#### DEPARTMENT OF ENGLISH

### **B.A (ENGLISH)**

### PROGRAM SPECIFIC OUTCOME (PSO)

PSO1: Students obtain proficiency in English communication.

PSO2: Students master the subtleties of Structural English and can differentiate between right and wrong usages through phonology, morphology and syntax.

PSO3: Their LSRW finds momentum through rigorous training.

PSO4: Students become adept in formal and informal communications and employ advanced business English in oral and written communications.

PSO5: Students acquire job competency as they can write applications, CVs, business reports, memos, emails etc using technology mediated English and make successful careers for themselves.

PSO6: Students by acquiring appreciation, understanding, general proficiency and interest in English grow to become global citizens.

# COURSE OUTCOME SEMESTER - I

#### COURSE: COMMUNICATIVE ENGLISH I

**CREDIT: 4** 

CO1: Understand and analyze different genres of Poetry and poetical rhythm.

CO2: Classify the different themes and concepts of Prose.

CO3: Inculcate some basic ethics and morals by understanding how characters are portrayed.

CO4: Understand the function of Grammar and able to frame own sentences.

CO5: Apply the learned skill for communication

CO6: Enrich and equip the students to enhance the communication

# COURSE: INDIAN WRITING IN ENGLISH (CORE PAPER 1)

**CREDIT: 3** 

CO1: Evaluate the various phases of the evolution of Indian Writing in English.

CO2: Analyze the thematic concern, genres and trends in Indian Writing in English

CO3: Describe the various aspects of Indian Society through a critical examination of the literary

texts representing different periods and culture.

CO4: Explain the Indian Culture reflected in Literature.

CO5: To Understand the various features of Indian literature in English Principal

CO6: To analyze the aspects of Indianness In Indian writing in english hadi - 635 752.

\* 989llo3 80

COURSE: ADVANCED ENGLISH GRAMMAR (CORE PAPER 2)

CREDIT: 3

CO1: Analyze different ways in which grammar has been described

CO2: Understand the difference between Spoken and Written.

CO3: Compare and Contrast various Components of grammar, using examples

CO4: Identify the grammatical structure

CO5: Recognize the various rules of grammar.

CO6: Students will be able to know the types of sentences

COURE: LITERARY FORMS AND TERMS (ALLIED 1)

CREDIT: 3

CO1: Acquaint with minor forms of Literature in English.

CO2: Classify the correct usage of terms

CO3: Analyze the particular forms literally

CO4: Expose and explain with examples about the literary devices used.

CO5: To scrutinized the various Literary Forms

CO6: To Understand Different Literary Terms

**COURSE: PROFESSIONAL ENGLISH** 

**CREDIT:3** 

CO1: To develop the language skills of students by offering adequate practice in professional contexts.

CO2: To sharpen student's critical thinking skills and make students culturally aware of the target situations.

CO3; understand the importance of reading for life

CO4: Read independently unfamiliar texts with comprehension.

CO5: Understand the importance of writing in academic life.

COURSE: ENVIRONMENTAL STUDIES

CREDIT:2

CO1: To Enhance the structure , concept and function of natural resources

slamiah Wome

CO2: Understand the values and uses of Biodiversity

CO3: To develop the environmental skills among the students

slamiah Women's Arts and Science College Vaniyambadi - 635 752.

#### SEMESTER II

#### **COURSE: COMMUNICATIVE ENGLISH II**

CREDIT: 4

CO1: Understand and analyze different genres of Poetry and poetical rhythm.

CO2: Classify the different themes and concepts of Prose.

CO3: Inculcate some basic ethics and morals by understanding how characters are portrayed.

CO4: Understand the function of Grammar and able to frame own sentences.

CO5: Develop Vocabulary and improve the accuracy in grammar.

CO6: Enhance the pronunciation skill.

### COURSE: BRITISH LITERATURE I (CORE PAPER 3)

**CREDIT: 4** 

CO1: Recognize different author's creative and imaginative writings through poetry.

CO2: Identify social status, class system that prevailed in Britain.

CO3: Compare and contrast between different characters.

CO4: Produce their own historical analysis and develop historical knowledge.

CO5: Appreciate the style of Bacon.

CO6: Understand the Social Life of 17th Century England.

### COURSE: AMERICAN LITERATURE I (CORE PAPER 4)

**CREDIT: 3** 

CO1: Identify the variety of forms and genres of poetry from diverse cultures, epic, free verse.

CO2: Explain the concepts of American Literature.

CO3: Analyze the major themes of American Literature.

CO4: Use historical sources and historical contexts.

# COURSE: SOCIAL HISTORY OF ENGLAND( ALLIED 2 )

**CREDIT: 5** 

CO1: Understand the antiquities of England.

CO2: Define religious groups like Catholism, Puritanism, Protestanism.

CO3: Classify the periods like Elizabethan, Queen Anne, Victorian.

CO4: Compare and contrast the growth of England.

CO5: It helps in preparing for competitive exams such NET, TET, etc.

CO6: Understand the subject thoroughly and provides them the scope for higher study.

Islamiah Women's Arts and Science College Vanıyambadi - 635 752. COURSE: PROFESSIONAL ENGLISH

**CREDIT: 3** 

CO1: It helps students with a research bent of mind, develop their skills in writing reports

CO2: Development of Vocabularies in their respective disciplines

CO3: Enhance the creativity of the students.

CO4: Develop their competitiveness

CO5: Improve their Employability Skills.

COURSE: VALUE EDUCATION

CREDIT: 2

CO1: Understand the value of education.

CO2: Recognize the essential steps to become good leaders.

CO3: Classify the difference between good and bad.

CO4: Apply learned value of education for society's progress.

CO5: Create awareness about global issues.

COURSE: SOFT SKILLS

CREDIT: 1

CO1: Communicate both in Speaking and Writing effectively.

CO2: Define any text analytically and critically.

CO3: Classify the different ways of communication in different contexts.

CO4: Understand clearly through multiple spoken and written forms.

CO5: Improve their Employability Skills.

### SEMESTER III

COURSE: FOUNDATION III

CO1: Understand and analyze different genres of Poetry and poetical rhythm.

CO2: Classify the different themes and concepts of Prose.

CO3: Inculcate some basic ethics and morals by understanding how characters are portrayed.

CO4: Understand the function of Grammar and able to frame own sentences.

CO5: To realize the beauty and communication power of English.

CO6: To develop students interest in reading .

**CREDIT: 4** 

\* 9891107 30V

slamiah Won

Printipal/
Islamiah Women's Arts and Science College
Vanıyambadı - 635 752

### COURSE: BRITISH LITERATURE II

CO1: Recognize different author's creative and imaginative writings through poetry.

CO2: Identify social status, class system that prevailed in Britain.

CO3: Compare and contrast between different characters.

CO4: Produce their own historical analysis and develop historical knowledge.

CO5: Understand the theme and structure in British poetry and drama.

CO6: Able to communicate clearly, effectively and handle various authors skills.

### COURSE: AMERICAN LITERATURE II

**CREDIT: 4** 

CO1: Identify the variety of forms and genres of poetry from diverse cultures, epic, free verse.

CO2: Recognize rhythm metrics and other aspects of Poetry.

CO3: Understand a literary text in different contexts and recognize selected literary text.

CO4: Analyze the Drama using appropriate theoretical, historical and cultural apparatus.

CO5: Understand what is life, culture language and society through literature.

CO6: Able to compare American writings with Indian writings with English.

### COURSE: HISTORY OF ENGLISH LITERATURE I

**CREDIT: 4** 

CO1: Classify the various contribution of writers in the age of Chaucer.

CO2: Understand religious changes that occurred during the development of Drama.

CO3: Describe the life and works of Shakespearean Era.

CO4: Examine the writing style of Milton's age.

CO5: Evaluate the works of writer's in the age of Dryden.

### COURSE: SKILLS FOR EMPLOYMENT I

**CREDIT: 3** 

CO1: Define the values and career choices through individual skill assessment.

slamiah Women

CO2: Apply the necessary steps to achieve the goal.

CO3: Develop and practice the skills for the better communication.

CO4: Improve personality development.

# COURSE: NME- LANGUAGE SKILLS & COMMUNICATION I

CREDIT: 2

CO1: Understand different people at different level.

CO2: Apply the learned skill in communication.

CO3: Improve communication skills.

CO4: Develop personality.

slamiah Women's Arts and Science College Vaniýambadi - 635 **752**.

### SEMESTER IV

### COURSE: FOUNDATION IV

**CREDIT: 4** 

CO1: Understand and analyze different genres of Poetry and poetical rhythm.

CO2: Classify the different themes and concepts of Prose.

CO3: Inculcate some basic ethics and morals by understanding how characters are portrayed.

CO4: Understand the function of Grammar and able to frame own sentences.

CO5: Identify the importance of communication and the role of grammar.

CO6: Encourage students to go ahead for further references

### COURSE: BRITISH LITERATURE III

**CREDIT: 4** 

CO1: Recognize different author's creative and imaginative writings through poetry.

CO2: Identify social status, class system that prevailed in Britain.

CO3: Compare and contrast between different characters.

CO4: Produce their own historical analysis and develop historical knowledge.

CO5: Trace the history of English literature from old English period.

CO6: Identify the transformation of language style themes reflected in the literary texts from old English to middle English period.

# COURSE: HISTORY OF ENGLISH LANGUAGE

CREDIT: 4

Islamiah V

CO1: Able to define language.

CO2: Classify the various stages of development of English language.

CO3: Compare and contrast the varieties of English used all over the world.

CO4: Understand clearly the coining of different words through different languages spoken in the world.

CO5: Able to form new words.

CO6: Explore literary elements.

CO7: Appreciate literary form and structure in shaping a texts' meaning

### COURSE: HISTORY OF ENGLISH LITERATURE II

CO1: Classify the various contribution of writers in the age of Pope.

CO2: Understand social strategies that occurred during the development of Johnson's Era.

CO3: Describe the development of prose in the age Wordsworth.

CO4: Examine the role of novel in the age of Tennyson. Islamiah Women's Arts and Science College

CO5: Evaluate the works of Hardy.

Vaniyambadi - 635 752.

### COURSE: SKILLS FOR EMPLOYMENT II

**CREDIT: 3** 

CO1: Define the values and career choices through individual skill assessment.

CO2: Apply the necessary steps to achieve the goal.

CO3: Develop and practice the skills for the better communication.

CO4: Improve personality development.

### COURSE: NME-LANGUAGE SKILLS & COMMUNICATION II

CREDIT:3

CO1: Understand different people at different level.

CO2: Apply the learned skill in communication.

CO3: Improve communication skills.

CO4: Develop personality.

#### SEMESTER V

### COURSE: BRITISH LITERATURE IV

**CREDIT: 4** 

CO1: Compare and contrast British Literature with Indian Literature.

CO2: Outline the study of Elizabethan Age.

CO3: Analyze the growth of English Literature.

CO4: Understand the history of British Literature.

CO5: Understand how to distinguish between reason and inspiration in romantic literature.

CO6: Understand the depth and diversity of British culture.

### COURSE: LANGUAGE AND LINGUISTICS

**CREDIT: 4** 

CO1: Able to define language.

CO2: Recognize speech sounds and phonetic system in English.

CO3: Identify the grammatical and phonemic components of the language.

CO4: Detect pronunciation mistakes.

CO5: Detect misspelling and to remove mistakes.

### COURSE: INTRODUCTION TO LITERARY CRITICISM

CO1: Develop student's ability to understand a literary piece.

CO2: Develop the ability to conduct literary research.

CO3: Examine the representative text of the Seminal literary critics.

CO4: Understand intrinsic and extrinsic criticism.

CO5: Expose to the concept of the historical perceptions over the centuries.

slamiah Wo CREDIT:

n's Arts and Science College Vaniyambadi - 635 752.

# COURSE: INDIAN LITERATURE IN TRANSLATION

**CREDIT: 4** 

CO1: Explain about the information and knowledge regarding history of English Language.

CO2: Recognize the various cultures, periods, elements of Prose and Poetry.

CO3: Improve the cultural knowledge and modes of communication.

CO4: Enrich the vocabulary to enjoy reading, writing & further teaching.

CO5: Attain the skill of translating passages from the source language to the target language and vice versa.

CO6: Inculcate the importance of sense for sense translation, rather than the word for word translation.

# COURSE: JOURNALISM AND MASS COMMUNICATION

CREDIT: 3

CO1: Classify newspaper as a recorder of news and events.

CO2: Understand the impact of newspaper on society, socio economic and cultural development.

CO3: Understand the role of the news editors, functions, duties and responsibilities.

CO4: Analyze the features as a special kind of reporting.

CO5: Describing the principles of editing, copy editing and computer editing.

### COURSE: CONVERSATIONAL ENGLISH

CREDIT: 3

CO1: Communicate both in Speaking and Writing effectively.

CO2: Define any text analytically and critically.

CO3: Classify the different ways of communication in different contexts.

CO4: Understand clearly through multiple spoken and written forms.

#### SEMESTER VI

### **COURSE: SHAKESPEARE**

CREDIT: 5

CO1: Define the genre of Drama.

CO2: Evaluate the art of writing drama.

CO3: Identify the terminology used during Elizabetahan period.

CO4: Compare and contrast the works of Shakespeare with other dramatists.

CO5: Evaluate the critical approaches of Shakespeare's writing.

CO6: Classify the different genres like Tragedy, Comedy, Historical plays etc.

CO7: Explain the universal appeal in the writings of Shakespeare. Arts and

\* Islamiah Womes

TS Arts and Science Sollege act

### COURSE: BRITISH LITERATURE V

CREDIT: 4

CO1: Compare and contrast British Literature with Indian Literature.

CO2: Outline the study of Elizabethan Age.

CO3: Analyze the growth of English Literature.

CO4: Understand the history of British Literature.

CO5: Understand the themes and structure in British poetry and drama.

CO6: Able to communicate clearly, effectively and handle various authors' skills.

### COURSE: NEW LITERATURES IN ENGLISH

**CREDIT: 4** 

CO1: Broaden the origin of new literature education.

CO2: Focus on emergence and importance of new writing style.

CO3: Widen the knowledge of traditionalism and modernism during colonialism period.

CO4: Understand the cultural dominance, inequality with peculiar presentation.

CO5: Appreciate of the subversive elements of these texts facilitating an understanding of the dichotomy pervasive in all such writings.

CO6: Develop a healthy aspect for the cultures all over the repressed world that survived the imperialistic attitudes and cultural conditioning.

### COURSE: TECHNOLOGY MEDIATED ENGLISH

CREDIT: 3

CO1: Describe and apply emerging technologies in teaching and learning environments.

CO2: Develop technology enabled assessment and evaluation strategies.

CO3: Demonstrate the uses of online education.

CO4: Display the knowledge of various uses of internet services.

#### COURSE: COPY EDITING AND PROOF READING

CREDIT: 3

CO1: Understand the use of style & style guides in proof reading and copy editing.

CO2: Describe editing tools and techniques.

CO3: Understand the role of the editor and sub-editor.

CO4: Analyze the scheduling and production of print & electronic documents.

COURSE: ENGLISH LANGUAGE AND TEACHING

CO1: Explain various teaching strategies.

CO2: Determine the aims of English Language teaching

CO3: Compute with new methodology of teaching.

CO4: Evaluate the basic concept and principles of English Language teaching

CO5: Encourage learning styles and to increase competence in the use of language.

CREDIT: 3

W/

Fincipal

Islamiah Wome

Islamiah Wohards Arts and Science College

#### M.A ENGLISH

### PROGRAM SPECIFIC OUTCOMES (PSO)

PSO1: Students demonstrate familiarity with a wide range of representative literary rhetorical texts, including influential criticism of and commentary on those texts.

PSO2: Students master the subtleties of Structural English and can differentiate between right and wrong usages through phonology, morphology and syntax.

PSO3: Students examine the theoretical premises underlying the critical analysis of literature, rhetoric and the teaching of reading and writing.

PSO4: They learn to analyze the functions of texts and their relations with historical, social and political contexts.

PSO5: Students learn to locate, evaluate and synthesize the available resources for researching a significant scholarly topic.

PSO6: They found aptitude in preparing and delivering effective oral presentations and arguments acceptable within the English professions.

### COURSE OUTCOME

#### SEMESTER I

COURSE: BRITISH POETRY (Chaucer to 20th century)

**CREDIT: 4** 

**CREDIT: 4** 

amiah w

CO1: The student will learn about the metaphysical poets and their style of writings

CO2: The student will know about the love and lust towards opposite gender

CO3: The student will be able to differentiate the various types of sonnets

CO4: The student will enjoy the beauty of the nature and imagination

CO5: The student will understand the romantic life of the poets

CO6: The student will differentiate the changes of language and style

**COURSE: AMERICAN LITERATURE** 

CO1: The student will come to know the prominent women writers

CO2: The student will able to distinguish the various thinking of American society

CO3: The student will understand transcendentalist and naturalist

CO4: The student will receive the seclusion temper and patriarchal society

CO5: The student will learn the reality of working classes and middle classes living in cities 20100

CO6:The student will know the culture and history of the United Statesen's Arts and Science College Vaniyambadi - 635 752.

### COURSE: INDIAN LITERATURE IN ENGLISH

**CREDIT: 4** 

CO1: The student will be able to know the complete picture of Indian writing and their uniqueness

CO2: The student will be able to know the importance of translation in various works

CO3: The student will know the sufferings and submissive conditions of people

CO4: The student will be able to know the childhood sufferings and search for identity through short stories

CO5: The student will learn the myths and ethics of Indians

CO6: The student will know how to write a script

### COURSE: ADVANCED LINGUSTICS

**CREDIT: 4** 

CO1: The student will follow the proper pronunciation of the words

CO2: The student will learn how to communicate effectively in various places

CO3: The student will easily know the difference between linguistics and non-linguistics

CO4: The student will link the relationship between language and literature

CO5: The student will enjoy the dialects of various places and persons

CO6: The student will think about the multi-lingualism

# COURSE: FOLK TALE AND MYTH (CORE ELECTIVE)

**CREDIT: 3** 

CO1: As per another legend, the disciples of Gautama were cursed to become Lizards.

CO2: The resided in the temple and relieved of the curse by the divine grace of Vishnu. There is the panel in the temple were the two lizards are depicted in the roof of the temple

CO3: The unit designates a critical approach in literary studies and also an eclectic approach to study the complex relationship between literature and myth

CO4: In short complex critical and theoretical questions about myth and literature continue to be asked

### COURSE: PUBLIC SPEAKING AND CREATIVE WRITING (OE)

**CREDIT: 3** 

Islamiah Women

CO1: The student will learn how to appreciate and analyze the poem

CO2: The student will get an idea of how to write poem

CO3: The student will receive the adequate knowledge about the paragraph writing

CO4: The student will become a good writer after getting the ideas about writing methods.

CO5: The student will be able to know how to differentiate between fiction and nonfictional Principal writings. Islamiah Women's Arts and Science College 291102 90

Vanrýambadi - 635 752.

#### SEMESTER II

COURSE: BRITISH DRAMA

**CREDIT: 4** 

CO1: Apply discipline - specific skills to the creation of performance

CO2: Draw connections between theatrical practices and social contexts in both modern and premodern periods.

CO3: They will demonstrate proficiency in specific skills like: acting, directing, choreography, play-writing or dramaturgy.

CO4: They will be able to analyze, interpret and evaluate the dramatic literature and theatrical productions.

### COURSE: TRANSLATION THEORY AND PRACTICE

**CREDIT: 4** 

CO1: The learner knows about the history of translation and its practice.

CO2: Interpretation of SL and TL can be done.

CO3: Reproduction of the translation and the process and product can be understood.

CO4: Problem and solution of the translation and the equivalence of the translation can be learned.

CO4: Translation is done in practice

### COURSE: CONTEMPORARY LITRARY THEORY

**CREDIT: 4** 

CO1: It reinforces the student's literary competence.

CO2: The students will develop an independent critical persona.

CO3: The students can understand the various types of theories

CO4: Theories after the 20th century is learned

### COURSE: NEW LITERATURE IN ENGLISH

CREDIT: 3

Jamiah Wome

CO1: The student will know about the definition and Origin of the Comparative Literature.

CO2: Influence and Imitation of the subject is taught.

CO3: The link between Comparative Literature and the literary History is exposed

CO4: The Comparison between the genres is taught to the learners.

CO5: The comparison of Themes were taught to the students.

Islamiah Women's Arts and Science Vaniyambadi - 635 752.

### **COURSE: HUMAN RIGHTS**

**CREDIT: 2** 

CO1: The student will be able to know the nature of human rights its origin, the theories, the movements in the march of human rights and the facets of future of human rights.

CO2: The student will be able to know the international dimension of human rights, the role of UN and the global effort in formulating conventions and declarations.

CO3: The student will be able to perceive the regional developments of human rights in Europe, Africa and Asia and the enforceable value of human rights in international arena.

#### **SEMESTER III**

### **COURSE: SHAKESPEARE STUDIES**

**CREDIT:5** 

CO1: Define the genre of drama

CO2: Evaluate the art of writing drama

CO3: Identify the terminology used during Elizabethan Period.

CO4: Compare and Contrast the works of Shakespeare with other dramatist

CO5: Evaluate the critical approaches of Shakespeare's writing.

CO6: Classify the different genres like tragedy, Comedy and historical plays.

CO7: Explain the universal appeal in the writings of Shakespeare.

### **COURSE: VICTORIAN LITERATURE**

**CREDIT:5** 

CO1: Explore the traits of Victorianism in English literature

CO2: Evaluate romanticism and Victorianism.

CO3: Explain the various aspects of Victorian writers.

CO4: Analyze the work of Victorian writers.

CO5: Examine the supernatural elements of Victorian writers.

CO6: Understand Victorian literature.

CO7: Explore various genre of Victorian literature.

### COURSE: CONTEMPORARY LITERARY THEORY I

CREDIT:5

clamiah Wo

CO1: Understand literary theory as a system.

CO2: Analyze critically & interpret literary texts.

CO3: Develop an understanding of the nature of language through scientific & analytical

approaches.

CO4: Understand the broad spectrum of thought that is covered by literary resource.

CO5: Enhance the literary resource.

Vaniyambadi - 635 752

### COURSE: RESEARCH METHODOLOGY

CREDIT: 4

CO1: Define the concept of research

CO2: Classify the different types of research methodologies.

CO3: Understand various research terminologies

CO4: Inculcate the research ethics.

# COURSE: LITERATURE: ANALYSIS, APPROACHES AND APPLICATIONS CREDIT: 3

CO1: Develop the working knowledge of practical criticism from diverse cultures, epic, free verse.

CO2: Recognize rhythms, metrics and other aspects of poetry.

CO3: Understand a literary text in different context and recognize selected literary text.

CO4: Analyze the drama using appropriate theatrical, historical and cultural apparatus.

CO5: Inculcate a rhetorical approach to the literary study of American text and also the consumption, myths and beliefs about American cultures.

#### SEMESTER - IV

# COURSE: TWENTIETH CENTURY LITEARTURE

CREDIT:5

CO1: Help to retrace the diversity of the literary schools of this period.

CO2: Understand more liberal in outlook & scientific in techniques.

CO3: Introduce student's thoroughly competent & literate authors in the traditional mode.

CO4: Understand the impact the world wars on society.

CO5: Recognize different collections of short stories.

CO6: Introduce literary theories such as new criticism.

CO7: Familiarize with the basic theories, knowledge areas and analytical tools of the field.

### COURSE: ENGLISH LANGUAGE TEACHING

**CREDIT: 5** 

slamiah Won

CO1: To use the language learning strategies effectively.

CO2: To have professional confidence.

CO3: To develop their English language skills continuously.

CO4: To develop new materials to be in the teaching process.

### COURSE: CONTEMPORARY LITERARY THEORY II

CO1: Understand literary theory as a system.

CO2: Analyze critically & interpret literary texts.

RY II Principal CREDIT: \$1100 9

Vanıyambadı - 635 752.

CO3: Develop an understanding of the nature of language through scientific & analytical approaches.

CO4: Understand the broad spectrum of thought that is covered by literary resource.

CO5: Enhance the literary resource

### COURSE: CHILDREN'S LITERATURE

**CREDIT: 3** 

CO1: Display a working knowledge of classic and contemporary children's literature

CO2: Analyze literary prose works from various genres for their structure and meaning, using correct terminology.

CO3: Identify and describe distinct literary characteristic of drama including techniques of illustration and format of children's boon.

CO4: Inculcate the approaches of short stories aspects.

CO5: Explain the concept of drama by using appropriate, theoretical historical & cultural approaches

Principal Islamiah Women's Arts and Science College Vanıyambadi - 635 752.

# DEPARTMENT OF TAMIL PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1: Understand the history and culture of ancient Tamilians especially Sangam age.

PSO2: Understand the values for life through Thirukkural

PSO3: Understand Tamil Literature on Saivism, Vashnavism, Islam, and Christians.

PSO4: Understand the 20th century poet and poetry's.

#### COURSE OUTCOME

#### SEMESTER I

COURSE: LANGUAGE (TAMIL), PART-I

**CREDIT: 4** 

CO1: Able to write poetry

CO2: To know about 20th century Poets History

C03: To Learning patriotic, History through Poem, &Prose

CO4: To create awareness on Social evils among students.

CO5: Understand and practice the foreign words, methods to write prose and poetry without

errors, &Types of Tamil Grammar

#### SEMESTER II

**COURSE: LANGUAGE (TAMIL)** 

**CREDIT: 4** 

CO1: Understand devotional Literature

CO2: To Learn Good Manners

CO3: To knowing the glories of the Lord (Siva, Vishnava, Islamic & Christian)

CO4: Develop the knowledge to interviews and learning to prepare reports

#### SEMESTER III

COURSE: TAMIL

**CREDIT: 4** 

CO1: Cultivate a sense of discipline and lead life of integrity through Thirukkural

CO2: Analyze the importance of family values, humanity and honesty through Kappiyangal

CO3: Able to lead the life of purity by comprehending devotional Literature

CO4: Develop a humanitarian outlook.

