

Outcomes

Index

Section A - Grant in Aid Courses

1. Faculty of Humanities and Social Sciences

1.1	English	4
1.2	Hindi	6
1.3	Marathi	9
1.4	Urdu	11
1.5	Sanskrit	14
1.6	Music	15
1.7	Economics	16
1.8	Geography	17
1.9	History	18
1.10	Home Economics	21
1.11	Philosophy	22
1.12	Political Science	23
1.13	Sociology	24
1.14	Psychology	25
1.15	Persian	26

2. Faculty of Science and Technology

2.1	Physics	28
2.2	Electronics	32
2.3	Chemistry	34
2.4	Botany	37
2.5	Zoology	38
2.6	Mathematics	39
2.7	Microbiology	40
2.8	Biochemistry	41
2.9	Food & Nutrition	42
2.10	Human Development	46
2.11	Textiles & Clothing	46
2.12	Family Resource Management	47
2.13	Home Science Extension	48
2.14	Applied Physiology	
2.15	Applied Electronics & Software Technology	48
2.16	Interior Design	50
2.17	Cosmetic Technology	55

2.18	Hotel Management & Catering Technology	57
3.	Faculty of Commerce and Management B. Com.	58
Section B - Non-Grant (Self-Financed) Courses (UG)		
1.	Faculty of Science and Technology	
1.1	Biotechnology	65
2.	Faculty of Commerce and Management	
2.1	B. B. A	66
2.2	B. C. C. A	70
Section C - Non-Grant (Self-Financed) Courses (PG)		
1.	Faculty of Humanities and Social Sciences	
2.	M. A. Political Science	76
2.1	M. Tech Cosmetic Technology	78
2.2	M. Sc. Biotechnology	81
2.3	M. Sc. Human Development	83
2.4	Master of Fashion Design	83
2.5	Master of Home Science Extension Education	84
2.6	PG Diploma in Fashion Design	85
3.	Faculty of Commerce and Management	
3.1	M. Com	86

Faculty of Humanities and Social Sciences

1.1 ENGLISH Programme: Bachelor of Arts (3 year - semester pattern) Program Outcomes:

S. No	Program Outcomes
PO1	The Humanities provide a greater insight into the world through the study of art, literature, philosophy, music and languages.
PO2	To help students to better understand both the past and the future.
PO3	To understand the moral and ethical impact of science and technology on the overall development of society.
PO4	To encourage students to think ethically and holistically.
PO5	To think creatively and to ask questions about our world.
PO6	To develop informed and critical citizens.
PO7	Develop commitment towards Indian Culture and Indian Value System
PO8	Develop sense of social responsibility
PO9	Inculcate critical temperament and creative knowledge
PO10	Develop scientific and rational analytical abilities
PO11	To create sense of citizenship and human values
PO12	To achieve administrative professionalism in their respective fields

S. No	Program Specific Outcomes
PSO1	To develop reading , writing, listening and speaking skills
PSO2	To develop the ability to comprehend and analyse written texts
PSO3	To develop the art of listening and speaking coherently in English
PSO4	To develop critical thinking skills using language as a tool.
PSO5	To strengthen the grammatical base of language learning.
PSO6	To use literary texts as learning platforms for value education and moral science.

Course Outcomes:

S. No	Course Outcomes Semester I
CO1	To understand the need and use of poetry in daily life
CO2	To develop the art of appreciating human behaviour and developing life skills through poetry
CO3	To learn cause and effect in transactional analysis through analysis of short stories, essays and researched writing.
CO4	To understand and appreciate the value of grammar in any language
CO5	To develop group speaking skills and dyadic speaking skills in English
CO6	To enhance issue-specific conversational skills and increasing self-awareness and community awareness through English speaking skills
CO7	To understand the need for effective public speaking.

CO8	To understand the importance of language and literature in interpersonal interactions.
CO9	To develop the ability to relate literature to life and thereby enhance empathetic learning practices.
CO10	To understand the socio cultural strains in literature and thereby effectively internalize key behavioral concepts.
CO11	To learn note-taking skills and apply them to business writing, writing for professional spaces and academic writing.
CO12	To learn the skills of effective letter writing, journalistic prose writing and summa
CO13	To develop and enhance problem solving and time management through language exercises of summarizing, précis and paragraph writing.
CO14	To encourage the skills of newspaper reading and comprehension of current affairs through journalistic prose.

S. No	Course Outcomes Semester V and VI
CO15	To enhance language acquisition by deciphering and analyzing complex sentence structures, complex and structured thought process.
CO16	To develop critical thinking skills and the power of effective argument.
CO17	To use language as a tool in creative thinking and creative writing .
CO18	To write advertisement copy and learn the power of persuasive language skills
CO19	To learn the art of social correspondence, writing complaints, official writing, and writing proposals.
CO20	To develop effective e platform writing and all types of e content.
CO21	To enhance public speaking skills of group discussion, presentation skills, interview techniques, all forms of effective communication skills.
CO22	To study the art and importance of role play in effective communication.

SUBJECT: SUPPLEMENTARY ENGLISH

Supplementary English is chosen as an optional subject by students from amongst group of languages like Marathi, Hindi, Sanskrit and Urdu. Those students who opt for Supplementary English are fluent in English and the main objective is to enrich/enhance or sharpen their skills in English and hone the same.

Programme Specific Outcomes for all Semesters I to VI:

S. No	Program Specific Outcomes
PSO1	To introduce various genres of literature to students
PSO2	To develop the ability to comprehend written texts
PSO3	To acquaint students with different cultures and mores of thinking in the world
PSO4	To give students a taste of the world
PSO5	To develop language skills in learners (Listening, Speaking, Reading and Writing Skills)
PSO6	To impart varied applied language skills to learners
PSO7	To develop aesthetic sense of learners
PSO8	To develop analytical skills in learners
PSO9	To develop critical acumen of the learners
PSO10	To motivate learners to read and write more

PSO11	To help them acquire language proficiency
PSO12	And to help in developing skills necessary to be a good, productive citizen

COURSE OUTCOMES:

B.A. Sem I and II:

S. No	Course Outcomes
CO1	Develop and enrich the skill of letter writing (to draft Professional and Business letters)
CO2	Develop the skill to construct/ sequence sentences properly
CO3	Get acquainted with connotations of words leading to use of most appropriate words
CO4	To train to analyse and appreciate poems
CO5	To learn skills of effective speaking
CO6	To learn paragraph and Precis writing skills
CO7	Develop Group Discussion Skills of the learners
CO8	To train in effective poetry recitation

B.A. Sem I and II:

S. No	Course Outcomes
CO1	To learn effective e-mail writing
CO2	To develop Precis writing skills amongst learners
CO3	To develop an ability to reflect on vital issues
CO4	Introduction of Translation Skills to the learners
CO5	Develop in them the skill to translate from one language into another
CO6	Inculcate in them skills to write a good book review of Classics

B.A. Sem V and VI:

S. No	Course Outcomes
CO1	To develop skills necessary for Competitive Exams
CO2	To learn usage of various verbal phrases
CO3	Develop an eye for mistakes in the sentences
CO4	Introduction of Research Skills in English among students
CO5	To learn to carry out effectively a Survey based on English language acquisition
CO6	Develop an ability to comprehend any unseen piece of literature
CO7	To teach skills required for expansion of an idea
CO8	Develop the skill to write good film reviews

1.2

DEPARTMENT OF HINDI

SUBJECT: HINDI

PROGRAM SPECIFIC OUTCOMES

S. No	Program Specific Outcomes
PSO1	Hindi Literature is important in everyday life. It connects individuals with larger truths and ideas of Society

PSO2	Hindi literature provides communication of thoughts, ideas and feeling through written words
PSO3	It is best Practice in elementary education, as it introduces all the genres of literature mythic, romance fiction, poetry, historical fiction, non- fiction etc
PSO4	It is a very poetic language & provides deeper Hindi study of Hindi literature
PSO5	Students to acquire knowledge of Hindi travelogues literature.
PSO6	Study of Hindi literature Develops critical thinking, analytical & life skills
PSO7	It helps students to acquire fundamental knowledge about the History of Hindiliterature
PSO8	Students acquire knowledge of the theory of translation. It is mainly based on definition, meaning, type and different theories of translation
PSO9	Learn about the origin and development of Hindi Novel, drama, one act play,theater, story, fantasy, poems etc.
PSO10	It helps students to acquire knowledge of Biography, Auto- Biography, Sketch and Hindi Essay by eminent Hindi Writers.

COURSE OUTCOMES:

Course: B.A, B. Sc., B.Com Sem. I (Compulsory Hindi)

S. No	Course Outcomes
CO1	Learn the art and style of letters
CO2	Read Hindi prose to know famous Hindi writers and their famous works
CO3	Know famous Hindi poems, poets, their poetry and its special features
CO4	Know the biography and auto- biography of reputed writers
CO5	Know about the “Paribhashik Shabdavali “

Course: BA Sem. II & B.Com Sem. II (Compulsory Hindi)

S. No	Course Outcomes
CO1	Learn the art and style of Idiom’s
CO2	Know about the Imagination
CO3	Read Hindi prose, know famous Hindi writers and their famous works
CO4	Know famous Hindi poems, poets, their poetry and its special features
CO5	Know the biography and auto- biography of reputed writers

Course: BA Sem. III (Compulsory Hindi)

S. No	Course Outcomes
CO1	Read Hindi prose, know famous Hindi writers and their famous works
CO2	Know Hindi poems and introduction of their poets
CO3	Know the biography and auto- biography of reputed writers
CO4	Know about the “Feature lekhan”
CO5	Know about the “Proof reading”

Course: BA Sem. IV (Compulsory Hindi)

S. No	Course Outcomes
CO1	Know famous Hindi poems, poets, their poetry and its special features
CO2	Know the biography and auto- biography of reputed writers

CO3	Know about the advertizing : meaning, definition, title, sub-title, kinds of advertisement, quality, principal, target and language
CO4	Know about 'Briefness' in Hindi

Course: BA Sem. V (Compulsory Hindi)

S. No	Course Outcomes
CO1	Provide knowledge about the essay "Manav sabhyata , Bhasha Aur samaj" written by Bakshi and Agey respectively
CO2	Know about sketch "Dur mukh" written by Mahadevi verma
CO3	Know about one act play "Deepdan" written by Ramkumar verma
CO4	Know about summary of stories, poems, articles

Course: BA Sem. VI (Compulsory Hindi)

S. No	Course Outcomes
CO1	Gain the knowledge about Novel 'Suraj ka Satva Ghoda' written By Dharmveer Bharti
CO2	Know about the summery, Principals & characters of Novel
CO3	Provide knowledge about the computer and Internet(Introduction and types)
CO4	Provide knowledge about the meaning, scope and nature of translation
CO5	Provide knowledge about the types of translation (Anuvad) like Shabdanuvad, Arthanuvad, Bhavanuvad, Aashu Anuvad etc

Course: BA Sem. I (Hindi Literature)

S. No	Course Outcomes
CO1	Provide knowledge about Hindi sahitya ke pramukh Itihasgranth (only Introduction), kal Vgibhajan aur Namkaran
CO2	Provide knowledge about Aadikal ki Prusthbhumi, Aadikal ke pramukh kavi, adikalki Bhumika, Rachanyein & Aadikal ki Pramukh Kavya Pravrutiya
CO3	Read Hindi prose, to know famous Hindi writers and their famous works
CO4	Know famous Hindi poems, poets, their poetry and its special features
CO5	Know about the Essay " Himmat aur Jindgi" written by Ramdhari singh Deenkar

Course: BA Sem. II (Hindi Literature)

S. No	Course Outcomes
CO1	Provide knowledge about Drama "Aadhe Adhure" written by Mohan Rakesh
CO2	Know about the summery, Principals & characters of Drama
CO3	Gain the knowledge about the "Mahakavya, khandkavya, Sansmaran"

Course: BA Sem. III (Hindi Literature)

S. No	Course Outcomes
CO1	Provide knowledge about Bhaktikal ka Samanya Parichaya, Nirgun Kavyadhara , (Gyanmarge evam Premmarge) ke pramukh kavi evam Rachanayaen
CO2	Gain knowledge about Sagun kavyadhara. Ram Bhakti shakha & krushan Bhaktishakha ke pramukh kavi

CO3	Provide deep knowledge of Kabeer ke Dohe
CO4	Provide deep knowledge of Tulsi das, Meera bai, Surdas, Rahim, Bihari, Raidas kepad

Course: BA Sem. IV (Hindi Literature)

S. No	Course Outcomes
CO1	Acquire knowledge about the origin and development of Hindi Novel. The importance of Vrundavanlal verma in Hindi Novel writing, main problems of Indian Society in his Novel 'Mrugnayni'
CO2	Provide knowledge about the "Murgnayni", their problems and movement of feminism
CO3	Gian the knowledge about Ritikal ki Prusthabhumi, Riti kavya ka Samanya Parichaya, evam visheshtayein
CO4	Provide knowledge about the "Rus and Alankar" and their importance in HindiKavya

Course: BA Sem. V (Hindi Literature)

S. No	Course Outcomes
CO1	Provide knowledge about the jayshankar Prasad poetries. Ida sarg
CO2	Gain knowledge about the Nirala, Bhavani Prasad Mishr And Muktibodh
CO3	Acquire knowledge about Bharaatendu yugin kavya, Dwidedi yugin Kavya tathaChhayavadi kavita
CO4	Provide knowledge about Pragativad, Prayogvad, Nayee kavita & Samkalin Kavita

Course: BA Sem. VI (Hindi Literature)

S. No	Course Outcomes
CO1	Provide knowledge about Gadya ki Pramukh vidhaon ka Kramik vikas : Upanyas, Kahani, Nibandh, Drama, one act play and Alochana
CO2	Provide knowledge of Essay, story, Travelogue -- 'Ifel tower ki chhaya me ' Written by Ramvruksh Benipuri, 'Krodh' Written by Ramchandra Shukl, 'Bhare pure Adhure' written by Amrutlal Nagar etc.
CO3	Know the biography and auto- biography of reputed writers. Like Mahip Singh, UshaPriyamvada, Ghyranranjan.Sriram Parihar

1.3 DEPARTMENT OF MARATHI

Program Specific Outcomes

S. No	Program Specific Outcomes
PSO1	Marathi Literature is important in everyday life. It connects individuals with larger truths and ideas of Society.
PSO2	communication of thoughts, ideas and feeling through written words
PSO3	introduces all the genres of literature mythic, romance fiction, poetry, historical fiction, non- fiction etc.
PSO4	It is a very poetic language & provides deeper Marathi study of Marathi literature.

PSO5	Students to acquire knowledge of Marathi travelogues literature.
PSO6	Study of Marathi literature Develops critical thinking, analytical & life skills.
PSO7	to acquire fundamental knowledge about the History of Marathi literature
PSO8	acquire knowledge of the theory of translation based on definition, meaning, type and different theories of translation
PSO9	Learn about the origin and development of Marathi Novel, drama, one act play, theater, story, fantasy , poems etc.
PSO10	It helps students to acquire knowledge of Biography, Auto- Biography, Sketch and Marathi Essay by eminent Marathi Writers.

