2.6.1: ***Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution***

SOCIOLOGY

Model Curriculum Name of the Degree Program: BA

Discipline Core: Sociology Total Credits for the Program: 06

Starting year of implementation: 2022-2023

Program Outcomes:

By thc end of the program the students will be able to:

Refer to literature on outcome-based education [0BE) for details on Program Outcomes)

1. Think critically by exercising sociological imagination

2. Question common wisdom, raise important questions and examine arguments

3. Collect and analyse data, make conclusions and present arguments

4. Think theoretically and examine the empirical data

5. Skilfully Participate in Research Groups and market Research Firms

6. Serve in Development Agencies, Government Departments and Projects

7. Be a Social Entrepreneur, Community Worker, Survey Designer, Research Analyst, Social Statistician

8. Transfer Skills as a Teacher, Facilitator of Community Development

9. Competent to make a difference in the community

Title of the Course: (B A - 3.d and 4th Semesters)

Social Stratification and Mobility

l. Understand the nature and role of social stratification

2. Recognise different types of stratification and mobility

3. Describe different types of social stratification and mobility

4. Critically understanding and analyse different theories of social stratification

Sociology of urban Life in India

1. Identify the new forms taken by social institutions
2. Critically understand the implications of changes occurring
3. Undertake micro research work and communicate effectively

Sociology of Marginalised Groups

1, Knowledge of marginalisation and marginalised groups in India

2. Understand the impact of powerlessness in social life

3. Ability to participate and critically view efforts undertaken to address inequalities

Population and Society

1. Define the basic concepts oI population studies

2. Understand the dynamics of population from sociological perspectives

3. Understand problems around India's population

4. Critically analyse population policies of India

BA Semester III

Title of the Course:

Course 5: Social Stratification and Mobility

Course 6: Sociology of Urban Life India

Course Outcomes (COs) for DSC 5: At the end of the course the student should be able to:

(Write 3-7 course outcomes. Course outcomes are statements of observable student actions that .serve as evidence of knowledge, skills and values acquired in this course)

l. understand the nature and role of social stratification

2, Recognise different types of stratification and mobility

3. Describe different types of social stratification and mobility

4. Critically understand and analyse different theories of social stratification

B.A. Semestcr III Course Title: Sociology of Urban Life in India

Course Pre-requisite(s): (Mention only course titles from the curriculum that are needed to be

Laken by the students before registering for this course)

Completion of DSCI- - DSC4

Course Objectives

' Describe the meaning and importance of Urban Sociology

" Understand the processes and types of urbanisation

. Appreciate different theoretical approaches to understanding urban social life

n Discuss social issues related to urbanisation and urban social]ife

Course Outcomes (COs) for DSC 6:

At t.he end of the course the student should be able to:

(Write 3-7 course outcomes. Course outcomes are statements of observable student actions that

serve as evidence of knowledge, skills and values acquired in this course)

1,. Define the basic concepts of Urban Sociology

2. Identify and describe different types of city

3, Analytically understand theoretical issues related to urban society

4. Critically evaluate urban policies

Course 7: Sociology of Marginalised Groups

Course 8: Population and Society

Course Pre-requisite(s): (Mention only course titles from the curriculum that are needed to be taken by the students before registering for this course)

Completion of DSCT -DSC4

Course Objectives

' Discuss the process of marginalisation and its types

' Eramine the consequences of marginalisation

. Describe the measures to ameliorate the negative consequences of marginalisation

' Analyse the impact of forces of social change on marginalised groups

Course 0utcomes (COs) for DSC 5;

At the end of the course the student should be able to:

(Write 3-7 course outcomes. Course outcomes are statements of observable student actions that

serve as evidence of knowledge, skills and values acquired in this course)

1,. Knowledge of marginalisation and marginalised groups in India

2. Understand the impact of powerlessness in sociallife

3. Ability to participate and critically view efforts undertaken to address inequalities

B.A. Semester IV

Course Title: Population and Society

Course Pre-requisite(s): (Mentiononlycoursetitlesfromthecurriculumthatareneededtobe

token by the students before registering for this course)

Completion of DSCT - DSC4

Course Outcomes (COs) for DSC B:

At the end of the course the student should be able to:

fWrite 3-7 course outcomes" Course outcomes are statements of observable student actions that

serve as evidence of knowledge, skills and values acquired in this course)

1. Define the basic concepts of population studies

2" understand the dynamics of population from sociological perspectives

3. Understand problems around India's population

4. Critically analyse population policies of India

Title of the Course: Open Elective

3: Sociology of Youth BA Semester III

Open Elective 3: Sociology of Tourism Management

Course Outcomes (COs)/ Program Outcomes (POs)

Explain the relationship between tourism, culture and cultural heritage

Explain the social, cultural and economic impacts of tourism on local communities

Understand the relationship between tourism and consumption

Understand the principles of tourism management

BA Semester IV

Title of the Course: Open Elective

4: Sociology of Leisure Open Elective

4: Sociology of Food Culture

Course Outcomes (COs)/ Program Outcomes (POs)

Explain the relationship between tourism, associated terms and types

Explain the social, cultural and economic impacts of tourism on local communities

Analyse the impact of commodification of leisure

Course Title: Sociology of Food Culture

Course Outcomes [COs)/ Program Outcomes [POs)

Appreciate the complex relations between food, individual and society

Understand the evolution of food production and consumption from household to industry

Critically understand the reiationshrp between food and risk society

PRINCIPAL
Sree Siddaganga College of Arts,
Science and Commerce for Women,
B.H. Road, TUMKUR.

POLITICAL SCIENCE

Name of the Degree Program: BA/BSc/BCom/BBA/BCA...

Without practical Course

Discipline Core: Political Science

Program Outcomes: By the end of the program the students wilt be able to:

Acquire domain knowledge. t Study and analyze political contexts from critical and constructive prospective.

Have a better understanding of the working of various political institutions including decentralized institutions state legislatures and parliament and relate this functionine to the greater cause of nation building as a responsible citizen.

Assess how global national and regional development affects polity and society.

