis and cancer therapy. There are many interesting applications of nuclear chemistry from energy (nuclear power generation) to medicine. |
| CHE23202P | Preparation of Inorganic Compounds | Global | Apply this skill to prepare simple inorganic compounds. These compounds are widely used in many applications, including the medical field, the water treatment process, metal treatment industry the textile industry and electroplating etc |
| CHE203303 | Organic Chemistry & Spectroscopy | Global | Understanding of structure, properties, classification and reactions of organic compounds in Organic chemistry plays a crucial role in, in the synthesis of new drugs, material science and in agrochemicals. Spectroscopic techniques IR, NMR and Mass spectrometry are utilized in drug discovery and development for identifying and characterizing chemical compounds, in pollution monitoring - to detect and quantify pollutants in air, water, and soil samples and in forensic laboratories for identifying and characterizing chemical substances found at crime scenes. |

| CHE203303P | Organic preparations practical | Global | Organic synthesis involves troubleshooting and optimization, as reactions may not always proceed as expected. By encountering and resolving challenges during synthesis, students develop problem-solving abilities and critical thinking skills essential for scientific inquiry. Organic synthesis is the foundation of modern drug discovery, materials science, agrochemical development, and many other fields. |
|------------|---|--------|--|
| CHE224305 | Inorganic, Organic & Physical Chemistry P-IV | Global | Photochemical processes are employed in photocatalytic reactions for drug development processes, drug therapy, environmental remediation, such as water purification and wastewater treatment. Photocatalysts can degrade organic pollutants and disinfect water using sunlight or artificial light sources, offering sustainable solutions for addressing water pollution issues. Understanding thermodynamic principles is crucial in the design and operation of energy systems, such as power plants (nuclear, fossil fuel, and renewable energy sources), engines (automobiles, aircraft, and spacecraft), and heating, ventilation, and air conditioning (HVAC) systems. Optimizing energy efficiency and minimizing waste heat are critical considerations for sustainable energy production and consumption, which are paramount for addressing global energy challenges and reducing greenhouse gas emissions. Organometallic compounds play a crucial role in the development of novel materials, energy conversion processes, medicinal chemistry, so it addresses all these global issues. |
| CHE224305P | Inorganic, Organic & Physical Chemistry P: Organic Qualitative analysis | Global | Understanding organic qualitative analysis is essential for researchers and professionals working in various fields such as pharmaceuticals, agrochemicals, polymers, and materials science. It forms the basis for further quantitative analysis and structural elucidation of organic compounds. |

| CHE224306 | Inorganic & Physical Chemistry P-V | Global | Coordination compounds are employed in various industrial processes, including catalysis, electroplating, and pigment production, development of advanced materials like Metal-organic frameworks (MOFs), the removal of heavy metals from wastewater and soil, as analytical reagents and indicators in various analytical techniques. Bioinorganic chemistry is integral to understanding roles of metal ions in biological systems, including enzyme catalysis, electron transfer, and signal transduction the mechanisms of action of metal-based drugs, such as cisplatin in cancer chemotherapy and metalloenzymes in drug metabolism. Electrochemistry contributes in energy production problems |
|-------------------|---|--------|---|
| CHE224306P | Inorganic & Physical Chemistry -P: Conductometric and Potentiometric Titrimetry | Global | Conductometric titrations can be applied to various types of chemical reactions, including acid-base, redox, and precipitation reactions. This versatility makes them valuable in analyzing a wide range of samples, from pharmaceuticals to environmental samples, enhancing students' understanding of different chemical systems. |
| CHE205305- 6D | Environmental Chemistry | Global | It develops the knowledge on environment related issues such as different kinds of pollution that occur in nature and how it is affects the human life and also the energy crisis and different aspects of sustainability. It also helps to acquire knowledge on biodiversity at national, global and regional level. |
| CHE205305- 6DP | Environmental Chemistry Practical | Global | Water analysis provides valuable information for assessing suitability of water for various uses such as drinking, agriculture, industry, and recreation |