Course : BA, B. Sc, B.Com Sem. I (Compulsor Marathi)

S. No	Course Outcomes
CO1 Sem I	Learn the art and style of letters, Read Marathi prose to know famous Marathi writers and their famous works, Know famous Marathi poems, poets, their poetry and its special features, Know about the “Samanartha Shabdavali “, report writing.
CO2 Sem II	Know the biography and auto- biography of reputed writers, information interview writing, Know about idiom & phrases

Course : BA (Compulsory Marathi)

S. No	Course Outcomes
CO1 Sem III	Know about the “Feature lekhan”, “Proof reading”, Media News writing, History writing (bfror y[lu)
CO2 Sem IV	Read Marathi prose to know famous Marathi writers and their famous works, Translation and interview writing
CO3 Sem V	Know the biography and auto- biography of reputed writers, “Feature lekhan”, editing process, summary of stories, poems, articles, official letter writing
CO4 Sem VI	Know about the summary, Principles & characters of Novel, computer and Internet(Introduction and types), examine text (xFk ijh{k.k), introduction of their poets.

Course : BA (Marathi Literature)

S. No	Course Outcomes
CO1 Sem I	about Marathi Novel “Tahan”, Marathi literature: meaning, definition, types, title, sub-title.
CO2 Sem II	knowledge of Drama “Ashrunchi Zali Fule” written by Vasant Kanetkar, Know about the summary, Principles & characters of Drama, biography and auto-biography of reputed writers
CO3 Sem III	about Sant Tukram “Abhang”, Gain knowledge about “Kavyashatra Parichaya”, Provide deep knowledge of “Sant Vangmayach Itihas ”, “Mamant, Waman, Bharat, Bhamh, Rudrat”
CO4 Sem IV	the origin and development of Marathi Poet, importance of “Kusmagraj” in Marathi Poet writing, “Kavyakaran, shabdshakti and Arthavichar”, Give the “Manabhau Literature, Shahiari Literature, Sant Literature”, “Modern Poetry” and their importance in Marathi Kavya.

CO5 SemV	knowledge of “Prachin Gadya”, “Dalit Literature”, “Bhasha Vidyan Parichya’
CO6 Sem VI	knowledge of Novel “Garudzep” written by Bharat Andhale, “Prachin literature cha Itihas”, biography and auto- biography of reputed writers like Santanchi Abhangwani, “Praman Bhasha and Boli”

1.4 DEPARTMENT OF

URDU PROGRAMME SPECIFIC OUTCOMES (PSOs)

By the end of the programme, the student will be able to:

S. No	Program Specific Outcomes
PSO1	Write essays on their own
PSO2	Know about Urdu essayists, novelists, dramatists, and new and old poets and their poetry
PSO3	Gain knowledge about the authors, their lives and their contributions to Urdu literature
PSO4	Read, understand and enjoy Urdu poems
PSO5	History of Urdu language and literature
PSO6	Understand and appropriately use Urdu grammar
PSO7	Understand ‘Sinatein’, their types and uses

COURSE OUTCOMES (COs)

COURSE: B.A., B.Sc. (Urdu)

Course: B.Sc. SEM I (Compulsory Urdu)

S. No	Course Outcomes
CO1	Introduce to Urdu Asnaf-e-Adab, Novels, Short stories and writers
CO2	Learn the style of writing essays
CO3	Know famous Urdu writers and their famous works
CO4	Know famous Urdu Ghazal poets

Course: B.Sc. SEM II (Comp. Urdu)

S. No	Course Outcomes
CO1	Write the essays in Urdu
CO2	Know about Urdu drama, Dramatist and their contribution in Urdu Literature
CO3	Get opportunity to read Rubaiyaat
CO4	Learn to read Urdu Nazmein, Qasida, Marsiya and Masnavi

Course: B.A. SEM I (Compulsory Urdu)

S. No	Course Outcomes
CO1	Learn the art and style of writing essays
CO2	Read Urdu prose, to know famous Urdu writers and their famous works
CO3	Know famous Urdu Ghazal Poets, their poetry and its special features
CO4	Acquaint with Urdu nazmein and the famous poets

Course: B.A. SEM II (Comp. Urdu)

S. No	Course Outcomes
CO1	Write the essays in Urdu
CO2	Know about Urdu drama, Dramatist and their contribution in Urdu Literature
CO3	Get opportunity to read and comprehend specialty of Urdu Gazals
CO4	Read and understand Urdu Nazmein

Course: B.A. SEM III (Comp. Urdu)

S. No	Course Outcomes
CO1	Read Urdu Novel “Gaban” and novelist Munshi Prem Chandar, his life and his important works in Urdu
CO2	Know about the major trends of Urdu Drama and ‘fan’
CO3	Read and learn about famous Urdu ‘Mazameen’
CO4	Read and understand the famous Urdu Patriotic poems

Course: B.A. SEM IV (Comp. Urdu)

S. No	Course Outcomes
CO1	Know about Midhatul Akhtar, his life and his important works in Urdu Adab
CO2	Read and understand the famous Quami Nazmein
CO3	Know about Drama writer Shameem Hanfi

Course: B.A. SEM V (Comp. Urdu)

S. No	Course Outcomes
CO1	Gain the art of writing essay in Urdu
CO2	Gain insight about the personality of Hali through his Famous book ‘Yaadgar e Hali’
CO3	Read and learn the famous Urdu ‘Hamd and Naat’
CO4	Read about the famous Urdu poets and understand their poetry

Course: B.A. SEM VI (Comp. Urdu)

S. No	Course Outcomes
CO1	Write essay and construct the sentences
CO2	Gain insight about the personality of Saleha Abid Hussain through his famous book ‘Yaadgar e Hali’
CO3	Read the Jadeed Urdu Ghazals
CO4	Learn about the Jadeed Urdu poets and their Poetry

URDU LITERATURE:

Course: B.A. SEM I (Urdu Literature)

S. No	Course Outcomes
CO1	Know Urdu Fiction and Fiction writers

CO2	Get opportunity to learn Urdu Ghazals
CO3	Learn about famous Urdu writers
CO4	Get knowledge about Urdu Marsiya nigari, and their poets
CO5	Read and learn Urdu Masnvi and fan
CO6	Gain knowledge about Urdu “Qasida goi” and their poets

Course: B.A. SEM II (Urdu literature)

S. No	Course Outcomes
CO1	Introduce to Urdu Novel, Short story and writers
CO2	Read and learn the old poems of Urdu Literature
CO3	Read and learn the famous Urdu ‘Rubaiyaat’
CO4	Read the Urdu ‘Qitaa’ and learn Urdu Grammar

Course: B.A. SEM III (Urdu Literature)

S. No	Course Outcomes
CO1	Understand ‘What is Literature?’ and the role of Literature in life
CO2	Get knowledge about History of Urdu Literature, its meanings and importance of themajor Urdu Dialects
CO3	Learn about the contributions of Sufi Sant in the Expansion of Urdu language.
CO4	Appreciation of the ‘Fanoone Latifa’
CO5	Learn about the major contribution of the famous Urdu writer “Sir Sayyed AhmedKhan” in Urdu Literature

Course: B.A. SEM IV (Urdu Literature)

S. No	Course Outcomes
CO1	Know about Urdu Literature and its beginning from Dakkan
CO2	Understand the different views about Urdu language and Expansion of Urdu language
CO3	Gain Knowledge about major dialects of Urdu language
CO4	Learn and Grasp the Essence of Urdu poetry, prose, Stories, Short Stories and Novels

Course: B.A. SEM V (Urdu Literature)

S. No	Course Outcomes
CO1	Learn about the life and contribution of Allama Iqbal in Urdu Literature
CO2	Read and learn the poetry of famous Urdu Poet Allama Iqbal
CO3	Read and learn about the famous Urdu writer Shibli Nomani and his major works
CO4	Learn about ‘Ilm e Bayaan’ and its types, and how to do ‘Taktee’

Course: B.A. SEM VI (Urdu Literature)

S. No	Course Outcomes
CO1	Learn about the life of Shair-e-Inqilab “Josh Malih Aabadi” and his contribution to

	Urdu Literature.
CO2	Get the opportunity to read the famous Urdu poems of Josh Malih Aabadi
CO3	Read and learn the mazameen of the famous Urdu writer Allama Shibli Nomani
CO4	Gain knowledge of 'Sanatein' and how to do 'Takti'

1.5 DEPARTMENT OF SANSKRIT

S. No	Course Outcomes BA, B. Com., B, Sc. Compulsory Sanskrit Sem I & II
CO1	Learn the poetic gesture.
CO2	Read and understand the language properly.
CO3	Know about famous authors and scientists of our ancient India.
CO4	Know about the variety of prose and poems in the literature.

S. No	Course Outcomes BA & B.Com sem III/IV (Compulsory Sanskrit)
CO1	Understand the deep Indian philosophy as course contains 2 nd canto of Shreematbhagvatgeeta.
CO2	Know about Upanishadas. As Upanishadas are main factor of our great philosophy.
CO3	Know about mono-act play in Sanskrit which is the proof of great and wide thinking of ancient authors.
CO4	Learn the pattern of learning, teaching, and royal dignity.

S. No	Course Outcomes BA Sem. V/VI (Compulsory Sanskrit)
CO1	Get the degree certificate.
CO2	Know the variety of poems.
CO3	Know the virtues of our life.
CO4	Create a composition.
CO5	Appreciate the poems.
S. No	Course Outcomes BA Sem. I / II (Sanskrit Literature)
CO1	Learn the basic grammar and Construct the sentence on their own.
CO2	Know the virtues and morals of our life.
CO3	Know the royal dignity and administrative machinery of ancient India.
CO4	Know about how to create suspense and twists in the drama.
CO5	Know about our first epic Ramayana.
S. No	Course Outcomes BA Sem. III / IV (Sanskrit Literature)
CO1	Know about poetics and diversity in literature
CO2	Compose their own composition.
CO3	Explain the text with adorning language.
CO4	Know about the great saint and author of our India Maharshi Ved Vyas and his epic Mahabharat.

S. No	Course Outcomes BA Sem. V /VI (Sanskrit Literature)
CO1	Learn the original grammar of the language.

CO2	Know about the great drama Abhidnyanshakuntalam.
CO3	Get the degree certificate.
CO4	Compose the composition.

1.6 DEPARTMENT OF MUSIC

Program Specific Outcomes:

S. No	Program Specific Outcomes
PSO1	The knowledge of various ragas and talas will provide an insight to Indian music and enhance the aural and vocal skills of the students
PSO2	They will be able to demonstrate and apply the practical and theoretical aspects of Indian music in various fields such as doordarshan, aakashwani, social media, academics, etc
PSO3	The overall study of music will enable them to gain stage confidence, and help enhance their creativity, concentration and memory
PSO4	Music learning will bring about in them the sense of equality, spirituality, brotherhood, and help inculcate moral values and ethics

Course outcomes:

S. No	Course Outcomes
CO1	The knowledge of ragas and talas will create an insight towards Indian music
CO2	The practical knowledge will enhance their aural and demonstration skills
CO3	The students will get well acquainted to different styles of Classical music
CO4	Study of various technical terms, contribution of great musicians and study of genesis and development of music will give them a broader outlook of history and culture of Indian music
CO5	The theoretical as well as practical aspects will help them apply the techniques in various fields (other than only becoming a performing artist), like meditation, yoga, therapies, media, academics etc.

1.7 DEPARTMENT OF

ECONOMICS Program Specific Outcomes (Economics)

S. No	Program Specific Outcomes
PSO1	Recognize and appreciate the diversity of views that have historically been expressed or may reasonably exist about economic problems and alternative economics systems and present those views in a coherently written essay
PSO2	Identify compile, interpret and analyze quantitative economic data by expressing relationships between concepts through graphs, statistical or econometric analysis
PSO3	To understand the monetary and fiscal policy of Government and to know the issues of unemployment, inflation, exchange rates, balance of payments or economic growth in a global context
PSO4	Use microeconomic tools and concepts to address public policies issues such as competition environmental protection, financial regulation, innovation and intellectual property, labor law or taxation
PSO5	Employ economic theory, broadly defined to provide an original analysis of current or historical events to analyze social problems and evaluate alternative public policy choices
PSO6	Present the results of their research using appropriate economic theories, concepts and terminology and methods in a professional setting
PSO7	Students will be able improve their economic vocabulary, the knowledge of the terms and concepts commonly used in discussion of economic issues
PSO8	Students will be able to demonstrate the ability to employ the economic way of thing
PSO9	Students will learn to apply economic theories and concepts to contemporary social issues, as well as analysis of policies
PSO10	Students will be able to formulate informed opinions on policy issues and recognize the validity of opposing viewpoints.
PSO11	Students will be able to understand the impact of government policies and will be able to assess the consequences of the policies of the parties involved.
PSO12	Students will be able to demonstrate quantitative reasoning skills
PSO13	Students develop an awareness of career choices and the option for higher studies

Course Outcomes (Micro Economics, Macro Economics and Indian Economy)

S. No	Course Outcomes
CO1	Apply the concept of opportunity cost
CO2	Employ marginal analysis for decision making
CO3	Analyzing operation of markets under varying competitive conditions
CO4	Analyze causes and consequences of unemployment, inflation and economic growth
CO5	Analyze the global business environment
CO6	Understand the various aspects of Indian Economy
CO7	Understand the role of the Indian Economy in the global context and how different factors have affected this process
CO8	Develop the prospective on the different problems and approaches to economic planning and development in India
CO9	Understand Indian Tax System, Trade Policies, and Finance Commission etc

CO10	Explain Price Elasticity of Demand and Price Elasticity of Supply and relationship of firm's price elasticity of demand and total revenue
------	---

1.9

DEPARTMENT OF GEOGRAPHY

Program Specific Outcomes

S. No	Program Specific Outcomes
PSO1	To understand the complex phenomena and processes of nature
PSO2	Application of geographic knowledge in day to day life
PSO3	To understand inter-relationship between man and environment
PSO4	Provides platform for critical thinking, analysis, interpretation, conclusions and solutions to geographic and environmental issues
PSO5	To understand 'Cause and Effect' relationship
PSO6	Provides information about environmental degradation, over use of natural resources and awareness for adaptation of renewable energy resources & development as a sustainable one
PSO7	Teaches the philosophy of life
PSO8	Diagrammatic representation of geographical data
PSO9	Acquiring degree in geography will provide platform for various jobs such as climatologist, cartographer, scientist etc
PSO10	With modern technology (RS/GIS), exploration and better use of natural resources

Course outcomes:

Semester-I Introduction to Geography

S. No	Course Outcomes
CO1	To understand fundamental concepts of geography
CO2	To understand fundamental concepts of geography
CO3	To explore uniqueness of the earth in the solar system
CO4	To understand Motion of the earth and its impact on the planet earth
CO5	Significance of latitude and longitude
CO6	To understand man-environment relationship
CO7	Provides Historical Development of geography and
CO8	Information about career opportunity in geography

Semester-II Climatology

S. No	Course Outcomes
CO1	To understand the significance of climatic processes and factors involved in it
CO2	To understand relation between temperature, pressure and wind
CO3	Significance of climatic phenomenon such as condensation, precipitation etc.
CO4	To analyse atmospheric disturbances and forecast for human betterment and
CO5	To study, analyse, interpretation and finding solutions to climatic issues

Semester-III Geomorphology

S. No	Course Outcomes
CO1	To gain knowledge and explore interior of the earth
CO2	Understanding movements of the earth and its consequences (earthquakes, etc)
CO3	To understand processes involved with geomorphic agents and
CO4	To study the landforms produced by various geomorphic agents.