CO5: Able to prepare Bio-Data, Agenda, Report, Personal and Official letters is Arts and Science College

Vanıyambadi - 635 752.

**COURSE: BASIC TAMIL** 

**CREDIT: 2** 

CO1: Understand basics of Tamil Language

CO2: Enables them to enhance their language skills.

CO3: Enables them to develop creative reading and writing.

CO4: Able to participate in dialogue without any difficulty

### **SEMESTER IV**

amiah Wo

#### COURSE: LANGUAGE (TAMIL) PART-I

**CREDIT:4** 

CO1: Recognize the excellence of ancient Tamil literature

CO2: Develop interest in Sangam literature

CO3: Understand the customs and manners of Tamil Language

CO4: Develop the noble attitudes, relationship with other organisms and living a good life

CO5: Develop the skill of Translation.

#### COURSE: BASIC TAMIL

**CREDIT: 2** 

CO1: Learn and practice the methods of writing sentence without errors.

CO2: Understand social value of short stories and develop creative skills.

CO3: Learn Translation and Interviews.

Principal
Santah Women's Arts and Science College
Vanıyambadı - 635 752.

### **DEPARTMENT OF URDU**

### COURSE OUTCOME FOR FOUNDATION COURSE URDU

#### **SEMESTER-I**

**COURSE: URDU** 

**CREDIT: 4** 

CO1: Understand Urdu Grammar

CO2: Analyze Urdu Prose

CO3: Understand Mazhar-e- Adab

CO4: Learn the art of letter writing

CO5: Able to differentiate personal and official letter

#### SEMESTER-II

**COURSE: URDU** 

**CREDIT: 4** 

CO1: Understand Urdu Ghazaliath

CO2: Analyze manzoomath

CO3: Understand Urdu Drama

C04: Learn Urdu Poem(Nazams)

C05: Understand Urdu Rubaiyaat

#### SEMESTER III

**COURSE: URDU** 

CREDIT:4

CO1: Understand History of Urdu Literature

CO2: Learn Translation

CO3: Understand Grammar

CO4: Learn Composition

CO5: Learn Mazher-e-Adah

#### SEMESTER IV

Vaniyamida

**COURSE: URDU** 

**REDIT: 4** 

CO1: Understand Non-detailed text CO2: Learn General Essay

CO3: Learn Urdu fiction writers CO4: Understand Urdu short stories

CO5: Analyze different author's style of writing

Islamiah Women's Arts and Science College Vanıyambadı - 635 752.

### DEPARTMENT OF BUSINESS ADMINISTRATION

### PROGRAM SPECIFIC OUTCOMES (PSO)

PSO1: To provide conceptual and depth knowledge of various functional areas of business enterprise.

PSO2: To impart and encourage 'Learn to work in teams'.

PSO3: To impart and understand the elements of the complex world of business.

PSO4: To impart knowledge of field visit and training to use techniques of Management

PSO5: To build up self - confidence and ability in students to take up self - serviceable business ventures.

PSO6: To build skills to apply knowledge in project report writing.

PSO7: To impart moral values and social responsibilities

PSO8: To imparts the students to identify their own values.

#### COURSE OUTCOME

#### SUBJECT: PRINCIPLES OF MANAGEMENT

**CREDIT: 3** 

#### SEMESTER- I (ODD SEMESTER)

CO1: Understand the critical management theories and philosophies and how to apply them.

CO2: Recognize the role of a manager and how it relates to the organization's mission.

CO3: Identify and communicate the purpose and functions of management.

CO4: Apply the concepts of decision making in a business situations.

### SUBJECT: BUSINESS MATHEMATICS AND STATISTICS - I

**CREDIT: 3** 

### SEMESTER-I (ODD SEMESTER)

CO1: Identify the scope and limitation of presentation of data.

CO2: Demonstrate the measure of central tendency.

CO3: Analyses the measure of dispersion of range, mean deviation.

CO4: Apply the mathematical for finance of simple and compound interest.

Vaniyamba

slamiah Women's Arts and Science College Vanıyambadı - 635 752.

#### SUBJECT: PROFESSIONAL ENGLISH - I

**CREDIT: 3** 

### SEMESTER-I (ODD SEMESTER)

CO1: To impart the learning skills among the students so as to become fluent in the use of language at all levels.

CO2: To enhance the student's skills in LSRW (Listening, Speaking, Reading& Writing) and also their competence to use language effectively.

CO3: To improve the student's vocabulary skills in order to face the interviews, group discussion, brainstorming methods and mind mapping in different fields used by the investors / interviewers.

#### SUBJECT: BUSINESS ORGANIZATION

**CREDIT: 3** 

#### SEMESTER- I (ODD SEMESTER)

CO1: Understand difference between business and profession.

CO2: Describe and differentiate the forms of business.

CO3: Recognize the need for identifying the location of industry.

CO4: Analyze the work of stock exchange.

CO5: Compare how trade associations differ from chamber of commerce.

### SUBJECT: BUSINESS ENVIRONMENT

**CREDIT: 3** 

### SEMESTER- II (EVEN SEMESTER)

CO1: Familiarize with the nature of business environment and its components.

CO2: Demonstrate and develop conceptual framework of business environment and generate interest in international business.

CO3: Understand the definition of ethics and the importance and role of ethical behavior in the business world today.

# SUBJECT: BUSINESS MATHEMATICS AND STATISTICS - II

SEMESTER-II (EVEN SEMESTER)

CO1: Apply the matrix theory of operation on determinants

CO2: Use the simultaneous equation of matrix method

CO3: Analyses the correlation of Karl Pearson's coefficient for concurrent deviation method colleges?

CO4: Evaluate the component of time series.

CO5: Determine the Index number of weighted and UN weighted index number.

CO6: Use of cost of living index.

CREDIT: 3

#### SUBJECT: PROFESSIONAL ENGLISH - II

**CREDIT: 3** 

#### **SEMESTER-II (EVEN SEMESTER)**

CO1: Understand the basic objective of the course by being acquainted with specific dimensions of communication skills i.e. Reading, writing, listening, thinking and speaking.

CO2: Create substantial base by the formation of strong professional vocabulary for its application at different platforms

CO3: Apply in the work place for writing purposes such as presentation/official drafting/administrative communication and use it for document/project/report/research paper writing.

CO4: Evaluate the correct & error-free writing by being well-versed in rules of english grammar & cultivate relevant technical style of communication & presentation at their work place & also for academic uses.

CO5: Apply techniques for developing inter-personal communication skills and positive attitude leading to their professional competence.

#### SUBJECT: PRINCIPLES OF BANKING SYSTEM

**CREDIT: 5** 

#### SEMESTER- II (EVEN SEMESTER)

CO1: Disseminate knowledge among the students inculcate with theoretical structures about banking

CO2: Train and equip the students with the skills of modern banking

CO3: Develop and inculcate the traits of professionalism amongst the students

CO4: Professional attire, professional communication skills and professional discipline will be inculcated.

#### SEMESTER III

### COURSE: PRODUCTION MANAGEMENT

**CREDIT: 4** 

CO1: Understand functions and scope of production management.

CO2: Describe the use of routing and scheduling, dispatching and maintenance.

CO3: Recognize the plant location and plant layout problems.

CO4: Analyze the need of works study, time study and work measurement.

# COURSE: MANAGEMENT ACCOUNTING - I

CO1: Develop the ability to collect, analyze and communicate the quantitative and non-quantitative information.

CO2: Assist the management in making more effective planning and control decision.

CO3: Compare and contrast the basic management accounting concept and their application in managerial decision making.

CO4: Analyze and assess the financial situation of a firm with the help of ratio analysis.

#### COURSE: STRATEGIC MANAGEMENT

**CREDIT: 4** 

CO1: Understand the vision, mission and goals of strategic management.

CO2: Identify the corporate strategy.

CO3: Recognize the strategic control process.

CO4: Understand the elements of strategy.

#### **COURSE: MANAGERIAL ECONOMICS**

**CREDIT: 3** 

CO1: Compare how micro economics differ from macroeconomics. CO2: Analyze the theory of consumer behavior.

CO3: Understand different cost concepts.

#### COURSE: OFFICE MANAGEMENT

**CREDIT: 4** 

CO1: Understand the management of office, methods and environment. CO2: Identify the use of office layout and know its accommodation.

CO3: Recognize the use of office furniture, appliances and equipment's.

CO4: Handling of inward mail and outward mail service and to know the mechanical devices for written communication.

### COURSE: CUSTOMER RELATIONSHIP MANAGEMENT

**CREDIT: 3** 

CO1: Understand the need for CRM and customer loyalty.

CO2: Determine the ground work for effective use of CRM.

CO3: Identify the call center process and selection of CRM package.

### **COURSE: MEDICINAL CHEMISTRY**

CO1: Understand chemical constituents of medicinal plants

CO2: Compare the biological functions of Vitamins

CO3: Analyze the use of drugs for diseases

CREDIT: 3

en's Arts &

COURSE: MATERIALS MANAGEMENT

SEMESTER IV Islamiah Women's Arts and Sc Vaniyambadi - 635 752

**CREDIT: 4** 

CO1: Understand the importance of material management.

CO2: Analyze the tools of inventory control like ABC, VED and FSN analysis.

CO3: Understand the protection of store keeping and know the handling of materials.

CO4: Analyze the importance of import purchase procedure.

#### COURSE: MANAGEMENT ACCOUNTING - II

CREDIT: 4

CO1: Apply and analyze different types of activity-based management tools through the preparation of estimates.

CO2: Identify the cost-volume- profit techniques to determine optimal managerial decision.

CO3: Preparation of budgets and their role as a planning and control tools.

CO4: Evaluate and estimate the required cost for a production process.

#### **COURSE: BUSINESS ENVIRONMENT**

**CREDIT: 3** 

CO1: Understand the concept of business environment.

CO2: Recognize the provision of Indian constitution pertaining to business.

CO3: Apply the economic parameters like GDP, urbanization, per capita income etc.

CO4: Analyze the working of commercial banks, RBI and NBFC'S.

#### COURSE: OPERATIONS RESEARCH

**CREDIT: 3** 

CO1: Explain about assignment transportation ,travelling salesman etc

CO2: Analyze the problem in mathematically and solve it graphically using simpler methods

CO3: Explain models from the verbal description

CO4: PERT and CPM to be applied in project management

CO5: Explain the group replacement policy

### COURSE: ORGANIZATIONAL BEHAVIOUR

**CREDIT: 4** 

CO1: Identify the need of behavior in organization.

CO2: Analyze the use of group cohesiveness and group dynamics.

CO3: Recognize how the leadership styles are followed in the organization.

CO4: Understand the theories of motivation.

CO5: Evaluate the culture and conflicts prevail in the organization.

### COURSE: TOTAL QUALITY MANAGEMENT

CO1: Identify the basic concept of total quality from design assurance to service assurance.

CO2: Understand the implication of quality on business and implement quality programs.

CO3: Realize the importance of quality and manage the quality improvement in businessellege Vanivambadi - 635 752.

CREDIT: 3

COURSE: CHEMISTRY IN EVERYDAY LIFE

**CREDIT: 2** 

CO1: Understand the basics of chemistry in everyday life

CO2: Identify the food colors.

CO3: Analyze diary chemistry

#### SEMESTER V

#### COURSE: MARKETING MANAGEMENT

**CREDIT: 4** 

CO1: Understand the fundamentals of marketing and its approaches.

CO2: Identify buying motives and factors influencing it.

CO3: Differentiate consumer goods from industrial goods.

CO4: Understand new product development and branding.

#### **COURSE: BUSINESS LAW**

**CREDIT: 4** 

CO1: Understand the formation and elements of contract and agreements.

CO2: Apply basic legal knowledge to business transaction.

CO3: Analyze the nature and terminology of the contract of law.

CO4: Recognize the genuineness of assent in contract formation.

CO5: Understand the legality and statute of frauds in contracts.

#### COURSE: COST ACCOUNTING

**CREDIT: 4** 

CO1: Understand the importance of cost ascertainment, cost reduction and control.

CO2: Compare and contrast the Financial Accounting with Cost Accounting

CO3: Prepare the Cost sheet, Tender and Quotations.

CO4: Determine the Levels of stock and methods of pricing of material issues.

CO5: Compute the various methods of wage payment and Incentive plan

CO6: Classify and analyze the Primary and Secondary Distribution of Overheads.

### COURSE: COMPUTER APPLICATION IN BUSINESS

CREDIT: 4

CO1: Understand about Information Technology and its components

CO2: Learn Microsoft Office Word and it's applications in business

CO3: Implement Microsoft Excel and how different calculations can be done by using it injumber

CO4: Understand Microsoft PowerPoint in Business and learned how it is useful for Business

Presentations.

CO5: Understand working of EDI, E-Commerce, Smart Cards and its various applications.

#### COURSE: HUMAN RESOURCE MANAGEMENT

**CREDIT: 3** 

CO1: Understand the various kinds of HRM.

CO2: Explain the procedure of recruitment and methods of selection.

CO3: Outline the importance of training and development.

CO4: Describe the performance appraisal, transfer and career development.

#### **COURSE: E - BUSINESS**

**CREDIT: 3** 

CO1: Understand E-Commerce Framework Technologies

CO2: Apply different communication Networks used in Business

CO3: Demonstrate Network Security Tools and Firewalls

CO4: Understand of Electronic Data Interchange and its Application in Business

CO5: Apply of different Electronic Payment System.

#### **SEMESTER VI**

### COURSE: INDUSTRIAL RELATIONS AND LABOUR LAWS

**CREDIT: 4** 

CO1: Know the development and the judicial setup of labour law.

CO2: Understand the salient features of health, safety, welfare and wage legislations.

CO3: Know the laws related to working conditions in different sectors.

CO4: Identify the terms of collective bargaining in the light of industrial conflicts

### COURSE: ENTREPRENEURIAL DEVELOPMENT

**CREDIT: 4** 

CREDIT: 6 nivambadi

CO1: Understand the concept and classification of the entrepreneurs.

CO2: Identify the factors influencing entrepreneurship.

CO3: Describe the role played by government and non-government agencies.

CO4: Design and develop business idea and its techniques.

CO5: Identify the various opportunities and evaluate the feasibilities of the project.

CO6: Understand the project appraisal methods and techniques.

#### COURSE: GROUP PROJECT

CO1: Develop the teamwork capacity among the students.

CO2: Understand the various functions of the organization during the training period

CO3: Identify and collect the various sources of data through primary and secondary data college

Vaniyambadi - 635 752.

CO4: Understand the various statistical tools.

CO5: Apply the suitable statistical tool and analyze the result

CO6: Identify the findings and suggestions

CO7: Able to prepare the report writing

CO8: Outline the summary to the project

#### **COURSE: INVESTMENT MANAGEMENT**

**CREDIT: 3** 

CO1: Understand the Investment objectives and its management

CO2: Define mutual funds, real assets, modern investments

CO3: Classify risk and computations of expected risks and returns

CO4: Evaluate time value for money, bond valuations, capital assets pricing

CO5: Outline various investment analysis

#### COURSE: RURAL MARKETING MANAGEMENT

**CREDIT: 3** 

CO1: Understand the rural marketing environment.

CO2: Identify the new product development and product strategy.

CO3: Analyze the rural pricing strategy.

CO4: Recognize the rural distribution system.

### COURSE: CREATIVITY AND INNOVATION

**CREDIT: 3** 

CO1: Understand creativity, innovation and convergent thinking.

CO2: Recognize the thinking hats method and brain storming.

CO3: Analyze the attitude towards lateral thinking.

Principal

Principal

Vaniyalslamian Women's Arts and Science College

Vaniyambadi - 635 752.

# DEPARTMENT OF COMPUTER APPLICATION B.C.A

### PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1: Able to develop Software and can serve as a Software developer and Programmer.

PSO2: Able to serve as the Software Professional in different IT sectors with enhanced knowledge of Software.

PSO3:Understand the Networking concepts and can serve as a Network Infrastructure Developer.

PSO4: Able to serve as a Database developer and also as DBMS Administrator by thoroughly learning DBMS.

PSO5: Able to serve as the Web Designers/Website Developers by knowing various Web Development Software.

PSO6: Able to present their innovations in more unique way by using Software.

#### COURSE OUTCOME

#### SEMESTER I

#### COURSE: PROGRAMMING IN C

**CREDIT: 4** 

CO1: The Student will be able to understand the concepts of Constants, Variables, and Data Types, Operators and Expressions

CO2: The Student will be able to understand the concepts of Managing Input and Output Operations, Decision Making and Branching, Decision Making and Looping.

CO3: The Student will be able to understand the concepts of Arrays, Character Arrays and Strings, User Defined Functions.

CO4:The Student will be able to understand the concepts of Structure and Unions, Pointers, File Management in C.

CO5:The Student will be able to understand the concepts of Fundamental Algorithms, Factoring Methods.

### COURSE: PROGRAMMING IN C LAB

**CREDIT: 2** 

CO1: Enhance the analyzing and problem solving skills and use the same for writing programs in C.

CO2: Write diversified solutions, draw flowcharts and develop a well-documented and indented program according to coding standards.

| Solution | Solution

CO3: Learn to debug a given program and execute the C program.

CO4: To have enough practice the use of conditional and looping statements.

CO5: To implement arrays, functions and pointers.

#### **COURSE: MATHEMATICAL FOUNDATIONS I**

**CREDIT: 3** 

CO1: Understand set theory

CO2: Learn Symbolic Logic concepts.

CO3: Understand Binary Operation, Differentiation, Two dimensional analytical geometry.

CO4: Implement concepts to convert between metric, household and Apothecary Units.

#### **SEMESTER-II**

#### COURSE: C++ & DATA STRUCTURE

**CREDIT: 4** 

CO1: The Student will be able to understand the concepts of object oriented programming Apply structure and inline functions.

CO2: The Student will be able to understand the concepts of the types of inheritances and Applying various levels of Inheritance for real time problems. Apply the OOPs concepts class and object.

CO3: Understand Explain the file concept and exception handlings in C++

CO4: The Student will be able to understand the concepts of Stacks and Queue using array and pointers.

CO5: The Student will be able to understand the concepts of Recursion, Binary Search Tree and graphs.

CO6: The Student will be able to understand the concepts of Sorting and Searching Algorithms.

### COURSE: C++ AND DATA STRUCTURES LAB

CREDIT: 2

CO1: Understand the creating and deleting the objects with the concepts of Constructors and Destructors.

CO2: Demonstrate the Polymorphism concepts and Operator Overloading

CO3: Understand basic Data Structures such as Arrays, Linked List, Stacks, Queues, Doubly Linked List and Infix to Postfix Conversion.

CO4: Apply algorithm for solving problems like Sorting and Searching.

CO5: Apply algorithm and use Graphs and Trees as tools to visualize and simplify problems.

Principal
Islamiah Women's Arts and Science College
Vaniyambadi - 635 752.

**COURSE: MATHEMATICAL FOUNDATIONS II** 

**CREDIT: 5** 

CO1: Understand Matrix, Skew-Symmetric Matrix

CO2: Understand Cayley-Hamilton theorem

CO3: Analyze definite integrals

CO4: Implement analytical geometry

CO5: Understand 3-Dimension

CO6: Compare area and volume using Integration CO7: Analyze Planes and Straight Lines

CO8: Analyze Hermition and Skew-Hermition

#### **SEMESTER - III**

#### **COURSE: JAVA PROGRAMMING**

CREDIT: 3

CO1: Use an integrated development environment to write, compile, run and test simple object oriented java programs.

CO2: Read and make elementary modifications to java programs that solve real- world problems.

CO3: Validate input in a java program.

CO4: Identify and fix defects and common security issues in code.

#### **COURSE: E-COMMERCE**

CREDIT:4

CO1: Understand traditional and electronic business applications

CO2: Analyze network infrastructure For E-Commerce

CO3: Understand network security and Firewalls

CO4: Analyze EDI and its applications

CO5: Understand about Encrypted documents

# COURSE: RESOURCE MANAGEMENT TECHNIQUES

CREDIT:4

CREDIT: 3

CO1: Understand linear programming problem

CO2: Analyze Assignment and transportation problem

CO3: Learn sequencing Model

CO4: Learn replacement Model

CO5: Understand networking analysis

### COURSE: JAVA PROGRAMMING LAB

CO1: Implement Package, Inheritances and interfaces

CO2: Analyze Flow, Border and Grid Layouts Validate input in a java program and Science College Vanivambadi - 635 752.

Vaniyambadi

CO3: Evaluate Dialogs, Menu and Frame

CO4: Implement User defined Exception Handling

#### COURSE: FINANCIAL ACCOUNTING

**CREDIT! 4** 

CO1: Understand financial Accounting concept

CO2: Understand the causes of depreciation

CO3: Analyze calculation of bills exchange and trade bills

CO4: Compare single entry and double entry system.

CO5: Understand profit and loss accounting

#### COURSE: DESIGN AND ANALYSIS OF ALGORITHM

**CREDIT: 3** 

CO1: Understand the concepts of Algorithm and Analysis.

CO2: Learn various advanced design and analysis techniques such as greedy algorithms, dynamic programming.

CO3: Understand different computational models and various complexity measures.

CO4: Analyze the complexity/ performance of different algorithms.

#### COURSE: TRAINING AND DEVELOPMENT

**CREDIT: 2** 

CO1: Understand the training needs and responsibilities of on the job and Off the job training.

CO2: Understand importance of career Planning.

CO3: Understand psychology of the learning process on which training is based.

CO4: Analyze the training needs of an organization.

#### SEMESTER - IV

### **COURSE: DATABASE MANAGEMENT SYSTEMS**

CO1: Understand the basic concepts of Database.

CO2: Analyze different data models.

CO3: Evaluate SQL and PL/SQL concepts

CO4: Implement Procedures, Functions, Triggers and Cursors.

### COURSE: ENTERPRISE RESOURCE PLANNING

CO1: Describe about business process under ERP system.

CO2: Understand the system of Industrial Credit Management system Principal

CO3: Define the various function areas

CREDIT: 3

**CREDIT: 4** 

nent system Principal Islamiah Women's Arts and Science College

Vaniyambadi - 635 752.

\* Vaniyambadi-2

CO4: Understand the concept of human resource management

CO5: Compare and contrast traditional system and ERP system

#### **COURSE: DECISION SUPPORT SYSTEM**

**CREDIT: 4** 

CO1: Understand the concepts of Decision Support system (DSS) and its affect on management.

CO2: Define the purpose of DSS and Data Warehousing.

CO3: Compare data, information and knowledge as they apply to DSS.

CO4: Define and describe the usefulness of the neural network.

CO5: Define and differentiate between the data warehouse, data marts and data mining.

#### **COURSE: RDBMS LAB**

**CREDIT: 3** 

CO1: Implement Simple Queries to fetch data from table.

CO2: Evaluate queries used to fetch data from table using aggregate functions and set operations.

CO3: Compare and Contrast Trigger Before and After

CO4: Implement Functions and Procedures in PL/SQL.

#### COURSE: FINANCIAL ACCOUNTING II

**CREDIT: 6** 

CO1: Understand different accounting methods

CO2: Evaluate department and branch account CO3: Compute partnership account

CO4: Analyze the procedure of dissolution of partnership form

CO5: Understand hire purchase and installation accounts.

### COURSE: COMPUTER ORGANISATION AND ARCHITECTURE

**CREDIT: 3** 

CREDIT: 2

CO1: Understand the basic computer architecture.

CO2: Compare the different Addressing Modes

CO3: Analyze Direct Memory Access

CO4: Compare and Contrast Memory Management

### COURSE: MANAGEMENT CONCEPTS

CO1: Understand the functions and responsibilities of managers.

CO2: Analyze tools and techniques to be used in the performance of the managerial job.

CO3: Analyze and understand the environment of the organization.

CO4: To develop cognizance of the importance of management principles.

Islamiah Women's Arts and Science College Vanıyambadi - 635 752.

#### SEMESTER - V

#### COURSE: MOBILE APPLICATIONS DEVELOPMENT

**CREDIT:3** 

CO1: Acquire knowledge of Mobile Applications Development

CO2: Understand Eclipse and Android Studio

CO3: Implement mobile applications development in Emulator

CO4: Understand Mobile databases

CO5: Understand Android Services and Android User Interface

#### **COURSE: OPERATING SYSTEM**

**CREDIT:3** 

CO1: Analyze various operating system services

CO2: Compare and contrast various scheduling algorithm

CO3: Understand memory management techniques

CO4: Implement various file management techniques

#### COURSE: DATA COMMUNICATION AND NETWORK

**CREDIT: 2** 

CO1: Understand data communication and prepare them for better computer networking

CO2: Prepare logical and physical network drawings for fairly simple networks, specifying network and link types, plus costs

CO3. Evaluate a java program using javadoc.

### COURSE: MOBILE APPLICATIONS DEVELOPMENT LAB

CREDIT: 3

CO1: Implement Basic Android Applications

CO2: Implement Activity, Intent, Spinner

CO3: Understand Android Studio and Eclipse

CO4: Implement Progress Bar, Gaming Apps, Alert Dialog

### COURSE: OPERATING SYSTEM LAB

CO1: Implement various scheduling algorithm concept

CO2: Analyze producer consumer problem using semaphore

CO3: Implement memory management techniques

CO4: Implement a program for system calls

CREDIT: 3

Islamiah Women's Arts and Science College Vanıyambadi - 635 752.