To gain critical thinking and develop the ability to make logical inferences about socio-economic and political issues, on the basis of comparative and contemporary political discourses in India.

Contemplate about national and international issues involving States having different political ideologies and historical contexts.

Pursue higher education such as Post Graduate Studies and Research in political Science and in other interdisciplinary areas to provide qualitative insights to create a better world.

POLITICAL THEORY DSC-2

Course Title: POLITICAL THEORY

Course Outcome: This course aims to introduce certain key aspects of conceptual analysis in political theory and the skills required to engage in debates surrounding the application of the concepts.

Course Title: HUMAN RIGHTS

Course Objective: This course aims to introduce the students to basic concepts and practices of Human Rights in the global and local domain. This course also exposes them to certain recent issues confronting the Human Rights debates.

PRINCIPAL
Sree Siddaganga College of Arts,
Science and Commerce for Women,
B.H. Road, TUMKUR.

HISTORY

Course Title: Political history of Karnataka (BCE-3 to 10 CE) Part-1 Course Code: HISDSC01

Course Outcomes (COs):

At the end of the course the student should be able to: (Write 3-7 course outcomes.

Course outcomes are statements of observable student actions that serve as evidence of knowledge, skills and values acquired in this course) Understand the continuity of Political developments and strategies. Analysis the importance of causes for the rise of regional political dynasties. Understand contextual necessities which influenced the era of political supremacy. Understand and describe the contemporary political history. Appreciate the confluence of diverse political elements.

Course Title: Cultural Heritage of India (2) Course Code: HISDSC02

Course Outcomes (COs):

At the end of the course the student should be able to:

Provide an insight about an extensive survey of heritage of India Familiarize Indian history and culture Expertize to analyze further development of culture of India Analyze the factor responsible for origin and decline of culture Provide the opportunity to understand the process of cultural development

Course Title: Cultural History of Karnataka (CE 3-CE 10) Part-I Course Code: HISOEC01

Course Outcomes (COs):

At the end of the course the student should be able to:

Provide an insight about the cultural development of Karnataka. Familiarize Karnataka history and culture. Expertize to analyze further development of culture of Karnataka. Analyze the factors responsible for origin and decline of dynasties. Provide the opportunity to understand the process of cultural diversities.

Course Title: Introduction to Archaeology Course Code: HISOEC02

Course Outcomes (COs):

At the end of the course the student should be able to:

Understand the concept of Archaeology as an ancillary for study of history Help to study features of Archaeology in understanding history Familiarize the students to know about scope of Archaeology.

Understand the various tools and techniques imbibed in Archaeology Study various schools of disciplines of Archaeology.

Course Title: Political History of Karnataka (CE11- 1750 AD) Course Code: HISDSC03

Course Outcomes (COs): At the end of the course the student should be able to:

Understand the rise and fall of Political dynasties in Karnataka. Familiarize with the patterns of administration. Analyze the traditional values and ethos of political development. Understand the rise and fall of regional variations. Study the complexities involved in polity of the time.

Course Title: Cultural Heritage of Karnataka Course Code: HISDSC04

Course Outcomes (COs): At the end of the course the student should be able to:

Understand the concept of cultural heritage of Karnataka Study various cultural factors which influence the flow ofculture Familiarize the factors which influenced in influencing culture and society Analyze the factors responsible for formation of pluralisticsociety Understand the concept "Unity in diversity

Course Title: Cultural History of Karnataka (11 AD to 1750 AD) Courses Code: HISOEC04

Course Outcomes (COs): At the end of the course the student should be able to: Understand the concept of cultural heritage of Karnataka Study various cultural factors which influence the flow ofculture Familiarize the factors which influenced in influencing culture and society Analyze the factors responsible for formation of pluralisticsociety Understand the concept "Unity in diversity".

Course Title: Manuscriptology Course Code: HISOEC05

Course Outcomes (COs): At the end of the course the student should be able to: Understand the importance of manuscripts Study manuscripts as an ancillary for study of history Understand the concept of cataloguing of manuscripts Practice the science of conservation and preservation of manuscripts Visit libraries and Archives to study conservation and preservation

PRINCIPAL
Sree Siddaganga College of Arts,
Science and Commerce for Women,
B.H. Road, TUMKUR.

MATHEMATICS

Syllabus for B.A./B.Sc. with Mathematics as Major Subject & B.A./B.Sc. (Hons)

Mathematics SEMESTER – I

MATDSCT 1.1: Algebra – I and Calculus – I

Course Learning Outcomes: This course will enable the students to

- Learn to solve system of linear equations.
- Solve the system of homogeneous and non homogeneous linear of m equations in n variables by using concept of rank of matrix, finding eigen values and eigen vectors.
- Sketch curves in Cartesian, polar and pedal equations.
- Students will be familiar with the techniques of integration and differentiation of function with real variables.
- Identify and apply the intermediate value theorems and L'Hospital's rule.

MATDSCP 1.1: Theory based Practical's on Algebra– I and Calculus – I

Course Learning Outcomes: This course will enable the students to

- Learn Free and Open Source Software (FOSS) tools for computer programming.
- Solve problems on algebra and calculus theory studied in MATDSCT 1.1 by using Maxima software. • Acquire knowledge of applications of algebra and calculus through Maxima.

Open Elective Course (with Practical's)

(For students of Science stream who have not chosen Mathematics as one of Core subjects)
MATOET1.1: Mathematics – I

Course Learning Outcomes: This course will enable the students to

- Learn to solve system of linear equations.
- Solve the system of homogeneous and non homogeneous linear of m equations in n variables by using concept of rank of matrix, finding eigen values and eigen vectors.
- Students will be familiar with the techniques of integration and differentiation of function with real variables.
- Identify and apply the intermediate value theorems and L'Hospital rule.
- Learn to trace some standard curves.

MATOEP 1.1: Theory based Practical's on Mathematics – I

Course Learning Outcomes: This course will enable the students to

- Learn Free and Open Source Software (FOSS) tools for computer programming.