| CHE205306- 7D | Green Chemistry & Nano Technology | Global | It develops the knowledge on synthesis of compounds using green solvent which are environment friendly and less hazardeous to human life and also the advantages of using green synthesis. Green chemistry prioritizes the health and safety of both humans and the environment by minimizing exposure to toxic chemicals and reducing the production of hazardous byproducts Nanotechnology helps us to understand the earlier detection of diseases and also the applications which include medicine, automobiles, textiles and fabrics, spacescience, electronics and device, advanced materials etc.,. It offer promising solutions to global challenges such as climate change, pollution, energy transition, and public health. |
|-------------------|--|--------|---|
| CHE205306- 7DP | Green Chemistry & Nano Technology Practical | Global | Develop knowledge on focuses on designing chemical products and processes that minimize the use and generation of hazardous substances, waste, and energy. Incorporating green chemistry principles into the curriculum teaches students how to develop environmentally benign solutions to real-world challenges, promoting sustainability and reducing the environmental impact of chemical industries. |



ASD GOVERNMENT DEGREE COLLEGE (W)(A), KAKINADA Curriculum & Its Relevance to Local/Regional/National/Global Needs

| | L | ocal/Regional/National | /Global Needs |
|------------------|----------------------------------|-------------------------------------|---|
| | | 2023-24 | |
| | | Department: Te | elugu |
| | grammes offered: 02 (General Tel | | |
| Course code | Course Title | Local/Regional/ National/ Global | Relevance of the Course |
| TEL- 23103 | SahithiSourabhamu | Global | The Course enables learners to recognise the importance of the eligibilities of the administrator and the precautions to be taken while selecting the skilled persons in various fields as officers of the Public Welfare Programmes to be undertaken by the administrator, the Good Governance Programme, the Military Welfare programmes etc The course also helps the learners to understand various modern literary forms like poetry, story, shorty stories, novel and biographies and also knows the contemporary history of society. |
| TEL- 23203 | SrujanatmakaRachana | Global | The course enables the learners to develop creative writing skills and to use language skills. Writing skills can be expressed in a creative form, can take advantage of employment opportunities, acquire proficiency. The course also helps the learners to develop Communication skills, creative writing, translation and also for writing for Print and Electronic Media. Students can understand the importance of mother tongue. |
| TEL- 20301 | SrujanaBharati | Global | The course enables the learners to develop creative writing skills and to use language skills. Writing skills can be expressed in a creative form, can take advantage of employment opportunities, acquire proficiency. The course also helps the learners to develop Communication skills, creative writing, translation and also for writing for Print and Electronic Media |
| M-TL- 23201 | AadhunikaKavithaParichayam | National | The course enables the learners to understand political and socio revolutions of 19 th century in India, Feelings of patriotism, prevention of social inequalities, humanitarianism, etc. are enhanced in the curriculum. Students can understand how modern Telugu powets influenced by English literature and Marxism. |
| ST-6A- 205107 | BhashaSwaroopam | National | The course enables the learners to understand linguistic theories and different language families in the world and especially Telugu grammar. |
| ST-7A 205108 | Telugu RachanaReetulu | National | The course enables the learners to develop creative writing skills and to use language skills. Writing skills can be expressed in a creative form, can take advantage of employment opportunities, acquire proficiency. The course also helps the learners to develop Communication skills, creative writing, translation and also for writing for Print and Electronic Media. This curriculum enables the students to understand the different styles of literary forms. |

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Signature of the Principal

ASD GOVERNMENT DEGREE COLLEGE FOR WOMEN (AUTONOMOUS): KAKINADA

Curriculum and its Relevance to Local/Regional/ National/ Global Needs Name of the Department - Horticulture

No of Programmes offered by the Dept: 01

Total No. of courses across all programs offered by the Department: 05

BSC (Horticulture)

| HT203309 | Basics of Vegetable science (Olericulture) | National | This course enables the students to learn about the production ,storage processing and marketing of vegetables Students will gain knowledge about cultivation aspects of different vegetable crops It encompasses the crop establishment including cultivar selection seed bed preparation and establishment of of vegetable crops by seed and transplants Students will learn the importance of cultivation of various Vegetable plants like Brinjal Tomato capsicum spinach and Coriander . This course enables the students to identify the pests & diseases of vegetable crops & their management Students will gain knowledge about the cultivation of Tuber crops like cultivation of Carrot Beetroot Colocasia Cole crops cabbage and cauliflower cultivation practices Cultivation practices of Leguminous Vegetables Cluster bean cow pea etc |
|----------|---|----------|--|
| HT224317 | Basics of Fruit Science (Pomology) | National | This course enables the students to realize the value of fruits in terms of Human nutrition & economy of Nation This course enables the students to gain knowledge on fruit tree improvement to increase production yield and quality Importance of fruits growing in India and Andhrapradesh Export and Import Production value of fruits Students would be able to gain knowledge how to get maximum quality production per unit area with low cost. This course |