S Arts & So

Vanivambad

#### **COURSE: DATA MINING**

**CREDIT: 3** 

CO1: Understand the concepts of data mining and data models

CO2: Acquire good knowledge of data pre processing.

CO3: Understand the concept of data classification.

CO4: Understand the concept of data cluster analysis.

#### **COURSE: SOFTWARE ENGINEERING**

**CREDIT: 3** 

CO1: Understand Software Engineering

CO2: Analyze different Process Models like Waterfall Model, Evolutionary Process Model

CO3: Explain about the Data Engineering and System Architecture Design

CO4: Compare the Black Box and White Box Testing

CO5: Analyze the Project Management.

#### **SEMESTER - VI**

#### **COURSE: CLOUD COMPUTING**

**CREDIT: 5** 

CO1: Understand the basic functions, principles and concepts of cloud systems.

CO2: Understand the basic concepts of cloud computing.

CO3: Determine the various services available for developing cloud.

CO4: Troubleshoot the various securities in cloud.

CO5: Evaluate the programming model technique available in cloud.

CO6: Acquire sufficient knowledge about the cloud.

### COURSE: OPEN SOURCE PROGRAMMING

**CREDIT: 4** 

CO1: Understand the basic concepts of HTML5&CSS

CO2: Analyze various Linux commands & security models

CO3: Discussion on MYSQL and PHP database connectivity

CO4: Evaluate PHP Controls, structures and arrays

CO5: Implement basic form processing with PHP and MYSQL

COURSE: ASPINET LAR

CO1: Implement validation controls.

CO2: Implement Web server controls.

CO3: Implement ADO.NET and how to access dafabase

CO4: Evaluate Ad rotator programs.

CREDIT: 3

Islamiah Women's Arts and Science College Vanıyambadi - 635 752.

#### COURSE: OPEN SOURCE PROGRAMMING LAB

**CREDIT: 3** 

CO1: Implement frames & tables in HTML

CO2: Implement various CSS styles and list concept.

CO3: Evaluate basic shell programs

CO4: Implement cookies and session concept

#### **COURSE: MOBILE COMPUTING**

**CREDIT: 3** 

CO1: Acquire Good Knowledge of Wireless Communication to Students.

CO2: Understand Fundamentals of Wireless Communication.

CO3: Analyze Security, Mobility, Scalability and Their Unique Characteristics in Wireless

Network.

CO4: Apply Knowledge of TCP/IP extension in Mobile computing.

#### **COURSE: MULTIMEDIA SYSTEMS**

**CREDIT: 3** 

CO1: Understand the concept of Multimedia

CO2: Compare different medium like text, audio, video, graphics and animation.

CO3: Analyse Application program interface

CO4: Acquire good knowledge about different Multimedia Software

#### **COURSE: ASP.NET**

**CREDIT: 3** 

CO1: Understand basic concepts of ASP.NET.

CO2: Evaluate different validation controls.

CO3: Analyze Architecture of ADO.net.

CO4: Understand how to access database in web application.

Principal Principal Vaniyambadi - 635 752.

#### BACHELOR OF COMPUTER SCIENCE

### PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1: Develop student's computer knowledge, their basic understanding of software commonly used in Educational and IT Sectors.

PSO2: Understand how to organize information accurately by using the different software available to perform activities accurately and quickly.

PSO3: Understand how to present their innovations in more unique way by using Software.

PSO4: Develop the various IT skills to the electronic databases. Use the Systems Analysis Design paradigm to critically analyze a problem.

PSO5: Solve the problems in the Information Technology environment (Networking Concepts and their broad usages)

PSO6: Understand how to function effectively as a team to accomplish a task of Software Development.

#### COURSE OUTCOME

#### SEMESTER I

#### COURSE: PROGRAMMING IN C

CREDIT: 4

CO1: The Student will be able to understand the concepts of Constants, Variables, and Data Types, Operators and Expressions

CO2: The Student will be able to understand the concepts of Managing Input and Output

Operations, Decision Making and Branching, Decision Making and Looping.

CO3: The Student will be able to understand the concepts of Arrays, Character Arrays and Strings, User Defined Functions.

CO4: The Student will be able to understand the concepts of Structure and Unions, Pointers, File Management in C.

CO5:The Student will be able to understand the concepts of Fundamental Algorithms, Factoring Methods.

### COURSE: PROGRAMMING IN C LAB

CREDIT: 2

CO1: Enhance the analyzing and problem solving skills and use the same for writing programs in C.

CO2: Write diversified solutions, draw flowcharts and develop a well-documented and indented Islanday Women's Arts and Science College program according to coding standards.

Vaniyambadi

Vanıyambadi - 635 752.

CO3: Learn to debug a given program and execute the C program.

CO4: To have enough practice the use of conditional and looping statements.

CO5: To implement arrays, functions and pointers.

#### **COURSE: MATHEMATICAL FOUNDATIONS I**

**CREDIT: 3** 

CO1: Understand set theory

CO2: Learn Symbolic Logic concepts.

CO3: Understand Binary Operation, Differentiation, Two dimensional analytical geometry.

CO4: Implement concepts to convert between metric, household and Apothecary Units.

#### SEMESTER II

#### COURSE: C++ & DATA STRUCTURE

**CREDIT: 4** 

CO1: The Student will be able to understand the concepts of object oriented programming Apply structure and inline functions.

CO2: The Student will be able to understand the concepts of the types of inheritances and Applying various levels of Inheritance for real time problems Apply the OOPs concepts class and object.

CO3: Understand Explain the file concept and exception handlings in C++

CO4: The Student will be able to understand the concepts of Stacks and Queue using array and pointers.

CO5: The Student will be able to understand the concepts of Recursion, Binary Search Tree and graphs.

CO6: The Student will be able to understand the concepts of Sorting and Searching Algorithms.

# COURSE: C++ AND DATA STRUCTURES LAB

CREDIT: 2

CO1: Understand the creating and deleting the objects with the concepts of Constructors and Destructors.

CO2: Demonstrate the Polymorphism concepts and Operator Overloading

CO3: Understand basic Data Structures such as Arrays, Linked List, Stacks, Queues, Doubly Linked List and Infix to Postfix Conversion.

CO4: Apply algorithm for solving problems like Sorting and Searching.

CO5: Apply algorithm and use Graphs and Trees as tools to visualize and simplify problems.

aniyambadi

Princilar amiah Women's Arts and Science College Vanıyambadi - 635 752.

### COURSE: MATHEMATICAL FOUNDATIONS II

**CREDIT: 5** 

CO1: Understand Matrix, Skew-Symmetric Matrix

CO2: Understand Cayley-Hamilton theorem

CO3: Analyze definite integrals

CO4: Implement analytical geometry

CO5: Understand 3-Dimension

CO6: Compare area and volume using Integration

CO7: Analyze Planes and Straight Lines

CO8: Analyze Hermition and Skew-Hermition

# SEMESTER - III

### COURSE: JAVA PROGRAMMING

**CREDIT: 3** 

CO1: Use an integrated development environment to write, compile, run and test simple object oriented java programs.

CO2: Read and make elementary modifications to java programs that solve real- world problems.

CO3: Validate input in a java program.

CO4: Identify and fix defects and common security issues in code.

# COURSE: JAVA PROGRAMMING LAB

CREDIT: 3

CO1: Implement Package, Inheritances and interfaces

CO2: Analyze Flow, Border and Grid Layouts Validate input in a java program

CO3: Evaluate Dialogs, Menu and Frame

CO4: Implement User defined Exception Handling

# COURSE: STATISTICAL METHODS & THEIR APPLICATIONS I

Arts & S

Vaniyambar

**CREDIT:4** 

CO1: Understand diagrammatic and graphical representation of data.

CO2: Implement Mean, Mode, Median

CO3: Evaluate skewness, co-efficient of skewness

CO4: Implement correlation, regression analysis

CO5: Understand different statistical method

slamiah Women's Arts and Science College Vanıyambadi - 635 752.

## COURSE: DESIGN AND ANALYSIS OF ALGORITHM

**CREDIT: 3** 

CO1: Understand concepts of Algorithm and Analysis.

CO2: Learn various advanced design and analysis techniques such as greedy algorithms, dynamic programming.

CO3: Understand different computational models and various complexity measures.

CO4: Analyze the complexity/ performance of different algorithms.

### **COURSE: BASIC MATHEMATICS**

CREDIT:2

CO1: Understand power sets, equality of sets

CO2: Understand binary, octal and hexadecimal numbers

CO3: Evaluate logical statements and connectives

CO4: Understand type of matrices

### **SEMESTER-IV**

### COURSE: DATABASE MANAGEMENT SYSTEMS

**CREDIT: 3** 

CO1: Understand the basic concepts of Database.

CO2: Analyze different data models.

CO3: Evaluate SQL and PL/SQL concepts

CO4: Implement Procedures, Functions, Triggers and Cursors.

### **COURSE: RDBMS LAB**

CREDIT: 3

CO1: Implement Simple Queries to fetch data from table.

CO2: Evaluate queries used to fetch data from table using aggregate functions and set operations.

Vaniyambadi

CO3: Compare and Contrast Trigger Before and After

CO4: Implement Functions and Procedures in PL/SQL.

# COURSE: STATISTICAL METHODS & THEIR APPLICATIONS II

CREDIT:4

CO1: Implement Curve fitting methods

CO2: Understand Baye's Theorem

CO3: Understand Binomial, Poisson, Normal distribution

CO4: Implement test of significance

CO5: Understand one and two way classification.

Principal niah Women's Arts and Science College Vanıyambadı - 635 752. **COURSE: STATISTICS PRACTICAL** 

CREDIT:2

CO1: Implement Skewness and Kurtosis

CO2: Understand Correlation and Regression

CO3: Understand Curve Fitting

CO4: Evaluate fitting of distributions - Binomial, Poisson, Normal

COURSE: COMPUTER ORGANISATION AND ARCHITECTURE

CREDIT: 3

CO1: Understand the basic computer architecture.

CO2: Compare the different Addressing Modes

CO3: Analyze Direct Memory Access

CO4: Compare and Contrast Memory Management

COURSE: FOUNDATION MATHEMATICS FOR COMPETITVE EXAMS CREDIT:2

CO1: Understand ratio and proportions

CO2: Understand profit and loss, discounts

CO3: Implement Simple and Complex interest

CO4: Understand time, distance and work

SEMESTER - V

COURSE: MOBILE APPLICATIONS DEVELOPMENT

**CREDIT: 3** 

CO1: Acquire knowledge of Mobile Applications Development

CO2: Understand Eclipse and Android Studio

CO3: Implement mobile applications development in Emulator

CO4: Understand Mobile databases

CO5: Understand Android Services and Android User Interface

COURSE: OPERATING SYSTEM

CO1: Analyze various operating system services

CO2: Compare and contrast various scheduling algorithm

CO3: Understand memory management techniques

CO4: Implement various file management techniques

COURSE: DATA COMMUNICATION AND NETWORK

CO1: Understand data communication and prepare them for better computer networking

Islamiah Women's Arts and Science College Vanıyambadı - 635 752.

CREDIT: 3

aniyambadi

**CREDIT: 2** 

CO2: Prepare logical and physical network drawings for fairly simple networks, specifying network and link types, plus costs

CO3. Evaluate a java program using javadoc.

### COURSE: MOBILE APPLICATIONS DEVELOPMENT LAB

**CREDIT: 3** 

CO1: Implement Basic Android Applications

CO2: Implement Activity, Intent, Spinner

CO3: Understand Android Studio and Eclipse

CO4: Implement Progress Bar, Gaming Apps, Alert Dialog

#### COURSE: OPERATING SYSTEM LAB

**CREDIT: 3** 

CO1: Implement various scheduling algorithm concept

CO2: Analyze producer consumer problem using semaphore

CO3: Implement memory management techniques

CO4: Implement a program for system calls

### **COURSE: DATA MINING**

CREDIT: 3

CO1: Understand the concepts of data mining and data models

CO2: Acquire good knowledge of data pre processing.

CO3: Understand the concept of data classification.

CO4: Understand the concept of data cluster analysis.

### COURSE: SOFTWARE ENGINEERING

CREDIT: 3

CO1: Understand Software Engineering

CO2: Analyze different Process Models like Waterfall Model, Evolutionary Process Model

CO3: Understand about the Data Engineering and System Architecture Design

CO4: Compare the Black Box and White Box Testing

CO5: Analyze the Project Management.

#### SEMESTER - VI

# **COURSE: CLOUD COMPUTING**

CO1: Understand the basic functions, principles and concepts of cloud systems,

CO2: Understand the basic concepts of cloud computing.

CO3: Determine the various services available for developing cloud's Aris and Scientific CO3: Determine the various services available for developing cloud's Aris and Scientific CO3:

CREDIT: 5

de College

Vaniyambadi - 635, 75

CO4: Troubleshoot the various securities in cloud.

CO5: Evaluate the programming model technique available in cloud.

CO6: Acquire sufficient knowledge about the cloud.

#### COURSE: OPEN SOURCE PROGRAMMING

**CREDIT: 4** 

CO1: Understand the basic concepts of HTML5&CSS

CO2: Analyze various Linux commands & security models

CO3: Discussion on MYSQL and PHP database connectivity

CO4: Evaluate PHP Controls, structures and arrays

CO5: Implement basic form processing with PHP and MYSQL

### COURSE: ASP.NET LAB

**CREDIT: 3** 

CO1: Implement validation controls.

CO2: Implement Web server controls.

CO3: Implement ADO.NET and how to access database

CO4: Evaluate Ad rotator programs.

#### COURSE: OPEN SOURCE PROGRAMMING LAB

CREDIT: 3

CO1: Implement frames & tables in HTML

CO2: Implement various CSS styles and list concept.

CO3: Evaluate basic shell programs

CO4: Implement cookies and session concept

### **COURSE: MOBILE COMPUTING**

**CREDIT: 3** 

CO1: Acquire Good Knowledge of Wireless Communication to Students.

CO2: Understand Fundamentals of Wireless Communication.

CO3: Analyze Security, Mobility, Scalability and Their Unique Characteristics in Wireless

Network

CO4: Apply Knowledge of TCP/IP extension in Mobile computing.

# COURSE: MULTIMEDIA SYSTEMS

**CREDIT: 3** 

CO1: Understand the concept of Multimedia

CO2: Compare different medium like text, audio, video, graphics and animation.

CO3: Analyse Application program interface

CO4: Acquire good knowledge about different Multimedia Software Arts and Science

Vaniyambadi - 635 752.

**COURSE: ASP.NET** 

**CREDIT: 3** 

CO1: Understand basic concepts of ASP.NET.

CO2: Evaluate different validation controls.

CO3: Analyze Architecture of ADO.net.

CO4: Understand how to access database in web application.

Principal
Principal
Principal
Vaniyambadi - 635 752.

# M.Sc (Computer Science)

# PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1: Understand programming language easily with the help of Object Oriented Programming Concepts.

PSO2: Understand thoroughly how to use software, able to develop software for the Client.

PSO3: Able to built a complete software project, to design, analyze, built, code, test etc.

PSO4: Able to develop Software Solutions for Complex Problems.

PSO5: Understand the Networking concepts and can serve as a Network Infrastructure Developer.

PSO6: Able to Serve as a Database developer and also as DBMS Administrator by thoroughly learning DBMS.

PSO7: Able to Serve as the Web Designers/Website Developers by knowing various Web Development Software.

# **COURSE OUTCOME (CO)**

## SEMESTER I

# COURSE: RELATIONAL DATABASE MANAGEMENT SYSTEM

CREDIT: 3

CO1: Understand database concepts and database management system software

CO2: Understand major DBMS components and their function

CO3: Understand model an application's data requirements using conceptual modelling tools like ER diagrams and design database schemas based on the conceptual model.

CO4: Learn SQL commands to create tables and indexes, insert/update/delete data, and query data in a relational DBMS

CO5: Learn data-intensive application using DBMS APIs.

# COURSE: ENTERPRISE JAVA PROGRAMMING

**CREDIT: 3** 

CO1: Learn Applet Programming using various techniques

CO2: Learn applications development using Abstract Window Toolkit and Events

CO3: Learn update and retrieve the data from the databases using JDBC- ODBC

CO4: Develop server side programs in the form of Servlets

CO5: Build up Java Applications using collections and JSP Tags.

Samiah Women's Arts and Science College Vanıyambadi - 635 752.

### **COURSE: PROGRAMMING USING C#.NET**

**CREDIT: 3** 

CO1: Understand the differences between desktop application and web application.

CO2: Learn to construct classes, methods, and access modifier and instantiate objects.

CO3: Learn to create and manipulate GUI components in C# for windows application.

CO4: Understand code solutions and compile C# projects within the .NET framework.

CO5: Learn to build the desktop application with Database.

### COURSE: RELATIONAL DATABASE MANAGEMENT SYSTEM LAB CREDIT: 2

CO1: Learn to perform DDL, DML Operations

CO2: Implement Constraints

CO3: Understand Nested Queries and Joins

CO4: Implement Cursor, Trigger, Procedure

### COURSE: ENTERPRISE JAVA PROGRAMMING LAB

**CREDIT: 2** 

CO1: Understand Applet Programming

CO2: Implement JDBC and Servlet

CO3: Understand Client Server Networking

CO4: Understand Jasper Report Generation

#### COURSE: PROGRAMMING USING C# LAB

**CREDIT: 2** 

CO1: Understand Classes, Objects, Inheritance

CO2: Implement Windows Form Control

CO3: Implement Menu Handling

CO4: Understand ADO.NET Connection

# COURSE: COMPUTER ORGANIZATION

**CREDIT: 3** 

CO1: Understand the types of instructions and the organization of registers and memory

CO2: Analyze the translation model of assembly language to machine language.

CO3: Understand the micro-program by mapping the instructions.

CO4: Learn the types of computer organizations.

CO5: Understand the better way of processing by Parallel and Vector Process.

COURSE: PRINCIPLES OF INTERNET

CO1: Learn the basics of Internet.

CO2:Understand the concept of www

**CREDIT: 3** 

hen's Arts and Science College

ivambadi - 635 752.

CO3: Understand Firewall, Digital Certificate

CO4: Learn about Browsers

## **SEMESTER II**

### COURSE: ADVANCED ENTERPRISE JAVA PROGRAMMING

**CREDIT: 3** 

CO1: Understand JSP, JSF and Servlet using MVC approach.

CO2: Develop the web applications using the MVC framework provided by Apache Struts

CO3: Develop Enterprise web application using EJB.

CO4: Implement the Object-Relation Mapping technique using Hibernate

CO5: Understand aspect Oriented Programming using Spring and Spring MVC.

# COURSE: DESIGN AND ANALYSIS OF ALGORITHMS

**CREDIT: 3** 

CO1: Analyze the running time of the basic algorithms for those classic problems.

CO2: Understand the basic knowledge of algorithm design and its implementation.

CO3: Learn the key techniques of Divide-and-Conquer and Greedy Method.

CO4: Recognize the concept of Dynamic Programming and its algorithms

CO5: Understand Backtracking algorithms.

CO6: Understand Branch and Bound techniques for designing and analyzing algorithms.

# COURSE: WEB APPLICATION USING C# .NET

CREDIT: 3

CO1: Understand the differences between desktop and web application.

CO2: Learn classes, methods, and accessor and instantiate objects.

CO3: Learn to create and manipulate GUI components in C#.

CO4: Understand code solutions and compile C# projects within the .NET framework.

CO5: Learn to build own desktop application with Database

# COURSE: ADVANCED ENTERPRISE JAVA PROGRAMMING LAB

**CREDIT: 2** 

s Arts & Science

CO1: Understand JSP and MVC

CO2: Implement object oriented and collection mapping

CO3: Implement Association, Component and Inheritance Mapping

CO4: Understand Spring Actions and Spring MVC

COURSE: DESIGN & ANALYSIS OF ALGORITHM LAB

CO1: Implement Divide and Conquer Algorithm

CO2: Implement Greedy Method

HM LAB Principal CREDITING 201

Islamiah Women's Arts and Science College

Vanıyambadı - 635 752.

CO3: Implement Back tracking, Pin Backing

CO4: Implement Travelling Sales Person Problem

# COURSE: WEB APPLICATION USING C# .NET LAB

CREDIT: 2

CO1: Understand Web Configuration File

CO2: Implement Rich Controls, Components

CO3: Understand Data Access

CO4: Understand Custom Controls and Rich Controls

# **COURSE: CLOUD COMPUTING**

**CREDIT: 3** 

CO1: Understand the broad perceptive of cloud architecture and model.

CO2: Understand the concept of parallel and distributed computing

CO3: Understand the different technologies.

CO4: Understand the features of virtualization.

CO5: Learn to design the trusted cloud computing system with different cloud platforms

# COURSE: PRINCIPLES OF WEB DESIGN

**CREDIT: 3** 

CO1: Learn to combine basic HTML elements to create Web pages.

CO2: Understand the use of HTML tags and tag attributes to control a Web page's appearance.

CO3: Learn to add absolute URLs, relative URLs, and named anchors to Web pages.

CO4: Understand using tables and frames as navigational aids on a Web site.

CO5: Control appearance web pages by applying style sheet.

### SEMESTER III

# COURSE: DISTRIBUTED OPERATING SYSTEM

CREDIT: 5

CO1: Understand DOS, Features and Synchronization

CO2: Implement RPC Model, Server Management

CO3: Analyze Clock Synchronization and event ordering

CO4: Analyze configuration API

CO5: Implement Algorithms and Process Migration

# COURSE: SOFTWARE PROJECT MANAGEMENT

CO1: Understand the concepts of Software Project Management, Islamiah Women's Arts and Science College

CREDIT: 3

Vanıyambadi - 635 752,

CO3: Understand the concepts of ERP and DSS.

CO4: Acquire good Knowledge of software Project.

# **COURSE: MOBILE COMPUTING**

**CREDIT: 3** 

CO1: Acquire good knowledge of Wireless Communication

CO2: Understand fundamentals of Wireless Communication

CO3: Analyze Security, Mobility, Scalibility and their unique characteristics in Wireless Network.

CO4: Apply knowledge of TCP/IP extension in Mobile Computing.

### **COURSE: DESIGN AND ANALYSIS OF ALGORITHMS**

CREDIT: 3

CO1: Understand how to find complexity of algorithms

CO2: Analyze different Algorithms used to solve problems.

CO3: Understand backtracking methods used for solving Hamiltonian and Knapsack problem

My wimen's Arts &

CO4:Understand Dynamic programming concepts.

### COURSE: MOBILE COMPUTING LAB

CREDIT: 2

CO1: Implement Button, Text View and Edit Text

CO2: Implement Menus and Intents

CO3: Understand File I/O, RDBMS (SQLite/MySQL)

CO4: Implement Phone services (SMS, Call)

# COURSE: DESIGN AND ANALYSIS OF ALGORITHMS LAB

**CREDIT: 2** 

CO1: Understand Divide and Conquer, Sorting Methods

CO2: Implement 0/1 Knapsack problem and Shortest path algorithms

CO3: Implement Minimum cost spanning tree using Prims Algorithms

CO4: Implement N-Queues using Backtracking

#### COURSE: MINI PROJECT

CO1: Understand front end and back end

CO2: Understand project design.

CO3: Evaluate testing and its types.

CO4: Understand about software coding.

**CREDIT: 2** 

Vaniyambadi - 635 752.

# COURSE: SOFTWARE QUALITY ASSURANCE

**CREDIT: 3** 

CO1: Understand the role of SQA

CO2: Understand Software Configuration Management

CO3: Implement total quality management

CO4: Analyze Software quality assurance concepts

CO5: Evaluate ISO 9000 Model with SEI's CMM.

### **SEMESTER IV**

### **COURSE: PROJECT WORK**

CREDIT: 20

CO1: Acquire good knowledge of project management.

CO2: Understand about project planning.

CO3: Evaluate front end and back end

CO4: Understand about project design.

CO5: Analyze testing and its types.

CO6: Troubleshoot software coding.

CO7: Understand about software maintenance.

CO8: Evaluate project documentation.

CO9: Understand project software requirement specification.

CO10: Understand how to develop real time projects.

Principal Islamiah Women's Arts and

Islamiah Women's Arts and Science College Vanıyambadi - 635 752.

### DEPARTMENT OF MATHEMATICS

# PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO 1: Understand the Mathematical concepts and applications in the field of algebra, analysis, computational techniques, optimization, differential equations, engineering, finance and actuarial science.

PSO 2: Develop numerical aptitude applying both qualitative and quantitative knowledge for their future career.

PSO 3: Acquire good knowledge and understanding in advanced areas of Mathematics and Statistics, chosen by the students from the given courses.

### SEMESTER I

COURSE: ALGEBR A

**CREDIT: 3** 

CO1: Know the relationship between roots and coefficients.

CO2: Identify the nature of the roots of the given equation .

CO3: Evaluate sum to infinity of the given binomial, exponential and logarithmic series.

CO4:Identify the types of matrices and calculate the Eigen values of a given square matrix.

CO5: Know the number theory concepts.

COURSE: TRIGONOMETRY

**CREDIT: 3** 

CO1: Know the expansions of  $cosn\theta$ ,  $sinn\theta$  in powers of  $cos\theta$  and  $sin\theta$ 

CO2: Expand powers of sines and cosines of  $\theta$  in terms of functions of multiples of  $\theta$ 

CO3: Know the concept of hyperbolic functions

CO4: Find the summation of trigonometric series.

CO5: Know the logarithm of complex quantities

## COURSE: NUMERICAL METHODS-I CREDIT: 3

CO1: Know the Newton-Gregory forward and Backward formula

CO2: Solve the gauss forward and backward formula

CO3: Understand divided difference formula.