- Solve problems on algebra and calculus theory studied in MATOEP 1.1 by using Maxima software.
- Acquire knowledge of applications of algebra and calculus through Maxima

Open Elective Course

(For students of Science stream who have not chosen Mathematics as one of Core subjects)

MATOET 1.2: Biostatistics

Course Learning Outcomes: This course will enable the students to:

- Translate the real word problems, in the field of biological sciences, through appropriate mathematical modelling.
- Learn the fundamentals of statistics, data classification and analysis.
- Get an insight into the theory of probability.

Open Elective Course (For students from other streams)

MATOET1.3: Quantitative Aptitude

Course Learning Outcomes: This course will enable the students to:

- Understand number system and fundamental operations.
- Understand the concept of linear, quadratic and simultaneous equations and their applications in real problems.
- Understand and solve the problems based on Age.
- Solve Speed and Distance related problems.

Skill Enhancement Course (SEC) (with Practical's)

(For students from other streams)

MATSECP 1.1: Theory based Practical's on Fundamentals of Mathematics –I

Course Learning Outcomes: This course will enable the students to

- Learn Free and Open Source Software (FOSS) tools for computer programming.
- Solve problems on algebra and calculus theory studied in MATSECP 1.1 by using Maxima software. • Acquire knowledge of applications of algebra and calculus through Maxima.

SEMESTER – II

MATDSCT 2.1: Algebra – II and Calculus – II

Course Learning Outcomes: This course will enable the students to

- Recognize the mathematical objects called Groups

- Link the fundamental concepts of groups and symmetries of geometrical objects.
- Explain the significance of the notions of cosets, normal subgroups and factor groups.
- Understand the concept of differentiation and fundamental theorems in differentiation and various rules.
- Find the extreme value of functions of two variables.

MATDSCP 2.1: Theory based Practical's on Algebra – II and Calculus – II

Course Learning Outcomes: This course will enable the students to

- Learn Free and Open Source Software (FOSS) tools for computer programming.
- Solve problems on algebra and calculus by using Maxima software.
- Acquire knowledge of applications of algebra and calculus through Maxima.

Open Elective Course (with Practical's)

(For students who have not chosen Mathematics as one of the Core subjects)

MATOET 2.1: Mathematics – II

Course Learning Outcomes: This course will enable the students to

- Recognize the mathematical objects called Groups.
- Link the fundamental concepts of groups and symmetries of geometrical objects.
- Explain the significance of the notions of Cosets, normal subgroups and factorgroups.
- Understand the concept of differentiation and fundamental theorems indifferentiation and various rules.
- Find the extreme values of functions of two variables.

MATOEP 2.1: Theory based Practical's on Mathematics – II

Course Learning Outcomes: This course will enable the students to

- Learn Free and Open Source Software (FOSS) tools for computer programming,
- Solve problems on algebra and calculus by using Maxima software.
- Acquire knowledge of applications of algebra and calculus through Maxima.

Open Elective Course

(For students who have not chosen Mathematics as one of the Core subjects)

MATOET 2.2: Biomathematics

Course Learning Outcomes: This course will enable the students to:

- Translate the real word problems, in the field of biological sciences, through appropriate mathematical modelling.

- Learn the applications of difference and differential equations.
- Learn the various techniques of mathematical modelling.

Open Elective Course

(For students who have not chosen Mathematics as one of the Core subjects)

MATOET 2.3: Business Mathematics – I

Course Learning Outcomes: This course will enable the students to:

- Integrate concepts in international business concept with functioning of global trade.
- Evaluate the legal, social and economic environment of business.
- Apply decision-support tools to business decision making.
- Will be able to apply knowledge of business concepts and functions in an integrated manner.

SEMESTER – III

MATDSCT3.1: Ordinary Differential Equations and Real Analysis – I

Course Learning Outcomes: This course will enable the students to:

- Solve first-order non-linear differential equations and linear differential equations.
- To model problems in nature using Ordinary Differential Equations.
- Formulate differential equations for various mathematical models.
- Apply these techniques to solve and analyze various mathematical models.
- Understand the fundamental properties of the real numbers that lead to define sequence and series, the formal development of real analysis.
- Learn the concept of Convergence and Divergence of a sequence.
- Able to handle and understand limits and their use in sequences, series, differentiation and integration.
- Apply the ratio, root, alternating series, and limit comparison tests for convergence and absolute convergence of an infinite series.

MATDSCP3.1: Theory based Practical's on Ordinary Differential Equations and Real Analysis –I

Course Learning Outcomes: This course will enable the students to gain hands on experience of

- Free and Open Source software (FOSS) tools or computer programming.
- Solving exact differential equations.
- Plotting orthogonal trajectories.

- Finding complementary function and particular integral of linear and homogeneous differential equations.
- Acquire knowledge of applications of real analysis and differential equations.
- Verification of convergence/divergence of different types of series.

Open Elective Course (with Practical's)

(For students who have not chosen Mathematics as one of the Core subjects)

MATOET 3.1: Mathematics – III

Course Learning Outcomes: This course will enable the students to:

- Understand the concept of the differential equations and their classification
- Know the meaning of the solution of a differential equation.
- To solve first-order ordinary differential equations.
- To solve exact differential equations and convert to separable and homogenous equations to exact differential equations by integrating factors.
- To solve Bernoulli differential equations.
- To find the solution to higher-order linear differential equations.

MATOEP 3.1: Theory based Practical's on Mathematics – III

Course Learning Outcomes: This course will enable the students to gain hands on experience of

- Free and Open Source software (FOSS) tools or computer programming.
- Solving exact differential equations
- Plotting orthogonal trajectories
- Finding complementary function and particular integral of linear and homogeneous differential equations.
- Acquire knowledge of applications of real analysis and differential equations.
- Verification of convergence/divergence of different types of series.

Open Elective Course

(For Students of other than Science Stream)

MATOET3.2 : Business Mathematics – II

Course Learning Outcomes: This course will enable the students to:

- Translate the real word problems through appropriate mathematical modelling.

- Explain the concepts and use equations, formulae and mathematical expression and relationship in a variety of context.
- Finding the extreme values of functions.
- Analyze and demonstrate the mathematical skill require in mathematically intensive areas in economics and business.