| | | | helps the students to develop knowledge on various Enterpreunership skills in related to fruit science |
|--------------|--|--------|--|
| HT224318 | Pests & Diseases of Horticulture plants and their management | Global | This course enables the students to learn about pest management which is an important component of crop production and prevent crop loss. Pests can have detrimental effect on Horticultural operations by effecting the quantity quality and ultimately the marketability of the crops grown Students will be able to study about the Symptoms and Plant diseases caused by Viruses Fungi and Bacteria Students will procure knowledge in disease management practices in various vegetable Crops, ornamental crops,fruit crops. This course enables the students to gain knowledge about classification of pesticides based on use chemical nature, formulation toxicity & action |
| HT 205317-6A | Ornamental Horticulture | Global | It is a skill Enhancement course which helps the students to acquire critical knowledge in identifying various components required for ornamental Garden Development, It helps the students to gain skills related to establishment & Maintenance of an Ornamental garden, It helps the students to learn about making & developing lawn and Bonsai.It makes the students to know about Landscape design using CAD. It helps the students to acquire skills of designing & developing ornamental gardens in public places |
| | | | It is a skill enhancement Course and helps the students to understand the importance of flowers in life. This course enables the students to acquire skills related to production techniques in floriculture, It helps the students to gain knowledge about various breeding techniques of some flowering plants and students will get an idea about post |

| HT205318- 7A | Commercial Floriculture | Global | harvest technology in handling of flowers in Floriculture This course enables the students to gain knowledge about performing skills of floral arrangements or making floral products This course helps the students to procure knowledge about use of chemicals & other compounds for prolonging the vase life of cut flowers |
|---|----------------------------|--------|--|
| Signature of HOD Lectured Department of kotany Incharge in Sotany AD.Govt. Degree College for Wo KAKINADA | | | Signature of Principal V. O. PRINCIPAL A.S.D.GOVT.DEGREE COLLEGE (W. AUTONOMOUS KAKINADA) |

Department of Home Science

Curriculum relevance to Local/regional/national/global needs 2023-24

Number of Courses offered 19

| Course | Coursetitle | Local/regional | Relevanceof thecourse |
|---------|---|----------------------|--|
| Code | | /national/glob al | |
| Course1 | Introduction to Home Science | Global | Introduces the students to the various specializations of Home Science and its relevance. It acquaints the students with the contemporary research going on in the various areas of home science specializations as well as both the career and entrepreneurship opportunities in home science |
| Course2 | Health, Hygiene wellness | Global | This course is relevant at local, regional, and global levels, focusing on health and wellness, disease prevention, and lifestyle management. It equips students with knowledge to address public health challenges. Students are also acquainted with practices such as hygiene, immunization, and the use of microorganisms. The course also emphasizes the role of physical activity, yoga, and meditation in modern lifestyle diseases and stress. |
| MDC | Principles of Psychology | Global | Students will understand human behaviour and its dimensions .Students also understand the mental health challenges and also improves their emotional intelligence. The course also supports educational and professional development by applying psychological principles and personality assessment. |
| Major 1 | Essentials of Home Science Extension | Local | This course helps the students understand the community and the problems and needs of community. It equips students with the skills to deliver education through formal and non-formal methods, using various teaching techniques and audio-visual aids to address various audiences. It empowers the students to work for community empowerment, social change, and the dissemination of information through modern and traditional media, contributing to sustainable development. |
| Major 2 | Human Development | | Students will gain an understanding of human development across the lifespan Students will gain an understanding about the various areas of development and the role of both heredity and environment on development. The knowledge of this course equips the students with a skill to understand thus maintaining good relationships thus contributing for a happy society |
| Minor | Food Science | | This course impart knowledge on plant and animal foods, their selection, nutritive values, composition, storage and processing. Students can learn about various food groups which enhances their creativity to make product development. This also helps students to upgrade knowledge on preparation of balanced diet |