CO4:Find the lagranges method and reversion series method.

CO5:understand the Gauss -seidal method.

SEMESTER - II

**COURSE: CALCULUS** 

CO1: Determine extreme values of the given function

CO2: Know the concept of Cartesian and polar coordinates



Principal
Islamiah Women's Arts and Science College
Vaniyambadi CREDIT: 3

CO3: Gain the knowledge of curvature, evolutes and envelope concepts

CO4: Evaluate double and triple integrals

CO5: Solve integration problems

#### COURSE: ANALYTICAL GEOMETRY OF THREE DIMENSIONS

**CREDIT: 3** 

CO1: Know the equation of the plane and its applications

CO2: Gain the knowledge of straight line and its applications

CO3: Solve sphere related problems

CO4: Know the concepts of cone, right circular cone and enveloping cone

CO5: Know the concepts related to cylinder.

### COURSE: NUMERICAL METHODS-II

CREDIT: 3

CO1: Understand Newton forward & backward differences .

CO2: Understand Simpson's rule.

CO3: Solve the Linear difference Equations.

CO4: Understand Regula Falsi method.

CO5: Analyze Eulers & Picards method.

# COURSE: NUMERICAL METHODS (ALLIED PRACTICAL)

**CREDIT:2** 

CO1: Understand Gauss - jacobi method.

CO2: Understand Gauss - Elimination method.

CO3: Solve the Linear difference Equations.

CO4: Analyze Runge-Kutta's method.

#### SEMESTER III

### **COURSE: DIFFERENTIAL EQUATIONS**

**CREDIT: 4** 

CO1: Classifies the differential equations with respect to their order and linearity.

CO2: Determines the types of linear differential equation system.

CO3: Evaluate and apply linear differential equation of second order(and higher)

CO4: Identify the solution of differential equation. CO5: Compute the solution of Laplace

Transform.

#### COURSE: MATHEMATICAL STATISTICS -I

CO1: Apply discrete and continuous probability distributions, including requirements, mean and

making decisions

CO2: Describe binomial outcomes and compute probability of getting X success in N trials

CO3: Analysis the characteristic of different discrete and continuous distributions

CO4: Identify the type of statistical situation to which different distributions can be applied

CO5: Apply Poisson, exponential distribution to solve statistical problems CO6: Apply normal

probability distribution including standard normal curve calculations of appropriate areas

CO7:Apply different distribution to solve simple practical problems

### **COURSE: LINEAR PROGRAMMING**

**CREDIT: 3** 

CO1:Explain the applications of linear programming.

CO2: Compare and contrast the types of quantitative methods. CO3: Apply the solution methods for LP models.

CO4: Describe quantitative methods used in decision making

# COURSE: ELEMENTS OF FINANCIAL ACCOUNTING (NME)

**CREDIT: 2** 

CO1: Understand the system of financial accounting

CO2: Aquire the knowledge of debit and credit system

CO3: Compute the method of calculating depreciation

CO4: Define differenent types of bills of exchange.

#### SEMESTER IV

#### COURSE: VECTOR ANALYSIS AND FOURIER ANALYSIS

**CREDIT: 4** 

CO1:Define a Vector differentiation.

CO2:Describe the Divergence and Curl

CO3:Define the vector integration, line surface and volume integration.

CO4: Evaluate Gauss divergence theorem, Stoke's theorem and Green's theorem.

CO5:Define Fourier series and finding Fourier expansion of a periodic functions with period .

### COURSE: MATHEMATICAL STATISTICS -II

CREDIT: 4 S Arts & S

CO1:Evaluate and interpret the correlation between the variables

CO2:Evaluate the simple linear regression equation for a set of data

CO3:Compute employee the principles of linear regression and correlation, including least square method, predicting a particular value of Y for a given value of X and significance of the correlation

coefficient

CO4: Classify the construction of point and interval estimators migh Women's Arts and Science College

CO5:Evaluate the properties of estimators

Vaniyambadi - 635 752.

# COURSE: MATHEMATICAL STATISTICS (ALLIED PRACTICAL)

**CREDIT: 2** 

CO1: Analyze the statistical data using measures of central tendency, dispersion and location.

CO2: Compute correlation coefficient for raw and grouped data, rank correlation coefficient.

CO3:Apply test of significance for large and small sample.

# COURSE: MATHEMATICS FOR COMPETATIVE EXAMINATION-I CREDIT: 3

CO1:Identify short tricks, tips and logical methods on difficult problems.

CO2:Compare and contrast the right approach and easiest technique to tackle math problems.

CO3:Plan and find confident in cracking GMAT, SAT and other maths exams.

CO4:Formulate easiest trick for solving challenging problems of maths in right time.

### **COURSE: ADVERTISING AND SALESMANSHIP**

**CREDIT: 2** 

CO1:Acquire the knowledge of development of advertisement

CO2:Understand the concept of DAGMAR Approach.

CO3:Define advertisement copy, salesman report

CO4:Understand the quality of good salesman.

### SEMESTER V

#### COURSE: ABSTRACT ALGEBRA

CREDIT: 4

CREDIT: 4 's Arts &

Vaniyambadi

CO1:Understand the concept of group, subgroup, normal subgroup.

CO2: Explain the terms Isomorphism and Homomorphism.

CO3:Calculate Permutation, cycles and Transposition 4) Describe the characteristic of a ring, quotient ring.

CO4:Define the ideals and their existence with examples.

### **COURSE: REAL ANALYSIS -I**

CO1:Describe the basic differences between the rational and the real numbers.

CO2:Define countable and uncountable sets.

CO3: Compare open sets, closed sets and limit points of a set.

CO4: Determine the continuous functions, uniform continuous functions.

### COURSE: COMPLEX ANALYSIS -I

Islamiah Women' CREDITScience College Vanıyambadı - 635 752.

CO1:Identify the concept of complex integration and series

CO2: Solve problems in derivatives in first order differential equation.

CO3:Compare and contrast the concepts of C.R equation.

CO4: Formulate improper integrals involving conformal mapping.

CO5:Apply the methods of Mapping by elementary transformation.

COURSE: STATICS CREDIT: 4

CO1:Apply newton's second law in vector form to problems in more than one dimension.

CO2:Solve static problems in one dimension that involve one or more forces of gravity.

CO3:Compare and contrast problems relating to the motion and a projectile in the absence of speed.

CO4:Explain basic terms for the description of the motion of particles and fundamental laws of mechanics.

# COURSE: DYNAMICS CREDIT: 4

CO1:Identify and apply specific boundary conditions relevant to specific application

CO2: Analyse the results and draw the appropriate inferences

CO3:Apply Newton's second law in vector form to problems in more than one dimension

CO4:Evaluate mechanics problems in one dimension that involve one or more of the forces of gravity, friction and air resistance

CO5:Understand and use basic terms for the description of the motion of particles vector function and the fundamental laws of Newtonian mechanics

#### COURSE: GRAPH THEORY

**CREDIT: 3** 

CO1: Analyse concept of graphs, subgraphs, paths ,cycles ,cut vertex and cut edges.

CO2:Define degree, distance, diameter, matching.

CO3:Classify the vertices, edges, and loops of a graph.

CO4:Determine whether a graph is connected or disconnected.

CO5:Create both a path and a circuit through a graph' 6) Analyse the concepts of planar graphs.

# COURSE: MATHEMATICS FOR COMPETATIVE EXAMINATION-II

CREDIT: 3

CO1:Identify short tricks ,tips and logical method on difficult problems.

CO2:Compare and contrast right approach and earliest to tackle math problems,

CO3:Formulate earliest trick for solving challenging problems in time, work and distance.

CO4:Plan and find confident in cracking SAT, BANK EXAMIRATION AY EXAMINATION College math exams.

#### SEMESTER VI

### **COURSE: LINEAR ALGEBRA**

**CREDIT: 4** 

CO1:Understand the new terms Basis And Dimensions.

CO2: Analyze finite and infinite Dimensional vector spaces and Subspaces over a field including the Basis structure of vector Spaces

CO3: Compute Characteristic Roots and Characteristic vectors

CO4:Define Trace And Transpose

CO5: Analyz regular, singular and similar matrices

#### COURSE: REAL ANALYSIS II

**CREDIT: 4** 

CO1:Understand the basics of Real Analysis.

CO2:Define metric spaces, such as continuity, compactness, completeness and connectedness

CO3:Describe Limits and how they are used in sequence and series

CO4:Define Riemann Integral

CO5:Apply Taylors theorem.

#### COURSE: COMPLEX ANALYSIS -II

**CREDIT: 4** 

CO1:Identify the concept of complex integration and series

CO2:Solve problems in pure as well as in applied mathematics using complex analysis.

CO3:Compare and contrast the concepts of singularities and residues.

CO4: Formulate improper integrals involving trigonometric functions.

CO5:Apply the methods of complex analysis to evaluate definite integrals and infinite series.

### COURSE: PROGRAMMING IN C LANGUAGE

**CREDIT: 3** 

CO1:Understand Basic Concept Of Variables, Data Types.

CO2: Apply Operators Expression & Pre Processor.

CO3:Determine the Concept Of Arrays And Its Declarations & Uses.

CO4:Determine the User Define Return Values And Their Values. Understand The Structure And en's Arts & Scientist

Unions.

#### COURSE: PRACTICAL IN C LANGUAGE

CO1:Design A Program Using Looping Concepts

CO2: Create A Program For Counting Vowels & Consonants, Three Dimensional Arrays Company

Arrays Concepts

Islamiah Women's Arts and Science College

CREDIT:

CO3:Implement Program Using Fibonacci Scries & Factorials Numbers'ambadi - 635 752.

CO4:Design Program Using Sorting Concepts.

### COURSE: OPERATIONS RESEARCH

**CREDIT: 3** 

CO1:Identify and develop operational research model.

CO2:Apply three time estimates scheduling by PERT.

CO3:Determine sequencing problem.

CO4: Analyz Sequeueing theory by steady state analysis of M/M/1 And M/M/N.

### **COURSE: FUZZY MATHEMATICS**

**CREDIT: 3** 

CO1:Apply the fuzzy set theory on the statistical method which is given

CO2:Prepare applications on fuzzy logic membership function fuzzy inference systems

CO3:Decide and compare between Crips and fuzzy set theory

CO4: Calculate homomorphic image and Pre-image

### COURSE: MATHEMATICS FOR COMPETATIVE EXAMINATION-III

**CREDIT: 3** 

s Arts &

CO1:Identify short tricks ,tips and logical method on difficult problems.

CO2:Compare and contrast right approach and earliest to tackle math problems.

CO3:Formulate earliest trick for solving challenging problems of maths in area, volume and surface.

CO4:Calculate Time and distance problems

# M.Sc (Mathematics)

# PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO -1: Students enable to apply the concepts of Graph theory, Fuzzy and Operations Research in real life problems.

PSO -2: Prepare and Motivate Students for research studies in mathematics and related fields.

PSO -3: Assist students in preparing for competitive examinations like CSIR, SET etc.

# COURSE OUTCOME (CO)

### SEMESTER I

COURSE: ALGEBRA I

CO1: Demonstrate ability to think group actions critically by Cayley's theorem and apply

CO2: The Sylow's theorems to describe the structure of certain finite abelian groups know the internal and external direct product of groups. Also, apply the structure

CO3: Theorem on abelian groups to find the non-isomorphic abelian groups of certain orders college check the irreducibility of a given polynomial.

Vaniyambadi - 635 752.

CO4: know about module and difference between the algebraic structures, Group, Ring and Module..

CO5: know the Linear transformation in canonical forms. Also, the matrix form of lineartransformation and its properties.

### **COURSE: REAL ANALYSIS I**

**CREDIT: 5** 

CO1: understand the concept of functions of bounded variation.

CO2: Discuss the Riemann integration and to solve its related problems.

CO3: Analyse the sequences and series of function and their limits.

CO4: Acquire the knowledge of Infinite Series and Infinite products.

CO5: Have knowledge of uniform convergence of sequence and series.

# COURSE:ORDINARY DIFFERENTIAL EQUATIONS

**CREDIT: 4** 

CO1: Solve Second order linear differential equations.

CO2: Solve nth order differential equations.

CO3: Solve differential equations with variable coefficients.

CO4: Solve differential equations with regular singular points.

CO5: Examine the existence and uniqueness of solutions of differential equations.

CO6: Apply ODE problems for real timeapplications.

#### COURSE: PRINCIPLES OF INTERNET

**CREDIT: 3** 

CO1: Learn the basic of internet

CO2: Understand the concept of www

CO3: Understand firewall, digital certificate

CO4: Learn about Browsers

### **COURSE: GRAPH THEORY**

**CREDIT:4** 

CO1: Grasp features and properties of special graphs

CO2: Check the given graph is Eulerian or not. Also able to find the Eulerian circuit.

And Hamiltonian paths of the given graph.

CO3: Find the matching/perfect matching, connectivity of given graphs

CO4: Find independent sets and chromatic number of a given graph.

CO5: Apply coloring and planarity of graphs in real life problems

Islamiah Women's Arts and Science College Vanıyambadi - 635 752.

Vaniyambad

### SEMESTER - II

**COURSE: ALGEBRA II** 

**CREDIT: 5** 

CO1: Demonstrate ability to find the extension field of polynomials. Also, gets the clear understanding of algebraic extensions and algebraic closures.

CO2: Work with the consequences of Galois Theory such as insolubility of certain classes of equations

CO3: Work with finite fields and certain important theorems related to Finite division ring

CO4: Use of Frobenius integral quaternions and the Four square theorem

**COURSE: REAL ANALYSIS II** 

**CREDIT: 5** 

CO1: Understand the concept of Fouier series and Fourier integrals

CO2: Discuss the inverse function theorem and implicit function theorem

CO3: Analysethe functions of several variables

CO4: Analyse the concept of inner and outer measure

CO5: Acquire the knowledge of Lebesgue measure

# COURSE: PARTIAL DIFFERENCE EQUATION

CREDIT:

CO1: Formulate and solve Partial Differential Equations (PDE) and apply PDE problems for real time applications.

CO2: solve partial differential equations of first and second order.

CO3: Classify the partial differential equations.

CO4: Identify the canonical forms of the partial differential equations.

CO5: Analyse the solution of Laplace, Diffusion and Wave equations in Cylindrical and polar coordinates.

**COURSE: DIFFERENTIAL EQUATIONS** 

**CREDIT:3** 

Islamiah Women's Arts and CREDIT: 3

Vanıyambadi -

CO1: Solve problems on Linear Difference Equations of Higher order

CO2: Understand the system of Linear Difference Equations

CO3: Apply Z-transform techniques in difference equation.

CO4: Solve problems on Oscillation Theory and Asymptotic Behavior of Difference

COURSE: PRINCIPLES OF WEBDESIGN

CO1: Learn to combine basic HTML to create web pages

CO2: Understand the use of HTML, tags and tag attributes to control a web page's appearance.

CO3: Understand using tables and frames as navigational aids on a web site.

CO4: Learn to add absolute URLs, relative URLs and named anchors to web pages.

CO5: Control appearance web pages by applying style sheet.

#### SEMESTER III

### COURSE: COMPLEX ANALYSIS -I

**CREDIT: 5** 

CO1:Define conformal Mappings and Explain Cauchy's theorem.

CO2: Classify different types of singularities ,Zeros and Poles .

CO3:Understand the Concepts of Residue Theorem and Argument Principle

CO4: Evaluate Definite integrals and Harmonic Functions

CO5:Express Taylors series and Laurent series

CO6:Understand the concept of General Form of Cauchy's theorem. CO7:Express logarithmic derivative and Rouchers theorem.

### **COURSE: TOPOLOGY**

CREDIT: 5

CO1:Understand terms, definitions and theorems related to Topology.

CO2:Create new Topological spaces by using subspace, product and quotient Topologies.

CO3:Understand the structure of Topological spaces using continuous functions and

Homeomorphisms.

CO4:Demonstrate knowledge and understand the concept of metric spaces.

CO5: Apply theoretical concepts in Topology to understand real world applications.

## **COURSE: OPERATIONS RESEARCH**

**CREDIT: 5** 

CO1:Apply the integer programming models using branch and bound method.

CO2:Understand the best strategy on the basis of decision criteria under risk.

CO3:Understand the best strategy on the basis of decision criteria under the uncertainty.

CO4: Explain fundamental of dynamic programming.

CO5:Use deterministic and stochastic dynamic programming approaches.

CO6: Analyse the general non linear programming problem.

CO7: Create linear integer programming models and discuss the solution technique

### COURSE: PROBABILITY THEORY

CO1:Apply problem solving techniques to solving real world events.

CO2: Identify the appropriate probability distribution for a given discrete of continuous random variable and use its properties to calculate.

| Slamiah Women's Arts and Science College Wanniamhadi - 635 752.

CO3: Evaluate probabilities by applying laws and theoretical results.

CO4: Understand the concept of borelcantelli lemma.

....

CREDIT: 5

CO5:Describe difference between Binomial, poisson and Normal distribution.

CO6:Explain regression of the first and second type.

CO7:Apply normal probability distribution including standard normal curve calculation of appropriate area.

### COURSE: TENSOR ANALYSIS AND RELATIVITY THEORY

**CREDIT: 3** 

CO1: Analyse the concept of tensor calculus

CO2:Apply the special theory of relativity

CO3:Formulate the momentum energy, conservation of energy

CO4: Evaluate christofel symbols and their properties

CO5:Create mixed ,zero tensor,tensorfield,intrinsic differentiation.

Principal

Principal

Islamiah Women's Arts and Science College Vanıyambadi - 635 752.

#### **SEMESTER IV**

### COURSE: COMPLEX ANALYSIS -II

**CREDIT: 5** 

CO1:Define Riemann Theta function and Normal families.

CO2: Classify infinite Products and canonical Products

CO3:Explain Arzela's theorem and families of analytic function.

CO4: Classify simply periodic functions and doubly periodic functions

CO5:Evaluate differential Equations

CO6:Express Conformal mapping of polygons

### **COURSE: FUNCTIONAL ANALYSIS**

CREDIT: 5

CO1:Identify duals of some normed spaces.

CO2:Determine whether a real valued function defined on Cartesian product of a vector space.

CO3: Analyse normed space which is not an inner product space.

CO4:Describe orthogonal sets and total sets.

CO5: Analyse Hahn-Banach Theorem.

CO6:Explain Open mapping theorem.

CO7: Apply Closed Graph theorem.

# **COURSE: MATHEMATICAL STATISTICS**

CREDIT: 5

CO1:Define Sequential probability ratio test.

CO2: Apply most powerful test using Neymannpearson lemma.

CO3:Explain critical region, test function, two kinds of error, and power function.

CO4: Explain students t distribution and chi square distribution.

CO5:Describe properties of point estimator such that consistency, unbiasedness, sufficiency and efficiency.

CO6:Prepare ANOVA table for one way and two classification.

CO7:Apply test of significance for large and small sample.

### **COURSE: DIFFERENCE EQUATIONS**

CO1: Analyse the general theory of linear difference equation, linear homogeneous equation.

CO2:Explain the Jordan form of linear periodic system.

CO3:Apply the inverse z-transform and solution of difference equation.

CO4:Calculate the second order difference equation of asymptotic diagonal system.

CO5:Evaluate three term difference equation of non linear difference equation of self adjoint lege second order equation.

| slamiah Women's Arts and School of Self adjoint lege |
| slamiah Women's Arts and School of Self adjoint lege |
| slamiah Women's Arts and School of Self adjoint lege |
| slamiah Women's Arts and School of Self adjoint lege |
| slamiah Women's Arts and School of Self adjoint lege |
| slamiah Women's Arts and School of Self adjoint lege |
| slamiah Women's Arts and School of Self adjoint lege |
| slamiah Women's Arts and School of Self adjoint lege |
| slamiah Women's Arts and School of Self adjoint lege |
| slamiah Women's Arts and School of Self adjoint lege |
| slamiah Women's Arts and School of Self adjoint lege |
| slamiah Women's Arts and School of Self adjoint lege |
| slamiah Women's Arts and School of Self adjoint lege |
| slamiah Women's Arts and School of Self adjoint lege |
| slamiah Women's Arts and School of Self adjoint lege |
| slamiah Women's Arts and School of Self adjoint lege |
| slamiah Women's Arts and School of Self adjoint lege |
| slamiah Women's Arts and Self adjoint lege |
| slamiah Women's Arts and Self adjoint lege |
| slamiah Women's Arts and Self adjoint lege |
| slamiah Women's Arts and Self adjoint lege |
| slamiah Women's Arts and Self adjoint lege |
| slamiah Women's Arts and Self adjoint lege |
| slamiah Women's Arts and Self adjoint lege |
| slamiah Women's Arts and Self adjoint lege |
| slamiah Women's Arts and Self adjoint lege |
| slamiah Women's Arts and Self adjoint lege |
| slamiah Women's Arts and Self adjoint lege |
| slamiah Women's Arts and Self adjoint lege |
| slamiah Women's Arts and Self adjoint lege |
| slamiah Women's Arts and Self adjoint lege |
| slamiah Women's Arts and Self adjoint lege |
| slamiah Women's Arts and Self adjoint lege |
| slamiah Women's Arts and Self adjoint lege |
| slamiah Women's Arts and Self adjoint lege |
| slamiah Women's Arts and Self adjoint lege |
| slamiah Women's Arts and Self adjoint lege |
| slamiah Wome

REDIT: 4

aniyambadi

## COURSE: MATHEMATICAL SOFTWARES- PRACTICALS

**CREDIT: 3** 

CO1:Compute various mathematical problems like multiplication of matrices and rank of the matrix.

CO2:Design two Dimensional and Three Dimensional graphs using plot function.

CO3:Create histogram and frequency curves.

CO4:Implement ANOVA using MATLAB code.

CO5:Formulate central measures and rank correlation.

Principal

Vaniyambadi?

Islamiah Women's Arts and Science College Vanıyambadi - 635 752.

# DEPARTMENT OF COMMERCE

# B.Com (General)

# PROGRAM SPECIFIC OUTCOME (PSOs)

PSO1: To understand the procedural part and documentation in life and general insurance business

PSO2: To analyze the national and international level economy

PSO3: To develop entrepreneurial qualities, skills requires for self employment

PSO4: To understand commercial activities covered by advanced technology like computerized accounting, E-commerce, E-banking, mobile banking, E-taxation.

PSO5: To understand basic knowledge of statistical technique applicable to the business

PSO6: To gain working knowledge of generally accepted auditing procedure, techniques and skills

PSO7: To obtain knowledge of various provisions of Income tax act and their applications in computation of income of individual and firms under various head of incomes.

# **COURSE OUT COME**

# SEMESTER I

### COURSE: FINANCIAL ACCOUNTING-I

CREDIT: 3

CO1: The students will be able to understand the basic fundamentals of double entry system accounting.

CO2: The students will be able to prepare final accounts.

CO3: The students will be able to understand the depreciation accounting.

CO4: The students will be able to prepare the accounting for single entry system.

CO5: The students will be able to - understand the importance of tally Accounting.

### **COURSE: BUSINESS ORGANIZATION**

**CREDIT: 3** 

CO1: The students will be able to gain knowledge about business and profession.

CO2: The students will be able to understand the different forms of business organization.

CO3: The students will be able to explore the theories of plant location and characteristics of layout.

CO4: The students will be able to know the concepts of business combination and function of chamber of commerce and Trade Association.

CO5: The students will be able to understand the basic concepts of MNCs

Islamiah Women's Arts and Science College Vaniyambadi - 635 752.

### COURSE: ALLIED - INDIAN ECONOMY-1

**CREDIT: 3** 

CO1: The students will be able to understand the various indicators of economic development.

CO2: The students will be able to understand the importance, causes and impact of population growth.

CO3: The students will be able to gain knowledge about the role of agriculture in economic development.

CO4: The students will be able to gain knowledge about the role of agriculture labour, problems and remedies.

CO5: The students will be able to understand the industrial development during plan period.

### COURSE: PROFESSIONAL ENGLISH I

**CREDIT: 3** 

CO1: Recognise their own ability to improve their own competence in using the Language.

CO2: Use language for speaking with confidence in an intelligible and acceptable manner.

CO3: Understand the importance of reading for life.

CO4: Read independently unfamiliar texts with comprehension

CO5:Understand the importance of writing in academic life.

CO6: Write simple sentences without committing error of spelling or grammar.

## **SEMESTER II**

# **COURSE: FINANCIAL ACCOUNTING-II**

**CREDIT: 3** 

CO1: The students will be able to understand the basic fundamentals of branch accounting.

CO2: The students will be able to understand the basic fundamentals of department accounting.

CO3: The students will be able to understand the hire purchase and instalment system of accounting.

CO4: The students will be able to prepare the accounts of partnership.

CO5: The students will be able to understand the basic of tally accounts

### **COURSE : OFFICE MANAGEMENT**

CREDIT 13 & S

CO1: The students will be able to gain knowledge about nature and scope of organization.

CO2: The students will be able to gain effective knowledge about administrative arrangements and physical conditions.

CO3: The students will be able to gain knowledge of office Equipments and office system anivambas

CO4: The students will be able to know about office correspondence.

CO5: The students will be able to learn about office supervisor. Vaniyambadi - 635 752.

### **COURSE: ALLIED INDIAN ECONOMY-II**

**CREDIT: 3** 

CO1: The students will be able to understand the formation of national income.

CO2: The students will be able to acquire knowledge about the planning in India.

CO3: The students will be able to clarify the economic reforms and LPG policy.'

CO4: The students will be able to understand the transport system and policy in India.

CO5: The students will be able to understand the information technology in India.

#### COURSE: PROFESSIONAL ENGLISH II

CREDIT: 3

CO1: Ability to improve their own communicative competence.