Semester-IV Human Geography

S. No	Course Outcomes
CO1	To understand basic concepts of human geography and human races
CO2	Study of human adaptation to their environment and
CO3	To study spatial distribution of population and its major concepts

Semester-V Regional Geography –Maharashtra

S. No	Course Outcomes
CO1	To acquire basic knowledge of Maharashtra
CO2	To study physical features and interrelation with climate, forest & soil
CO3	To understand and analyses economic activities and
CO4	To study growth and composition of Population

Semester-VI Regional Geography –India

S. No	Course Outcomes
CO1	To study origin and formation of physical features of India.
CO2	To understand climatic phenomenon of India and its overall significance & for agriculture
CO3	To analyse Green revolution & its impact on Indian agriculture and
CO4	To study and analyse trade of India

1.10

DEPARTMENT OF HISTORY

Program Specific Outcomes

On completion of **B.A (Three year program)** with **History** as a subject students will be able to;

S. No	Program Specific Outcomes
PSO1	Understand the basic themes, concepts, chronology and the Scope of History (Indian, Regional and World History).
PSO2	Gain knowledge of various issues related to history that span different eras
PSO3	Develop comparative approach in understanding the history of other countries in relation to history of India.
PSO4	Develop the ability to establish cause and effect relation between events leading to develop historical and critical writing and discussion
PSO5	Read and understand the maps of different time period and nations leading to the knowhow of socio-economic, political and cultural civilization of human race
PSO6	Prepare for various types of Competitive Examinations

PSO7	Have Analytical skills to gauge social, cultural, economic and political transformation
------	---

Course Outcomes

B.A Semester I: History of India from earliest times to 1525 AD

S. No	Course Outcomes
CO1	Know about the Indus valley civilization in India, Vedic Age and Religious reformation in the society through studying the rise of Jainism and Buddhism
CO2	Know the political integration and economic strengthening of India under the Mauryas and the Guptas
CO3	Study the rise of Islam and age of invasion in India from 7th century AD
CO4	Understand the establishment, expansion and administration of Muslim rule in Sultanate era
CO5	Know the architecture of sultanate era and socio-religious reform movements in Hinduism and Islam

B.A Semester II: History of India from 1526 to 1761 AD

S. No	Course Outcomes
CO1	Understand the onset of Mughal rule in India and underlying north Indian politics and administration
CO2	Know the Post-Akbar rule along with the art, architecture and socio-religious conditions
CO3	Explain the rise of Chatrapati Shivaji and Maratha rule in Deccan
CO4	Know about the administrative need and the importance of grand coronation of Chatrapati Shivaji. Assess the Chhatrpati Shivaji's invasion on Karnataka
CO5	Understand the Maratha's struggle for existence after Shivaji's death and rise of Peshwas under Shahu's reign
CO6	Comprehend the increase of Maratha influence in north India thereby leading to the Third battle of Panipat
CO7	Get acquainted with the advent of European traders in India

B.A Semester III: History of India 1764 to 1885 AD

S. No	Course Outcomes
CO1	Analyze establishment of British power in India
CO2	Understand the phases of diplomacy and administration of East India Company government in India. Know about the development of means of transport and communication in India from the mercantile point of view
CO3	Evaluate the effects of British policy on Indian Economy, Agriculture and Industries
CO4	Understand the resistance to British rule through the 1857 Revolt
CO5	Evaluate the renaissance and social reform movement in India
CO6	Study the passing of Company rule to the British crown and analyze the change in administrative policy of British towards India as a result of political awakening
CO7	Understand how the foreign rule inspired rise of nationalist feelings

B.A Semester IV: History of India 1886 to 1947 AD

S. No	Course Outcomes
CO1	Understand the difference between moderates, extremists and revolutionaries
CO2	Compare Nationalist movements- Pre-Gandhian and Post- Gandhian Era
CO3	Understand how the Indian freedom struggle mass movements created insecurity for the British rule
CO4	Understand the British policy of Divide and Rule and its impact on rise of communalism in India
CO5	Know how British colonial empire was looming under threat due to the Second World War. Know the effect of this world war by studying the evolutionary processes of constitutional developments in India
CO6	Understand the phase of communalism which gave rise to demand of Pakistan
CO7	Evaluate the British plans for granting independence to India leading to birth of two nations

B.A Semester V: Modern World 1789 to 1920 AD

S. No	Course Outcomes
CO1	Understand the causes and aftermaths of the French revolution
CO2	Understand how industrial revolution, scientific and geographical encouraged colonial expansion in Asia and Africa
CO3	Know the rise of imperial Japan and resultant conflicts with Russia and China
CO4	Understand China's transformation from conservative monarchy to Confucian Communism
CO5	Understand the conditions of pre and post First World War. Analyze how Eastern question led to balkanization of Europe and ultimately give rise to causes of First World War
CO6	Understand and evaluate the provisions and consequences of Treaty of Versailles
CO7	Study establishment and work of League of Nations
CO8	Understand the causes and consequences of Russian Revolution

B.A Semester VI: Modern World 1920 to 1960 AD

S. No	Course Outcomes
CO1	Understand the Socio-economic and political conditions of Soviet Russia under Lenin and Stalin's rule
CO2	Comprehend the rise of dictatorial ship in Germany and Italy and study the impact of their policies on world politics
CO3	Understand the conditions of pre and post Second World War and study its causes and effects
CO4	Know the structure, significance and functioning of UNO
CO5	Understand the division of World in communist and capitalist blocs and the onset of Cold War and its phases
CO6	Know the rise of Third World nations and Non-alignment Policy

1.11 DEPARTMENT OF HOME

ECONOMICSProgramme Specific Outcomes

S. No	Program Specific Outcomes
PSO1	Have various opportunities in developing entrepreneurship in various fields related to interior decoration, handmade decorative articles, food products, baby garments and baby food, nursery educational aids etc
PSO2	Learn essential things for betterment of life
PSO3	Can 'earn while learn'
PSO4	Get basic knowledge for pursuing advance degree / diploma
PSO5	Can have job opportunities in boutiques and textile industries, food industry etc.

Course Outcome

B.A. Sem I & II

S. No	Course Outcomes
CO1	Students learn Embroidery stitches and able to do Hand Embroidery
CO2	Student develop knowledge and skill about principles and methods of Interior decoration
CO3	Develop employability skills and 'Earn while learn' skill

B.A.Sem III & IV

S. No	Course Outcomes
CO1	Understand the concept of adequate diet, functions of food and role of various nutrients, their requirements in different stages of life
CO2	Develop the ability to improve nutritional quality of food

B.A. Sem. V & VI

S. No	Course Outcomes
CO1	Students understand biological and psychological foundation of development. Understand and appreciate the importance of parent child relationship
CO2	Student learn different creativity skills

1.12**DEPARTMENT OF PHILOSOPHY****Program Specific Outcomes**

Philosophy enhances intellectual skills to question, to think seriously, to speak clearly.

S. No	Program Specific Outcomes
PSO1	Students will be able to apply their Philosophical learning for important public issues
PSO2	Students can apply Philosophical methods and insights to other areas of human interest, experience or cognitive inquiry
PSO3	Speculative method of Philosophy gives insight in to the nature of universal human values
PSO4	Students will possess the critical reasoning skills necessary to effectively analyze and critique abstract concept and arguments
PSO5	Students will be able to apply critical reasoning skills in a wide range of career setting

Course outcomes**Semester I****(Ethics)**

S. No	Course Outcomes
CO1	Understand the ethical principals in General
CO2	Can apply Ethical principals in various academic, professional, social or personal contexts
CO3	Understand how cultural, historical, Spiritual, Ethical forces shape the world and recognize the role of the individual with in communities to effect change
CO4	This includes the ability to Reflects on one's cultural identities and values

Semester II (Logic)

S. No	Course Outcomes
CO1	Analyze, synthesize and integrate knowledge
CO2	Critically evaluate the validity of arguments and conclusions
CO3	Practice creative thinking and expressions
CO4	Demonstrate the capacity to argue in innovative directions

Semester III (Epistemology and Metaphysics)

S. No	Course Outcomes
CO1	Introduce Students to main themes in the theory of Knowledge & Ultimate Reality
CO2	Understand what is knowledge and the key issues regarding the sources of Knowledge
CO3	Analyze metaphysical views and explore their implications

CO4	Engage in scholarly inquiry to identify and investigate questions of a theoretical nature
CO5	Develop ability to think Philosophically
CO6	Develop intellectual independence and practice self-directed inquiry
CO7	Students can explain main problem of Metaphysics, Epistemology

1.13 DEPARTMENT OF POLITICAL

SCIENCE Program Specific Outcomes:

S. No	Program Specific Outcomes
PSO1	Theoretical and practical knowledge of Government machineries, its functions and responsibilities
PSO2	Knowledge of Indian National politics, Indian Judiciary and International Politics
PSO3	To create political leadership in students
PSO4	To inculcate professional and competitive exams temperament in students

Course Outcomes:

B.A Sem. I: Political Theory

S. No	Course Outcomes
CO1	Study of various concepts and theories
CO2	Study of theories propounded by eminent political thinkers

B.A I Sem. II : Western Political Thoughts

S. No	Course Outcomes
CO1	Study of various western political thinkers and their political thoughts/ theories
CO2	Comparative study of western and Indian political thoughts
CO3	Comparative study of normative and empirical political thoughts

B.A Sem. III : Indian Government and Politics

S. No	Course Outcomes
CO1	Study of Indian Constitution and its relevance
CO2	Inculcate Political Culture
CO3	Knowledge of issues and challenges in contemporary Indian politics

B.A Sem. IV: State Government and Politics

S. No	Course Outcomes
CO1	Acquiring knowledge of state political machinery of Maharashtra
CO2	Study of Local Self Government, its functions and responsibilities in Maharashtra
CO3	Study of Regional Political Parties and their influence on Indian Political scenario

CO4	To promote Local elections awareness and political leadership
-----	---

B.A Sem. V: Comparative Government and Politics

S. No	Course Outcomes
CO1	Comparative study of various Constitutions (Legislature, Executives and Judiciary)
CO2	Historical development of various constitutions in the worlds
CO3	Study of contemporary world issues such as Feminism and political Participation
CO4	Study of comparative political issues such as comparative political culture, political parties, and political socialization in various nations

B.A Sem. VI: International Relations

S. No	Course Outcomes
CO1	Study of India's International Relations with other countries
CO2	Study of various International organisations, its formation and role in International Politics
CO3	Study of International Law and Human Rights
CO4	Study of concepts of world Peace
CO5	India's role in International Politics

1.14

DEPARTMENT OF SOCIOLOGY

Program Specific Outcomes:

S. No	Program Specific Outcomes
PSO1	Students will be able to think sociologically about the relationship between socialstructure, interaction, identities, and inequalities
PSO2	Students will be able to identify and explain major sociological theories and applythem to everyday life
PSO3	Students will be proficient in qualitative and quantitative research design, datacollection and data analysis
PSO4	Students will be proficient in oral and written communication skills appropriate to the discipline
PSO5	Students will be able to practice sociology as educated and civically engaged persons
PSO6	To understand the intricacies of caste, family and educational system in India andtheir changing patterns
PSO7	To understand the issues and problems related to population in India

Course Outcomes:

Semester I Sociology: An Introduction

S. No	Course Outcomes
CO1	To induct the students to sociology as the beginner of the subject
CO2	To expose the students to the basic concepts in sociology

CO3	To expose the students to the themes and concepts in sociology as a science of society and make them acquainted with different types of society, sociological perspectives, social structure and social change
CO4	To make students understand the ideas of socialization, social control, conformity, social stratification and mobility in society

Semester II Sociology: Themes and Perspectives

S. No	Course Outcomes
CO1	To orient the students to certain basic perspectives in sociology
CO2	To make students know in details about culture, stratification and mobility and the deviant patterns and social control in society

Semester III Foundations of Sociological Thought

S. No	Course Outcomes
CO1	To orient the students to the basic sociological thoughts of the great masters of sociology
CO2	To help the students to shape their thoughts and ideas and also addressing many current sociological issues and problems
CO3	To make students acquainted with the social, political, economic and intellectual contexts in which sociology emerged as a distinctive discipline
CO4	To help students to gain deeper understanding into the works of the founding fathers of sociology and their relevance in contemporary society

Semester IV Indian Sociological Tradition

S. No	Course Outcomes
CO1	To make the students understand the seminal ideas and thoughts reflected in the works of Indian Sociologists
CO2	To help the students in understanding at the theoretical level the sociological issues concerning Indian society

Semester V Indian Society, Structure and Inequality

S. No	Course Outcomes
CO1	To acquaint the students with Indian society in terms making them know the issues and problems confronting the institutions of caste and family
CO2	To bring into fore the issues and problems concerning the tribes and rural communities in India
CO3	To make students acquainted with Indian society, its issues and problems
CO4	To make them understand the intricacies of caste, family and educational system in India and their changing patterns
CO5	To understand the issues and problems related to tribes and population in India

Semester VI Current Social Problems in India

S. No	Course Outcomes
CO1	The paper is based on the problems the society in India is facing at present

CO2	To make the students know the nature, causes and consequences of those problems aswell as the measures to put a check on them
-----	---

1.15 DEPARTMENT OF

PSYCHOLOGY Program Specific Outcomes:

S. No	Program Specific Outcomes
PSO1	Understand human Behavior and develop oneself
PSO2	Be psychologically healthy , positive thinker and learn to live Quality of life
PSO3	Respect others and show unconditional expectance
PSO4	Learn to support others
PSO5	Prepare oneself for the competitive examination
PSO6	Prepare oneself for the future academic
PSO7	Application of knowledge in everyday life. Develop insight for the research in social science.