| | | | without losing nutrients. |
|---------|--|----------|---|
| HSC 301 | Family and Community Nutrition | | This course is highly relevant at the local, regional, and global levels as it addresses fundamental aspects of nutrition, health, and well-being in various societal contexts. Empowers families to adopt healthy eating practices tailored to their socioeconomic and cultural context. This course trains students to contribute to regional health and nutrition programs, and also Provides knowledge to address global challenges like hunger, food insecurity, and micronutrient deficiencies. |
| HSC 302 | Principles of garment Construction | | It is a skill based course which enables the students to acquire skills in operation of a sewing machine and principles of garment construction. This course has relevance at local ,regional and global levels. This course encourages local entrepreneurship by enabling the students to design custom fit garments as per the changing fashion trends |
| HSC 303 | Child Development | | This course is highly relevant at the local, regional, and global levels as it provides essential knowledge and skills for fostering the holistic development of children. This prepares professionals to improve the quality of early childhood development programs at local, regional and global levels. |
| HSC301 | CommunityNu trition(FN-3) | Regional | Communitynutritionisthesciencerelatedtopracticala pplicationofthenutritionalknowledgeinthefieldtoide ntifyand solve nutritional problems ofpopulation groups in the community. Further, students can apply Nutritional assessment techniques in different regions to understand the specific nutritional problems. Apart from this, students able to understand Planning of nutritious diets according to RDA for different age group's i.e. Infancy to old age and physiological conditions - Pregnancy and lactation. This course enhances students 'Knowledge, employability and entrepreneurial skills. |
| HSC302 | PrinciplesofGa rmentconstruct ion(TEX-2) | Local | It is a skill based course whichenablesthestudentstoacquireskillsinoperation of as ewing machine and principles of garment construction |
| HSC303 | Child Development | Global | Childdevelopmentcourseenables the students understandthedevelopmentalpatternsofthehumans in various stages of lifespan and also imparts knowledge oidentification ofdevelopmentaldelaysandvarious developmental disorders. This has global relevance wherethestudentscanpursuetheircareersintheareaofs pecialeducation, humandevelopment and Guidanceand counselling |
| HSC401 | Therapeutic Nutrition(FN- 4) | Global | Thiscourseisverymuchessential to the students for self-awareness as well as to becomedieticianinthehospitalatlocal, national and global level. |

| HSC402 | Fabric Construction | Regional | Studentscanunderstandaboutmodification of normal diets totherapeuticdietsfordifferentdiseaseslikeObesity,C ardiovascular, Renal, Diabetesmellitusetc. TheyalsoacquireknowledgeonCalculationofNutrien tRequirementsforcomplicationsindifferentdiseaseco nditions. After completing thiscourse,studentscangetemployment in hospitals, healthcarecenters,Dietcounselling centers,slimmingcenters etc. Thisisaskillbasedcoursewherethestudentslearnabout thevariousfinishesandcareofFabrics and has |
|--------|---|----------|---|
| | &ApparelCare(T EX-3) | | entrepreneurial value |
| HSC403 | HumanDevelo pmentand Family Dynamics(HD-2) | National | This course enables the studentsunderstandthedevelopmentpatterns during adolescence and also the dynamics of marriage and family. This has local relevance as the student can extend the knowledge and coping strategies to the community through counselling for strengthening the families and thus the society |
| HSC404 | Nutritional Bio-Chemistry(FN-5) | Local | NutritionalBiochemistryisanadvancednutritioncour seemphasizingthemetabolismand Bio chemistry of the energy containing macronutrients:carbohydrates,lipids,proteinsandoth errelatedcompounds. Theirchemicalstructures, digest ion, absorption, distribution, and cellular metabolism are covered. Centralthemes will include the utilization of macronutr ients in energy metabolism and the integration and regulation of metabolic pathways. The overall focus is on the application of biochemistry to nutrition to provide an appreciation for the chemical basis of applied nutrition science |
| HSC406 | Home Science ExtensionAndCo mmunity Development(EXT- 2) | Regional | Enablesthestudentstolearnaboutthecommunity andtheirneedsand the ways of extending theirknowledgeforthebettermentof thecommunity |
| HSC16c | Food Quality Control andAssurance | National | Thiscoursecoversthebasicconcepts of Food quality controlandassurancewithrespecttoits Importanceaswellastherelated termsanddefinitions. Thecoursealsodiscussesfoodqualitycontroldevelopment, foodquality parameters and how they are evaluated. The course also deals with the structure, management and functions of quality control system son industrial and regulatory scales. After successful completion of this course the |