CO2: Ability to persuasive communication skill.

CO3: Understand the importance of digital competence.

CO4: Develop creativity and imagination power.

CO5: Understand the importance of workplace communication and academic Writing.

### SEMESTER III

aniyambad

### COURSE: CORPORATE ACCOUNTING I

**CREDIT: 4** 

CO1: Understand the equity shares and preference shares.

CO2: Compute the debenture accounts.

CO3: Identify the Acquisition and Amalgamation of companies

CO4: Explain the profit prior incorporation.

CO5: Analyze the final account statements.

### **COURSE: BUSINESS LAW**

CREDIT: 4

CO1: Explain the formation and Essential Elements of contracts

CO2: Understand the Performance of contracts

CO3: Discuss the Bailor and Bailee

CO4: Definition of sales

CO5: Understand the offer and Acceptance.

### COURSE: BANKING THEORY LAW AND PRACTICE

CREDIT: 3

CO1: Understand the banking regulation act and role of banking

CO2: Explain the functions of E- Banking

CO3: Classify the different types of banking

CO4: Classify the types of negotiable instrument

h Women's Arts and Science College Vaniyambadi - 635 752.

# **COURSE: BUSINESS STATISTICS I**

**CREDIT: 3** 

CO1: Identify the Primary data and Secondary data.

CO2: Computation of Mean, Median, Mode

CO3: Classifying Mean deviation and Standard deviation.

CO4: Understand the Skewness and Karl Pearson's Co efficient of Skewness.

CO5: Describe the Statistical Quality Control

# COURSE: BUSINESS ECONOMICS-I(ALLIED-III)

**CREDIT: 4** 

CO1: Define Demand analysis

CO2: Explain the social responsibility of business

CO3: Analysis the Utility

CO4: Classify demand forecasting

CO5: Explain the functions of production

CO6: Compute Break-even analysis

CO7: Define Demand curve

# COURSE: E-COMMERCE AND ITS APPLICATION (SBS-I)

**CREDIT: 3** 

CO1: Understand the basic concept of E-Commerce.

CO2: Explain the Business models of E-Commerce and its Challenges

CO3: Discuss E-Hub concept and E-Filing

CO4: Define Internet Operation, Web Browsing and Creation of E-mail id

# COURSE: INTRODUCTION TO INFORMATION TECHNOLOGY (NME-I)

**CREDIT: 2** 

CO1: Understand the characteristics of Computer.

CO2: Classifies the Networks.

CO3: Describe the types of internet connections

CO4: Understand the Uses of Internet.

SEMESTER IV

#### COURSE: CORPORATE ACCOUNTING II

CO1: Explain the Methods of Valuation of Goodwill

CO2: Explain the Liquidation of companies

CO3: Discuss the Bank and insurance company account

**CREDIT: 4** 

Islamiah wang riheibal Aniyambadi - 635 zoo College

s Arts &

Samiah

CO4: Explain the Holding Company account

CO5: Computation of inflation accounting

**COURSE: COMPANY LAW** 

CREDIT:4

CO1: Define company

CO2: Classify company

CO3: Compare private company and public company

CO4: Define prospectus

CO5: Evaluate statement in Lieu of prospectus

CO6: Define Directors

CO7: Explain the methods of winding up

### **COURSE: BUSINESS COMMUNICATION**

**CREDIT: 3** 

CO1: Understand the importance of communication in Commerce, Trade and to draft business letter.

CO2: Explain the basic Principle in Drafting, Appearance, Structure and Layout.

CO3: Analyze the different types of Business letter and Drafting.

CO4: Define letters of Application with CV, Resumes.

CO5: Discuss the types of Business Report and importance.

#### **COURSE: BUSINESS STATISTICS-II**

**CREDIT: 3** 

CO1: Understand and apply statistical tools in Business.

CO2: Computation of Correlation and Regression equation.

CO3: Find out types of Index number and its uses.

CO4: Determine the Time series methods and its uses.

CO5: Analyze the probability and its Theorem.

# COURSE: BUSINESS ECONOMY -II (ALLIED-IV)

CREDIT:6

CO1: Define cost and revenue.

CO2: Acquire knowledge of market structure and classifies the market

CO3: Discuss distribution theories and profit theories.

CO4: Comparison of perfect and imperfect competition

CO5: Computation of National Income.

CO6: Explain industrial policy.

CO7: Compare and contrast of revenues and public expendence

h Women's Arts and Science College Vanıyambadi - 635 752.

# COURSE: INDUSTRIAL ORGANIZATION (SBS-II)

CREDIT: 3

CO1: Discuss the basic Industrial structure and it's working.

CO2: Explain Industrial ownership and its types.

CO3: Define Plant Location and Layout.

CO4: Understand the production Management, Material Management and its Techniques

### **COURSE: INTERNET AND ITS APPLICATION (NME-II)**

CREDIT: 2

CO1: Able to use Basics usage of internet

CO2: Prepare digital world

CO3: Create and Learn E-mail

CO4: Design Web pages

### SEMESTER V

#### COURSE: COST ACCOUNTING- I

**CREDIT: 5** 

CO1: Aimed to familiarize the concept of cost accounting

CO2: Facilitate the idea and explain the meaning of material control with pricing methods

CO3: Develop the knowledge about remuneration and incentives

CO4: Define the concept of overhead cost

CO5: Understand the concept of Cost control.

CO6: Computation of Machine Hour Rate.

#### **COURSE: PRACTICAL AUDITING**

CREDIT: 4

CO1: Define Auditing

CO2: Classify the Audit

CO3: Define Audit program

CO4: Evaluate verification and valuation of assets and liabilities

CO5: Define Audit note book

CO6: Explain Qualification and Disqualification of auditors

CO7: Determine Audit working papers

### COURSE: BUSINESS MANAGEMENT

CREDIT: 4

aniyambadi

CO1: Define concept of Business Management and understand the various theories of management

CO2: Understand the functions of Management and level of management/omen's Arts and Science College Vanıyambadi - 635 752

CO3: Evaluate the concept of organizing and understand the principles of organizing

CO4: .Discuss the function of staffing

CO5: Analyze the concept of directing, coordinating and controlling

CO6: Understand and evaluate the concept of motivation, communication and leadership

### COURSE: INCOME TAX TAW AND PRACTICE -I

**CREDIT: 4** 

CO1: Define basic roles and Regulation of Income Tax Act

CO2: Explain in order to familiarize the different know how and heads of Income.

CO3: Computation of Income from house property

CO4: Describe more idea about the Income from business or profession CO5: Familiarizes with the concept of Depreciation and its provisions.

# COURSE: ENTREPRENEURIAL DEVELOPMENT (ELECTIVE PAPER -I)

**CREDIT: 3** 

CO1: Describe the enterprise.

CO2: Understand the functions of entrepreneurship.

CO3: Differentiate the partnership and sole proprietorship.

CO4: Explain the sources of finance.

CO5: Find the solutions to the problem of women entrepreneurs.

CO6: Understand the incentives and subsidies.

# COURSE: PRINCIPLES OF MARKETING (SBS-III)

CO1: Meaning and definition of marketing

CO2: Classification of marketing

CO3: Analyses of Marketing mix and Product policy

CO4: Discuss the Recent trends in marketing.

### **SEMESTER VI**

### COURSE: COST ACCOUNTING II

CO1: Understand the knowledge of Job, Batch, and Contract costing

CO2: Define the basic concepts and processes used to determine product costs

CO3: Interpret the Transport costing

CO4: Analyses and evaluate information for cost ascertainments planning control and decisionence College making

Vanivambadi - 635 752.

**CREDIT: 3** 

s Arts &

aniyambadi CREDIT: 5

CO5: Solving simple cases.

CO6: Computation of BEP and Margin of Safety.

CO7: Understand the Reconcilation of Cost

### **COURSE: MANAGEMENT ACCOUNTING**

**CREDIT: 5** 

CO1: Define management accounting

CO2: Explain the functions of management accounting

CO3:Determine Trend Analysis

CO4: Define Ratio Analysis

CO5: Prepare funds flow statement

CO6: Prepare cash Flow statement as per AS3

CO7: Understand the Budget and Budgetary Control

# COURSE: INCOME TAX LAW AND PRACTICE - II

**CREDIT: 5** 

CO1: Develop an idea about Capital Gain

CO2: Determine the concept of Income from other sources.

CO3: Analyze and Determine the Clubbing of Income, Set-off and Carry forward of loss.

CO4: Determine the concept of assessment of Individual.

CO5: Computation on Assessment of firms and Deduction u/s 80.

CO6: Explain the filling of return, PAN, Types of Assessment and Advanced payment of Tax.

# COURSE: FINANCIAL MANAGEMENT (ELECTIVE PAPER-II)

CREDIT: 3

CO1: Explain the Function of finance Manager

CO2: Explain the Concept of Financial planning, forecasting

CO3: Calculation of NPV, ARR, IRR Methods

CO4: Analysis of Financial Ratio

CO5: Discuss the Goals of financial Function

# COURSE: HUMAN RESOURCE MANAGEMENT (ELECTIVE PAPER -

**CREDIT: 3** 

CO1: Define the concept of Human Resource Management

CO2: Evaluate the functions and significance of Human Resource Management

CO3: Understand the concept of Recruitment and selection

CO4: Evaluate the concept of training and understand the methods of Training Islamiah Women's Arts and Science College Vanivambadi - 635 752.

Jones's Arts & Science College & Kaniyambadi 2\*

CO5: Analyze the concept of motivation

CO6: Compare and contradict the theories of motivation

CO7: Evaluate the concept of promotion and career development

# COURSE: COMPUTER APPLICATIONS IN BUSINESS (SBS-IV)

**CREDIT: 3** 

CO1: Able to understand the input and output devices.

CO2: Understand the concept of LAN and VAN

CO3: Explain Word Processing.

CO4: Create EXCEL and Power Point formatting and functions.

Heimer's Arts & Science College Colleg

Principal
Islamiah Women's Arts and Science College
Vanıyambadi - 635 752.

# M.Com (General)

# PROGRAM SPECIFIC OUTCOMES - (PSO)

PSO1: To impart the students with higher level knowledge and understanding of contemporary trends in commerce and business finance

PSO2: To equip the students to evaluate environmental factors that influence business operation with the conceptual requirements and skills on preparation and interpretation of financial statements

PSO3: To prepare the students to apply Statistical methods and proficient use of tools for modeling and analysis of business data

PSO4: To facilitate the students to apply capital budgeting techniques for investment decisions

PSO5: To prepare students to appraise the structure and operations of banking system

PSO6: To prepare the students for an in depth analysis of investment, portfolio management, investment banking and liquidation of investments

PSO7: To develop competency in the students about the laws and regulations, and roles of commercial, government and central banks in controlling money market and inflation

PSO8: To facilitate the students to analyze and frame micro financing schemes for rural banking

PSO9: To impart concept of risk mitigation in financial sectors and their role in investment decisions of individuals and business enterprises

PSO10: To provide the guidance to students to plan and undertake independent research in a chosen discipline

### **COURSE OUTCOME**

#### **SEMESTER-I**

COURSE: ADVANCED FINANCIAL MANAGEMENT

CREDIT:4

CO1. The student will be able to understand the functions of finance management

CO2. The student will be able to know about the term sources of funds and environment of working capital

CO3. The students will be able to gain information about capital structure and leverage

CO4. The student will be able to gain knowledge about capital investment

CO5. The student will be able to be acquainted with on the subject of working capital

management

Islamiah Women's Arts and Science College Vanıyambadi - 635 752.

### COURSE: ACCOUNTING FOR MANAGERIAL DECISION

**CREDIT:4** 

- CO1. The student will be able to understand the concept of accounting for Decision Making
- CO2. The student will be able to understand the Ratio analysis, Leverage analysis- Budgeting and budgetary control
- CO3. The student will be able to understand the analysis of fund flow and cash flow statement
- CO4. The student will be aware of the marginal applications and its technique
- CO5. The student will be able to know financial decision making

#### **COURSE: MARKETING MANAGEMENT**

CREDIT:4

- CO1. The students will able to know the core market and their functions
- CO2. The students will able to know the various kinds of pricing and various stages in product life cycle, new product development
- CO3. The students will gain knowledge about the marketing channel and distribution
- CO4. The students will learn about the kinds of advertisement and qualities of good salesman.
- CO5. The student will know about the recent trend in modern marketing and digital marketing.

# COURSE: ADVANCED BUSINESS STATISTICS

**CREDIT:4** 

en's Arts & S

- CO1. The student will be able to know partial and multiple correlations
- CO2. The student will be able to know probability and binomial distribution
- CO3. The student will know the issues surrounding sampling, Hypothesis, test and T Test.
- CO4. The Student will be able to have the awareness about application of chi-square distribution
- CO5. The student will be able to know about analysis of variance and F Test.

# **COURSE: CORE ELECTIVE - COMPUTER APPLICATION IN BUSINESS-I**

CREDIT:3

CO1. The student will be able to understand the various components of a computer system: storage devices, Input Devices and Output devices

CO2. The student will be able to develop an idea about World Wide Web and internet browsing

CO3. The student will be able to know about the preparation and presentation of business ambad

documents using word document

CO4. The student will be able to gain knowledge about the preparation and presentation of business documents using Excel Sheet

| Slamiah Women's Arts and Inc. | Standard Women's Arts and Inc. | Sta

business documents using Excel Sneet

CO5. The student will be able to acquire the knowledge about how to prepare PPT Power 52.

point presentation using various transitions, Animation and other layouts.

#### COURSE: OPEN ELECTIVE -PRINCIPLES OF INTERNET

**CREDIT:3** 

CO1. Students are able to learn the basics of internet

CO2.Students are able to provide fundamental knowledge www.

#### SEMESTER -II

#### COURSE: CORPORATE LAWS

**CREDIT:4** 

- CO1.Define Corporate Personality ,Corporate Governance, E-Governance and describe the Corporate Governance Code in Companies Act.
- CO2. Discuss the prohibitions of certain Agreements, Abuse of Dominant Position and Regulation of combinations under the competition Act.
- CO3. Enumerate the power and Function of SEBI.
- CO4.Describe the provisions related to listing of securities, public Offering and discuss the prohibition of Insider trading in various regulations of SEBI.
- CO5.Discuss the provisions related to Regulation and Management of Foreign Exchange, Related Offences, Penalties and Appeals Procedure under FEMA, 1999.
- CO6. Elucidate the Corporate Insolvency Resolution Process and Liquidation Process under Insolvency and Bankruptcy Code, 2016.

#### COURSE: HUMAN RESOURCES MANAGEMENT

CREDIT:4

- CO1. The student will be able to understand the concept of Human Resource Management
- CO2. The student will be able to understand recruitment and Selection procedure
- CO3. The student will be able to know the various ways of solving the employee grievances procedure
- CO4. The student will be able to know the evaluation the methods of performance Appraisal
- CO5. The student will be able to evaluate the Different Techniques of Training

#### COURSE: ADVANCED CORPORATE ACCOUNTING

**CREDIT:4** 

- CO1. The Student will be able to make them aware about the accounts of banking companies
- CO2. The students will gain knowledge on preparation of accounts of insurance companies
- CO3. The students will be able to know to develop knowledge of holding company concept and preparation of consolidated balance sheet
- CO4. The student will be able to know about Inflation accounting and CPP method
- CO5. The student will be able to know about Human Resource Accounting in India.

## COURSE : CORE ELECTIVE E-COMMERCE -II

**CREDIT:3** 

- CO1. The students will be able to understand the applications of E Commerce in business
- CO2. The students will be able to understand Network Infrastructure of E Commerce
- CO3. The students will be able to understand the Internet Protocols in E Commerce
- CO4. The students will be able to understand the Network Security in E- Commerce
- CO5. The students will be able to understand the types of Digital Documents in E Commerce.

#### COURSE: PRICIPLES OF WEB DESIGN

- CO1: The Students are able to learn how to combine basic HTML.
- CO2. The Students are able to understand the use of HTML tags and attributes to control a Web page's appearance
- CO3. The Students are able to capable to learn how to add absolute URLs, relatives URLs, and named anchors to Web pages
- CO4. Students are able to gain a good understanding of using tables and frames as navigational aids on a web site.
- CO5. Students are able to control appearance of web pages by applying style sheet.

#### SEMESTER-III

**COURSE: BASICS OF GST** 

**CREDIT: 5** 

- CO1: Distinguish the earlier Indirect tax system and present indirect tax system
- CO2: Explain the structure and analyze the benefits of GST
- CO3: Discuss about the basic concepts and terms under CGST and IGST act
- CO4: Describe the provisions of levy and collection of GST
- CO5: Understand the concept of time, place and value of supply
- CO6: Analyze the importance and benefits of Input tax credit
- CO7: Develop the knowledge of registration, payment of tax, interest, TDS, TCS, refund and

returns.

#### COURSE: ORGANIZATIONAL BEHAVIOR

CO1: Understand the Fundamental concepts of Organizational behavior.

CO2: Identify the Early theory and Contemporary theory.

CO3: Compare and contrast the Group dynamics and Group behavior.

CO4: Explain the concepts of Leadership, Trait and Contingency theories.

CO5: Understand the concept of Transactional Analysis.

CO6: Analyze the organizational structure .

CO7: Explain the organizational climate.

CREDIT: 5

Principal

Vanivambad

#### COURSE: ADVANCED COST ACCOUNTING

**CREDIT: 5** 

CO1: Understand the basic concept of Cost Accounting.

CO2: Identify, classify the expenses and prepare the cost sheet.

CO3: Analyze the tenders and prepare the quotations.

CO4: Understand the methods of solving various issues, complexities and explaining to prepare the Process Accounts.

CO5: Understand the concept of contract Accounting and solve the issues, problems and prepare the Contract Accounting.

CO6: Define and compute the variances of difference elements of costing.

CO7: Compare and contrast the Methods of Cost Control and Cost Reductions.

CO8: Identify the wastage, scrape, spoilage and defectiveness and compute the loses.

CO9: Categories the inventories into A,B and C and manage Inventories based on priorities.

#### **COURSE: RESEARCH METHODOLOGY**

CREDIT: 5

CO1: Define the characteristics, nature and scope of Research.

CO2: Understand the various types of research formulation.

CO3: Able to explain Sampling methods and Sampling errors.

CO4: Explain the Sources of data: Primary and Secondary data.

CO5: Describe Factor analysis.

CO6: Identifying, editing, coding and tabulation.

CO7: Compare and contrast types of the Research reports.

# COURSE: COMPUTER AND OFFICE MANAGEMENT(ELECTIVE PAPER-III) CREDIT: 3

CO1: Understand History of computer.

CO2: Analyze Hardware and Software

CO3: Understand Anti -virus programme

CO4: Understand Powerpoint.

SEMESTER IV ambad

Arts & S

Principal
Slamiah Women's Arts and Science College
CREDIVAS badi - 635 752.

#### COURSE: DIRECT TAXES

CO1: Define and determine the residential status of various persons and identify the scope total of income for them.

CO2: Apply the proper provisions of direct tax laws and compute the taxable income of various heads.

CO3: Evaluate and apply the various exemptions and total deductions available as per income tax Act.

CO4: Compare and contrast the various methods of depreciation and compute Depreciation as per

the provision of Income tax Act.

CO5: Compute the taxable income and tax liabilities of various Person and Assesses.

CO6: Understand the concept of setoff and carry forward of losses.

CO7: Understand the powers and duties of Income tax authorities.

CO8: Define the procedure to file the income tax return and consequence of failure to file the return of income tax.

#### COURSE: INVESTMENT MANAGEMENT

CREDIT: 5

CO1: Understand the Financial Assets.

CO2: Explain the scope of Security analysis.

CO3: Understand the valuation of the securities

CO4: Define the Industry analysis and company analysis.

CO5: Classifies the Efficient market Hypothesis.

CO6: Classifies the debentures and bonds

COURSE: PROJECT

CREDIT: 10

CO1: Understand the concept of Research and Methods of Research.

CO2: Design the work plan.

CO3: Identify the real issues in business related areas and chose the topic for project.

CO4: State the project topic, importance, objectives, and hypothesis.

CO5: Describe the research methodology and sample frame.

CO6: Design the instruments for data collections.

CO7: Analyze the related theories and reviews.

CO8: Design the suitable instruments' based on the research concepts.

CO9: Make the data editing, data management and apply the suitable statistical tools for analysis the data and make the data interpretations.

CO10: Write the finding, suggestion and conclusion.

COURSE: INTRODUCTION TO INFORMATION TECHNOLOGY (ELECTIVE –IV)

CREDIT: 3

"niyambadl

CO1: Understand the characteristics of Computer.

CO2: Analyze Networks.

CO3: Understand types of internet connections

CO4: Understand the Uses of Internet.

# DEPARTMENT OF COMMERCE (COMPUTER APPLICATIONS)

# PROGRAM SPECIFIC OUTCOMES (PSOs)

- PSO1: Understand Commercial Activities Covered by Advanced Technology Like Computerized Accounting, E Commerce, E Banking, Mobile Banking, And E Taxation.
- PSO2: Obtain Knowledge of Various Provisions of Income Tax Act, & Their

  Application in Computation of Individuals & Firms under Various Heads of Income.
- PSO3: Students have a Plethora of Choices to Pursue Professional Courses Such As M.Com CA M. Com, MBA, CMA, ICWA, M.Com CA etc.
- PSO4: Students Will Be Able to Pursue Their Career in Teaching and Research
- PSO5: Develop entrepreneurial qualities & skills & awareness about self employment

## **COURSE OUTCOME:**

#### SEMESTER I

## COURSE: FINANCIAL ACCOUNTING

**CREDIT: 3** 

- CO1: Understand the systems of Financial Accounting.
- CO2: Prepare the basic accounting Principles.
- CO3: Evaluate the methods of recording depreciation.
- CO4: Prepare the Final Accounts, Profit & Loss Account and Balance sheet of a Company.
- CO5: Able to compute profit incomplete records.

## COURSE: BUSINESS APPLICATIONS & ACCOUNTING SOFTWARE CREDIT: 3

- CO1: Understand the basics of Computer.
- CO2: Able to create a word document, worksheet and its formatting.
- CO3: Design MS -PowerPoint presentation.
- CO4: Able to prepare generate financial reports.
- CO5: Creating Company voucher and stock group in Tally ERP 9.

COURSE: BUSINESS STATISTICS-I

CO1: Understand the basics of statistical tools in business.

CO2: Enable the student to calculate various averages.

CO3: Understand to compute measures of dispersion.

CO4: Compare various methods of computing Skewness.

CO5: Able to Understand SQC and different Control Charts.

CREDIT: 3

#### **SEMESTER-II**

# COURSE: FINANCIAL ACCOUNTING-II

**CREDIT: 3** 

CO1: Understand the accounting methodology for Branch Accounting.

CO2: Prepare the Departmental trading and Profit & Loss Account.

CO3: Able to Calculate interest on Hire purchase and to prepare accounts for hire purchase contract

CO4: Outline the fundamentals and reconstitution of Partnership Firm.

#### **COURSE: SOFTWARE & TALLY LAB**

**CREDIT: 3** 

CO1: Understand the concepts of MS-Word.

CO2: Understand the concepts of MS-Excel.

CO3: Understand the concepts of MS-Power Point and Tally.

CO4: Able to create MS-Office Applications

## **COURSE: BUSINESS STATISTICS-II**

**CREDIT: 5** 

CO1: Understand basics of Business statistics.

CO2: Computation of correlation Coefficient and rank correlation.

CO3: Derive regression equation.

CO4: Able to calculate various index numbers.

CO5: Able to derive various averages in time series.

CO6: Understand different probability theorem.

CO7: Able to apply statistical tools in business decisions.

#### SEMESTER III

## COURSE: CORPORATE ACCOUNTING - I

**CREDIT: 4** 

CO1: Understand different methods of valuation of shares

CO2: Understand different methods of valuation of debentures.

CO3: Acquire the knowledge of acquisition of Business and accounting treatment.

CO4: Prepare the statement of Profit and Loss Account and Balance Sheet.

CO5: Able to know different methods of Purchase Consideration and prepare Amalgamation,

Absorption and Internal & External reconstruction.

COURSE: BUSINESS LAW

**CREDIT: 4** 

CO1: Describe origin of RBI in India.

CO2: Understand the traditional and modern function of the Commercial Banks.

CO3: Identify different methods of Bank Account.

CO4: Acquire the knowledge on Negotiable Instruments.

CO5: Describe about different method of lending and its policies.

COURSE: MANAGEMENT INFORMATION SYSTEM

**CREDIT: 3** 

CO1: Understand the concepts of Management Information.

CO2: Able to understand the concepts of Information system and its types.

CO3: Understand the concepts of system analysis.

CO4: Understand the concepts of Development, Maintenance of MIS.

COURSE: MOBILE COMPUTING

CREDIT: 4

CO1: Acquire good knowledge of wireless communication.

CO2: Apply knowledge of GSM and GPRS extension in mobile computing.

CO3: Analyze mobile platforms and its applications.

CO4: Understand the concepts of E-Business, E- Commerce and M-Commerce.

COURSE: ELEMENTS OF INSURANCE

**CREDIT: 3** 

CO1: Understand the concepts of Insurance.

CO2: Understand the different policies in Life Insurance.

CO3: Acquire the knowledge of Marine Insurance.

CO4: Understand the concepts of Fire Insurance.

COURSE: BASIC TAMIL

CREDIT:2

CO1: Understand basic of Tamil language.

CO2: Enable them to enhance their language skill.

CO3: Enable them to develop creative reading and writing.

CO4: Able to participate in dialogue without any difficulty.

**COURSE: BASIC MATHEMATICS** 

CO1: Understand the foundations of Mathematics.

s Arts & Science College CO2: Able to perform the basic computation in sets.