Course

Outcomes:

Semester I:

S. No	Course Outcomes
CO1	Understand the basic concepts of Psychology. To understand the basic procedure of Psychology practical's, how to conduct experiments, Psychological testing and analysis. Hands on Experience

Semester II:

S. No	Course Outcomes
CO1	To understand about Social Psychology, Attitude, Pro-social Behavior, Aggression and its management and communication

Semester III:

S. No	Course Outcomes
CO1	Abnormal psychology: causes, symptoms and therapies

Semester IV:

S. No	Course Outcomes
CO1	Application of statistics, psychological testing

Semester V:

S. No	Course Outcomes
CO1	Organisational behavior, work motivation stress and job satisfaction

Semester VI:

S. No	Course outcomes
CO1	To understand about positive psychology, Importance of counseling, various techniques of counseling includes Yoga and Meditation

1.15 Department of Persian

Subject: Persian Literature

Programme Outcomes

S. No.	Programme Outcomes
PO1	Write letters in Persian on their own
PO 2	Write essays in Persian on their own
PO 3	Know about modern Persian novelist, Short Story writers and modern and ancient poets
PO 4	History of Persian language and literature
PO 5	Read, write and understand and enjoy Persian Ghazals and poem
PO 6	Gain knowledge about the authors and poets their lives and their contribution to Persian literature
PO 7	Understand the grammar and make a sentences in Persian
PO 8	Understand the Prosody their types and uses
PO 9	Understand the Rhetorics their uses

B.A. SEM. I (Persian Literature)

Course Outcomes:

S. No.	Course Outcomes:
CO 1	Understand literature and the role of literature in life
CO 2	Knowledge about Indian history of Persian literature and translation of the work
CO 3	Learn about the contribution of modern Persian poets
CO 4	Learn about famous Indian Persian writers
CO 5	Get knowledge about Persian Qasidah goi and their poets
CO 6	Read the Ghazal and use the Rhetorics and their poets

Course: B.A. SEM.II (Persian Literature)

Course Outcomes:

S. No.	Course Outcomes:
CO 1	Learn about the life and contribution of “Jawahar Lal Nehru”
CO 2	Knowledge about how to write autobiography
CO 3	Read and learn the Qasidah of Persian literature
CO 4	Knowledge about “Qitaa”
CO 5	Learn about “illustration” and how to do use it

Course: B.A. SEM.III (Persian Literature)

Course Outcomes

S. No.	Course Outcomes:
CO 1	Introduce to Persian Short Story, Drama and writers. Knowledge about Mughal history and contribution of Persian translation work
CO 2	Read and learn the Qasidah of famous Persian Poet “ Abul Faiz Faizi”
CO 3	Read and learn the Ghazal of Persian
CO 4	

Course: B.A. SEM.IV (Persian Literature)

Course Outcomes:

S. No.	Course Outcomes:
CO 1	Know Short Story of Persian and Persian writers.
CO 2	Read and learn the poetry of famous Persian Poet Jami.

CO 3	Read and learn about the famous Persian Novel writer “ Mohammad Hejazi”.
CO 4	Learn about the Rhetorics and its type and how to do use it.

Course: B.A. SEM.V (Persian Literature)

Course Outcomes:

S. No.	Course Outcomes:
CO 1	Learn about the life and contribution of “ Dr. Zabiullaha Safa” in Persian Prose.
CO 2	Read and learn about the famous Persian writer “Ali Dashti and Sheen Par Tao”.
CO 3	Learn about the contribution of Sufi poet of Persian language.
CO 4	Learn about the major contribution of the famous Persian Poet “ Aufi”.

Course: B.A. SEM.VI (Persian Literature)

Course Outcomes:

S. No.	Course Outcomes:
CO 1	Learn about the life of “ Mohammad Ali Jamal Zadeh” and his contribution of Persian literature.
CO 2	Get the opportunity to read the famous Persian Poet of Sahikh Fariduddin Attar
CO 3	Read and learn about the famous Persian “Ghazal” of Shaher Yar.
CO 4	Gain knowledge of sentence and how to use the sentence.

1. Faculty of Science and Technology

Programme: Bachelor of Science (3 year - semester pattern)

Program Outcomes:

S. No	Program Outcomes
PO1	Apply principles of science for problem analysis and solving
PO2	Use the modern tools of scientific temper and logical thinking in daily life
PO3	Use critical thinking and ethical values in carrying out daily responsibilities of a good citizen
PO4	Be committed to the Indian culture and ethos
PO5	Respect the environment and sustainability of natural resources of the country
PO6	Be a socially responsible person
PO7	Acquire the ability for self-learning and independent thinking
PO8	Apply and adapt their knowledge in the practice of their profession.
PO9	Achieve professional growth in their field

1.1 DEPARTMENT OF

PHYSICSCOURSE: B. Sc. (Three years; Six Semesters)

S. No	Program Specific Outcomes
PSO1	To demonstrate proficiency in mathematics and the mathematical concepts needed for a proper understanding of physics.
PSO2	To demonstrate knowledge of selected topics from classical mechanics, quantum mechanics, electromagnetism, thermodynamics, electrodynamics, solid state electronics, communication electronics, digital electronics, biophysics, nanotechnology, and be able to apply this knowledge to analyse a broad range of physical phenomena

PSO3	To be able to show that they have learned laboratory skills, enabling them to take measurements in a physics laboratory and analyse the measurements/recorded observations to draw valid/ logical conclusions
PSO4	To be capable of oral and written scientific communication, and should be able to prove that they can think critically and work independently
PSO5	To have a firm foundation in every aspect of Physics and to explain a broad spectrum of modern trends in physics; and to develop experimental, computational and mathematics skills of students.

COURSE OUTCOMES

	Semester I Paper I
CO1	Understanding the concept Elasticity of materials, concept of modulus of elasticity and estimation of these in laboratory experiments, elastic limits.
CO2	Concept of Viscosity- Streamline and turbulent flow, Coefficient of viscosity, Stokes law, Variation of viscosity with temperature.
CO3	Surface tension- Introduction, Angle of contact and wetting, Surface energy. Understanding the surface tension of different liquids (eg. Water, mercury) and determining the values by different methods in laboratory. Mechanics- Newton's laws of motion, motion in a plane, components of velocity and acceleration in different coordinate system, Centripetal acceleration, Coriolis force and its applications.
CO4	Mechanics- System of particles, Centre of mass, Equation of motion, Conservation of linear momentum, angular momentum and Conservation of energy, Single stage and multistage rockets, Elastic and inelastic collisions, Moments of inertia and their products
	Semester I Paper II
CO1	Electrostatics- Concept of electric charge(s), electric dipoles, electric potential, electric field, electric field intensity.
CO2	Understanding Dielectric materials and their behaviour under the influence of electric field. Classification of dielectric materials and their applications.
CO3	Study of Time varying fields and electric currents. Response of resistor, inductor and capacitor, and their combinations to electric current. Study of Electromagnetic induction and its application to transformers.
CO4	To Analyse, determine and derive the behaviour of alternating currents in pure resistive(R), pure inductive(L) and pure capacitive (C) circuit, application of j-operator in LR, CR and LCR circuit, Resonance circuits, Sharpness of resonance, Q factor, Power in an a. c. circuit, Power factor.
	Semester II Paper I
CO1	To understand SHM and derive equations for Free oscillations and damped oscillations, Power dissipation and quality factor. Lissajous's figures.

CO2	To understand SHM and derive equations for Forced oscillations- Resonance (Amplitude), Sharpness of resonance, Power dissipation, Quality factor and bandwidth. Understanding of Kinetic theory of gases Boyle's law, Equipartition of energy, Molecular collision, Mean free path and collision cross section, To Estimate of molecular diameter and mean free path.
CO3	Understanding Transport phenomenon in gases; Study of Thermodynamic s-Thermodynamic variables, Thermal equilibrium and temperature, Thermodynamic processes (Reversible and Irreversible), zeroth and first law of thermodynamics, Carnot cycle
CO4	Thermodynamics-Entropy, Second and third law of thermodynamics, Thermodynamic scales of temperature, Maxwell general relationship and it's applications, Joules coefficient, Porous plug experiment, Liquefaction of gases- Boyle's temperature and inversion temperature, Liquefaction of Helium, Air conditioning (Concept only).
Semester II Paper II	
CO1	Gravitation- Kepler's laws of Planetary motion (statement only), Newton's law of gravitation, Relation between G and g, Gravitational field, Gravitational potential, Gauss's theorem, Gravitational potential and intensity due to uniform solid sphere at a point inside and outside the sphere, Gravitational self energy of a galaxy.
CO2	Astrophysics : Understanding various constituents of universe (Solar system, Stars, Galaxies, Stellar spectra, The Milky way (shape, size, clusters), Cosmological theories of the universe (Concept only).
CO3	Understanding Magnetism- Introduction and classification of Magnetic materials and study of relevant theories and derivations of , superconductors, and their properties and applications,
CO4	Study of Magneto statics. Concept of magnetic field, Magnetic dipole moment, Magnetization current, Magnetic vectors and derivation of relevant formulae, Gauss law of magnetization. Biot- Savarts law and it's applications, Ampere's law and it's applications
Semester III Paper I	
CO1	Understanding Waves in media, concept and derivations of Group velocity and phase velocity and their relation and measurement, Standing waves, Harmonics, Understanding of the concept of Quality of sound, Study of Human ear and its response to waves and limitations , the musical scale, Temperaments and musical instruments.
CO2	Study of Applied acoustic, Acoustic of building, Reverberation and reverberation period, Factors affecting the acoustics of building, Requirements for good acoustics.
CO3	Study of Ultrasonic waves and Application of ultrasonic waves
CO4	Study of Power supplies –Understanding the circuits of half wave and full wave rectifiers Filters, various components in power supply circuits for regulation and stabilization
Semester III Paper II	
CO1	To study Interference of light and construction and working of various instruments Newton's ring apparatus, Michelson Interferometer, Fabry - Perot Interferometer and their applications

CO2	To study Diffraction of light and classify and identify Fresnel and Fraunhofer diffraction, Study of principle, construction and working of diffraction grating and its applications, Resolving power of grating, Rayleigh's criterion for resolution.
CO3	To understand Polarization of light and its types, principle, construction and working of Uniaxial and biaxial crystals, Nicol prism and its application, phase retardation plate (Half and Quarter wave), Double prism.
CO4	Study of electromagnetic waves in free space and in conducting media, Maxwell equations and their physical significance, Poynting theorem.
Semester IV Paper I	
CO1	Study of crystal structures and classification into Bravais Lattices, Determinations of Miller indices, allowed rotations, lattice types, lattice planes, Bravais lattices, packing fraction coordination number, Inter-planar distances, Study of Crystal structures of NaCl, diamond, CsCl, ZnS etc.
CO2	X-ray-study of discrete and continuous X-ray spectra, X-ray emission spectra, Characteristics X-ray spectra, Moseley law its importance and applications, Auger effect, X-ray absorption spectra, applications of X-rays in various fields.
CO3	Studying the concept of Reciprocal lattice, Wigner Seitz cell, Geometrical relation between direct and reciprocal lattice, Laue's theory of X-ray diffraction, Bragg's law and Bragg's diffraction conditions in direct and reciprocal lattice, Laue's pattern, Bragg's spectrometer and its applications (wavelength determination and simple cubic structure determination).
CO4	Study of LASER- Introduction to Laser (purity of spectral line, spatial and temporal coherence), Einstein's relation, absorption, spontaneous and stimulated emission, Population inversion, Optical pumping, characteristics of laser beam, three level and four level laser system, Ruby laser, He-Ne laser, Semiconductor laser, Application of lasers.
Semester IV Paper II	
CO1	Study of Light Emitting Diode, Solar Cell, Photovoltaic cell, Bipolar transistor: Construction and working, transistor characteristics in CE and CB Mode, Graphical analysis of CE configuration. Hybrid parameters, Stability factor, Bias stabilizing circuits.
CO2	Study of Field Effect Transistor- Construction, and working principle and characteristics of JFET, MOSFET, their special features and applications.
CO3	Study of Rotational, vibrational and rotational-vibrational spectra of molecules, Derivation of Quantization of vibrational and rotational energies, Born Oppenheimer approximation.
CO4	Study of Experimental set up of Raman effect, Classical and quantum explanation, Applications of Raman effect, Study of Electronic spectra, Elementary ideas of NMR and ESR and their applications in spectroscopy.
Semester V Paper I	
CO1	To study different atomic models, concept of space quantization, electron spin, Study of quantum numbers, study of Zeeman effect and Stark effect
CO2	To study Free electron theory and Band theory of solids, distinction between metal, semiconductor and insulator. Study of Hall effect
CO3	Study of various concepts for the development of mathematical formulations in Statistical Physics. Maxwell-Boltzmann distribution law, its application to

	molecular speed
CO4	Study of Bose-Einstein statistics, its applications, Fermi-Dirac distribution and its application to free electrons in a metal, Study of concept of negative temperature, Fermi level and Fermi temperature, comparison between M-B, B-E and F-D statistics.
	Semester V Paper II
CO1	Study of Quantum mechanics- Failure of classical physics to explain several
	experimental results like black body spectra, Planck's radiation law, Compton Effect, Understanding Concept of Wave particle duality, Experimental demonstration of matter waves and derivation of wavelength of matter wave, Study of Davisson and Germer experiment, Heisenberg's uncertainty principle and Thought experiment.
CO2	Study of Schrodinger's equation (Time dependent and time independent equations), Physical significance of wave function Ψ , Operators, Expectation values of a dynamical quantities, Study of free particle in a one and three dimension.
CO3	Introduction to Nanoscience and Nanotechnology, Study of Difference between nanomaterials and bulk materials, Understanding Reduction of dimensions 3D, 2D, 1D, 0D materials, various morphologies of nanomaterials
CO4	Nanotechnology- Different methods of synthesis of nanomaterials (Determination of size of nanoparticles, application of nanomaterials in various fields)
	Semester VI Paper I
CO1	Study of general theory of relativity and special theory of relativity, Inertial and non-inertial frames, Galilean transformation Lorentz transformations, Length contraction, Time dilation, Velocity addition theorem, variation of mass with velocity, Mass energy equivalence and equations.
CO2	Study of particle accelerators and radiation detectors, Shell model of the nucleus, Nuclear fission, and nuclear fusion, Liquid drop model, Chain reaction, Nuclear reactors, Nuclear fusion, Cosmic rays, Elementary particles,.
CO3	Understanding α -decay, β -decay and γ -decay, relevant theories, estimation of energies and range during these decay processes.
CO4	Study of History of bio physics, Bio Potential, measurements of ECG, EEG, ERG, EMG. Basic principle, construction and working and applications of Bioinstruments- colorimeters, Spectrophotometer, PH-Meter and centrifuge
	Semester VI Paper II
CO1	Study of Classification of amplifiers, multistage amplifiers, OPAMP IC-741, and its application as inverting, Non inverting, Adder, Subtractor, Integrator and Differentiator, Study of Phase shift oscillator, Hartley oscillator, Colpitts oscillator.
CO2	Understanding Propagation of light waves in optical fiber, various types of optical fibres and their Basic structure, parameters which decide performance during transmission of optical signals

CO3	Study of amplitude modulation and frequency modulation , theory and derivations, Merits and demerits.
CO4	Study of Number Systems- Binary, decimal, octal, hexadecimal and their interconversions, Binary coded decimal (BCD), Addition and subtraction of binary numbers Study of basic logic gates, NOR, NAND, Ex-OR, Ex-NOR and their truth table, Circuits for Half adder, Full adder, Half subtractor and full subtractor, Boolean equations, De Morgan's theorem and its verification.