| | | | student should beableto:1.Understandtheprinciplesofmanagements ystemsdirectedtowardsthecontroloffoodquality.2.R ecognizefoodlawsandregulations governing the qualityof foods. 3. Develop procedures and approaches to identify foodsafetyhazardsinfoodprocessing. 4. Identify the widevarietyofparametersaffectingfoodquality.5.De velopquality controlstrategies. |
|--------|--|----------|--|
| HSC17c | FoodSafety,Sani tationandHygien e | Global | Enablesthestudenttolearnaboutthe sanitation and hygiene whilehandlingdifferentfoodsfrom productiontoconsumptionstage |
| HSC18c | GuidanceandCounsell ing | Global | Providesthestudentswithknowledge on various guidanceandcounsellingtechniqueswhicharehelpful inpersonaland professionallevel |
| HSC19c | Educationand CounsellingforP arentsand Community | Regional | Studentslearnstheskillofeducatingtheparentsandalso surroundingcommunityofthestudent population about the knowledgeandskillsacquiredasapart oftheir formal education |
| HSC20a | InteriorDesignan d&coration | Global | Studentsgainknowledgeandunderstanding about the art anddesign and how to incorporate intheir interiors which is requiredasapartofanyprofessionartanddesign |

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A.S.D.GOVERNMENTDEGREECOLLEGEFORWOMEN(AUTONOMOUS):KAKINADA

Curriculum and its Relevance to Local/Regional/National/Global Needs

NameoftheDepartment: Hindi

2023-24

| HIN2 4101 | Hindi Gadya Saahity. | National | The course enables the learns to develop proficiency in reading, writing, speaking, and understanding the language. The Course enhances student's overall language skills and it also promotes cross-cultural understanding, empathy, and appreciation for linguistic diversity. The Hindi prose literature curriculum holds immense relevance to national needs. It not only preserves and promotes India's rich literary heritage but also aligns with the country's goals of education, cultural integration, and social progress. Integrating such a curriculum ensures the holistic development of individuals and empowers them to address the challenges of a dynamic and evolving nation. |
|--------------|----------------------------|----------|--|
| HIN 24201 | Kaavya Deep | National | TheCourse Hindi "Kaavya Deep" curriculum serves as a vital resource for understanding India's rich poetic tradition. It preserves the cultural and literary heritage of the nation while providing moral, spiritual, and societal guidance. This curriculum plays a significant role in shaping students' intellectual and emotional development while addressing national priorities. The Course helps the students improve their language skills. This knowledge enhances their reading comprehension, writing proficiency, and overall command of the Hindi language. prose and short stories often reflect the cultural, social, and historical aspects of India. By studying these texts, students gain insights into the values, beliefs, and experiences of people from different regions and time periods. |







A.S.D. GOVERNMENT DEGREE COLLEGE FOR WOMEN (AUTONOMOUS), KAKINADA

Curriculum and its Relevance to Local/Regional/ National/ Global Needs: 2023-2024

Name of the Department: Microbiology

No of Programmes offered by the Dept: **01** (**B.Sc CBMB & Minor**)

Total No. of courses across all programs offered by the department: 06

| SEM/ COURSE CODE | COURSE TITLE | Local/Regio nal/National/ Global | Relevance of the Course |
|------------------|--|--|---|
| Minor Sem2 | Introduction to Applied Microbiology | National/Glo bal/Regional | Local Level Help to know the history, groups of microbes and basic core techniques of microbiology that is needed for a Microbiologist • Community Impact: Analyzing local trends (e.g., public health, community diseases & education outcomes). • Localized: Encouraging students to work with community-specific intrests. • Employment: Preparing graduates for jobs in local industries, Hospitals, Diagnostic, research centres, and NGOs National Level • Public Health: Microbiological training to address national healthcare challenges such as epidemics, diseases, and vaccine development. • Education: Ensuring that graduates are equipped to contribute to national research and development. Global Level • Global Challenges: Equipping students to work on |
| Sem3 | Molecular Biology and Microbial Genetics | National/Glo bal | international issues such as pandemics, climate change, Develop knowledge on microbial genetics and molecular biology and instrumentation. National Level Concepts of genetics helpful in understanding the hereditary disease diagnosis which in turn helps in prevention of such disorders. Global Standards: Aligning with international guidelines for laboratory safety (e.g., BSL, ISO standards practices). Collaboration: Preparing graduates for work in multinational corporations, international organizations (e.g., WHO), and academic collaborations. Global Networks: Leveraging online and cross-border resources to create globally connected Microbiologists. |
| Sem4 | Immunology And Medical | National/Glo | Local Level: |