CO3: Develop and maintain problem solving skills.

Islamiah Women's Arts and Science College

Vaniyambadi - 635 752.

#### COURSE: LANGUAGE SKILL AND COMMUNICATION-I

**CREDIT: 2** 

CO1: Able to understand and apply knowledge of human communication and language.

CO2: Understand the importance of language in communication.

CO3: Analyze the correct usage of grammar in writing and speaking.

#### SEMESTER IV

#### COURSE: CORPORATE ACCOUNTING - II

**CREDIT: 4** 

CO1: Evaluate different methods of valuation of Goodwill and Share.

CO2: Acquire knowledge of preparing liquidator's Final Statement and Affairs.

CO3: Prepare Bank and Insurance Company Accounts.

CO4: Describe Capital and Revenue Profit and Consolidate Balance sheet.

CO5: Understand the limitations of Historical Cost Accounting and evaluate the methods of CPP methods and CCA methods.

## COURSE: PRINCIPLES OF MARKETING

**CREDIT: 4** 

CO1: Understand and describe basics of Marketing.

CO2: Identify market segmentation and Consumer Behavior.

CO3: Acquire knowledge of marketing policy and life cycle of the product.

CO4: Evaluate and determine channel of distribution.

CO5: Identify recent marketing in the Global Scenario.

# COURSE: RELATIONAL DATABASE MANAGEMENT SYSTEM

**CREDIT: 3** 

CO1: Understand the concept of Database.

CO2: Analyze different data models available.

CO3: Compare and contrast what is SQL and PL/SQL.

CO4: Analyze and Understand data definition language, Data Manipulation languages

#### COURSE: RELATIONAL DATABASE MANAGEMENT SYSTEM LAB

CREDIT: 3 anivambad

CO1: Understand the concept of manipulation of Queries.

CO2: Develop program based on PL/SQL concepts like procedure, Trigger, Cursor and functions

CO3: Create and design software using different DBMS Packages. Vaniyambadi - 635 752.

#### COURSE: E-COMMERCE AND ITS APPLICATIONS

**CREDIT: 6** 

CO1: Understand the concepts of E-Commerce.

CO2: Acquire the major challenges of B2C and E-Commerce.

CO3: Understand the E-Hub and its Concepts.

CO4: Prepare e-mail Id and etiquettes.

CO5: Define the Web Browsing, Web sites and Web designs.

CO6: Determine the Internet and its operation.

CO7: Compare the difference between B2C and B2B

#### COURSE: INDUSTRIAL ORGANIZATION

**CREDIT: 3** 

CO1: Understand the basic Industrial growth and current Scenario.

CO2: Describe different ownership of the firm.

CO3: Able to know about physical facilities, plant location and plant layout.

CO4: Evaluate the product design, production planning and control.

CO5: Understand different types of purchasing policy and inventory control.

#### **COURSE: BASIC TAMIL**

**CREDIT: 2** 

CO1: Learn and participate the methods of writing sentence without errors.

CO2: Understand social value of short stories and develop creative skills.

CO3: Learn Translation and Interviews

# COURSE: FOUNDATION MATHEMATICS FOR COMPETITIVE

#### **EXAMINATION**

CREDIT: 2

amiah

CO1: Understand the basic formula in computation skill needed in competitive examination.

CO2: Able to perform basic computation in simple and compound interest.

CO3: Develop problem solving skills.

# COURSE: LANGUAGE SKILLS AND COMMUNICATION-II

**CREDIT: 2** 

CO1: Discuss different perspective and stances on skills in communication.

CO2: Analyze the importance of skill development.

CO3: Able to understand and apply the knowledge in communication.

#### SEMESTER V

## COURSE: COST ACCOUNTING - I

**CREDIT: 4** 

CO1: Understand the basic concepts and application of cost accounting in business.

CO2: Able to compute cost sheet.

CO3: Compute material issue price under different techniques.

CO4: Able to calculate labour rate under different methods.

CO5: Computation of machine hour rate and labour hour rate.

CO6: Classify overhead and its appointment.

## **COURSE: MANAGEMENT ACCOUNTING**

**CREDIT: 4** 

CO1: Understand the basic principles of lying with management accounting.

CO2: Able to prepare various ratios, financial statement from ratios.

CO3: Able to compute cash flow statement and fund flow statement as per AS3

CO4: Able to compute material, labour and overhead variances.

CO5: Compare budget and budgetary control.

# **COURSE: BUSINESS MANAGEMENT**

**CREDIT: 4** 

CO1: Able to describe about business management basics.

CO2: Compare and Contrast between management and Administration.

CO3: Able to define authority and responsibility

CO4: Understand the role of directing and leadership in business.

CO5: Able to define process controlling and its techniques.

# COURSE: INTERNET AND ITS APPLICATION

**CREDIT: 4** 

CO1: Understand the concepts of Internet.

CO2: Understand the concepts of Web Browsers.

CO3: Understand the concepts of email and e-marketing.

CO4: Understand the concepts different payment systems.

## COURSE: INCOME TAX LAW & PRACTICE - I

CO1: Understand the concepts of Income tax act.

CO2: Define the procedure for heads of Incomes.

CO3: Compute the procedure for taxation of salary income.

CO4: Prepare the statement of Profit and Gains of Business.

CO5: Outline the powers and rights of income tax authorities.

CREDIT: 3

## COURSE: COMPUTER APPLICATIONS IN BUSINESS

**CREDIT: 3** 

CO1: Understand the basics concepts of Computer.

CO2: Able to understand and create MS-Word.

CO3: Able to understand and create MS- Excel

CO4: Understand concept of E-Commerce and SMART card Applications.

#### SEMESTER VI

#### COURSE: COST ACCOUNTING - II

CREDIT: 5

CO1: Able to calculate cost per unit, job batch and contract.

CO2: Compute problems under process costing and process loss under equivalent production.

CO3: Prepare Operating cost sheet.

CO4: Compute Problems under marginal costing.

CO5: Able to reconcile cost and financial accounts.

#### **COURSE: WEB TECHNOLOGY**

CREDIT: 5

CO1: Able to face the different web Application program using HTML tags.

CO2: Create the HTML program using style sheets.

CO3: Understand the concepts of Object in HTML.

CO4: Create the cookies program using HTML and scripting language.

CO5: Compare the concepts of request and response objects.

CO6: Understand the concepts of OLEDB connections.

CO7: Understand the concepts of HTML server Control.

#### COURSE: WEB TECHNOLOGY LAB

**CREDIT: 5** 

CO1: Understand HTML program using HTML basic tags.

CO2: Able to image and table on a web page.

CO3: Create the hyper link on a web page.

CO4: Understand the concept of Script language to display the content on web site.

CO5: Create the cookies program on a web page.

CO6: Understand the various concepts of web Application programs. CO7: Able to create a web

page.

## COURSE: INCOME TAX LAW & PRACTICE-II

CO1: Understand the concepts of assessment of an Individual Income Islamiah Women's Arts and Science College Islamiah Women's Arts and Science College Vaniyambadi - 635 752.

CO2: Prepare the Statement of Capital Gains.

CO3: Outline the procedure of other sources income.

CO4: Determine the concepts of agriculture and clubbing of income.

anivamba

n's Arts &

CO5: Prepare the taxation and filing of an individual's income.

# COURSE: ENTERPRISE RESOURCE PLANNING CREDIT: 3

CO1: Describe about business process index ERP System.

CO2: Understand sales order Processing and CRM in ERP Environment.

CO3: Identify production and sales forecasting under SAP ERP.

CO4: Understand system of Industrial Credit Management and Profitability analysis.

CO5: Outline the system of Preparing Payroll and Travel Management under ERP Software.

CO6: Compare and Contrast between traditional system and ERP system.

#### COURSE: INDUSTRIAL RELATIONS

**CREDIT: 3** 

CO1: Understand the concepts of Industrial Relation and factors affecting IR in changing Environment.

CO2: Understand the concepts of Trade union.

CO3: Able to know about collective Bargaining and workers participation Management.

CO4: Describe about the Industrial Disputes and the provisions.

CO5: Understand the provision relating to Health, safety and welfare facilities

# DEPARTMENT OF NUTRITION FOOD SERVICE MANAGEMENT AND DIETETICS B.Sc (NFSM&D)

# PROGRAMME SPECIFIC OUTCOME (PSOs)

PSO1: Eligible to work as a "Chief Dictician".

PSO2: Work as a "Chief Chef".

PSO3: Good quality controller in Food service Industry.

PSO4: Good diet counselor for the patient.

PSO5: Good food left -over Manager.

PSO6: Good baker.

PSO7: Best table Decorator.

PSO8: Best health and fitness Manager.

# **COURSE OUTCOME**

## SEMESTER I

## COURSE: FOOD MICROBIOLOGY

**CREDIT:4** 

CO1: Know the different types and morphology of microorganisms

CO2: Understand various specialized technique in food processing and preservation

CO3: Acquainted with various sterilization techniques

CO4: Able to preserve the non-perishable foods from microbial contamination and spoilage

CO5: Able to differentiate food poisoning and food borne infections

# COURSE: CHEMISTRY-I

CREDIT: 3

CO1: Gain Basic knowledge on Metallurgy, Cycloalkanes, Polarising Effects, Stereochemistry, Chemical Kinetics, Catalysis, Photochemistry

CO2: Understand concept of VSEPR Theory, Fuels, Osmosis, Nuclear Chemistry, Petroleum

Chemistry, Chemistry of Naphthalene, Conductors.

CO3: Understand the Applications wherever necessary are to be taught for I- Semester.

#### SEMESTER II

**COURSE: HUMAN PHYSIOLOGY** 

CO1: Able to analyse haematological parameters and blood pressure

CO2: Understand the relationship between a cell's structure and its function

CO3: Relate the structure with functions of the tissues and organs

Principal

Islamiah Women's Arts and Science College Vanıyambadı - 635 752.



**CREDIT:4** 

CO4: Comprehend the structure and functions of the various organ systems of the body

CO5: Recognize the clinical symptoms of nutritional deficiencies based on anatomical

considerations

#### COURSE: CHEMISTRY-II

CREDIT:3

CO1: Gain Basic knowledge on Coordination Chemistry, Industrial Chemistry.

CO2: Acquire knowledge on Carbohydrates, Amino acids, Proteins, Electrochemistry.

CO3: Understood the concept of Paints and Pigments, dyes, Vitamins, Medicinal Chemistry,

Corrosion and Applications wherever necessary are to be taught for II- semester.

## SEMESTER III

#### COURSE: FOOD SCIENCE

**CREDIT: 3** 

CO1: Define basic 5 food Groups.

CO2: Understand changes during cooking.

CO3: Classify various method of cooking.

CO4: Compare and contrast the nutritive values of Milk, Meat and Poultry.

CO5: Determine stages of sugar cookery.

## COURSE: NUTRITIONAL BIOCHEMISTRY (Allied-II)

**CREDIT: 3** 

CO1: Define biochemistry and relation to Nutrition.

CO2: Classify the based on amino acid.

CO3: Explain the chemical composition of Fats.

CO4: Determine the Nucleic Acids and protein bio synthesis.

CO5: Describe the inborn errors of Metabolism.

# COURSE: BAKERY (SBS - I)

**CREDIT: 3** 

CO1: Understand basic concepts of baking.

CO2: Discuss with the role of various major and minor ingredients in bakery products.

CO3: Explain baking process and operation.

CO4: Define the quality parameters of baking products.

CO5: Formulate the icing pasturing preparation.



# COURSE: HEALTH AND FITNESS (NME-I)

**CREDIT: 2** 

CO1: Define health and wellness. CO2: Describe nutrition and exercise.

CO3: Explain nutrition in sports nutrient.

CO4: Describe basic components of physical activity.

CO5: Explain awareness health and fitness.

# SEMESTER IV

#### **COURSE: HUMAN NUTRITION**

**CREDIT: 3** 

CO1: Define the Health Statics of the people.

CO2: Determine the Energy required by various age groups.

CO3: Understand the effect of lipid on health statics.

CO4: Classify the protein based on the quality.

CO5: Describe the Role of vitamins and minerals.

# COURSE: FOOD PRESERVATION (Allied)

CREDIT: 4

CO1: Understand the principles of preservation.

CO2: Compare the preservation by high osmotic pressure concentration of salt.

CO3: Explain the preservation by uses of high and low temperature.

CO4: Classify the preservation by using chemicals and food radiation.

CO5: Compare and contrast the drying and dehydration.

# COURSE: FOOD PRODUCT DEVELOPMENT AND MARKETING STRATEGY (SBS –II) CREDIT: 3

CO1: Develop new marketable, nutritionally and economically viable food products.

CO2: Create entrepreneurship skills for setting up small scale industries.

CO3: Understand packaging of different food products.

CO4: Analyze financial management and marketing food products.

# COURSE: NUTRITION FOR THE FAMILY (NME-II)

**CREDIT: 2** 

CO1: Classify the basic 5 food groups.

CO2: Explain the dietary problem eating disorders.

CO3: Classify the types of supplementary foods



# COURSE: (A) FOOD SCIENCE (B) HUMAN NUTRITION(Practical - II) CREDIT: 3

- CO1: Evaluate the Qualitative estimation of CHO.
- CO2: Determine the Protein & Minerals present in the food materials.
- CO3: Explain the techniques used in measurement of food stuff.
- CO4: Formulate different recipes using basic 5 food groups.
- CO5: Prepare hot & cold beverages.

# COURSE: NUTRITIONAL BIOCHEMISTRY (B) FOOD PRESERVATION (Allied)

Practical CREDIT: 3

- CO1: Determination of CHO Qualitative tests.
- CO2: Explain the blood glucose level.
- CO3: Classify the class I, class II food preservatives.
- CO4: Identify the uses of sorbic acid and sulphurdioxide as antimicrobial preservatives.
- CO5: Classify the Traditional methods of food preservation.

## SEMESTER V

## **COURSE: DIETETICS - I**

**CREDIT: 5** 

- CO1: Define role of diet.
- CO2: Understand principles of diet.
- CO3: Describe menu planning and serving therapeutic diet.
- CO4: Analyze the nutritive values.
- CO5: Determine the diet in infections and fevers.
- CO6: Outline disease of the gastro intestinal tract.

# COURSE: NUTRITION THROUGH LIFE CYCLE

**CREDIT: 5** 

- CO1: Explain nutrition during life span.
- CO2: Prepare the dietary modification.
- CO3: Classify the Recommended allowances.
- CO4: Describe the nutrition in pregnancy.
- CO5: Determine physiology of lactation hormonal control and reflex action.
- CO6: Prepare the infancy feeding programme.
- CO7: Explain the packed lunch for school going children.

## **COURSE: COMMUNITY NUTRITION**

CREDIT: 5

CO1: Define the role of Community Nutrition.

CO2: Understand the mal nutritional Problems among the community.

CO3: Outline the nutrition and health in national development.

CO4: Apply nutrition policy and programs.

CO5: Describe the skills needed to delivery nutrition services.

# COURSE: HOSPITAL FOOD SERVICE ADMINISTRATION

(Elective – I) CREDIT: 03

CO1: Define role of hospital food service administration.

CO2: Develop skills to maintain medical records.

CO3: Understand the management of resource in hospitals.

CO4: Describe the principles of hospitals management.

CO5: Design hospital diets and housekeeping department.

# COURSE: INTERNSHIP (SBS-III)

**CREDIT: 3** 

CO1: Define role of diet.

CO2: Understand principles of diet.

CO3: Describe menu planning and serving therapeutic diet.

CO4: Analyze the nutritive value of food ingredients.

CO5: Identify the nutrition related problems, determine and evaluate nutrition intervention programs.

#### SEMESTER VI

#### COURSE: DIETETICS -II

**CREDIT: 5** 

CO1: Classify the principles of diet therapy and different therapeutic diets.

CO2: Develop attitude for taking up dietetics as a profession.

CO3: Describe the menu planning to therapeutic diet.

CO4: Explain the food sensitivity and genetic disorder.

CO5: Classify the stages of HIV infections and medical nutritional therapy.

CO6: Compare and contrast the modification of diet in obesity and underweight. Momen's Arts

CO7: Outline the disease of liver, gall bladder and pancreas.

#### COURSE: FOOD SERVICE MANAGEMENT

**CREDIT: 4** 

CO1: Create and awareness on the organizational aspect and functioning of different types of food service institutions.

CO2: Develop managerial skills among the students.

CO3: Understand the space allocation and arrangement of food service units.

CO4: Explain quantitative and qualitative food analysis.

#### COURSE: HUMAN DEVELOPMENT & COUNSELLING

CREDIT: 4

CO1: Define concept of development and growth.

CO2: Understand development aspects from conception to old age as they can be guided effectively.

CO3: Explain the behavior pattern of the individual and various factors influencing them.

CO4: Describe the prenatal and postnatal development.

CO5: Classify the stages of life span.

# COURSE: FOOD STANDARD AND QUALITY CONTROL (Elective -II) CREDIT: 3

CO1: Define government regulation in quality control.

CO2: Classify the AGMARK and specification for food grains.

CO3: Explain the consumer protection Act.

CO4: Design the company quality Assurance program.

CO5: Identify the quality control and common food standard.

# COURSE: NUTRACEUTICALS AND NUTRIGENOMICS (Elective -III) CREDIT: 3

CO1: Define Nutraceuticals and nutrigenomics.

CO2: Explain the role of dietary supplements and nutraceuticals in health and disease.

CO3: Classify the probiotics and prebiotics.

CO4: Determine the application of nutrigenomics in health and diesease.

# COURSE: PERSPECTIVE OF HOME SCIENCE (SBS –IV)

CO1: Understand the concept and scope of Home science and its components.

CO2: Explain the job opportunities in home science.

CO3: Create new design in home science.

CO4: Outline balanced diet for various age groups.

CO5: Describe human development.

CREDIT: 3

nijambadi

Principal

# COURSE: (A) NUTRITION THROUGH LIFE CYCLE (B) DIETETICS –I (Practical - III) CREDIT: 3

CO1: Describe menu planning.

CO2: Formulate the food preparation.

CO3: Compare nutritional requirement for infant to old age.

CO4: Analyze nutritional requirements for Expectant and Lactating women

CO5: Describe the menu planning to therapeutic diet.

# COURSE: (A) FOOD SERVICE MANAGEMENT (B) DIETETICS –II (Practical – IV) CREDIT: 3

CO1: Outline well organized food service unit.

CO2: Explain table settings.

CO3: Prepare quantity cookery.

CO4: Differentiate normal and therapeutic diet

CO5: Plan and prepare a diet for diabetes mellitus with and without insulin.



# M.Sc (FOODS AND NUTRITION)

# PROGRAM SPECIFIC OUTCOME (PSOs)

PSO1: To work as a chief dietician.

PSO2: Best Creech center manager.

PSO3: Best New-food formulator.

PSO4: Best food quality controller.

PSO5: Best preservation manager (or) using natural colour.

PSO6: Best kitchen Dietician.

PSO7: Best beverage department manager.

PSO8: Best interior designer.

# **COURSE OUTCOME (CO)**

## SEMESTER I

#### COURSE:ADVANCED PHYSIOLOGY

CREDIT: 5

CO1: Understand the basic tenets of human physiology

CO2: Acquire skills in measurement of blood pressure, ECG, grouping blood

CO3: Comprehend the role of digestive juices and hormones and the structure and functions of nerves

CO4: Enumerate the process of gaseous exchange and urine formation and functions and secretion of hormones

CO5: Apply knowledge gained in physiology to nutrition and health

#### COURSE: ADVANCED FOOD SCIENCE

**CREDIT: 5** 

CO1: Gain knowledge on physio chemical changes in food and factors affecting the quality and quantity of nutrients

CO2: Learn the structure and properties of food components

CO3: Enlighten with techniques of food science to be applied in formulation and development of new food products,normal and therapeutic foods

CO4: Knowledge about food additives and limitations and application of food additives in food industry

CO5: Able to discuss the changes that takes place in fats and oils on heating and preventive measure to overcome the undesirable changes that takes place in fats like rancidity and decomposition of triglycerides.

## COURSE: ESSENTIALS OF MACRO NUTRIENTS

**CREDIT: 5** 

CO1: Understand the role of energy in various physiological conditions of the body.

CO2: Know the nutritional significance and health benefits of macronutrients.

CO3: Explore the role of glucose, dietary fibre, aminoacids and fatty acids in humannutrition and disease

CO4: Acquire skills to evaluate protein quality

CO5: Comprehend on the water balance and assessment of hydration status.

## **COURSE: HEALTH AND FITNESS**

CREDIT: 3

CO1: Understand Concept of Fitness Training

CO2: Foster Fitness Skills

CO3: Prevent and Manage Lifestyle related Disorders

CO4: Utilise exercise in Stress and Health Management

CO5: Gain the Technical Ability to run Fitness Centres

# COURSE: FOOD HYGIENE AND SANITATION

**CREDIT: 3** 

CO1: Understand the national and international programmes and laws on food safety and Standards

CO2: Recognize the role of food handlers, food safety officers and health personnel

CO3: Master the standards followed for food safety

CO4: Appreciate the importance of personnel and environmental hygiene for hygienic practices; sanitary handling of food.

## **COURSE: FOOD PROCESSING**

CREDIT:3

CO1: Know the principles of preservation behind the methods of preservation.

CO2: Understand the stages of sugar cookery, quality of pectin and acidity in the development of preserved fruit products.

CO3: Acquire skills to formulate fruits based preserved products with value addition for nutritional benefits.

# COURSE: CULINARY SKILLS

CREDIT:3

Arts &

CO1: Acquired a sound foundation for healthy cooking

C02: Learned Selecting and correctly use utensils and equipment

CO3: Learned basic cooking methods

Principal

## COURSE:BASICS FOOD SCIENCE

**CREDIT:3** 

CO1: Understand the food groups and their functions.

CO2: Acquire knowledge on different methods of cooking

CO3: Apply process of different foods

CO4: Use combination of foods in the development of food products.

CO5: Identify and control adulterants in various foods and evaluate food quality.

## **COURSE: NUTRACEUTICALS**

CREDIT:3

CO1: Understand the developments in the field of nutraceuticals and nutrigenomics.

CO2: Comprehend the components of functional foods and foods containing nutraceuticals

CO3: Know the importance of probiotics and prebiotics in human health

CO4: Understanding the effects of nutrients in molecular level process in the body and the effect of phytochemicals in disease conditions.

CO5: Articulate and advocate the principle of nutrigenomics in controlling life style diseases.

#### **COURSE: PRINCIPLES OF INTERNET**

**CREDIT: 3** 

CO1: Learn the basics of Internet.

CO2: Understand the concept of www

CO3: Understand Firewall, Digital Certificate

CO4: Learn about Browsers

# COURSE: ADVANCED FOOD SCIENCE (PRACTICAL)

CREDIT: 0

CO1: Develop the culinary skills in the preparation of recipes and different stages of sugar cookery

CO2: Demonstrate the effect of fermentation of batter

CO3: Recognize the reactions of food components due to the effect of acid, alkali and heat on the cooking of pulses, vegetables, egg and meat

CO4: Apply the knowledge and skill to identify the microscopic structures of starch and sugar crystals

# **SEMESTER-II**

#### **COURSE: ESSENTIALS OF MICRO NUTRIENTS**

CO1: Gain in depth knowledge on the physiological and metabolic role of Vitamins and minerals

CO2: Outline the role of vitamins in health and disease.

CO3: Assess the physiological action of vitamins and minerals.

Pfincipal Islamiah Women's Arts and Science College Vanıýambadi - 635 752.

hiyambadi

CO4: Acquire in depth knowledge of macro and micro minerals and their role in human health and diseases.

CO5: Enable to understand the inter relationship between vitamins and minerals.

# COURSE: ESSENTIALS OF MICRO NUTRIENTS (PRACTICAL) CREDIT: 4

- CO1: Acquire the knowledge on diagnostic level of blood and urine biochemical parameters.
- CO2: Learn the analytical techniques in biochemical assessment of nutritional status.
- CO3: Analyse blood and urine biochemical parameters and depict nutritional status.
- CO4: Demonstrating skills for the estimation of blood and urine biochemical parameters.

#### COURSE: NUTRITION THROUGH LIFE CYCLE

CREDIT: 4

- CO1: Identify the nutritional deficiency symptoms among the population
- CO2: Prevent and alleviate nutritional deficiencies common among population
- CO3: Gain knowledge to formulate weaning foods, packed lunch and age/activity specific diets adequate in quality and quantity
- CO4: Understand and tackle age specific food related problems and eating behaviours

# COURSE: NUTRITION THROUGH LIFE CYCLE (PRACTICAL) CREDIT: 4

- CO1: Menu Planning, Preparation and Presentation of a day's Menu for all age group.
- CO2: Impart knowledge on the importance of nutrition during life span.
- CO3: Understand the role of nutrition in different stages of life cycle.
- CO4: Comprehend the nutritional requirements for special events

#### COURSE:FOOD MICROBIOLOGY

**CREDIT: 4** 

- CO1: Understand the general morphology and the growth inhibiting and promoting factors for microorganisms
- CO2: Categorize the sources, contamination and type of spoilage
- CO3: Enumerate food poisoning food born hazards and food intoxication of microbial origin to ensure food safety
- CO4: Learn about the Principles of preservation by high and low temperature and new trends in preservation Gain knowledge in Sterilization by Physical agents, types of sterilization,

Microbiology of water, bacterial examination for water and water treatment

# COURSE:FOOD STANDARD AND QUALITY CONTROL

**CREDIT: 3** 

CO1: The control of quality and use of additives is known.

CO2: Knowledge on the standards for food quality and food laws is obtained.