Open Elective Course

(For Students of other than Science Stream)

MATOET3.3 : Vedic Mathematics

Course Outcomes: This course will enable the students to:

- Understand the vedic methods of arithmetic.
- Understand the vedic methods of division with two/three digit divisor.
- Understand the vedic methods of power and root power of two digit numbers.

MATSECP 3.1: Theory based Practical's on Fundamentals of Mathematics – II

Course Learning Outcomes: This course will enable the students to

- Learn Free and Open Source Software (FOSS) tools for computer programming.
- Solve problems on algebra and calculus theory studied in MATSECP 3.1 by using Maxima software. • Acquire knowledge of applications of algebra and calculus through Maxima.

SEMESTER – IV

MATDSCT 4.1: Partial Differential Equations and Integral Transforms

Course Learning Outcomes: This course will enable the students to

- Solve the Partial Differential Equations of the first order and second order.
- Formulate, classify and transform partial differential equations into canonical form.
- Solve linear and non-linear partial differential equations using various methods and apply these methods to solving some physical problems.
- Able to take more courses on wave equation, heat equation and Laplacian equation.
- Solve PDE by Laplace Transforms and Fourier Transforms.

MATDSCP 4.1: Theory based Practical's on Partial Differential Equations and Integral Transforms

Course Learning Outcomes: This course will enable the students to

- Learn Free and Open Source Software (FOSS) tools for computer programming.
- Solve problems on Partial Differential Equations and Integral Forms.

- To find Laplace transform of various functions.
- To find the Fourier Transform of periodic functions
- To solve differential equations by using Integral transforms.

Open Elective Course (with Practical's)

(For students of Science stream who have not chosen Mathematics as one of Core Course)
MATOET4.1: Mathematics-IV

Course Learning Outcomes: This course will enable the students to

- Explain the concept of the differential equation.
- Classify the differential equations concerning their order and linearity.
- Explain the meaning of the solution of a differential equation.
- Solve first-order ordinary differential equations.
- Solve exact differential equations and convert separable and homogenous equations to exact differential equations by integrating factors.
- Solve Bernoulli differential equations.
- Will be able to find the solution to higher-order linear differential equations.

MATOEP 4.1: Theory based Practical's on Mathematics-IV

Course Learning Outcomes: This course will enable the students to gain hands on experience of

- Free and Open Source software (FOSS) tools or computer programming.
- Solving exact differential equations
- Plotting orthogonal trajectories
- Finding complementary function and particular integral of linear and homogeneous differential equations.
- Acquire knowledge of applications of real analysis and differential equations.
- Verification of convergence/divergence of different types of series

Open Elective Course

(For students of other than science stream)

MATOET4.2: Mathematical Finance

Course Learning Outcomes: This course will enable the students to

- Understand how compute profit and loss, discount and Banker's discount.

- Understand the concept of Linear equations and inequalities and their use in the solving the Linear Programming Problems.
- Formulation of Transportation Problem and its application in routing problem.

Open Elective Course

(For students of other than science stream)

MATOECT4.3: Mathematics for Social Sciences

Course Learning Outcomes: This course will enable the students to

- Understand the mathematical concept of sets and counting problems.
- Understand the concept of limits and continuity of functions and its applications in business and social sciences.

PRINCIPAL
Sree Siddaganga College of Arts,
Science and Commerce for Women,
B.H. Road, TUMKUR.

ENGLISH

ABILITY ENHANCEMENT COMPULSORY COURSE, LANGUAGE (AECC)

L2 - GENERIC ENGLISH (As per NEP 2020)

Course Learning Outcomes

At the end of the course the students will have

1. Acquired enhanced LSRW (Listening, Speaking, Reading, Writing) skills

2. Equipped with interpersonal communication skills

3. Augmented presentation and analytical skills

4. Ability to critically analyse, interpret and appreciate literary texts

5. An awareness of social, cultural, religious and ethnic diversities

6. Facilitated employability in emerging sectors such as – content writers, interpreters, translators, transcribers 7

. Acquired language skills for competitive examinations - UPSC/KPSC/IBPS/SSC/RAILWAYS/TOEFL/IELTS and others.

Indian Literature in English Translation (Paper 2)

Course Outcome (CO):

1. Will be able to understand the purpose of translation

2. Will be able to understand the scope of translation in the modern age

3. Will have the knowledge of Regional Indian writers and their literature in general

4. Will be able to appreciate the translated text

L2 - GENERIC ENGLISH (As per NEP 2020) Semester -IV

COURSE OUTCOMES

By the end of the course the students will have

1. Acquired creative, interpretative and critical thinking

2. Skills to communicate confidently and effectively

3. Obtained persuasive and creative social media writing skills

4. Developed analytical and evaluative skills

5. Learnt to identify and understand social contexts and ethical frameworks in the texts

6. Ability to articulate their views with clarity and confidence

7. Eligibility to take up jobs such as content writing, journalism and such other jobs with proficiency in English

Title: English through World Literature

Course Outcome:

Beside learning the essential skills of language, the learners here through English will learn the cultural norms, politico- historical significance and the social conditions of differentages

III SEM ENGLISH

Learning Outcome At the end of the course the student will be able to:

- Apply the skills of translation in very day communication in the fields of business, Journalism tourism and mass communication
- Translate simple literary passages in English into Kannada and From Kannada into English, for academic and non-academic purposes.
- Translate for various professional endeavors and human resource in general.

PRINCIPAL
Sree Siddaganga College of Arts,
Science and Commerce for Women,
B.H. Road, TUMKUR.

ECONOMICS

BA (Hons) Economics Semester – I

Course Title : ECODSC01: Basic Economics – I

Course Outcomes: By the end of the course the student will be able to:

• Identify the facets of an economic problem.

• Learn basic economic concepts and terms.