| | Microbiology | bal | Public Policy and Services: Helps in understanding community needs |
|-------|---|------------------------------|---|
| | | | Public Health: Immunology helps us understand how and why people get sicknesses. Understand the concept of immune mechanism and develop knowledge on disease transmission, control and collection and handling of laboratory specimens Regional Level: |
| | | | Healthcare and Public Health: Large-scale health studies and disease prevention strategies. Infrastructure Development in Health: Surveys for regional planning and resources allocation. Global Level: |
| | | | Scientific Research: Used in global collaborations and large- scale experiments. |
| Sem 4 | Microbial Ecology & Industrial Microbiology | Regional/Nati onal/Global | Local Level: Helps to know about biotechnological applications of microbes in Industrial production of various products of human interests in the field of food, beverage, pharmaceutical products etc. Ecosystem & Environment Protection: Microbial ecology explores the diversity, distribution, and abundance of microorganisms, their specific interactions, and the effect that they have on ecosystems. Small Businesses: Guides decisions based on customer feedback or product testing. Regional Level: |
| | | | Infrastructure Development: Demand based startups & small scale industry establishment in Industry sector Agriculture: Field experiments for improving crop yields and sustainability. National Level: Employment: Preparing graduates for jobs in local industries, research centres and government projects on public health. Policy Making: Formulates evidence-based decisions in |
| | | | various sectors. Global Level: |
| | | | Scientific Research: Used in global collaborations and large-scale experiments. Environmental Studies: Climate change studies and biodiversity assessments. Global Business and Trade: International market studies and cross-cultural experiments. |
| Sem 5 | Food, Agriculture and Environmental | Regional/Nati onal/Global | Regional Level: Impart knowledge on soil microorganisms and role in nutrient cycles and inculcate knowledge on plant diseases and their |

| | Microbiology | | control. |
|---|---------------|--|---|
| | | | Sustainable Agriculture: Role of microbes in sustainable environment and Agriculture developments. |
| | | | Employment: Preparing graduates for jobs in local food industries |
| | | | Market Research: Exploring new strategies to develop Agricultural products with environmental protection. |
| | | | Global Level: |
| | | | Scientific Research: Used in global collaborations and large-scale experiments. Environmental Studies: Climate change studies and |
| | | | biodiversity assessments. |
| | | | Environmental Monitoring: |
| | | | Analyzing local pollution levels, water quality, and other environmental indicators. |
| Sem 5 | Management of | Regional/Nati | Local Level: understanding medicine and healthcare. |
| Human Microbial or Diseases and Diagnosis | onal/Global | Employment : Preparing graduates for jobs in local industries, Hospitals, Diagnostic, research centres through skill in disease diagnosis & public health sector can be improved. | |
| | | | Public health: Disease outbreaks can be more precisely handled with knowledge of serology, clinical laboratory techniques, diagnostic microbiology techniques. |

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A.S.D. GOVERNMENT DEGREE COLLEGE FOR WOMEN (AUTONOMOUS), KAKINADA

Name of the Department: Sanskrit

Curriculum Relevance to Local / Regional / National / Global Needs 2023-24

PAPER -I POETRY, PROSE&GRAMMER

Samskruta CHANDRAMAA /Local

The course provides learners with an invaluable opportunity to Global/National explore India's rich traditions, philosophies, and ancient religious texts, including the *Vedas*, *Upanishads*, and *Mahabharata*. By engaging with these seminal works, students gain a profound understanding of India's cultural and spiritual heritage, fostering a broader awareness of the diverse cultural landscapes and enriching their global worldview.

> Furthermore, the course enhances students' language skills, deepening their understanding of grammar, vocabulary, and syntax. This linguistic development not only strengthens their command of Sanskrit but also lays a solid foundation for further study in linguistics, classical literature, and modern Indian languages. The ability to analyze and interpret texts with precision is a crucial skill, particularly for students pursuing careers in academia, translation, or interdisciplinary research. It enables them to bridge the gap between ancient wisdom and contemporary literary and linguistic studies, offering a unique perspective that connects the past with the present.