CO3: Discuss on the food safety measures and importance of food labelling in the food

CO4: Items purchased.

## COURSE: HOSPITAL FOOD SERVICE

**CREDIT: 3** 

CO1: Understand the principles of food service

CO2: Gain knowledge on meal planning

CO3: Describe the hygiene and sanitation followed in food service unit

CO4: Distinguish tool of management

#### COURSE: TEXTILES AND CLOTHING IN HUMAN CARE

**CREDIT: 3** 

CO1: Classify the fibres and explain its properties.

CO2: Assess the types and properties of yarns.

CO3: Compile the fabric construction techniques.

CO4: Describe the process and agents in stain removal.

CO5: Determine the laundering procedures for various fabrics.

#### COURSE:BAKERY SCIENCE

CREDIT: 3

n's Arts &

aniyamba

CO1: An understanding about ingredients used for baking and how their characteristics

CO2: Gain knowledge about the appropriate preparation, mixing, make-up, baking, decorating and presenting of baked products.

CO3: Describe and apply appropriate sanitation, health and safety practices in baking

CO4: Demonstrate the safe operation, cleaning, maintenance and storage of baking equipment and utensils

# COURSE: HOME SCALE PRESERVATION OF FRUITS AND VEGETABLES CREDIT: 3

CO1: Gain expertise to preserve fruits and vegetables at home scale level

CO2: Apply the skill in improving the quality of the preserved food products

CO3: Excel in the field of applying fermentation techniques

CO4: Enhance the knowledge on usage of sugar, salt and chemicals in fruits and vegetables

CO5:Become as an entrepreneur in small scale food industries.

#### **COURSE: LIFESTYLE PRACTICES**

**CREDIT: 3** 

CO1: Relate nutritional requirement for various stages of life.

CO2: Plan a balanced diet. 3 Distinguish between healthy and unhealthy life style practices.

CO3:Correlate life style practices with health outcomes.

CO4: Practice and promote healthy life style practices.

## SEMESTER III

## COURSE: NUTRITIONAL BIOCHEMISTRY

CREDIT: 4

CO1: Define biochemistry and relation to Nutrition.

CO2: Classify the based on amino acid.

CO3: Explain the chemical composition of Fats.

CO4: Determine the Nucleic Acids and protein bio synthesis.

CO5: Describe the inborn errors of Metabolism.

# COURSE: RESEARCH METHODOLOGY AND APPLIED STATISTICS CREDIT: 4

CO1: Explain primary and secondary data.

CO2: Compare and contrast the correlation co- efficient between two variables.

CO3: Analyze statistical data using MS-Excel.

CO4: Describe simple linear regression equation for a set of data.

CO5: Apply test of significance for large and small sample.

#### **COURSE: COMMUNITY NUTRITION**

**CREDIT: 4** 

CO1: Define the role of Community Nutrition.

CO2: Understand the mal nutritional Problems among the community.

CO3: Outline the nutrition and health in national development.

CO4: Apply nutrition policy and programs.

CO5: Describe the skills needed to delivery nutrition services.

# COURSE: NUTRITION IN EMERGENCIES (Elective – III)

**CREDIT: 3** 

CO1: Understand the protecting people's right to nutrition during disaster.

CO2: Prepare for emergencies, to prevent hunger, malnutrition and deficiency disorder.

CO3: Create and awareness on nutrition policies and programmes to combat nutritional problems.

Vaniyamb

CO4: Outline the communicable disease.

Principal

# COURSE: FUNCTIONAL FOODS AND NUTRACEUTICALS- ELECTIVE -II

**CREDIT: 3** 

CO1: Describe the source of functional foods and nutraceuticals.

CO2: Explain the role of functional foods and nutraceuticals and dietary supplements in health and disease.

CO3: Classification based on food source.

CO4: Create source and role of functional foods and nutraceuticals.

# COURSE: INTERNSHIP (SBS - III)

**CREDIT: 2** 

CO1: Define role of diet.

CO2: Understand principles of diet.

CO3: Describe menu planning and serving therapeutic diet.

CO4: Analyze the nutritive value of food ingredients.

# **SEMESTER IV**

# **COURSE: DIET THERAPY**

CREDIT: 5

CO1: Understand the principles of diet and nutrition in the causes and treatment of disease.

CO2: Learn recent concept in dietary management of different disease.

CO3: Understand the modification in nutrients and dietary requirement for therapeutic condition.

CO4: Explain principles of nutritional care.

CO5: Plan and prepare a day's menu of disease condition.

CO6: Explain parenteral feeding jejunonstomy, nasogastric, gastronomy, rectal feeding.

CO7: Describe cardio vascular system.

# **COURSE: FOOD BIOTECHNOLOGY**

CREDIT: 3

CREDIT:

CO1: Explain recent updated on recent advanced in the application of genetic engineering in food.

CO2: Develop an understanding about Nano biotechnology industries.

CO3: Describe classical strain improvement.

CO4: Apply the Nano biotechnology in food industries.

COURSE: (A) NUTRITIONAL BIOCHEMISTRY (B) COMMUNITY NUTRITION

(Practical)

CO1: Determine the saponification number.

CO2: Describe the serum proteins by Biuret method.

CO3: Determine the albumin/ globulin ratio biuret.

CO4: Develop the plan for nutrition education programmes in community.

CO5: Develop the low cost recipes for infant, preschooler, elementary.

CO6: Classify the communication aids for different groups.

# COURSE: DIET THERAPY (Practical - IV)

**CREDIT: 4** 

CO1: Explain the types of diet.

CO2: Understand the principles of therapeutic diet for various disease conditions.

CO3: Plan and Calculate nutritive value of diet

CO4: Classify the type- I and II diabetes mellitus. CO5: Plan a diet for deficiency disease.



#### DEPARTMENT OF CHEMISTRY

# **B.Sc** (Chemistry)

# Program specific outcomes (PSO)

PSO1: Understand the basic concepts of organic, inorganic, analytical, and pharmaceutical.

PSO2: Evaluate the practical knowledge about gravimetrical analysis, inorganic analysis and instrumental knowledge.

PSO3: Understand water treatment and analysis.

PSO4: Understand nutritive value of food items and diet.

PSO5: Apply industrial and pharmaceutical related sectors.

# COURSE OUTCOME SEMESTER I

#### COURSE: GENERAL CHEMISTRY - I

**CREDIT: 4** 

CO1: Recollect the Chemistry of Quantum Numbers.

CO2: Review and apply periodicity of properties.

CO3: Discuss various types of bonding through VB & MO theories.

CO4: Name simple Aliphatic and Aromatic Compounds.

CO5: Illustrate and apply electron displacement effects and reaction mechanisms.

CO6: Elaborate the basic concepts of solid, liquid and gaseous states.

CO7: Apply the principles of Volumetric Analysis.

## COURSE: ALLIED ZOOLOGY - I

CREDIT: 3

CO1: The students will be able to understand the life – cycle to and adaptations of protozoa, poriferacoelenterata and platy helminthes.

CO2: The student will be able to understand the functional morphology of Annelids, Arthropods Molluscs and Echinoderms.

CO3: The student will be able acquire knowledge about the functional morphology of chordata, prochordatas and pisces.

CO4: The student will be able have a thorough knowledge about Frog and Calotes.

CO5: The student will be able to understand the functional morphology of Aves and Mammals.

# SEMESTER II

#### COURSE: GENERAL CHEMISTRY - II

**CREDIT: 4** 

CO1: Compare the basic properties of elements and their Compounds of s & p block elements.

CO2: Explain the reaction mechanisms of alkanes, alkenes and alkynes and predict the products.

Prindipal

CO3: Classify dienes and analyze the stability of alkanes, alkenes and cycloalkanes.

CO4: Recollect the basic concepts of Quantum Theory and Thermodynamics.

CO5: Calculate the thermodynamic parameters using thermo chemical equations and data.

## COURSE: ALLIED ZOOLOGY-II

**CREDIT: 3** 

CO1: Understand the principles of cell biology, genetics, development biology, physiology, Ecology and Evolution.

CO2: Explain the study of the internal structure of animals.

CO3: Explain the relationship between the organisms and their surrounding environments

CO4: Understand heredity and its vibrations.

# COURSE: VOLUMETRIC ANALYSIS CORE PRACTICAL-I

**CREDIT: 2** 

CO1: Understand lab safety and handling of apparatus.

CO2: Estimate Acidimetry.

CO3: Estimate Precipitation Titration.

CO4: Evaluate Permanganometry.

#### SEMESTER III

#### COURSE: GENERAL CHEMISTRY-III

CREDIT: 3

CO1: Outline in organic analysis and its applications.

CO2: Analyze P-block elements and group study.

CO3: Apply aromaticity and substitution reactions.

CO4: Apply different types of reactions their mechanism

CO5: Evaluate second law of thermodynamics concept of entropy.

## COURSE: ALLIED BIO-CHEMISTRY-III

**CREDIT: 4** 

CO1: Classify the structure and functions of carbohydrates

CO2: Understand the reactions and properties of Amino Acids

CO3: Discuss about the various structures of Proteins

CO4: Outline biological functions and classification of peptides.

COURSE: WATER TREATMENT & ANALYSIS (SBS-I)

**CREDIT:3** 

CO1: Discuss about water softening methods.

CO2: Explains about desalination of brackish water.

Aslamiah Wamen's Arts and Science College Vanivambadi - 635 752.

c Arts & C

CO3: Deals with sterilization and disinfection ofwater.

CO4: Discuss about water softening methods.

#### **COURSE: HEALTH AND NUTRITION**

**CREDIT: 2** 

CO1: Understand food groups

CO2: Outline food processing and food preservation

CO3: Estimate food malnutrition

## SEMESTER IV

#### COURSE: GENERAL CHEMISTRY-IV

CREDIT: 3

CO1: Describe about noble gases their inertness and clatharites.

CO2: Discuss about monody carbocarboxylic acids and amities.

CO3: Concept related to alcohols phenols and properties.

CO4: Evaluate Gibbs-Helmholtz evolution Maxwell relations.

# **COURSE: ALLIED BIO-CHEMISTRY-II**

CREDIT: 4

CO1: Discuss about TCA Cycle and Glucose Metabolism

CO2: Outline metabolic disorders like diabetes, jaundice.

CO3: Classify the enzymes and mechanism of enzyme action.

CO4: Understand the central dogma of Molecular biology.

CO5: Outline requirement and biological functions of VITAMINS.

# COURSE: FOOD CHEMSITRY (SBS-II)

**CREDIT:3** 

CO1: Discuss about food prevention food additives packaging of foods.

CO2: Understand food colours, food processing

CO3: Estimate nutritive value of food and food preservation.

CO4: Discuss about food prevention food additives packaging of foods.

# COURSE: INORGANIC QUALITATIVE ANALYSIS & PREPATATION

## (CORE PRACTICAL-II)

CREDIT:3

CO1: Understand Inorganic qualitative analysis and preparation

CO2: Provide analysis of two cations and two anions.

CO3: Explain semimicro methods using conventional scheme to be adopted

CO4: Evaluate preparation of different inorganic compounds &

#### COURSE: ALLIED BIOCHEMISTRY I & II (ALLIED PRACTICAL) **CREDIT: 2**

CO1: Evaluate volumetric estimation

CO2: Estimate Glucose by Benedict's Method

CO3: Evaluate Glycine by Formal Titration

#### COURSE: NON MAJOR ELECTIVE FIRST -AID

CREDIT: 2

CO1: Explain the importance of giving first-aid.

CO2: Understand knowledge on basic for first-aid treatment in case of injury or accidents.

CO3: Explain the simple life saving techniques that would greatly help in case of emergency.

CO4: Understand to react to a given emergency situations correctly.

# SEMESTER - V

#### COURSE: INORGANIC CHEMISTRY-I

CREDIT:4

CO1: Describes halogens classification of halides comparative study of interhalogen compounds.

CO2: Understand about coordination compounds, nomenclature and isomerism.

CO3: Analyze knowledge of VBT and CFT, hybridization and structures of carbonyls

CO4: Explain different theories of coordination chemistry

CO5: Explain the nature of the solid state

#### COURSE: ORGANIC CHEMISTRY-I

CREDIT:4

CO1: Understand the carbohydrates structure elucidation of glucose, sucrose.

CO2: Describes stereoisomerism elements of symmetry, chirality etc,

CO3: Explain conformational analysis axial and equatorial interconversions.

CO4: Outlines heterocyclic compounds, huckels rule, aromaticity

CO5: Explain electrophilic substitution reactions.

# COURSE: PHYSICAL CHEMISTRY-I

**CREDIT:4** 

CO1: Explain about azeotropic mixtures partially miscible liquids

CO2: Outline applications of phase rule, cooling curves, and Gibb's phase rule.

CO3: Discuss about equivalent conductance, kholraush's law ionic Mobility, hittorff's method.

CO4: Evaluate about cooligative properties, van't haff factors. onen's Arts &

CO5: Explain about conductometric measurements.

# COURSE: ANALYTICAL CHEMISTRY-I (ELECTIVE-I)

**CREDIT:3** 

CO1: Deals with data analysis, types of errors, solvent extraction

CO2: Describes gravimetric analysis. Ignition of precipitate.

CO3: Discuss about microwave spectroscopy, IR spectroscopy, raman spectroscopy and their applications.

## COURSE: PHARMACEUTICAL CHEMISTRY (ELECTIVE-II)

**CREDIT: 3** 

CO1: Outline different types of drugs, various diseases and their treatment importance of Indian medicinal plants.

CO2: Discuss about organic pharmaceutical aids, narcotic drugs.

CO3: Analyze different types of drugs like analgesics, anesthetics drugs affecting CNS

## COURSE: APPLIED CHEMISTRY (SBS-III)

CREDIT:3

CO1: Classify petrochemicals deals with paper technology, sugar industry.

CO2: Analyze explosives, photography techniques, xerographic copying etc.

CO3: Determine the processing of milk, sterilization homogenization techniques.

#### SEMESTER VI

#### **COURSE: INORGANIC CHEMISTRY-II**

CREDIT: 4

CO1: Evaluate nuclear stability, N/P ratio and nuclear binding energy magic numbers.

CO2: Describes nuclear radio activity, half life period, thermo nuclear reactions.

CO3: Analyze metallurgical process, zone refining, deals with comparative study of Ti. V. Cr, Mn.

CO4: Able to make a study of lanthanides and actinides, extraction of thorium and uranium.

CO5: Explain organometallic compounds.

## COURSE: ORGANIC CHEMISTRY-II

**CREDIT: 4** 

CO1: Imparts knowledge on mechanism of rearrangement reactions differentiate inter molecular

s Arts &

CO2: Formulate amino acids and poly peptides, end group analysis.

CO3: Define proteins and nuclic acids, differentiates DNA and RNA

CO4: Discuss about organo synthetic reagents and natural products

CO5: Explain chemistry of natural products.

Principal
Islamiah Women's Arts and Science College
Vaniyambadi - 635 752

#### COURSE: PHYSICAL CHEMISTRY-II

**CREDIT: 4** 

CO1: Outline galvanic cells, emf of a cell, standard hydrogen electrode, reference electrode

CO2: Define liquid junction potential, quinhydrone and glass electrodes

CO3: Evaluate kinetics of reaction by volumetric, polarimetric, spectrophotometric methods.

CO4: Classify adsorption, catalysis and deals with laws of photochemistry.

CO5: Explain kinetics of photochemical reactions.

#### COURSE: ANALYTICAL CHEMISTRY (ELECTIVE-II)

CREDIT:4

CO1: Understand principles and techniques of chromatographic techniques.

CO2: Describe principles and applications of HPLC, gas, Liquid chromatography.

CO3: Apply to ESR spectroscopy and thermo analytical techniques.

CO4: Discuss about rig rule Mc Lafferty rearrangement

CO5: Discuss various components with block diagram.

# COURSE: AGRICULTURE & LEATHER CHEMISTRY (SBS-I)

**CREDIT: 4** 

CO1: Outline soil fertility and productivity, soil chemistry

CO2: Outline classification of insecticides, environmental effects of pesticides. CO3: Apply Dye

manufacture of leather, dyeing of leather, treatment of tannery effluents

CO4: Outline effect of tannery effluents

CO5: Discuss vegetable tanning, chrome tanning and deliming.

# COURSE: GRAVIMETRIC ESTIMATION (CORE PRACTICAL-IV)

CREDIT:3

CO1: Describe with gravimetric estimation of sulphate as Barium sulphate

CO2: Evaluate gravimetric estimation of lead as lead chromate

CO3: Discuss about estimation pf calcium as calcium oxalate monohydrate

# COURSE: ORGANIC ANALYSIS & PREPARATIONS(CORE PRACTICAL-V)

**CREDIT: 3** 

CO1: Analyze organic compounds containing one functional group and characterization with one derivative

aniyamba

CO2: Analyze of aldehyde, ketone nitro compounds, ester amines.

CO3: Outline organic preparations by acylation, halogenations, diazotization

# COURSE: PHYSICAL CHEMISTRY EXPERIMENTS (CORE PRACTICAL-VI)

**CREDIT: 3** 

CO1: Determine order of reactions by kinetics

CO2: Determine cell constant equivalent conductivities by conductivity experiments.

CO3: Evaluate potentiometric titrations if strong acid against strong base.

Waniyambadi Laniyambadi Laniya

## DEPARTMENT OF BIOCHEMISTRY

# PROGRAM SPECIFIC OUTCOME (PSO)

PSO1: Students will gain knowledge of cytology, biomolecules

PSO2: Practical skill of Microbial culture and antimicrobial chemotherapy PSO3:Students will be able to apply analytical instruments in the field of research for Isolation, Separation and Purification of organelles and protein, DNA and RNA

PSO4:Student will be able to understand the Role of enzymes in Metabolism and as Marker for Disease and Industrial application enzymes

PSO5: Students will be able to understand the mechanism of Molecular biology and applications in Recombinant DNA technology, Fingerprinting, Human genome project, Plant and animal cell culture.

PSO6: Students will be able to understand about Etiology of Disease, Diagnosis using laboratory technology and Treatment procedure.

PSO7:Students will able to understand the concept of Immune system which protects the body from disease and Immunological disorders and production of vaccines.

PSO8: Role of computer and Statistics in data analysis in clinical epidemiology and Research.

# **COURSE OUTCOMES (CO)**

## **SEMESTER-I**

**COURSE: CELL BIOLOGY** 

**CREDIT:4** 

CREDIT:4

CO1: Identify the view of cells origin and the solution of cell theory.

CO2: Compare and contrast of prokaryotic and eukaryotic cells.

CO3: Explain the sub organelles and its type of cell

CO4: Define the nature and role of organelles such as endoplasmic reticulum, ribosome,

mitochondria and plasma membrane.

CO5: Outline about chromosomes, chloroplast cell communication.

# **COURSE: ALLIED CHEMISTRY I**

CO1: Explain the terms and process used in Metallurgy

CO2: Compare the types of effects of polarisationplays the role in organic reactions.

CO3: Determine the rate of reaction and to compare the types of catalysis.

CO4: Evaluate the types of nuclear reaction and applications of radio-isotopes.

CO5: Classify the types of hybridization and shapes of molecules.

#### SEMESTER-II

## **COURSE: BIOMOLECULES**

**CREDIT-4** 

CO1: Classifiy of carbohydrates, isomerism of sugars, reactions of carbohydrates.

CO2: Explain about amino acid, protein and its structure.

CO3: Define the functions of lipids with classifications.

CO4: Determine the nature of genetic materials purine and pyrimidine bases

CO5: Design Watson and Crick model of DNA and types of RNA

CO6: Outline of dietary sources, deficiency and biological functions of fat & water soluble vitamins.

## **COURSE: ALLIED CHEMISTRY II**

CREDIT-4

CO1: Describe the coordination compounds and their applications.

CO2: Evaluate the role of carbohudrate, Amino acid, proteins and vitamins.

CO3: Determine the types of conductions in electrochemistry.

CO4: Explain the application of points, chromatographic techniques.

CO5: Evaluate the types of drugs applied for diseases.

# COURSE: CHEMISTRY I & II (ALLIED PRACTICAL)

**CREDIT: 2** 

CO1: Analyze and identify the functional groups present in the given substance.

CO2: Understand types f reaction

CO3: Determine the strength of the solutions.

# COURSE: LANGUAGE SKILLS AND COMMUNICATION-I (NME) CREDIT-2

CO1: Understand the importance of Language and communication

CO2: Able to understand and apply the knowledge of human communication and language

CO3: Acquire skills like interpersonal, intra personal and intra cultural communication.

### COURSE: CORE PRACTICAL - PRACTICAL I

**CREDITS-4** 

CO1: Analyze qualitative tests of carbohydrates

CO2: Describe about reducing sugar, osazone formation with conformation test

CO3: Analyze qualitative test of amino acids

CO4: Determine quantitative test of sugar, amino acids & ascorbic acids

# COURSE: ALLIED PRACTICAL - CHEMISTRY PRACTICAL I & II

**CREDITS 2** 

CO1: Understand the lab safety & handling the apparatus

CO2: Compare the properties of organic substances

CO3: Evaluate the normality of the solutions

## COURSE: CORE PRACTICAL - PRACTICAL II

**CREDITS 4** 

CO1: Understand the concept of isolation process of lipids, cholesterols from egg

CO2: Isolate starch from potato

CO3: Demonstrate colorimetry & chromatographic techniques

CO4: Estimate the quantity of amino acid, protein by colorimetrically CO5: Preparation of buffer

# COURSE: ALLIED PRACTICAL - MICROBIOLOGY I & II

**CREDITS 2** 

CO1: Understand the sterilization techniques

CO2: Evaluate the soil microorganisms

CO3: Explain staining Techniques

CO4: Explain serial dilution techniques

CO5: Analyze puncture techniques

# COURSE: CORE PRACTICAL - PRACTICAL III

**CREDITS 5** 

CO1: Analyze creatinine, urea, glucose by colorimetrically CO2: Analyze biological samples of salivary amylase CO3: Estimate enzyme activity of urease

CO4: Analyze serum samples (SGOT, SGPT) CO5: Demonstration of electrophoretic techniques

CO6: Understand the concept of sample separation by electrophoretic techniques

COURSE: ELECTIVE PRACTICAL - PRACTICAL IV MEDICAL LAB TECHNOLOGY

**CREDITS 3** 

CO1: Acquire phlebotomy skills

CO2: Evaluate the haematology parameters

CO3: Identify the normal & abnormal constituents of urine

CO4: Understand microbiological concept of staining, streaking & culturing.

### SEMESTER-III

### COURSE: FUNDAMENTALS OF COMPUTER I (SBS)

**CREDIT: 3** 

CO1: Acquire basic word processing skills with Microsoft Word, such as text input and formatting, editing, cut, copy and paste, spell check, margin and tab controls, keyboard shortcuts, printing, as well as how to include some graphics such as pictures and charts.

CO2: Evaluate information on the Web

(learn how to be critical and evaluate what is valid and reliable).

CO3: Explain the basics of e-mail, such as sending, forwarding and receiving mail, attaching documents, creating mailboxes, filters, and address books.

CO4: To be able to describe why computer systems are important needed to be reliable.

CO5: Explain Fundamental concepts related to computer system.

# COURSE: BIOPHYSICAL AND BIOCHEMICAL TECHNIQUES I CREDIT: 3

CO1: Students will demonstrate a core knowledge base in the theory and practice of modern Biochemistry and biophysical (BB)

CO2: Understand Units of solute measurement in solution.

CO3: Explain about the Concept and application of pH in the buffer.

CO4: Illustrated the Instrumentation and application of electrode

CO5: Understand the partition and abstraction Chromatography Technique.

CO6: Acquire knowledge on Preparative and differential certification technique.

### COURSE: MICROBIOLOGY (ALLIED)

**CREDITS: 4** 

CO1: Understand the microscopic techniques

CO2: Classify the structure and functions of cell organelles

CO3: Understand animal cell culture techniques

CO4: Acquire skills on the classical techniques of microbial identification

CO5: Analyze microbial growth determination.

LANGUAGE SKILLS COURSE: AND COMMUNICATION-II (NME)

CREDIT-2

CO1: Acquire skills on technology mediated communication

CO2: Able to improve the fluency of speaking

CO3: Analyze the correct usage of grammar in writing and speaking

### SEMESTER-IV

# COURSE: BIOPHYSICAL TECHNIQUES -I

**CREDIT-3** 

CO1: Create a practical knowledge on the separation of biological sample by centrifugation

CO2: Create analytical skills to separate samples by chromatography.

CO3: Acquire knowledge of spectroscopy.

CO4: Explain about the radiation and types of radio decay.

### **COURSE: MICROBIOLOGY**

**CREDIT-4** 

CO1: Understand the Microbial waste treatment methods.

CO2: Explain about the food prevention techniques.

CO3: Illustrate the distribution and source of airborne microorganisms.

CO4: Design the industrial production of penicillin.

CO5: Theorize the cloning techniques and gene therapy methods.

## **COURSE: COMPUTER APPLICATION**

**CREDIT-3** 

CO1: Understand operating system, MS DOS and Windows XP opening and closing.

CO2: Construct electronic mailing and web page.

CO3: Solve computer virus and components failure then downloading files.

CO4: Defend computer applications in educational institutions.

### SEMESTER-V

# COURSE: ENZYMES AND INTERMETIARY METABOLISM

**CREDIT-6** 

CO1: Classify and nomenclature specificity of enzymes.

CO2: Analyze the factors affecting enzymes activity -pH, temperature, enzyme concentration.

CO3: Formulate metabolic pathways of carbohydrate metabolism.

CO4: Evaluate high energy components of metabolites.

CO5: Explain about the oxidation of fatty acids-  $\beta$ - oxidation,  $\alpha$ - oxidation and  $\omega$ - oxidation.