• Explain the operation of a market system;

• Analyze the production and cost relationships of a business firm;

• Evaluate the pricing decisions under different market structures; and

• Use basic cost-benefit calculations as a means of decision making

Semester - I

Course Title : ECODSC02: Contemporary Indian Economy

Course Outcomes (COs): At the end of the course the student should be able to:

• Understand the current problems of IndianEconomy

• Identify the factors contributing to the recent growth of the Indian economy

• Evaluate impact of LPG policies on economic growth in India

• Analyze the sector specific policies adopted for achieving the aspirational goals

• Review various economic policies adopted

Semester - I

Course Title : ECOOEC01: Fundamentals of Economics

Course Outcome: By the end of the course the student will be able to:

• Learn the basic concepts and terms of Economics

• Understand the production and cost relationship (Input-Outputrelationship)

• Know the price and output determination under different marketstructures

• Understand the calculation of National Income

• Learn the impact of price fluctuations

• Understand the concept of Money.

Semester – I

Course Title : ECOOEC02: Development Studies

Course Outcomes (COs): At the end of the course the student should be able to:

• Graduates will be able to excel in higher studies and/or to succeed in profession.

• Graduates will get a solid foundation of fundamentals required to solve socioeconomic problems and also to pursue higherstudies.

• Graduates will demonstrate knowledge to appreciate of the dimensions of contemporary development issues, to generate sensitivity to problems concerning ethics and human values to develop orientation towards effective communication and critical analysis, and to appreciate the interrelationships among disciplines as they relate to everyday realities.

• Graduates will cultivate professional and ethical attitude, effective Communication skills, teamwork skills, multidisciplinary approach, and to facilitate an advanced understanding and appreciation of the principles, methodologies, value systems, and thought processes employed in human inquiries.

Semester – I

Course Title : ECOOEC03: Pre-Reforms Indian Economy

Course Outcomes (COs): At the end of the course the student should be able to:

• Trace the evolution of IndianEconomy

• Identify the structural features and constraints of the Indian economy

• Evaluate planning models and strategy adopted inIndia

• Analyze the sector specific problems and contributions towards overall economic growth

• Review various economic policies adopted

Semester - I

Course Title :ECOOEC04 : Kautilya's Arthashastra

Course Outcomes (COs): At the end of the course the student should be able to:

• This course will enlighten the students about the ancient fundamentals about political and economic constituents, which will frame out a basic land of understanding the modern trends. This will help them to understand the upcoming needs in the area of policy making for states at national and international level.

• This treatise deals with the science of Governance, so it projects out all the dimensions needed to be understood by students about the present socio-economic and political rules and regulations of the state.

Semester – II Course Title : ECODSC03: Basic Economics – II

Course Outcomes (COs): At the end of the course the student should be able to:

• Understand the operation of the overall economic system;

• Calculate national income and related aggregates

• Explain the relationship between macroeconomic aggregates;

• Analyze the nature of business cycles and policies towards controlling them;

• Evaluate the macroeconomic policies for solving major problems like poverty and unemployment

Semester - II Course Title : ECODSC04: KarnatakaEconomy

Course Outcomes (COs): At the end of the course the student should be able to:

• Understand the nature of economic growth and problems of Karnatakastate.

• Explain the process of structural growth in Karnatakaeconomy;

• Evaluate the policies and programmes undertaken by the Govt. of Karnataka for bringing about socio-economic development

Semester – II Course Title : ECOOEC05: Contemporary Indian Economy

Course Outcomes (COs): At the end of the course the student should be able to:

• Understand the current problems of Indian Economy

• Identify the factors contributing to the recent growth of the Indian economy

• Evaluate impact of LPG policies on economic growth in India

• Analyze the sector specific policies adopted for achieving the aspirational goals

• Review various economic policies adopted

Semester - II Course Title : ECOOEC06: FinancialEconomics

Course Outcomes (Cos): At the end of the course the student should be able to:

• To familiarize students with the financial system and its components viz. financial instruments, financial institutions, financial markets, and financialregulations.

• To familiarize them with contemporary theories about the workings of different financial markets.

• To provide insight about the relationship of the risk and return and how risk should be measured to bring about a return according to the expectations of theinvestors.

• Familiarize the students with the fundamental and technical analysis of the diverse investment avenues.

Semester II Course Title :ECOOEC07:Economicsof BusinessEnvironment

Course Outcomes (COs): At the end of the course the student should be able to:

• Explain the elements of Business environment.

• Identify the environmental constraints in the growth of a business firm.

• Analyze the ways to utilize the current environmental conditions to achieve higher business growth.

Semester - II Course Title : ECOOEC08: Sustainable Development

Course Outcomes (COs): At the end of the course the student should be able to:

• Understand the basic concept of Sustainable Development (SD), the environmental, social and economic dimensions.

• Know the history of the SDidea.

• Be able to discuss the conflicts which are involved in the SD concept on the national as well as on the global scale.

• Be able to discuss the (dis-)advantages of instruments for SD;

• Evaluate the sustainable development goals and their attainments.

PRINCIPAL
Sree Siddaganga College of Arts,
Science and Commerce for Women,
B.H. Road, TUMKUR.

BCA

Model Course Content for BCA, Semesters I and II Semester: I

Course Code: CADSC01

Course Title: Fundamentals of Computers

Course Outcomes (COs):

- Introduction to computers, classification of computers, anatomy of computer, constituents and architecture, microcontrollers
- Operating systems, functions of operating systems, classification of operating systems, kernel, shell, basics of Unix, shell programming, booting
- Databases, why databases are used, users, SQL, data types in SQL, introduction of queries - select, alter, update, delete, truncate, using where, and or in not in
- Internet basics, features, applications, services, internet service providers, domain name system, browsing, email, searching
- Web Programming basics, introduction of HTML and CSS programming
- Introduction of computers, classification of computers, anatomy of computer, constituents and architecture, microcontrollers.

Course Code: CADSC02

Course Title: Programming in C

Course Outcomes (COs): After completing this course satisfactorily, a student will be able to:

- Confidently operate Desktop Computers to carry out computational tasks
- Understand working of Hardware and Software and the importance of operating systems
- Understand programming languages, number systems, peripheral devices, networking, multimedia and internet concepts
- Read, understand and trace the execution of programs written in C language
- Write the C code for a given problem
- Perform input and output operations using programs in C
- Write programs that perform operations on arrays

Course Code: CADSC03(a)

Course Title: Mathematical Foundation

Course Outcomes (COs):

- Study and solve problems related to connectives, predicates and quantifiers under different situations.