1.2 DEPARTMENT OF ELECTRONICS

COURSE: B. Sc. (Three years; Six Semesters)

Program Specific Outcomes:

S. No	Program Specific Outcomes
PSO1	Understand and appreciate the principles of electronics and their applications in the modern life
PSO2	Apply the knowledge of electronics to enhance the quality of life of self and community
PSO3	Be aware of the dangers of over use and misuse of electronic gadgets
PSO4	Be aware of and work to reduce the effect of e-waste on the environment

COURSE OUTCOMES:

Semester I and II -Paper I-Electronic Components and Semiconductor Fundamentals

S. No	Course Outcomes
CO1	Understand the construction and working of electronic components, their symbols and types and apply the knowledge in solving simple circuits and problems
CO2	State and understand the network theorems and apply them for solving simple circuits with DC sources
CO3	Understand the classification of materials based on electrical properties and the semiconductor materials, their types and properties
CO4	Construction, working and science of PN junction diodes, Zener diodes, BJTs, FETs, MOSFETs, SCR, DIAC, TRIAC, UJT etc their biasing, characteristics and applications

Semester I and II –Paper II-Digital Electronics

S. No	Course Outcomes
CO1	Understand different number systems, codes and their inter conversions and uses
CO2	Understand Logic Gates, their symbols, applications, universal gates, and circuits
CO3	Understand and apply laws of Boolean Algebra for solving and simplifying logic circuits
CO4	Understand and apply FFs to counters and registers

Semester III and IV -Paper I-OP AMPS and Applications

S. No	Course Outcomes
CO1	Understand and apply Differential Amplifier circuits to OP AMPs
CO2	Understand and apply concept of feed back to amplifiers

CO3	Apply OP AMPs as various operational circuits
CO4	Apply OP AMPs to Oscillators, Instrumentation Amplifiers and multivibrators

Semester III and IV -Paper II- Instrumentation

S. No	Course Outcomes
CO1	Understand and apply concepts of circuit design using circuit maker software
CO2	Application of CRO for measurement
CO3	Application of 555 timer for oscillators and multivibrators
CO4	Understand the concepts of instrumentation design and apply to bio-medical instrumentation
CO5	Understand the concepts and use of transducers to various instrumentation systems

Semester V and VI -Paper I-Communication Electronics and C programming

S. No	Course Outcomes
CO1	Understand and apply concepts of Digital and analog communication systems
CO2	Understand apply the knowledge to satellite communication systems
CO3	Learn and apply concepts and applications of C-programming language

Semester V and VI –Paper II- Microprocessors and Micro controllers

S. No	Course Outcomes
CO1	Understand the Hardware and apply the software of 8085 micro processor to various applications
CO2	Understand the Hardware and apply the software of 8051 micro controller to various applications

1.3 DEPARTMENT OF

CHEMISTRY COURSE: B. Sc. (Three years; Six Semesters)

Programme Specific Outcomes:

S. No	Program Specific Outcomes
PSO1	To understand basic facts and concepts in Chemistry
PSO2	To develop the ability to apply the principles of Chemistry
PSO3	To develop problem solving skills
PSO4	To become familiar with the emerging areas of Chemistry and their applications in various spheres of Chemical sciences
PSO5	To apprise the students of its relevance in future studies
PSO6	To develop skills in the proper handling of apparatus and chemicals
PSO7	To get exposure to the different processes used in industries and their applications

Course Outcomes:

Organic Chemistry (All semesters)

S. No	Course Outcomes
-------	-----------------

CO1	To make students capable of understanding and studying nomenclature and classification of organic compounds, organic reactions and to have exposure to various upcoming areas of organic chemistry
CO2	To develop skills required for the qualitative analysis of organic compounds, determination of physical constants.
CO3	To impart the students a thorough knowledge about the mechanisms of reactions of some selected functional groups in organic compounds and also to give an outline of applied organic chemistry and the applications of organic chemistry in various spheres of chemical sciences. To give an elementary idea of chemotherapy, organic spectroscopy and photochemistry. To analyse organic compound using UV, IR and NMR spectroscopic techniques, which provides platform for students to work in industries.
CO4	The students will understand some fundamental aspects of organic chemistry. They will learn mechanism of some organic reactions, classification of polymers, structure and uses of some commercial and natural polymers.
CO5	To know stereochemistry and various possible conformations of organic compounds and how it affects the reaction outcome
CO6	To be familiarise with the important photochemical reactions in Organic Chemistry ..
CO7	To understand the functions and applications of bioorganic compounds
CO8	To learn the separation and purification of an organic mixture by chemical/solvent separation methods

Physical Chemistry (All Semesters)

S. No	Course Outcomes
CO1	To study the basic postulates of quantum mechanics • To enable the students to solve the simple quantum mechanical models such as simple harmonic oscillator, particle in a 1D- box, rigid rotor, H atom etc. • To understand the quantum mechanical aspect of angular momentum and spin. • Enable the students to predict the point group of important molecules and to know how they are classified • To understand the idea of space groups and to learn the theory of molecular symmetry. • To gain

	skill to apply group theory to vibrational and electronic spectroscopy.
CO2	To learn the different theories of reaction rates and factors affecting reaction rates • To have an idea about the different types of catalysis and their mechanisms • To study the chemistry of surfaces and different types of surface phenomena • To get an idea about the various techniques employed for the characterisation of surfaces • To know the general properties of colloids and macromolecules • To have an idea about the important aspects of photochemistry.
CO3	To study the principle, instrumentation and applications of diffraction method, fluorescence spectroscopy, atomic spectroscopy and electroanalytical techniques.
CO4	To provide an insight into the thermodynamic and kinetic aspects of chemical reactions and phase equilibria. To derive some thermochemical equations and kinetic equations. To study phase diagrams and elementary idea of catalysis To develop skills in doing experiments in kinetics, Potentiometry and phase rule. Enable the students to prepare data analysis using spreadsheet program.
CO5	To provide an insight into the characteristics of different types of solutions and electrochemical phenomena. To learn ionic equilibria and electrical properties of ions in solution. To learn the concepts of acids and bases, pH and buffer solutions.

Inorganic Chemistry (All Semesters)

S. No	Course Outcomes
CO1	To impart skill to students in the systematic qualitative analysis of mixtures containing two acid and two basic radicals with one interfering radical by semi-micro method.
CO2	To know the structure and bonding of important coordination compounds • To understand the magnetic properties of complexes and to know how magnetic moments can be employed for the interpretation of their structure • To get an overview about the stereochemistry of coordination compounds .To get an idea about the basic coordination chemistry of Lanthanides and Actinides.
CO3	Ability to prepare inorganic complexes. Ability to prepare inorganic complexes.
CO4	To know about VBT, CFT and MOT of co-ordination complexes
CO5	Develops accuracy and precision in doing experiments, understands the different errors and methods for minimising errors. Conduct acid base titrations, complexometric titrations and redox titrations like permanganometry, dichrometry and iodometric-iodimetric titrations

Microscale Techniques in Chemistry Experiments (All Semesters) SEAT (Student, Environment, Administrator, Teacher Friendly)

S. No	Course Outcomes
CO1	Better understanding of scientific concepts and principles
CO2	Promote of basic skills and competencies (procedural and manipulative skills, reporting and interpretation skills)
CO3	To awaken and maintain curiosity in the learning environment.

1.4 DEPARTMENT OF

BOTANY COURSE: B. Sc. (Three years; Six Semesters)

Program Specific Outcomes:

S. No	Program Specific Outcomes
PSO1	Knowledge and understanding of: 1. The range of plant diversity in terms of structure, function and environmental relationships. 2. The evaluation of plant diversity. 3. Plant classification and the flora of Maharashtra. 4. The role of plants in the functioning of the global ecosystem. 5. A selection of more specialized, optional topics. 6. Statistics as applied to biological data.
PSO2	Practical skills: To carry out practical work, in the field and in the laboratory, with minimal risk; To gain introductory experience in applying each of the following skills and gain greater proficiency in a selection of them depending on their choice of optional modules - 1. Interpreting plant morphology and anatomy. 2. Plant identification. 3. Vegetation analysis techniques. 4. A range of physiochemical analyses of plant materials in the context of plant physiology and biochemistry. 5. Analyze data using appropriate statistical methods and computer packages. 6. Plant pathology to be added for sharing of field and lab data obtained.
PSO3	Scientific Knowledge: To apply the knowledge of basic science, life sciences and fundamental process of plants to study and analyze any plant form
PSO4	Design solutions: To design solutions from medicinal plants for health problems, disorders and disease of human beings and estimate the phytochemical content of plants which meet the specified needs to appropriate consideration for the public health.
PSO5	Environment and Sustainability: To understand the impact of the plant diversity in societal and environmental contexts, and to demonstrate the knowledge of, and need for sustainable development.
PSO6	Ethics: To apply ethical principles and commit to environmental ethics and responsibilities and norms of the biodiversity conservation
PSO7	Life-long learning: To recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Course Outcomes (All Semesters):

S. No	Course Outcomes
CO1	To critically evaluate ideas and arguments by collecting relevant information about the plants, so as to recognize the position of plant in the broad classification and phylogenetic level.
CO2	To apply the scientific method to questions in botany by formulating testable hypotheses, collecting data that address these hypotheses, and analyzing those data to assess the degree to which their scientific work supports their hypotheses.
CO3	To use the evidence of comparative biology to explain how the theory of evolution offers the only scientific explanation for the unity and diversity of life on earth. They will be able to use specific examples to explicate how descent with modification has shaped plant morphology, physiology, and life history.

CO4	To explain how Plants function at the level of the gene, genome, cell, tissue, Flower development. Drawing upon this knowledge, they will be able to give specific examples of the physiological adaptations, development, reproduction and mode of life cycle followed by different forms of plants.
CO5	To explain the ecological interconnectedness of life on earth by tracing energy and nutrient flow through the environment. They will be able to relate the physical features of the environment to the structure of populations, communities, and ecosystems.

1.5 DEPARTMENT OF

ZOOLOGY COURSE: B. Sc. (Three years; Six Semesters)

Program Specific Outcomes:

S. No	Course Outcomes
PSO1	Develop a strong foundation of basic sciences, especially Zoology
PSO2	Prepare and be ready for a career in Industry through mastery of core curriculum
PSO3	Prepare and be ready for higher studies of their choice
PSO4	Prepare and be ready for job oriented diploma and PG courses related to Zoology (like Mushroom cultivation Vermiculture, DMLT (Micro/Zoo or Micro/Botany), Radiotherapy Technology, Medical Laboratory Technology, X Ray Radiography and Ultra Sonography Techniques etc.)
PSO5	To apply the knowledge about Breeding, Genetics, Biotechnical, Nutritional farming, diagnosis of disease in fishes, other aquatic resources, Fish Processing, Freezing, Value addition of Sustainable, Productive Fisheries and aquaculture, improve food and nutrition security and will be able to increase income and contribute in economic growth.
PSO6	making their careers in small scale industries & develop entrepreneurship

Course Outcomes (All Semesters):

S. No	Course Outcomes
CO1	In the class B.Sc. Semester –I& III the student learn classification of Invertebrates & Vertebrates and can identify and classify different animals and this knowledge gives them an opportunity to become a Taxonomist
CO2	Students of Semester III & IV Genetics one of the branches of Zoology makes them aware about the importance of genetics in day to day life and they can work in various research institutes, Hospitals, Agricultural field
CO3	Semester–V& VI syllabus includes Economic Zoology which deals with Aquaculture (Fisheries & Prawn Culture, Pearl Culture), Entomology (Sericulture, Apiculture, Lac culture) enables students to become an entrepreneur. They acquire knowledge about Breeding, Genetics, Biotechnical, Nutritional farming, diagnosis of disease in fishes, other aquatic resources, Fish Processing, Freezing, Value addition of Sustainable, Productive Fisheries and aquaculture, improve food and nutrition security and increase income and economic growth.

2.6 DEPARTMENT OF

MATHEMATICS: COURSE: B. Sc. (Three years; Six Semesters)

Program specific outcomes:

S. No	Program Specific Outcomes
PSO1	Construct mathematical arguments, proofs and develop mathematical as well as analytical thinking
PSO2	Critically interpret numerical data, graphical data and develop models
PSO3	Apply mathematical knowledge to a career and research related to mathematical sciences
PSO4	Apply critical thinking skills to solve problems which can be modeled mathematically.

Course Outcomes:

Sem. I & II Paper-I (Algebra & trigonometry, Differential and difference equations)

S. No	Course Outcomes
CO1	Understand the applications of De Moivre's theorem, properties of groups and subgroups
CO2	Learn basic properties of first order, higher order differential equations and solve them with different methods.
CO3	Understand to find unknown solution by using known solution, the formation of difference equation, solution of homogeneous and non-homogeneous linear equation.
CO4	Understand the concepts of rank, Eigen values of matrices, solution of homogeneous and non-homogeneous system of equations.

Sem I & II Paper-II (Calculus, Vector calculus & improper integrals)

S. No	Course Outcomes
CO1	Understand basic properties of limit, continuity and derivability of functions, expansion of functions in terms of infinite series by using different methods
CO2	Find indeterminate forms and partial differentiation of functions with two or more variables
CO3	Understand basics of directional derivatives, gradient, divergence and curl
CO4	Evaluation of double and triple integral, improper integrals and their convergence

Sem III & IV Paper-I (Advanced calculus, Partial Differential equations & calculus of variations)

S. No	Course Outcomes
CO1	Understand concept of limit and continuity of functions of two variables, application of Mean value theorems
CO2	Study of convergence, divergence of sequences and series using various tests.
CO3	Understand ordinary differential equation in more than two variables and methods of finding solution
CO4	Study Lagrange's method, Charpit's method, Jacobi's method to solve PDE, homogeneous and non-homogeneous PDE with constant coefficients

Sem III & IV Paper-II (Differential equations & group homomorphism, Mechanics)

S. No	Course Outcomes
CO1	Understand basic properties of Laplace transforms, inverse Laplace transforms and solution of ordinary differential equation using Laplace transform.
CO2	Study of group homomorphism, isomorphism in details.
CO3	Understand kinematics in two dimensions, mathematical exposition and geometrical representation of simple harmonic motion.
CO4	Study mechanics of system of particles and Lagrange's equations.

Sem V & VI Paper-I (Analysis, Abstract algebra)

S. No	Course Outcomes
CO1	Study Fourier series and its convergence, existence of Riemann-Stieltjes integral, construction of analytic function, harmonic function etc.
CO2	Understand conformal mapping, bilinear transformation.
CO3	Study Group automorphism, inner automorphism, vector spaces and its properties, subspaces, basis, dimensions etc.
CO4	Understand algebra of linear transformation and its inverse, matrix associated with linear map and vice versa, properties of inner product space.

Sem V & VI Paper-II (Metric space, complex integration & Algebra, Special theory of relativity)

S. No	Course Outcomes
CO1	Understand concepts of countable, uncountable sets, completeness, compactness, connectedness of metric space.
CO2	Calculation of zeros and different types of singularities of analytic function, application of Cauchy's residue theorem to evaluate integral.
CO3	Study geometrical interpretation, group properties of Lorentz transformations and basics of tensors, metric tensors etc.
CO4	Understand equivalence of mass and energy, transformation formulae for mass, momentum and energy, relativistic equations of motion, Maxwell's equations etc.