CO6: Define the degradation of proteins.

CO7: Explain about the biosynthesis and degradation of purine and pyrimidine metabolism.

# COURSE: HUMAN PHYSIOLOGY AND NUTRITIONAL BIOCHEMISTRY CREDIT-4

CO1: Explain the components of transport of O2 and CO2 role of Hb mechanism of respiration.

CO2: Define digestive system, digestion and absorption of nutrients.

CO3: Outline of excretory system and function of urine.

CO4: Design Endocrine glands and their function of nervous system and neurotransmission.

CO5: Analyze basic food groups' role and nutritional significance and malnutrition.

# **COURSE: MEDICAL LAB TECHNOLOGY**

**CREDIT-3** 

CO1: Understand about the code of conduct for lab personnel.

CO2: Design and handle the basic instruments for laboratory usages.

CO3: Collect and analyze biological samples like urine, blood, fecal sample and its analysis.

CO4: Explain about the CSF, other body fluids and parasites.

# COURSE: GENETICS AND MOLECULAR BIOLOGY

**CREDIT-4** 

CO1: Understand the concept of hereditary in plant and human being.

CO2: Describe the mechanism of DNA, RNA and Protein synthesis.

CO3: Identify the role of Inhibitors in treatment of cancer.

CO4: Compare and contrast role of mutation in genetic disorder and cancer development.

CO5: Explain the role of mutation in genetic disorders and biodiversity.

### SEMESTER VI

### **COURSE: IMMUNOLOGY**

**CREDIT-3** 

CO1: Compare and contrast innate and adaptive immunity

CO2: Design a model of immunoglobulin and its role

CO3: Explain cell types and organ present in the immune response

CO4: Identify various mechanisms that regulate immune response and its tolerance.

# **COURSE: CLINICAL BIOCHEMISTRY**

**CREDIT-6** 

CO1: Define the fundamental biochemistry knowledge related to health& diseases

CO2: Explain diseases related to carbohydrate, amino acid & lipid metabolism

CO3: Evaluate the clinical importance of inborn errors of metabolism

CO4: Determine the clinical laboratory procedure and quality control, sign and symptoms, diagnosis & treatment

CO5: Define clearance test, and explain the clinical interpretation of function tests

CO6: Outline the functional and non functional plasma enzymes

CO7: Diagnose of clinical disorder by estimation of biomarkers

### COURSE: BIOTECHNOLOGY

### CREDIT-4

- CO1: Understand the different vectors plasmid, cosmid and phages with its role.
- CO2: Understand the types of yeast, plant, animal vector and artificial chromosome.
- CO3: Identify selection and screening of recombinant vectors.
- CO4: Understand the mechanism and types of animal and plant tissue culture.
- CO5: To develop therapeutic vaccines, hormone clotting factors, stem cell and animal cloning.

### COURSE NAME: BIOSTATISTICS

### **CREDIT-3**

- CO1: Understand the collection, classification and tabulation of statistical data.
- CO2: Execute measure of central tendency, mean, median and mode.
- CO3: Analyze standard deviation, variance and coefficient of variation.
- CO4: Define kinds of probabilities, permutation and combination.
- CO5: Compare correlation analysis, partial and total correlation.

# M.Sc (Biochemistry) COURSE OUTCOME SEMESTER I

# COURSE: CELL DYNAMICS AND ENVIRONMENT BIOLOGY CREDIT-4

- CO1: Understand the regulation of cell growth in prokaryotes and eukaryotes.
- CO2: Define the morphology of cell organelles and its function.
- CO3: Distinguish and differentiate the biotic and abiotic environment
- CO4: Describe the synthesis of organic polymers
- CO5: Understand the concept of evolution, molecular divergence and molecular clock.

Vaniy

### COURSE: CHEMISTRY OF MACROMOLECULES

### CREDIT-5

- CO1: Describe the structure and function of homo and hetroglycans
- CO2: Understand the structural elucidation of amino acids and proteins
- CO3: Distinguish the Nucleic acids
- CO4: Describe the lipids classification, structure and functions

CO5: Understand the vitamins deficiency diseases

### **COURSE: HUMAN PHYSIOLOGY**

CO1: Describe the composition of digestive system

CO2: Understand the cardiac cycle

**CREDIT-5** 

CO3: Explain the mechanism of resprition and reproduction

CO4: Explain endocrine & nervous system

CO5: Understand the nutritional value & dietary system

### COURSE: PLANT BIOCHEMISTRY AND PLANT MOLECULAR

**BIOLOGY** 

**CREDIT-3** 

CO1: Understand the concept of light and dark reaction of photosynthesis in C3 and CAM Plants.

CO2: Understand the Nitrogen fixation in leguminous and non-leguminous plants.

CO3: Distinguish and differentiate the role of plant hormones.

CO4: Understand the DNA polymorphism using RFLP and RAPD in Plant breeding.

### SEMESTER II

### COURSE: ANALYTICAL BIOCHEMISTRY

CREDIT-4

CO1: Describe the instrumentation & its application of electrodes

CO2: Acquire the concept of chromatographic techniques

CO3: Explain the separation of biological samples by centrifugation techniques

CO4: Describe the instrumentation & applications of Electrophoretic techniques

CO5: Distinguish the principles & methodology molecular techniques

### COURSE: ADVANCED ENZYMOLOGY

CREDIT-4

CO1: Explain classification, isolation and purification of enzymes

CO2: Analyze the enzyme kinetics

CO3: Understand the mechanism of enzymication and inhibition

CO4: Distinguish the role co enzymes and isoenzymes

CO5: Understand the uses of enzymes in industrial and clinical

### COURSE: INTERMEDIARY METABOLISM

**CREDIT-4** 

CO1: Understand the carbohydrate metabolic pathway

CO2: Describe the lipid metabolism

CO3: Explain protein metabolism

CO4: Understand nucleic acid metabolism

CO5: Understand prophyrin photosynthesis and metabolic activity

# **COURSE: MICROBIOLOGY (ELECTIVE)**

**CREDIT-3** 

CO1: Understand the morphology of ultrastructure of microbes

CO2: Understand the Calvin cycle

CO3: Explain the methods microbial media

CO4: Understand the principle of microbial techniques

### COURSE: PRATICAL -I - ISOLATION AND PURIFICATION

CREDITS-5

CO1: Analyzing the isolation of Glycogen, DNA,RNA

CO2: Estimate the quantitatively Pyruvate, Tryptophan, Ascorbic acid

CO3: Understand the chromatographic techniques

CO4: Understand the separation of Protein and Glutathione

CO5: Estimate the amount of iron, Sodium

# COURSE: PRATICAL -II -ENZYMOLOGY AND PURIFICATION AND KINETIC

**STUDIES** 

**CREDITS-5** 

CO1: Estimate the amount of isolation of acid phosphates

CO2: Understand the assay of clinical important of enzymes

CO3: Understand the handling and maintance of microbial techniques

CO4: Analyze the assay of serum enzymes

CO5: Understand the various media preparation CO6: able to know the techniques PCR PAGE

TLC

### SEMESTER III

### COURSE: ADVANCED ENDOCRINOLOGY

**CREDIT-5** 

CO1: Discuss the classification of hormones based on receptors

CO2: Illustrate the synthesis of amino acid derived hormones

CO3: Understand cyclic hormonal cascade system and protein kinases

CO4: Execute the role hormone receptors and its regulation

CO5: Categorize the steroid hormones

CO6: Describe the hormonal disorders

### COURSE: RESEARCH METHODOLOGY

CREDIT-5

CO1: Discuss the essential features of scientific writing.

CO2: Illustrate the figures, tables and reference style.

CO3: Calculate the test of significance based on large samples.

CO4: Execute the role of computers in biology to find the research articles using science direct/PubMed.

CO5: Categorize the database management systems and searching sequence database using

FASTA, BLAST/CLUSTAL.

CO6: Recognize CPCSEA guidelines and ethics in drug safety.

# **COURSE: BIOTECHNOLOGY**

**CREDIT-5** 

CO1: Understand the different vectors plasmid, cosmid and phages with its role.

CO2: Understand the types of yeast, plant, animal vector and artificial chromosome.

CO3: Seek insertion of foreign DNA using restriction enzyme.

CO4: Identify selection and screening of recombinant vectors.

CO5: Understand the mechanism and types of animal tissue culture.

CO6: Understand the genetically modified organisms

### **COURSE: BIOINFORMATICS**

CO1: Understand the data concept of bioinformatics.

CO2: Able to know types of alignment of nucleic acid and protein.

CO3: Analyze the sequences using bioinformatic tools (BLAST, FASTAPrincipal

CO4: Evaluate and predict phylogenetic tree, protein structure and drug designing 5,752

CREDIT-3

### SEMESTER IV

### **COURSE: MOLECULAR BIOLOGY**

**CREDIT-5** 

CO1: Understand the type of DNA replication

CO2: Able to know types of RNA and its transcription

CO3: Analyze the genetic codon and its features

CO4: Describe the protein biosynthesis

CO5: Analyze the protein transport and gene expression

CO6: Evaluate type of mutation and repair mechanism

# COURSE: ADVANCED CLINICAL BIOCHEMISTRY

**CREDIT-5** 

CO1: Understand the normal values of clinical parameters

CO2: Able to know the method of CSF collection

CO3: Analyze the disorder of carbohydrate metabolism

CO4: Describe the lipid metabolism

CO5: Analyze the protein and clinical enzymology

CO6: Evaluate renal and hepatic function test

# **COURSE: HERBAL TECHNOLOGY**

**CREDIT-5** 

CO1: Understand the Indian system of medicine.

CO2: Distinguish and differentiate the medicinal plant classification.

CO3: Analyze the morphological and histological studies of plant drug.

CO4: Evaluate the medicinal uses and biomedical importance of plants.

CO5: Able to know plant drug used in cardiac disease, cerebral disease and Nasal diseases.

CO6: Able to know conservation of medicinal plants and pharmacological analysis of plant drug.

# COURSE: CORE PRACTICAL - PRACTICAL III BIOCHEMICAL ANALYSIS OF BLOOD, IMMUNOLOGICAL AND MOLECULAR BIOLOGY TECHNIQUES

CREDIT: 5

CO1: Analyze creatinine, urea, glucose by semiautoanalyzer

CO2: Analyze biological samples of serum cholesterol, triglycerides

CO3: Estimate bilirubin and hemoglobin

CO4: Analyze blood grouping and Rh typing

CO5: Demonstration of ELISA

CO6: Understand the concept of immunodiffusion

# COURSE: ELECTIVE PRACTICAL - PRACTICAL IV HAEMATOLOGICAL METHODS

AND URINARY ANALYSIS

**CREDIT: 5** 

CO1: Acquire clotting bleeding time

CO2: Evaluate the ESR and PTT

CO3: Identify the RBC and WBC count

CO4: Understand urinary analysis

CO5: Demonstration of urinary culture analysis



Principal

# B.Sc (IDD)

# PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1: Design consultant for interior work.

PSO2: Work as landscape Designer and space planner or allocator for commercial areas

PSO3: Take up interior projects on contract basis

PSO4: Work as the drafter for plans and colour consultant.

PSO5: Work as set and costume designer.

### **COURSE OUTCOME:**

### SEMESTER I

### **COURSE: DESIGN BASICS**

**CREDIT: 4** 

- CO 1: Understand the elements of design.
- CO 2. Understand the various principles of design
- CO 3. Learn the application of principles of design in creating beautiful interiors.
- CO 4. Learn to develop own innovative designs
- CO 5. Compare and contrast the modern trends with the classical interiors.
- CO 6. Impart different types of design in interior spaces.
- CO 7. Understand the aesthetic concept and its application in interior.

### COURSE: APPLIED ARTS ON TEXTILES-I

**CREDIT: 3** 

- CO1: Understand art and apply its principles in the creation and selection of Textiles.
- CO2: Develop design in textiles and apply the same on materials.
- CO3: Understand and interpret the various finishing process of fabrics.
- CO4: Identify Different type of Fabrics and its uses in soft furnishings.
- CO5: Understand the manufacturing Techniques of yarn and fabrics.

#### SEMESTER II

### COURSE: COLOUR AND LIGHTING

**CREDIT: 4** 

CO1: Formulate the innovative approach on color and lighting and its application in interior.

CO2: Understand the sources of color and color and lighting and its dimension.

CO3: Compare and contrast various colour theories

CO4. Learn the psychological aspects of lighting and colour in interior spaces.

CO5. Develop colour scheme and lighting fixtures.

CO6. Learn the amount of lighting required in each space.

CO7. Learn the various materials in lighting system.

Islamiah Women's Arts and Science College Vanıyambadi - 635 752.

Vaniyambad

### COURSE: APPLIED ARTS ON TEXTILES-II

**CREDIT: 3** 

- CO1: Create surface enrichment of fabric using embroidery, appliqué, etc.
- CO2: Identify and analyse the various folk embroideries in India
- CO3: Evaluate figure irregularities and eliminate using optical illusion
- CO4. Learn the various stitching techniques.
- CO5. Understand the importance of fabrics in soft furnishings.CO6. Learn to enhance fabric with decoration.

# COURSE: DESIGN BASICS (PRACTICAL)

CREDIT:2

- CO1: Have acquired skills in planning spaces for interior.
- CO2: Develop fabric surface enrichment using embroidery, sequins, etc.
- CO3: Formulate design and color the fabric using printing techniques like stenciling, block printing, etc.
- CO4. Create motifs and designs for window grills, Foot mats and bed spreads.

# COURSE: APPLIED ARTS ON TEXTILES (PRACTICAL)

**CREDIT: 2** 

- CO1: Create fabric using knitting and crochet.
- CO2: Develop fabric surface enrichment using embroidery, sequins, etc.
- CO3: Formulate design and color the fabric using printing techniques like stenciling, blockprinting, etc.

### SEMESTER III

# COURSE: BASIC COMPUTER APPLICATION & AUTOCAD-I CREDIT: 4

- CO1: Understand the need for AutoCAD software.
- CO2: Compare and contrast point fixing methods.
- CO3: Identify various tools in AutoCAD software.
- CO4. Learn how to use modification tools effectively. CO5. Understand the tools used for drafting plan.
- CO6. Learn the dimensioning techniques in AutoCAD.

# COURSE: INTERIOR DESIGN STUDIO & BUILDING SYSTEM TECHNOLOGY

CO1: Analyse various construction techniques in interiors.

CO2: Identify various transportation systems in interiors like elevators, staircases, etc.

CO3: Plan and design rain water harvesting techniques for residential.

Islamiah Women's Arts and Science College Vanıyambadı - 635 752.

CREDIT

CO4.Learn the various materials and finishes used in building construction.

CO5.Undersatnd the types of foundation and its techniques.

CO6. Learn the structural elements of buildings.

# COURSE: DRAFTSMAN SHIP-I (SKILL BASED)

**CREDIT: 3** 

CO1: Compare and contrast various drafting tools and techniques

CO2: Understand dimensioning and its methods

CO3: Develop skills in technical and free hand sketching

CO4. Develop manual drafting skills.

### COURSE: LANGUAGE SKILLS AND COMMUNICATION I (NME)

**CREDIT: 2** 

CO1: understand the importance of language in communication

CO2: Understand and apply knowledge of human communication and language.

CO3: Develop Skills like interpersonal, intrapersonal, intercultural skills and technology mediated communication.

#### SEMESTER IV

# COURSE: BASIC COMPUTER APPLICATION & AUTOCAD-II

**CREDIT: 4** 

CO1: Understand 3D modeling concepts

CO2: Compare and contrast various primitive tools such as box, cone, wedge etc.

CO3: Understand the steps and process of installing lighting and rendering.

CO4. Learn the various inquiry tools in AutoCAD software.

CO5. Learn various dimensioning styles and lettering styles.

CO6. Learn to draw isometric drawings of furniture.

# COURSE: INTERIOR DESIGN STUDIO & BUILDING SYSTEM TECHNOLOGY-II

1

CO1: Understand the importance of acoustics in interior

CO2: Compare and contrast various HVAC systems

CO3: Develop electrical plans for residential and commercial spaces.

CO4. Learn the plumbing plans for residential and commercial spaces.

CO5. Analyse various building by- laws formulated by government.

Principal
Islamiah Women's Arts and Science College
Vanıyambadi - 635 752.

Inivambad

**CREDIT: 4** 

COURSE: DRAFTSMAN SHIP-II (SKILL BASED)

**CREDIT: 3** 

CO1: Understand plumbing systems in buildings.

CO2: Analyze orthographic views.

CO3: Understand the need for symbols used for developing plans

CO4. Compare and contrast the isometric and perspective views.

CO5. Learn to draft plans in perspective, orthographic and isometric view.

COURSE: INTERIOR DESIGN STUDIO & BUILDING SYSTEM TECHNOLOGY

(PRACTICAL)

CREDIT: 2

CO1: Develop skills on manual ling drafting floor plan

CO2: Create elevation view of the buildings

CO3: Develop perspective and isometric drawings.

COURSE: BASIC COMPUTER APPLICATION & AUTOCAD (PRACTICAL)

**CREDIT: 3** 

CO1: Create orthogonal views for the layouts

CO2: Utilize various text and dimension styles in AutoCAD.

CO3: Design furniture and furnishings using AutoCAD software

COURSE: LANGUAGE SKILLS AND COMMUNICATION II (NME) CREDIT: 2

CO1: understand the importance of improving fluency while speaking.

CO2: Develop skills in usage of grammar in writing and speaking.

CO3: Develop Skills in public communication.

**SEMESTER V** 

COURSE: FURNITURE IN INTERIOR

**CREDIT: 5** 

aniyamba

CO1: Learn the various types of furniture used for activities.

CO2: Develop the knowledge on various styles of furniture.

CO3: Understand the selection techniques in furniture.

CO4. Develop skills in furniture arrangement for each room.

CO5. Learn the concepts of techniques in maintaining the furniture.

CO6. Understand the various materials used in furniture and its construction techniques.

COURSE: FLORICULTURE AND LANDSCAPING

**CREDIT: 5** 

CO1: Learn the various types of plants and Flowers.

CO2: Develop the knowledge on Landscaping Plans.

CO3: Understand the various styles of garden.

CO4. Develop skills in flower arrangement.

CO5. Learn the concepts of lawn growth techniques.

CO6. Understand the various plant growing techniques.

## COURSE: PLANNING THE LIFE SPACE

**CREDIT: 5** 

CO1: Learn the various types of Spaces.

CO2: Develop the knowledge on allocating Spaces.

CO3: Understand the various architectural plans.

CO4. Develop skills in traffic pattern and circulation in interior.

CO5. Learn the concepts of Space saving Techniques.

CO6. Understand the modern building construction techniques.

### COURSE: KITCHEN DESIGN

CREDIT: 3

CO1: Learn the various types Kitchen Layouts and its selection.

CO2: Develop the knowledge on various finishes and materials used in kitchen.

CO3: Understand the anthropometric measurement of human body and its effect in kitchen.

CO4: Learn to design effective kitchen plan which reduces fatigue and discomfort.

### COURSE: RESIDENTIAL SPACE DESIGNING (SKILL BASED)

CREDIT: 3

s Arts & S

CO1: Learn the housing problems in India and its solution.

CO2: Develop the knowledge on housing Standards.

CO3: Understand the various funding agency and the government schemes for housing.

CO4. Develop zoning and bye laws for building construction.

### SEMESTER VI

### **COURSE: SOFT FURNISHINGS**

CO1: Learn the various types of furnishings used in interior.

CO2: Develop the knowledge on various floor coverings and curtain.

CO3: Understand the selection techniques in furnishings.

CO4. Learn various window treatments and its purpose in interior.

CO5. Learn the concepts of techniques of care and maintenance of soft furnishings.

CO6. Understand the various materials used in furnishings and its manufacture techniques.

Islamlah Women's Arts and Science College Vanıyambadi - 635 752.

**CREDIT: 5** 

**COURSE: APPLIED ARTS** 

**CREDIT: 5** 

CO1: Learn the various Techniques in enrichment of material.

CO2: Develop the knowledge on creating art pieces.

CO3: Understand the various accessories and its placement.

CO4. Develop skills in table setting with decoration.

CO5. Learn the concepts of craft with various skills.

CO6. Understand techniques of art.

## **COURSE: PROFESSIONAL PRACTICE**

**CREDIT: 3** 

CO1: Learn the space planning for residence and commercial interior.

CO2: Develop the knowledge on estimation of construction.

CO3: Develop skill to formulate quotation and tender for construction.

CO4. Learn the concepts of Specifications.

# **COURSE: ERGONOMICS**

**CREDIT: 3** 

CO1: Learn the concept of ergonomics.

CO2: Develop the knowledge on various ergonomic factors and its effect in interior.

CO3: Understand the anthropometric dimensions.

CO4: Learn to design ergonomic work areas and improve the work efficiency.

# COURSE: COMMERCIAL SPACE DESIGNING (SKILL BASED)

CREDIT: 3

CO1: Learn the concept of commercial art.

CO2: Develop the knowledge on designing various commercial interiors.

CO3: Understand the window display and interior display techniques.

CO4: Learn various trends in commercial architecture.

# COURSE: FURNITURE AND FURNISHINGS(PRACTICAL)

**CREDIT:3** 

CO1: Learn the correct usage of furniture and furnishings in the effective way.

CO2: Develop the knowledge on designing various furniture layouts. CO3: Understand the

techniques in stitches and pleats.

CO4: understand the evaluation of furniture.

# COURSE: FLORICULTURE AND LANDSCPING (PRACTICAL)

CO1: Learn the techniques of raising various gardens.

CO2: Develop the skill in flower arrangements.

CO3: Understand the method of cultivation.

CO4: Learn to identify various ornamental plants.

CREDIT: 3

# DEPARTMENT OF ZOOLOGY B.Sc (Zoology)

# PROGRAM SPECIFIC OUTCOME (PSOs)

PSO1: Understand the nature and basic concepts of cell biology, genetics, taxonomy, physiology, ecology and applied Zoology

PSO2: Analyse the relationships among animals, plants and microbes

PSO3 Perform procedures as per laboratory standards in the areas of Taxonomy, Physiology,

Ecology, Cell biology, Genetics, Applied Zoology, Clinical science, tools and techniques of

Zoology, Toxicology, Entomology, Nematology Sericulture, Biochemistry, Fish biology, Animal

biotechnology, Immunology and research methodology

PSO4:Understand the applications of biological sciences in Apiculture, Aquaculture, Agriculture andMedicine

PSO5:Gains knowledge about research methodologies, effective communication and skills of problem solving methods

PSO6: Contributes the knowledge for Nationbuilding.

PSO7:The students will have the knowledge to minimize the environmental issues like global warming, pollution, degradation of natural resources, and helps in conservation endangered species, afforestation etc.

PSO8: The students will able to apply their knowledge of biological sciences in various disciplines like vermiculture, mushroom culture, aquaculture, apiculture, agriculture and medicine. And contribute the knowledge for Nations development.

#### COURSE OUTCOME

### SEMESTER I

**COURSE: INVERTEBRATES** 

CO1 Describe general taxonomic rules on animal classification

CO2 Classify Protista up to phylum using examples from parasitic adaptation

CO3 Classify Phylum Porifera to Echinodermata with taxonomic keys

CO4 Imparts knowledge regarding the various Invertebrates species and the regulatory processes

### **COURSE: ENVIRONMENTAL STUDIES**

aniyamba(

CREDIT 2

CREDIT 4

CO1 Imparts knowledge to the student regarding environment and conservation biology.

CO2 Gains knowledge in the areas of responses to Laws of limiting factor, Laws of minimum,

Laws of Tolerance and Tragedy of commons

CO3 Types of ecosystem - freshwater, marine and terrestrial,

CO4 Population characteristics and dynamics - conceptual approach

# COURSE: PROFESSIONAL ENGLISH FOR LIFE SCIENCE CREDIT 3

CO 1 Students will be enabled to understand the basic objective of the course by being acquainted with specific dimensions of communication skills i.e. Reading, Writing, Listening, Thinking and Speaking.

CO 2 Students would be able to create substantial base by the formation of strong professional vocabulary for its application at different platforms and through numerous modes as Comprehension, reading, writing and speaking etc.

CO 3 Students will apply it at their work place for writing purposes such as Presentation/official drafting/administrative communication and use it for document/project/report/research paper writing.

CO 4 Students will be made to evaluate the correct & error-free writing by being well-versed in rules of English grammar & cultivate relevant technical style of communication & presentation at their work place & also for academic uses.

### **SEMESTER II**

### **COURSE: VERTEBRATES**

CREDIT 4

CO1 Imparts conceptual knowledge of vertebrates, their adaptations and associations in relation to their environment

CO2 Classify phylum Protochordates to Mammalia

CO3 Gains knowledge of functional anatomy of vertebrates from Fishes to Mammals.

CO4 Students will be able to list out the unique characters of Fishes., Amphibians, Reptiles, Aves and Mammals

# **COURSE: VALUE EDUCATION**

**CREDIT 2** 

CREDIT 3

CO 1 Students will understand the importance of value based living.

CO 2 Students will gain deeper understanding about the purpose of their life.

CO 3 Students will understand and start applying the essential steps to become good leaders.

CO 4 Students will become value based professionals.

### COURSE: PROFESSIONAL ENGLISH FOR LIFE SCIENCE

At the end of the course, learners will be able to.

CO1 Attend interviews with boldness and confidence.

CO2 Adapt easily into the workplace context, having become Islamiah Women's Arts and Science College

Vanivambadi - 635 752.

communicatively competent.

CO3 Apply to the Research & Development organisations/ sections in companies and offices with winning proposals.

Vaniyamb<sup>2</sup>