- Develop basic knowledge of matrices and to solve equations using Cramer's rule.
- Know the concept of Eigen values.
- To develop the knowledge about derivatives and know various applications of differentiation.
- Understand the basic concepts of Mathematical reasoning, set and functions

Course Code: CADSC03(b)

Course Title: Accountancy

Course Outcomes (COs):

- Study and understand Accounting, systems of Book, Branches of accounting advantage and limitations
- Know the concept of accounting, financial accounting process and Journalization
- Maintenance different account book and reconciliations
- Preparations of different bills, and trial balance.
- Understand the basic concepts of Mathematical reasoning, set and functions

Semester: II

Course Code: CADSC04

Course Title: Data Structures using C

Course Outcomes (COs): After completing this course satisfactorily, a student will be able to:

- Describe how arrays, records, linked structures, stacks, queues, trees, and graphs are represented in memory and used by algorithms
- Describe common applications for arrays, records, linked structures,stacks, queues, trees, and graphs
- Write programs that use arrays, records, linked structures, stacks, queues, trees, and graphs
- Demonstrate different methods for traversing trees
- Compare alternative implementations of data structures with respect to performance
- Describe the concept of recursion, give examples of its use
- Discuss the computational efficiency of the principal algorithms for sorting, searching, and hashing

Course Code: CADSC05

Course Title: Object Oriented Programming with JAVA

Course Outcomes (COs): After completing this course satisfactorily, a student will be able to: Understand the features of Java and the architecture of JVM

Write, compile, and execute Java programs that may include basic data types and control flow constructs and how type casting is done

Identify classes, objects, members of a class and relationships among them needed for a specific problem and demonstrate the concepts of polymorphism andinheritance

The students will be able to demonstrate programs based on interfaces and threads and explain the benefits of JAVA's Exceptional handling mechanism compared to other Programming Language

Write, compile, execute Java programs that include GUIs and event driven programming and also programs based onfiles

Course Code: CADSC05P

Course Title: JAVA Lab

Course Outcomes (COs): After completing this course satisfactorily, a student will be able to:

- Implement Object Oriented programming concept using basic syntaxes of control Structures
- Identify classes, objects, members of a class and the relationships among them needed for a finding the solution to specific problem
- Demonstrates how to achieve reusability using inheritance
- Demonstrate understanding and use of interfaces, packages, different exception handling mechanisms and concept of multithreading for robust faster and efficient application development.
- Identify and describe common user interface components to design GUI in Java using Applet & AWT along with response to events

Course Code: CADSC06

Course Title: Discrete Mathematical Structures

Course Outcomes (COs): After completing this course satisfactorily, a student will be able to:

- To understand the basic concepts of Mathematical reasoning, set and functions.
- To understand various counting techniques and principle of inclusion and exclusions.
- Understand the concepts of various types of relations, partial ordering and
- equivalence relations.
- Apply the concepts of generating functions to solve the recurrence relations.
- Familiarize the fundamental concepts of graph theory and shortest

PRINCIPAL
Sree Siddaganga College of Arts,
Science and Commerce for Women,
B.H. Road, TUMKUR.

COMMERCE (B.Com)

Name of the Program: Bachelor of Commerce (B.Com.)

Course Code: B.Com. 1.3

Name of the Course: Principles of Marketing

Course Outcomes: On successful completion of the course, the Students will be able to

a.Understand the basic concepts of marketing and asses the marketing environment.

b.Analyse the consumer behaviour in the present scenario and marketing segmentation.

c.Discover the new product development and identify the factors affecting the price of a product in the present context.

d.Judge the impact of promotional techniques on the customers & importance of channels of distribution.

e.Outline the recent developments in the field of marketing.

Name of the Program: Bachelor of Commerce (B.Com.)

Course Code: B.Com. 1.4

Name of the Course: Digital Fluency for Business

Course Outcomes: On successful completion of the course, the Students will be able to

a. Understand the Computer concepts and Operations

b. Design and Demonstrate the MS Office applications for Business activities

Name of the Program: Bachelor of Commerce (B.Com)

Course Code: B.Com. 1.5 (Open Elective Course)

Name of the Course: Accounting for Everyone

Course Outcomes: On successful completion of the course, the Students will be able to

a. Analyse various terms used in accounting;

b. Make accounting entries and prepare cash book and necessary accounts while running a business; c. Prepare accounting equation of various business transactions;

d. Analyse information from company's annual report;

e. Comprehend the management reports of the company.

Name of the Program: Bachelor of Commerce (B.Com)

Course Code: B.Com. 1.5 (Open Elective Course)

Name of the Course: Financial Literacy

Course Outcomes: On successful completion of the course, the Students will be able to

a. Describe the importance of financial literacy and list out the institutions providing financial services;

b. Prepare financial plan and budget and manage personal finances;

c. Open, avail, and manage/operate services offered by banks;

d. Open, avail, and manage/operate services offered by post offices;

e. Plan for life insurance and property insurance & select instrument for investment in shares

Name of the Program: Bachelor of Commerce (B.Com)

Course Code: B.Com. 1.5 (Open Elective Course)

Name of the Course: Event Management

Course Outcomes: On successful completion of the course, the Students will be able to

1. Describe the key elements involved in event management and event marketing.

2. Evaluate the application of marketing mix while designing the Event management activities of event of diverse nature.

3. Plan for the procedure in getting certifications and other related government regulations to be observed for a hypothetical event management process.

4. Identify the event management pre, during and post event activities onthe basis of nature of event.

5. Formulate the strategic market planning to plan, assess, analyse, implement, control and evaluate the activities of different events

6. Illustrate the role of Event Manager in managing successful events in the wake of recent trends in event management industry.