Global Needs

Globally, this course addresses the need for cultural and intellectual exchange by equipping students with the tools to understand and appreciate the diverse traditions and philosophies of the world. The study of foundational Indian texts offers insights into universal themes such as ethics, justice, spirituality, and human experience, fostering cross-cultural understanding and empathy. In an increasingly interconnected world, these insights are essential for global cooperation, peace-building, and addressing complex issues such as sustainability, human rights, and global governance. The linguistic skills developed through the study of Sanskrit also contribute to the preservation and understanding of ancient texts, making them accessible to a global audience for scholarly and cultural enrichment.

National Needs

On a national level, the course plays a vital role in preserving and promoting India's rich literary and philosophical heritage. It strengthens national identity by reinforcing the importance of understanding India's traditional wisdom, which continues to shape contemporary societal values. The course also prepares students to engage with modern issues using the insights derived from ancient texts, contributing to national conversations on justice, ethics, and social responsibility. Moreover, the development of linguistic skills in Sanskrit and other Indian languages supports the ongoing effort to preserve and promote India's linguistic diversity, ensuring that future generations can engage with classical literature and philosophical works in their original form.

Local Needs

Locally, this course fosters a deep connection with one's cultural roots and identity. It encourages students to explore and appreciate local traditions and languages while recognizing their place within a



broader cultural context. The advanced language skills and critical thinking abilities gained through the course are essential for engaging in local community activities, education, and professional environments. Moreover, by connecting students with their cultural heritage, the course fosters pride and a sense of belonging, helping preserve local traditions and languages that form an integral part of India's cultural fabric.

In conclusion, this course addresses significant global, national, and local needs by providing students with the tools to engage with cultural, philosophical, and linguistic traditions that are foundational to human knowledge. Through an in-depth understanding of these traditions, students contribute to global dialogue, national progress, and the preservation of local cultural identities.

SAN 23202

PAPER -II POETRY, PROSE&GRAMMER Samskruta CHANDRAMAA

Local

Global/National The course offers profound personal benefits, fostering creativity, introspection, and a deeper appreciation for the beauty of language and literature. It promotes disciplined study habits, patience, and meticulous attention to detail—qualities that significantly contribute to personal growth and the development of a wellrounded education.

> Through the study of grammar, students acquire a comprehensive understanding of linguistic principles and structures. They engage with the complexities of sound patterns, word formation, and grammatical rules, establishing a solid foundation in the mechanics of language. These skills not only enhance linguistic proficiency but also nurture analytical and critical thinking, which are applicable across a wide range of academic and professional fields. Global Needs

> On a global scale, the course addresses the growing need for effective communication and cross-cultural understanding. By studying the intricacies of language and literature, students can engage with diverse cultures, fostering global cooperation and empathy. A deep understanding of linguistic structures also facilitates translation, intercultural dialogue, and the preservation of endangered languages. In a world increasingly connected through technology, the skills gained through this course are essential for participating in global discussions on topics such as human rights, sustainability, and international policy.

National Needs

At a national level, the course plays a crucial role in strengthening linguistic diversity and preserving cultural heritage. By enhancing students' grasp of grammar and literature, it helps ensure the preservation of classical languages and fosters a deeper appreciation for the nation's literary traditions. Furthermore, the analytical and critical thinking skills cultivated through the study of language are vital in shaping informed citizens capable of engaging in national debates about social, political, and ethical issues. These skills also empower students to contribute to national development through research, policy analysis, and education.

Local Needs

Locally, the course helps build a strong foundation for community engagement and social responsibility. By encouraging students to reflect on language, ethics, and culture, it fosters a sense of EC belonging and identity within local contexts. The focus on grammar and linguistic analysis enhances communication skills, which are essential for active participation in local civic activities, education,



and professional environments. Additionally, the course promotes local language preservation and helps bridge generational gaps by enabling younger generations to connect with classical literary works that form the cultural bedrock of their communities. In conclusion, this course addresses critical global, national, and local needs by equipping students with the linguistic and analytical tools necessary for effective communication, cultural understanding, and intellectual contribution to society.