2.7 DEPARTMENT OF**MICROBIOLOGY COURSE: B. Sc. (Three years; Six Semesters)****Program Specific Outcomes:**

S. No	Program Specific Outcomes
PSO1	To gain the knowledge for various specialized discipline of Microbiology like:- 1) Molecular biology of micro-organisms. 2) Metabolic studies of micro-organisms. 3) Industrial application of micro-organisms. 4) Clinical/pathogenic microbiology. 5) Microbial biotechnology
PSO2	To acquire, articulate, retain and apply specialized language and knowledge relevant to microbiology.

PSO3	To demonstrate competency in laboratory safety and in routine and specialized microbiological laboratory skills applicable to microbiological research or clinical methods, including accurately reporting observations and analysis
PSO4	To communicate scientific concepts, experimental results and analytical arguments clearly and concisely, both verbally and in writing
PSO5	To demonstrate various technique in the Microbiology discipline through involvement in research or internship activities

Course Outcomes (All Semesters):

S. No	Course Outcomes
CO1	To demonstrate theory and practical skills in microbiology and their handling techniques, staining procedures, microbial techniques for isolation of pure cultures of bacteria, fungi and algae.
CO2	To comprehend the various methods for identification of various unknown microorganisms
CO3	To get conceptual knowledge of properties, structure, function of enzymes, enzyme kinetics and their regulation, enzyme engineering, application of enzymes in large scale industrial processes
CO4	To specify the biological significance of bio-molecules in metabolism

2.8 DEPARTMENT OF

BIOCHEMISTRY COURSE: B. Sc. (Three years; Six Semesters)

Program Specific Outcomes:

S. No	Program Specific Outcomes
PSO1	Leads to an under graduate degree -B.Sc a three year degree course with Biochemistry as one of the three major subject
PSO2	To apply the knowledge gained for the general well-being of self and other persons
PSO3	To equip the students for health/clinical courses like degree/diploma in pathology, nutrition studies like dietetics
PSO4	To gain basic knowledge for being fully equipped for first aid procedures and thus can be of help to society
PSO5	To increase health awareness in an individual and to spread the same among the masses.
PSO6	To inculcating hygienic practices in self and to teach others
PSO7	To become qualified for pursuing post-graduation in various subjects of Life Sciences.
PSO8	To become qualified to pursue Hospital management courses, Laboratory management courses and management courses in Biotechnology
PSO9	To acquire skill to work in clinical industries

Course Outcomes

B.Sc Semester I

S. No	Course Outcomes
CO1	To understand the chemistry of biomolecules, the physiological process, their immune system and also microbes.
CO2	To understand the constitution and working of human body, the diseases caused by microbes and also the economic importance of beneficial microbes.
CO3	To understand about our natural and acquired immunity

B.Sc Semester III & IV

S. No	Course Outcomes
CO1	To acquire knowledge about the various tool and techniques used in study of biology in detail and their applications. This also helps them further in carrying out projects and in research.
CO2	To gain knowledge about the functional biomolecules (chiefly nucleic acids and proteins) in detail. This helps them to take up courses in genetic engineering, biotechnology, biochemistry and genetic studies.
CO3	To acquire an in depth knowledge about enzymes which act as biocatalyst especially their construction of structure, the mechanism of reactions they catalyze and the way to isolate and purify them. This lays the basis for studying fermentation technology.

B.Sc. Semester V & VI

S. No	Course Outcomes
CO1	To get a detailed understanding of the play of different molecules inside the human body in network of reactions and the controlled mechanisms regulating the life processes
CO2	To understand the role of Replication of DNA for the transfer of heredity from one cell to another.
CO3	To understand Protein synthesis mechanisms and unravel the making of molecules and body building processes
CO4	To understand and use Recombinant DNA technology, the tools and techniques used by the scientists for making molecules for the benefit of mankind

2.9 DEPARTMENT OF B.Sc. HOME SCIENCE**COURSE : B. Sc. Home Science (Three Years, Six Semester****Course) Program Specific Outcomes**

Sr. No.	Program Specific Outcomes
PSO1	Food & Nutrition
	To acquire skills of Change Agents and Assistants to Dieticians
	To apply the knowledge gained for the general well-being of self, family and community. To inculcate hygienic practices in self and teach others.
	To gain basic knowledge for being fully equipped for Scientific Therapeutic Cooking, Creativity and Management of Resources, Nurturing and Counseling, Designing and also Extending this Knowledge gained to the Community thus can be of help to society, to work in various industries like Bakery, Preservation etc. and in Social Organizations, Media etc.
	To increase health awareness in an individual and to spread the same among the masses, to become qualified for pursuing higher courses in hospital management, laboratory management, PG in Food Science and Nutrition and Dietetics.
PSO2	Human Development
	To acquire skills of Pre-school teachers
	To acquire skills to become assistant to counselors and psychologists
	To become equipped to run creative classes for young children and to prepare educational toys
PSO3	To acquire skills for taking care of elderly both institutionalized and non-institutionalized
	Textile & Clothing

	To acquire the skills of Fashion Designing
	They can start their own unit of dyeing and printing and start a tailoring unit
	They can venture for a hand embroidery unit
	They can begin a start up in regional and traditional embroidery
PSO4	Family Resource Management
	To acquire the skills of Event Management
	To acquire the skills of interior decoration
	They can become administrative managers
PSO5	To acquire skills to become entrepreneur i.e. the programme focuses on building entrepreneurship.
	Home Science Extension Education
	They can work as Extension Scientists who transfer the agricultural technology from research station to farmers.
	They can be absorbed in different central government departments as officers in food corporation, plant protection boards, etc.
PSO6	To acquire skills needed in media agencies like news edition, media manager, radio jockey, agricultural journalists, etc.
	Students can work as Extension workers at block level, district level.
	To equip the students for courses like degree/diploma in nutrition studies like Dietetics/Food Science, Family Resource Management, Human Development, Textiles & Clothing/ Fashion Technology/and Home Science Extension Education.

Course Outcomes

S. No	Course Outcomes Semester I and II
CO1	Food & Nutrition
	To promote basic knowledge pertaining to various Food Groups and Nutrients.
	To relate the composition of foods to their various properties.
	To understand the concept of Recommended Dietary Allowances
	To promote understanding of common nutritional disorders due to the deficiency of nutrients
CO2	Human Development
	Students will be made aware about the science and scope of human development as a subject.
	Students will be able to understand about the different methods used to study human behavior.
	Students will learn in-depth about the growth and development occurring during prenatal and neonatal stages.
	Students will be able to understand about the growth and development taking place during infancy and early childhood.
	Students will study about the different factors which influence the development during infancy and early childhood years.
	Students will be made aware about the development happening in key areas like physical, motor, cognitive, language, social and emotional development.
	Students will be offered opportunities to observe infrastructural set ups by visit to nursery school.
CO3	Textile & Clothing
	To get acquainted with basic knowledge of textile fibers and to acquire knowledge of various principles of clothing construction and their applications

	Scope of textiles and importance of clothing
	Classification, properties and manufacturing process of different natural and man made fibers along with introduction to new fibres
	How to take body measurement and different methods of constructions, tools and equipments required for construction, their care and functions.
	Yarns and different sewing techniques
	Acquire knowledge of types of yarn, spinning methods, skill regarding stitching techniques for various garment construction such as plackets, pockets, collars and fasteners
CO4	Family Resource Management
	To develop good taste, through the study of basic elements and principles of art.
	To develop aesthetic sense and to become a good artist.
	To give knowledge about the various types of design.
	To develop skill in using colors to create different effect in space, with the use of various color scheme.
	To teach techniques of using color in interior.
	To impart knowledge about the characteristics of colors and the psychological effects of color.
	To create illusion effect with the help of various dimension of the colors.
	To give Knowledge of flower/ floral decoration and arrangement.

CO5	Home Science Extension Education
	To understand the meaning and need of Home Science Extension To understand the meaning and importance of Rural Sociology. To know the Society in respect of Social problems. To understand the Rural problems and poverty.
	To impart knowledge of Community Development. To develop awareness regarding community development programs. To access the methods of social and social research. To gain the knowledge about gender and development. To know the Government agencies for eradication of poverty.
CO6	Ecology and Environment I
	To get acquainted with the physical environment and its components
	To know the methods to protect the environment and conserve natural Resources.
CO7	Basic Chemistry I
	To get acquainted with the knowledge of Basic Chemistry like methods of purification of water for domestic purpose.
	Knowledge about various alloy, physical properties or liquids, colloids, emulsion gel.
CO8	Applied Physics and Basic Computer I
	To refresh concept of physics and computers.
CO9	English and Communication I
	To prepare the students to communicate effectively and fluently in English

	To enable students listening, speaking reading and writing
	To strengthen grammatical accuracy
	To prepare the students to deal with customers, professional, counselors in correct grammatical, idiomatic English
	To provide personality development training through situational role play, interview techniques, group discussions, seminar presentation etc.

S. No	Course Outcomes Semester III and IV
CO1	Food and Nutrition
	To learn Principles of Meal Planning, Assessment techniques of nutritional status in the community (anthropometry and dietary)
	To plan and prepare balanced diets for family members of different age groups, Health and nutrition education of the community with teaching aids.
	To orient student to the basic principles of nutritional assessment as applied to the study of community nutrition
	To develop an understanding of the role of micro-organism in environment, industry and in maintenance of health
CO2	Human Development
	Students will be able to understand about the development occurring during the late childhood and adolescence.
	Students will gain knowledge about the issues concerning the late childhood and adolescence.
	Students will get opportunity to perform some exercises on life skill development.
	Students will get a first-hand experience of using few basic psychological tests.
	Students will be able to understand about the various dimensions of development in adulthood.
	Students will get an opportunity to reflect upon the concerns of the family and society with respect to individual in adulthood.
	Students will be made aware about the diversity of adult life-style in different socio-cultural contexts.
	Students will study about the various issues and concerns of individuals in different phases of adulthood.
CO3	Textile & Clothing
	knowledge of various methods of fabric construction
	learn about weaving along with loom and knitting
	learn elements and principles of designs and to develop creativity in designing for prints, knowledge regarding regional embroideries of India
	knowledge of dyes, its classification, concept of dying and printing such as block, screen, stencil, roller, flock, tie & dye, batik
	knowledge of traditional textiles of India and costumes from different states of India.
CO4	Family Resource Management
	To develop understanding regarding housing needs, principles, planning of house.
	To experiment with space, preparing house plans.

	To develop graphic skills to express ideas in design, form, knowledge of landscaping and economic use of space.
	Impart knowledge about various furniture, furniture materials and arrangement of furniture in interior.
	To give knowledge about how a professional landscape design can enhance home.
	To teach history of bonsai, and preparation of different styles of bonsai.
	To gain knowledge about the role of internal amenities in contributing for satisfying family living.
	To impart knowledge about different types of lighting and to study various principles of lighting in interior.
	To learn technique that will help one to construct some furnishing items, relative to their function and beauty.
	Give knowledge about the importance of vastu shrta
CO5	Home Science Extension Education
	To impart knowledge of extension teaching. To develop awareness about extension learning. To access the extension teaching methods and approaches. To gain the knowledge about art of presentation and devices in effective communication.
	To develop understanding regarding communication techniques. To develop concept and learn process of communication. To understand the concept of mass communication. To comprehend the concept of advertisement in extension. To develop the understanding of journalism.
CO6	Applied Physiology I
	To get a general orientation of different systems of human body their physiology and first aids in household emergencies.
CO7	Basic Chemistry I
	To get acquainted with the knowledge of carbohydrates, fermentation, oils and fats, soaps and detergents and shampoos.
CO8	Applied Physics and Basic Computer I
	To learn about electrical safety, Heat, Appliances and Operating systems and word processing software (MS WORD) and database creation and management software (MS EXCEL)
S. No	Course Outcomes Semester V and VI
CO1	Food and Nutrition
	Develop an understanding of principles of diet therapy
	Obtain knowledge about the therapeutic adaptations of a Normal Diet
	To plan and prepare diets relating to specific health condition such as Diabetes, Hypertension etc.
	Determine and calculate the nutritive value of diets prepared for various diseased states.
CO2	Human Development
	Students will be made aware about the basic concept of marriage focusing on its meaning, philosophy, readiness, premarital counseling etc.
	Students will understand about the concept of family, emphasis will be on the various

	structures of family prevalent today.
	Students will be familiarized with the concept of developmental assessment- its importance and some tools used for such assessment.
	Students will get a first-hand experience of observing a child and identifying its developmental status.
	Students will be made to understand about the importance of care and well-being in human development.
	Students will get awareness about the various concerns at different stages of life.
	Students will get an opportunity to explore the availability of services and institutions that promote care and wellbeing.
	Students will get a practical knowledge of various care giving centres through visits.
CO3	Textile & Clothing
	developed skills and designing and making paper patterns for different garments and pattern layout
	learn drafting method, flat pattern method and draping method of pattern designing and also grading
	to know how to solve fitting problems and how to construct different types collars, skirts
	They stitch Salwar Kurties, Skirt-Tops, Cocktail dress and sari-blouse.
	learn to use elements and principles of design in fashion designing
	understand terminology related to fashion, basic factors influencing fashion, they come to
	know work of some national and international fashion designers
	learn fashion designing process and about garment industries
	gain knowledge of fashion marketing and merchandising
CO4	Family Resource Management
	To recognize the importance of wise use of resources in order to reach personal and family goals.
	To make students realize the importance of motivating factors in management- Values, goals and standards.
	To give opportunity to develop ability to take rational decision.
	To develop the quality of students to become efficient manager.
	To give opportunity to develop ability to manage time, energy and money.
	To develop ability to apply management principles in experimental house and in day to day life experience and various small events.

	To develop ability to apply work simplification techniques.
	To make them aware of intelligent choice of consumer goods.
CO5	Home Science Extension Education
	To develop understanding about Program Planning. To understand the need for program planning. To develop understanding of community organization. To know the significance of adoption process in community development. To comprehend the communication of innovation.
	To understand the importance of leadership in extension work. To developed the concept of teaching methods. To understand the necessity of co-ordination in extension work. To know the concept of development communication. To understand administration, supervision and evaluation for extension work.
CO6	Nutritional Biochemistry
	Develop an understanding of the principles of biochemistry (as applicable to humannutrition)
	Obtain an insight into the chemistry of major nutrients and physiologically important compounds.
	Understand the biological processes and systems as applicable to human nutrition.
	Apply the knowledge acquired to human nutrition and dietetics.
CO7	Health Science & Hygiene
	To understand basic concept of microorganisms
	To impart knowledge of measures taken for prevention and control of diseases
	To promote basic knowledge of role of disinfection in health.