Name of the Program: Bachelor of Commerce (B.Com)

Course Code: B.Com. 1.5 (Open Elective Course)

Name of the Course: Gender and Leadership

Course Outcomes: On successful completion of the course, the Students will be able to

a. Describe the leadership in the context of gender, race and cultural dynamics of in an organizational set up.

b. Relate the gender in leadership with gender theories, gender identity and related behavior in the historical and contemporary context.

c. Illustrate the challenges and new initiatives for empowering the discriminated genders for leadership.

d. Work for the ways and means of navigating the challenges and limitations of gender identity in business, corporate and politics

e. Design the strategies to establish work life balance and obliterate gender differences.

f. Develop the strategies adopted by women to advance herself to leadership position

Name of the Program: Bachelor of Commerce (B.Com)

Course Code: B.Com. 1.5 (Open Elective Course)

Name of the Course: Travel Agency and Tour Operations

Course Outcomes: On successful completion of the course, the Students will be able to

a. Illustrate the role and functions of travel agencies and tour operators.

b. Compare and contrast non-commission system and commission system of travel agents and its recent trends.

c. Describe the terminologies connected with Travel and rules and regulations applicable to Travel Agencies and tour operators.

d. Choose a minimum of two major tourism destinations for each country studied.

e. Develop a tour itinerary plan taking all essential components of tour itinerary.

f. Estimate cost of tour itinerary taking all the components of pac

PRINCIPAL
Sree Siddaganga College of Arts,
Science and Commerce for Women,
B.H. Road, TUMKUR.

CHEMISTRY

Name of the Degree Program: B.Sc (Honors) Chemistry

Program Outcomes: By the end of the program the students will be able to:

1. PO. 1: To create enthusiasm among students for chemistry and its application in various fields of life.

2. PO. 2: To provide students with broad and balanced knowledge and understanding of key concepts in chemistry.

3. PO. 3: To develop in students a range of practical skills so that they can understand and assess risks and work safely measures to be followed in the laboratory.

4. PO. 4: To develop in students the ability to apply standard methodology to the solution of problems in chemistry.

5. PO. 5: To provide students with knowledge and skill towards employment or higher education in Analytical chemistry or multi-disciplinary areas involving chemistry.

6. PO. 6: To provide students with the ability to plan and carry out experiments independently and assess the significance of outcomes and to cater to the demands of chemical Industries of well-trained graduates.

7. PO. 7: To develop in students the ability to adapt and apply methodology to the solution of unfamiliar types of problems.

8. PO. 8: To install critical awareness of advances at the forefront of chemical sciences, to prepare students effectively for professional employment or research degrees in chemical sciences and to develop an independent and responsible work ethics.

Semester 1

CHEDSC01: (Chemistry -I)

Program outcome

- The concepts of chemical analysis, accuracy, precision and statistical data treatment
- Understand the preparation of alkanes, alkenes and alkynes, their reactions, etc.
- Understand the mechanism of nucleophilic, electrophilic reactions

CHEDSC01P: (Chemistry Practical-I)

Handle the glassware, prepare and dilute the solutions and perform experiments with prepared reagents.

- Determine the analytic through volumetric and gravimetric analysis and understand the chemistry involved in each method of analysis.
- Prepare organic compounds and calculation of percentage yield.

Semester II

CHEDSC02: (Chemistry-II)

Program outcome

Understanding the Bohr's theory of atomic structure •

Quantum numbers and their necessity in explaining the atomic structure

The concept of unit cell, symmetry elements, Nernst distribution law

CHEDSC02P: (Chemistry Practicals-II)

To prepare standard solutions • Techniques like precipitation, filtration, drying and ignition

• Various titrimetric techniques and gravimetric methods

Semester III

CHEDSC03: (Chemistry - III)

• The structures of molecules/compounds/ions based on different models/theories and concept of mechanism and its importance will be taught.

• The fundamentals of thermodynamics, surface chemistry, will be taught

. • Principle, instrumentation and applications of spectrophotometry, nephelometry and turbidometry will be taught.

CHEDSC03P: (Chemistry Practicals-III

• Impart skills related to preparation of stock and working solutions and handling instruments

• Techniques to identify the bifunctional groups in organic compound.

• To impart skills related to instrumental analysis

Semester IV

CHEDSC04: (Chemistry - IV)

•Properties of compounds based on bonding, structure, stereochemistry and its importance will be taught

. •Electrochemistry dealing with electrolytes in solution. Conductance measurements and applications.

• Principle, types and applications of solvent extraction and chromatography will be taught.

• Semester V

CHEDSC05: (Chemistry –V + Practical's)

- Understanding the chemistry of transition, inner transition elements and main group elements.
- Properties of non-aqueous solvents.
- Chemistry of carbonyl and heterocyclic compounds.
- Concepts of quantum mechanics.
- Physics approach to molecular spectroscopy.

CHEDSC06: (Chemistry VI + Practical's)

- Understanding the structure and bonding in coordination Compounds.
- Chemistry of natural photochemistry and electrochemistry.
- Principles of photochemistry and electrochemistry.
- Application of spectroscopy to organic molecule.

Semester VI

CHEDSC07: Selected topics in Physical Chemistry

CHEDSC07P: Physical Chemistry Practical's.

- Understanding the structure and bonding in coordination compounds.
- Reactions and rearrangement
- Study of ionic equilibrium and chemistry dynamics
- Principles of green chemistry and nanomaterials.

CHEDSC08: Spectroscopy

CHEDSC08P: Analytical and Industrial Chemistry Practical's

- Organometallic compounds and their importance.
- Chemistry of biomolecules.
- Phase equilibrium and application of thermodynamics.
- Bioorganic and bioinorganic chemistry.

PRINCIPAL
Sree Siddaganga College of Arts,
Science and Commerce for Women,
B.H. Road, TUMKUR.

BSC

Model Syllabus for BSc (Basic and Honors),

Semesters I and II

Course Code: CSDSC01

Course Title: Computer Fundamentals and Programming in C

Course Outcomes (COs): After completing this course satisfactorily, a student will be able to:

- Confidently operate Desktop Computers to carry out computational tasks
- Understand working of Hardware and Software and the importance of operating systems
- Understand programming languages, number systems, peripheral devices, networking, multimedia and internet concepts
- Read, understand and trace the execution of programs written in C language
- Write the C code for a given problem • Perform input and output operations using programs in C
- Write programs that perform operations on arrays

Semester: II Course Code: CSDSC02 Course Title: Data Structures using C

Course Outcomes (COs): After completing this course satisfactorily, a student will be able to:

- Describehowarrays,records,linkedstructures,stacks,queues,trees,andgraphsare represented in memory and used by algorithms
- Describecommonapplicationsforarrays,records,linkedstructures,stacks,queues,trees, and graphs
- Writeprogramsthatusearrays,records,linkedstructures,stacks,queues,trees,and graphs
- Demonstrate different methods for traversing trees
- Compare alternative implementations of data structures with respect to performance
- Describe the concept of recursion; give examples of its use
- Discuss the computational efficiency of the principal algorithms for sorting and searching

Model Syllabus for BSc (Basic and Honors),

Semesters III and IV Semester: III

Course code: DSC3

Course Title: Object Oriented Programming Concepts and Programming in Java

Course Outcomes (COs): At the end of the course, students will be able to:

- Explain the object-oriented concepts and JAVA.
- Write JAVA programs using OOP concepts like Abstraction, Encapsulation, Inheritance and Polymorphism.
- Implement Classes and multithreading using JAVA.
- Demonstrate the basic principles of creating Java applications with GUI.

Course Title: JAVA LAB Course code: DSC3LAB

Course Outcomes (COs): After completing this course satisfactorily, a student will be able to:

- Implement Object Oriented programming concept using basic syntaxes of control Structures
- Identify classes, objects, members of a class and the relationships among them needed for a finding the solution to specific problem
- Demonstrates how to achieve reusability using inheritance
- Demonstrate understanding and use of interfaces, packages, different exception handling mechanisms and concept of multithreading for robust faster and efficient application development.
- Identify and describe common user interface components to design GUI in Java using Applet & AWT along with response to events

Semester: IV Course Title: Database Management System Course code: DSC4

Course Outcomes (COs): At the end of the course, students will be able to:

- Explain the various database concepts and the need for database systems.
- Identify and define database objects, enforce integrity constraints on a database using DBMS.
- Demonstrate a Data model and Schemas in RDBMS.
- Identify entities and relationships and draw ER diagram for a given real-world problem.
- Convert an ER diagram to a database schema and deduce it to the desired normal form.
- Formulate queries in Relational Algebra, Structured Query Language (SQL) for database manipulation. • Explain the transaction processing and concurrency control techniques.

Semester: III Course Title: Database Management System Course code: CAC07

Course Outcomes (COs): At the end of the course, students will be able to:

- Explain the various database concepts and the need for database systems.
- Identify and define database objects, enforce integrity constraints on a database using DBMS.
- Demonstrate a Data model and Schemas in RDBMS.

- Identify entities and relationships and draw ER diagram for a given real-world problem.
- Convert an ER diagram to a database schema and deduce it to the desired normal form.
- Formulate queries in Relational Algebra, Structured Query Language (SQL) for database manipulation. • Explain the transaction processing and concurrency control techniques

Course Title: C# and Dot Net Framework Course code: CAC08

Course Outcomes (COs): At the end of the course, students will be able to:

- Describe Object Oriented Programming concepts like Inheritance and Polymorphism in C# programming language.
- Interpret and Develop Interfaces for real-time applications.
- Build custom collections and generics in C#.

Course Title: Computer Communication and Networks Course code: CAC09

Course Outcomes (COs): At the end of the course, students will be able to:

- Explain the transmission technique of digital data between two or more computers and a computer network that allows computers to exchange data.
- Apply the basics of data communication and various types of computer networks in real world applications.
- Compare the different layers of protocols.
- Compare the key networking protocols and their hierarchical relationship in the conceptual model like TCP/IP and OSI.

Semester: IV Course Title: Python Programming Course code: CAC10

Course Outcomes (COs): At the end of the course, students will be able to:

- Explain the basic concepts of Python Programming.
- Demonstrate proficiency in the handling of loops and creation of functions.
- Identify the methods to create and manipulate lists, tuples and dictionaries.
- Discover the commonly used operations involving file handling.
- Interpret the concepts of Object-Oriented Programming as used in Python.
- Develop the emerging applications of relevant fields using Python

Course Title: Computer Multimedia & Animation Course code: CAC11

Course Outcomes (COs): At the end of the course, students will be able to:

- Write a well-designed, interactive Web site with respect to current standards and practices.

• Demonstrate in-depth knowledge of an industry-standard multimedia development tool and its associated scripting language.

• Determine the appropriate use of interactive versus standalone Web applications.

Course Title: Operating System Concepts Course code: CAC12

Course Outcomes (COs): At the end of the course, students will be able to:

• Explain the fundamentals of the operating system.

• Comprehend multithreaded programming, process management, process synchronization, memory management and storage management.

• Compare the performance of Scheduling Algorithms

• Identify the features of I/O and File handling methods.

Skill Enhancement Course: SEC for B.Sc. & other Subject Students

Semester: III/IV

Course Title: Artificial Intelligence C

Course Outcomes (COs): At the end of the course, students will be able to:

• Appraise the theory of Artificial intelligence and list the significance of AI.

• Discuss the various components that are involved in solving an AI problem.

• Illustrate the working of AI Algorithms in the given contrast.

• Analyze the various knowledge representation schemes, Reasoning and Learning techniques of AI.

• Apply the AI concepts to build an expert system to solve the real-world problems.

Open Source Tools (Skill Enhancement Course: SEC for BCA Course)

Semester: III

Course Title: Open Source Tools

Course Outcomes (COs):

• Recognize the benefits and features of Open Source Technology and to interpret, contrast and compare open source products among themselves

• Use appropriate open source tools based on the nature of the problem

• Write code and compile different open-source software.

PRINCIPAL
Sree Siddaganga College of Arts, Science and Commerce for Women,
B.H. Road, TUMKUR.