2.10 DEPARTMENT OF APPLIED ELECTRONICS

Bachelor of Applied Electronics and Software Technology (4 year degree course, 8 semesters)Program Specific Outcome:

S. No	Program Specific Outcomes
PSO1	Fundamental aim of education is to develop capability in students to think independently. Use the information and knowledge gained for betterment of societyand self.
PSO2	To grow professionally in the field of study and interest
PSO3	To develop responsible citizens with commitment towards society and nation
PSO4	Using electronic and computer technology for betterment of human life and for protecting mother earth from harmful effects of modern technology
PSO5	To earn bread and butter for self and family respectfully.

Course Outcomes:**BAEST Part I (Sem. I & II):**

S. No	Course Outcomes
CO1	Applied Physics: To understand about magnetic, dielectric materials. To learn about various characteristics of conductors resistors, super conductors. To study semiconductors their applications, types, fabrication etc. Various semiconductor devices.
CO2	Applied Chemistry: To impart knowledge about kinetics, various types of fuels, air pollution, water treatment etc.
CO3	Computer programming: To introduce to the computer technology various software, hardware and learn programming language
CO4	Electrical Engineering: gain knowledge of ac, dc circuits. Laws governing these circuits. Knowledge of transformers, generator and motors
CO5	Communicative English: To develop soft skills and communication skill
CO6	Engineering Mathematics: To give knowledge of mathematics required for learning various principals of physics, chemistry, electronics , computers etc.

BAEST Part II (Sem. III & IV):

S. No	Course Outcomes
CO1	Electron Devices and Circuits : 1) basic concepts of electronics 2) Working of Power supply etc. They can check various electronic devices. 3) They can check various electronic devices. 4) They also understand difference between electrical and electronics device.
CO2	Digital Electronics: To gain knowledge about various no. systems their applications, digital techniques in electronics. Development of digital instruments. Their advantages etc.
CO3	Computer Programming: to enhance the computer knowledge, programming skill. Linear Network Analysis: To analyse various circuits their behavior etc. Engineering Mathematics: gain knowledge of Fourier series, Laplace transform etc. and their applications Engineering Drawing and workshop: Students will be able to present electronic product designs, panel designs and various fabrication techniques

BAEST Part III (Sem. V & VI)

S. No	Course Outcomes
CO1	Linear Integrated Circuits: To know operational amplifiers, their importance in electronic circuits' applications, various other amplifiers, oscillators etc. <ul style="list-style-type: none"> • They understand electronic amplifier. • They are able to convert weak signal into strong signal. • They are able to convert physical signal into electronic/electrical signal. • New electronics equipment useful knowledge for their daily life.
CO2	Microcontrollers: Know about architecture, programming and use in developing automated instruments useful for industry and daily life
CO3	Instrumentation and control system: to know the requirement of control system for designing various instruments. Various types of sensors.
CO4	Digital Signal processing: Digital techniques of transmission and reception of communication signal. Various techniques of filtering the signals

CO5	Algorithm and data structure: development of various algorithms and knowledge of Computer data structure.
CO6	Communication Electronics: various communication techniques, transmitters, receivers, antenna, television etc.

BAEST Part IV (Sem. VII & VIII):

S. No	Course Outcomes
CO1	Circuit Design: Designing various electronic circuits as per the requirement of industry or user
CO2	Advanced Microcontroller: Advanced version of microcontroller programming and applications
CO3	Advanced programming: Knowledge of latest computer programming language
CO4	System Design: Using knowledge of micro controller gained in part III, design embedded system for various applications
CO5	Industrial Organisation: Knowledge of various industry concepts and working style
CO6	Database management system: Data base handling for the computers.

2.11 DEPARTMENT OF INTERIOR DESIGN

Bachelor of Interior Design (Four years, eight semesters program)

Bachelor of Interior Design I (Sem. I & II)

S. No	Course Outcomes
CO1	Understand the elements of design as point, line, plane and volume and their combinational character
CO2	. Classification of variables as size, shape, colour, texture and light and its impact on the elements of design.
CO3	. Making compositions as symmetrical, asymmetrical, steady and dynamic.
CO4	. Understanding of form, space and organization through synthesis. Organization through perception by resolving figure and ground relationship.
CO5	. Analyzing visual elements through various principles of design as Unity, Balance, Harmony, Contrast, Rhythm etc.

Bachelor of Interior Design II (Sem. III & IV)

S. No	Course Outcomes
CO1	Understanding concept of space and elements of enclosed forms as three dimensional spaces.
CO2	Identify space and its relation with function. Apply the knowledge of basic living activities of a human being in designing spaces.
CO3	Find standards as anthropometric data for space planning applicable to residential design.
CO4	Analysis as quantitative and qualitative aspects of space through case studies.
CO5	Understand importance of structural, materials, furniture, lighting and ventilation in interior spaces through examples.

MCT

S. No	Course Outcomes
CO1	Demonstrate fundamental knowledge of the systems and processes used to construct the built and interior environment, including an understanding of industry terminology
CO2	Behavior and properties of various types of building materials and their availability and suitability to building and interior components.
CO3	Installation methods of different components of interior and interior finishes including construction drawings.

IEC, IS

S. No	Course Outcomes
CO1	Understanding interface of different services on space planning like, power distribution systems, mechanical systems (HVAC, plumbing), Energy management, data/voice telecommunications systems, lighting systems, security systems, acoustics, fire and life safety principles and thermal comfort.

Training

S. No	Course Outcomes
CO1	Providing opportunities for design work experience (for example, internship, that familiarize students with the culture and environment of the professional studio and professional practice).

Det

S. No	Course Outcomes
CO1	Produce construction drawings and documents using industry standards for a variety of interior spaces
CO2	Interface of work station furniture systems with building systems (for example, columns, fenestration, convective units, and power sources).
CO3	Ability to operate effectively within participatory and collaborative environments, team work.
CO4	Ability to interact with multiple disciplines (for example, engineers, architects, artists, behaviorists, consultants in the field of HVAC, power systems,) consultants of various building services, representing a variety of points of view and perspectives on design problems.

GRAPHICS LAND II

S. No	Course Outcomes
CO1	Handle the drawing set up and equipment by Familiarization to their various attributes to be able to draw and depict via technical drawing and sketching.
CO2	Acquire the knowledge of and apply or use of various metric scales, conventions, standard annotations and format
CO3	Acquire the ability to apply Principles of plane geometry and geometrical constructions
CO4	Understand the concept of enlargement and reduction of objects
CO5	Drawing Orthographic Projections of simple and complex solids based on geometrical constructions, either single or in combinations

CO6	Understanding And Ability Of Drawing Views:
CO7	Understand And Draw The Development Of Surfaces
CO8	Understanding And Ability Of Drawing : Interpenetration Of Solids
CO9	Geometrical Drawing Of Special And Complex Curves
C10	Drawing Perspectives

FURNITURE DESIGN I AND II

S. No	Course Outcomes
CO1	Understanding of and ability of drawing details
CO2	Overview of ergonomics and design relevance's and understand co relation of factors influencing human performance.
CO3	Analytical abilities : analysis of existing piece of furniture in its functional aspects, technical aspects, skills required, materials, flexibility, comfort, ergonomic and aesthetic considerations
CO4	Transportation and economic factors
CO5	"Measure Drawing" of a piece of furniture – plan, elevation and detail drawing on full scale.
CO6	Understanding Measurement of quantity of material used in furniture (eg: measurement of Cubic feet of wood to be used in a wooden chair). Deriving cost of material.
CO7	Understanding constraints and identity determinants to design furniture elements
CO8	Visual perception of furniture as single form and as a system in a given interior space.
CO9	History of furniture forms from early days to industrial revolution and now to neoclassicism
CO10	Understanding the viability and validity of each component used and designed
CO11	Understanding the critical issues of human anthropometrics, critical nature of each and every Dimension, details, material and aesthetics and the degree of comfort through models and prototypes.

INTERIOR DESIGN V and VI

S. No	Course Outcomes
CO1	Develop floor plans with facilitation and clearances with all relevant details with specifications
CO2	Generate reflected ceiling plan/s and its detailing with specification and finishes
CO3	Develop wall elevations and relevant sections with materials and finishes and specifications
CO4	Generate working drawings of furniture and other relevant components of interiors and integrate services in interiors viz. electrification , AC , lighting plan etc.
CO5	Generate views , sketch views and perspectives to present their ideas
CO6	Design of majorly non-residential projects

CO7	Develop floor plans, detailing, writing specifications and Generate working drawings of furniture
CO8	Apply digital output methods
CO9	Understand typical non-residential building types
CO10	Use human scale and dimension to public spaces
CO11	Draw reflected ceiling plans
CO12	Create advanced powerpoint presentations for showcasing their design creations

Estimation & Costing I

S. No	Course Outcomes
CO1	Knowing materials of construction and interior works available in market, their rates and specifications
CO2	Understanding approximate methods of costing
CO3	Understanding, using & applying methods of estimation.
CO4	Understanding preparation of schedule of quantities and estimates for basic civil works of brickwork and plaster of buildings
CO5	Understanding schedule of quantities and estimates for plumbing systems and electrical fittings

Estimation & Costing II

S. No	Course Outcomes
CO1	Understanding preparation of schedule of quantities and estimates for flooring and ceiling of various kinds
CO2	Understanding preparation of schedule of quantities and estimates for coloring and treatment to walls.
CO3	Knowing application of knowledge of estimation to interior works
CO4	Understanding of how rates are decided for items of civil & interior works
CO5	Understanding instructions to be given as an interior designer while coordinating various agencies involved in work of interior. Knowing how financial records are maintained.

Structure – I

S. No	Course Outcomes
CO1	Understanding basic elements of building and different types of loads on structures.
CO2	Understanding types of soils, principle of foundations, types of simple foundations & thumb rules for design of foundations.
CO3	Knowledge of deep foundations & their types.
CO4	Understanding activities during construction like shoring, scaffolding and underpinning.
CO5	Understanding Stability of Structures & equilibrium of bodies.

Structure – II

S. No	Course Outcomes
CO1	Understanding effect of forces acting on bodies using analytical method.
CO2	Analyzing effect of forces acting on bodies using graphical method.
CO3	Knowing types of supports beams and trusses, loading conditions

CO4	Understanding and locating centroids of laminae of various shapes.
CO5	Understanding moment of inertia of laminae, terminologies and theorems.

Structure - III

S. No	Course Outcomes
CO1	Understanding structural properties of basic materials used in building construction and interior.
CO2	Gaining basic knowledge of concrete technology.
CO3	Understanding simple stresses & strains, their effect on bodies, safe stresses for steel and concrete as per IS code.
CO4	Understanding simple bending, deflections of beams, allowable limit.
CO5	Understanding difference in short columns, long columns and their failure

Structure - IV

S. No	Course Outcomes
CO1	Understanding how shear force & bending moment values are determined for deciding reinforcement in beams and slabs.
CO2	Understanding basic RCC structures for load distribution & typical reinforcement details.
CO3	Understanding load distribution and calculation in trusses.
CO4	Understanding and reading ability of structural drawings and schedules for lintels, slabs and beams.
CO5	Understanding and reading ability of structural drawings and schedules for columns, column footings, staircases.

Structure – V

S. No	Course Outcomes
CO1	Understanding types of beams, fixed and continuous, their behavior, through bending moment diagrams.
CO2	Understanding how renovation of load bearing & framed structures can be carried out
CO3	Understanding application of knowledge of renovation to case studies
CO4	Knowing common causes and prevention of cracks in buildings, investigations relating to cracks, severity of cracks.
CO5	Be aware of anti termite treatment and types of anti-termite treatment.

Structure – VI

S. No	Course Outcomes
CO1	Understanding different ways of covering large span areas and effect of simple geometric forms on the overall structural behavior.
CO2	Understanding preliminary design criteria & thumb rule for sizes of steel columns and steel girders, relative strengths of beams as 'I', '[' and 'L' sections.
CO3	Understanding welded connections of steel structures
CO4	Understanding roof trusses their preliminary design for tension and compression members
CO5	Knowledge of earthquake proof buildings.
CO6	Understanding load transfer in three hinged Arches.

Green Building Technology

S. No	Course Outcomes
CO1	Realize the necessity of practicing Green Building Technology.

CO2	Knowledge of parameters considered for making buildings green.
CO3	Be familiar to materials used in green building construction and green interiors.
CO4	Understanding methods of reducing use of natural resources to make buildings green
CO5	Be aware of rating systems of green buildings, green buildings certification & carbon credits.

2.17 DEPARTMENT OF COSMETIC TECHNOLOGY

Bachelor of Cosmetic Technology (Four years, eight semesters

Program):Program Specific Outcomes:

S. No	Program Specific Outcomes
PSO1	To develop professional, creative and skilled students for cosmetic industry.
PSO2	To develop the students who can work in all the streams of profession in the Cosmetic industry like Quality Control and evaluation, Research and development, Manufacturing, Packaging, Techno marketing of cosmetics etc.
PSO3	To use the technology for the betterment of society and self-employment as well.
PSO4	The students also study the regulatory affairs i.e. Drug and Cosmetic Act to understand their responsibility towards citizens and society.
PSO5	To develop professionalism in the student and helps to develop leadership qualities and administrative capabilities.
PSO6	To be qualified for pursuing Post Graduation and Research leading to Ph.D. programme. This enables the students to work at higher position in the academic and industrial scenario.

Course Outcomes

Bachelor of Cosmetic Technology Sem. I & II

S. No	Course Outcomes
CO1	Elementary Mathematics: To understand the basics regarding Mathematics and statistics.
CO2	Organic and Physical chemistry: As the course is completely based on chemical processes. Chemistry subject imparts knowledge of ingredients and properties as well as basic physical properties.
CO3	Cosmetic Chemistry: Impart the knowledge of various basic processes for evaluation of impurities in cosmetics.
CO4	Anatomy and Physiology: Teaches basic knowledge of Anatomy and Physiology of body especially skin and its appendages like Hair and Nails which are important for application of cosmetics.
CO5	Natural Cosmetic Agents: Introduction of Natural ingredients for example herbs and other materials of natural sources.

Bachelor of Cosmetic Technology Sem. III & IV

S. No	Course Outcomes
CO1	Cosmetic Technology:- Introduce of basic formulations method of cosmetics using various raw materials.
CO2	Cosmetic Engineering: Imparts the knowledge of primary unit engineering operations useful in cosmetic industries.
CO3	Cosmetic Chemistry: mainly the emphasis on biochemical properties and evaluation of the ingredients like amino acids, proteins, enzymes, Minerals etc.
CO4	Drug & Cosmetic Law: Teaches regulation, rules and laws schedules related to cosmetics that is Drug and Cosmetic Act.
CO5	Introductory Pharmacology and Toxicology: Introduces pharmacological and toxicological aspects of cosmetics, routes of administration and mechanism of action/ drug action as well as toxicological aspects.
CO6	Instrumental Methods of Analysis: Introduces the instruments used for analysis of raw material and finished cosmetic products.

CO7	Beauty Culture: Impart a knowledge of the application of various cosmetic products systematically with precautions.
-----	--

Bachelor of Cosmetic Technology Sem. V & VI

Course Outcomes:

S. No	Course Outcomes
CO1	Perfumes: Introduces the knowledge of perfumery ingredients of various origins their availability and isolation.
CO2	Cosmetic Technology: Learn about the preparation of advanced cosmetic products like soaps, colour cosmetic, astringents and tonics, face packs etc.
CO3	Principles of Cosmeceutics: Teaches all the fundamental physico-chemical properties and concepts of cosmetic ingredients with their methods of determination and their effects on cosmetic products.
CO4	Cosmetic Engineering: advanced unit operations and manufacturing processes involving various equipment and engineering aspects of manufacturing processes are taught.
CO5	Beauty Culture: Various beauty treatments professional make-ups and various advanced methods of applications of cosmetics are taught with more emphasis on practical aspects.
CO6	Pharmacology and Interactions: Student study the pharmacological aspects of skin, hair and nails along with their interactions, side effects, and disorders.

Bachelor of Cosmetic Technology Sem. VII &

VIII Course Outcomes:

S. No	Course Outcomes
CO1	Cosmetic Technology – This subject aims to study all sort of sophisticated cosmetic preparations which include hair, skin, oral, foot, tooth and sun screening preparation, its formulation and development.
CO2	Perfume and colors – Learn advanced formulation with incorporation of colors and perfumes, its packaging source, properties and composition of perfumes.
CO3	Plant Design- Designing of machineries used in plants, its material, plant location, site, factory building and factors affecting.
CO4	Quality Assurance Techniques – Learn the importance of quality control in cosmetic preparations, its guidelines, ISO significance, validation of cosmetic manufacturing stability study of cosmetic and evaluation of raw material by proper analytical method using BIS standers.
CO5	Herbal Cosmetic- study the herbs used in skin and hair care preparation with respect to its biological source, chemical constituents and incorporation in cosmetics. Also study the stability at different storage condition.
CO6	Organization & Management of Industries- Learn the entrepreneurial development, finance and personal management, different management development programmes.

2.18 DEPARTMENT OF HOTEL MANAGEMENT AND CATERING TECHNOLOGY

Bachelor of Hotel Management and Catering Technology (Four years, eight semesters Program): Program Specific Outcomes:

S. No	Program Specific Outcomes
PSO1	To equip the students with skills and theoretical knowledge in operation and management of different types and class of hotels. The students after undergoing the rigorous practicals and hands on job, industrial training in various hotel organization aids in setting up entrepreneur project and prepares them to face challenge of Hospitality and allied fields .

Course Outcomes:

FOOD AND BEVERAGE MANAGEMENT:

S. No	Course Outcomes
CO1	To learn about the various food and beverage service areas and the equipment used, staff organization structure and service methods; to understand the types of menu and menu planning considerations, control systems and billing methods; to have a detailed knowledge about the different wine producing regions, grape varieties, production of spirits and brand names, Preparation and types of cocktails, Bar planning and operation along with beverage control; to have knowledge Banquets, Banquet protocol, buffets and outdoor catering, the techniques of preparation and complete procedure of guerdon service.

FRONT OFFICE MANAGEMENT:

S. No	Course Outcomes
CO1	To learn about Introduction to Hotel industry - Its origin and development and also different types of Rooms; to understand layout of front office department, equipment used in front office and reception areas; to have detailed knowledge about Pre arrival, arrival, registration, reservation and departure procedures; to have knowledge about duties and responsibilities of front office staff, Qualities and communication skills; to know how to make various formats and report.

HOUSE KEEPING OPERATIONS:

S. No	Course Outcomes
CO1	To understand different types of rooms and cleaning procedure of rooms and public areas, overall cleaning and maintenance; to know Duties and responsibilities of housekeeping personnel; to learn about room layout, designing, furniture selection and furnishings; To know to make various flower arrangements.

FOOD PRODUCTION:

S. No	Course Outcomes
-------	-----------------

CO1	To understand the various principles of cooking and baking, the modern techniques in preparation, appetizers, garnishes, pastas and ice creams and frozen desserts; to have a detailed knowledge about national and international cuisine, charcuterie; the various principles of food and plate presentation; Research and product development, food trials, evaluating a recipe, food safety and hygiene, HACCP principles etc.
-----	---

2. FACULTY OF COMMERCE AND MANAGEMENT

Three Years, Six Semesters B.Com. Program

Program Specific Outcomes

Course Outcomes

B.Com. Sem. I

Financial

Accounting-I

S. No	Course Outcomes
CO1	Understand the concepts and conventions behind following accounting standards and IFRS
CO2	Know about different methods used in the process of maintaining accounts for HP and installment system
CO3	Know the methods used in preparing accounts for cooperative Society
CO4	Know the methods used in preparing accounts for joint venture

Business Organisation

S. No	Course Outcomes
CO1	Know the concepts, types, Industrial services trade and social responsibilities of Business
CO2	Learn the forms of Business Units
CO3	To study about types of Organisations
CO4	Gain knowledge about the recent trends in Business Organisation

Company Law

S. No	Course Outcomes
CO1	Know concepts of Company Act-2013, Corporation, incorporation, formation, promotion and types of company
CO2	Study about Memorandum, Articles association, private and public placement, prospectus
CO3	To understand shares and share capital, Depositories and dematerialization
CO4	Explore about membership, Director and provisions relating to directorship and shareholder Director, Auditor.

Business Economics-I

S. No	Course Outcomes
CO1	To understand meaning, nature and scope of Business Economics, nature and type of business decisions. To know about role and responsibilities of business and business economist and to understand the concept, scope, merits and demerits of

	micro and macroeconomics
CO2	Explore knowledge of Theory of Consumption. To know the concept, properties, importance of indifference curves. To understand elasticity of demand, its kinds, how to measure elasticity of demand and factors influencing elasticity of demand and also know about Demand forecasting, its need, importance and methods
CO3	Explore the idea about theory of production, its functions, concept, types of products, total production, average production. To know about law of variable proportions, its assumptions, significance and limitations. To know about Isoquant curve, its properties and expansion path and also knowledge of Law of Returns to Scale, Internal and External economies and diseconomies of scale, Ridge Lines
CO4	Understand theory of cost and revenue, includes Law of Supply & Criticisms, Factors influencing supply. Concept of Cost in the Short & Long Run- Accounting Cost, Economic Cost, Opportunity Cost, Fixed Cost, Variable Cost, Direct and Indirect Costs, Real Cost, Explicit & Implicit Costs etc.

B.Com. Sem. II

Statistics and Business Mathematics

S. No	Course Outcomes
CO1	To understand the term Statistics, its meaning, scope, importance and functions and also to know Collection of data, Tabulation and Classification, Frequency distribution. Mean, Median, Mode, Geometric Mean and Harmonic Mean (Theory & Numericals)
CO2	To learn Dispersion- Meaning and significance of dispersion, Methods of measuring dispersion, Mean Deviation, Standard Deviation, Quartile Deviation, co-efficient of variation (Theory & Numericals)
CO3	Explore the knowledge of Skewness-Absolute Measures of Skewness, Relative Measures of Skewness, Karl Pearson's Coefficient of Skewness, Bowley's Coefficient of Skewness. (Numericals)
CO4	To study Business Mathematics:- Ratio Proportion, Percentages, Simple & Compound Interest, Profit/ Loss. (Numericals).

Business Management

S. No	Course Outcomes
CO1	To gain knowledge about introduction, scope and functions of Business Management
CO2	Study about Planning, Decision Making
CO3	Learn Delegation of Authority Co-ordination and Controlling
CO4	Understand the recent trends in Business Management

Secretarial Practices

S. No	Course Outcomes
CO1	Explore about different types of companies, qualifications, functions, role, duties of a company secretary.
CO2	Know about various types of company meetings.
CO3	Understand report writing, E-Governance and E-Filling.
CO4	Learn the Managerial Remuneration.

Business Economics-II

S. No	Course Outcomes
CO1	To get an idea about Market Structure, its meaning, definition and classification and also about Firm and Industry
CO2	To understand perfect and imperfect competition, also knowledge of the term Monopoly, price determination and monopolistic competition
CO3	Explore the knowledge of theories of distribution like Modern Theory of Distribution. Theories of Rent- Ricardian theory of Rent, Modern theory of Rent, Concept of QuasiRent, Theory of Wages etc
CO4	To understand the Concept, Features, Types, Phases of Business cycle and also Meaning, Concepts of National Income and Methods of Measuring it and Difficulties in National Income Accounting.

B.Com. Sem. III Financial Accounting- II

S. No	Course Outcomes
CO1	Learn the process adopted by a company in preparing accounting procedure of Issues of shares, Forfeiture of shares
CO2	Learn about preparation of Final accounts of companies
CO3	Understands term of Consignment and also learn the preparation of consignment accounts
CO4	To know about the various type of Branches and also learn Branches Accounts

Business Communication & Management

S. No	Course Outcomes
CO1	Understand the basics of Business Communication, along with theories of and the role of audience in communication process
CO2	Learn different types of communication in corporations and organisations, different networks of communication, overcoming communication barriers and develop communication skills
CO3	Develop various communication skills like group discussions, public relation management
CO4	Learn the distinction between the format and style of different types of business letters and formal and informal mode of written communication

Business Law

S. No	Course Outcomes
CO1	Understand the law related to contract, Void Agreement and Law of Agency
CO2	Know about definition of sale, essential of a contract of a sale, unpaid seller, conditions and warranties, details about consumer protection act
CO3	Explore the concept, characteristics and types of negotiable instruments
CO4	Identify causes, types and redressal machinery concerning industrial disputes

Monetary Economics-I

S. No	Course Outcomes
CO1	Understand the types of money, methods of note issue and quantity theory of money
CO2	Understand the causes, effects of inflation and deflation and role of monetary policy and fiscal policy in controlling inflation and deflation
CO3	Acquaint the knowledge of money market and its recent trends. Understand the objectives, importance and instruments of monetary policy and fiscal policy
CO4	Understand the root of public finance and to secure maximum social benefit. Toknow taxation system of India

B.Com. Sem. IV Financial AccountingIII

S. No	Course Outcomes
CO1	To acquire knowledge of -Meaning of Banking Companies, Functions of Banking, Restrictions for a Banking Company, Provision of the Banking Companies Regulation Act 1949, Preparation of Annual accounts as per Banking Companies Regulation Act 1949 as per amendment by RBI
CO2	To acquire knowledge of General Insurance, Important Terms and preparation of final accounts
CO3	To know what are Characteristics of Goodwill, Factors influencing the value of goodwill, Need for Valuation of goodwill and various methods of Valuation of goodwill
CO4	To know the concept and Types of Liquidation, Steps in Voluntary Liquidation, Functions of Liquidator. Preparation of Liquidator's Final Statement of Account

Skill Development

S. No	Course Outcomes
CO1	Understand Basic of personality, Human growth and behavior, Motivation and morality, Meaning of Skill, types; soft and hard skill, need for developing skill, human skill and behavior, Motivation and morality, skill development and employment
CO2	To acquire the knowledge of Intra-personal communication and Body Language, Inter-personal Communication and Relationships, Leadership Skills, Team Building and public speaking, Communication in English, Presentation Skills, and Quality required for good public speaker
CO3	To know how to develop Self-confidence, Mnemonics, Goal setting, Time Management and effective planning, Stress Management, Meditation and concentration techniques, Self-Motivation Self-acceptance and Self-growth
CO4	To gain knowledge of Skill development of rural industrial sectors - small scale - handloom - agro based industries, rural artisans - handicrafts and sericulture. Meaning of entrepreneurship, types skill required for entrepreneurship

Income Tax

S. No	Course Outcomes
CO1	Know the basic concept of Income Tax Act. Understand the Heads of Income
CO2	Learn to calculate Income from Salary. Income from House Property and Income from other sources

CO3	Know the various types of deduction from Gross Total income. Allow under Income Tax Act.
CO4	Learn the calculation of Tax Liability of an individual/Person.

Monetary Economics-II

S. No	Course Outcomes
CO1	Understand overall Banking Industry, role, functions of commercial bank, credit creation, investment policy, causes of etc
CO2	Learn the knowledge about ATM, credit cards, smart cards, EFT, ECS etc.
CO3	Acquire of Banker Customer relationship. How the Trust plays an important role in building healthy relationship.
CO4	Understand the role and functions and working of Central Bank and working of RBI. RBI is the apex bank of the Indian banking system.

B.Com. Sem. V Financial accounting-IV

S. No	Course Outcomes
CO1	To learn about accounting procedure of amalgamation and absorption of companies.
CO2	To learn accounting procedure of reconstruction of companys.
CO3	To know accounting of public utility company.
CO4	To know term of valuation of shares.

Cost Accounting

S. No	Course Outcomes
CO1	To acquaint with the concept of Cost Accounting Elements of Cost, Cost Absorption and Methods of Costing. Preparation of cost sheet and Tender sheet, Quotations. Tender sheet, Quotations.
CO2	To understand the concept of Reconciliation of profit/loss; objectives, methods and difference between Cost Account and Financial Account. Preparation of Reconciliation statement.
CO3	To learn the methods, advantages and limitations of process costing and to understand the concept of Normal Loss, Abnormal Loss and Abnormal Effectiveness. Preparation of process accounts.
CO4	To gain the knowledge about contract costing nature of cost. Types and elements of contract cost and to calculate the profit of completed contract and incomplete contract.

Computerized Accounting

S. No	Course Outcomes
CO1	To know the introduction, advantages and need of computerized accounting, difference of manual vs computerized accounting, also about accounts organization and group, loans liabilities, Assets and Budget.
CO2	Explore knowledge about Accounting Software like Tally's introduction, and to learn how to create a company in tally software.
CO3	To learn about Accounts Info Menu and Account Groups, i.e. creation of new group and primary group, creation of ledgers, vouchers and budget etc.
CO4	To understand the concept of Inventory Info and features and also its involving term like Ratio Analysis, Display, Printing Reports, Export Data etc.

Indian Economics-I

S. No	Course Outcomes
CO1	Understand the features of Indian Economy, need of economic planning and reason being replaced of planning commission with NITI Ayog.
CO2	Understand the features of developing country India and know the availability of natural resources, infrastructure, energy and transport system in India.
CO3	Explore the causes of population explosion which leads to unemployment and Government policies for removing unemployment.
CO4	Acquaint the knowledge about public expenditure, public revenue, public debt etc. and to know causes and measures of fiscal deficit.

Auditing

S. No	Course Outcomes
CO1	Understand the meaning, objects and scope of Auditing, Audit and Auditor
CO2	Learn procedure of Auditing.
CO3	Understand the term Audit Programme, Audit Documentations and Evidence.
CO4	Know the standard of Auditing by ICAI.
CO5	Gain Knowledge about Audit Report and Certificate.

Business Finance-I

S. No	Course Outcomes
CO1	The designed to enable the students to understand the meaning, nature, significance, objectives and scope of Business finance and function of financial executives and efficient source of Business Finance.
CO2	Explore the concept of project financing and steps involved in project financing. To know about various levels of Inventory Management.
CO3	To know the definition and concept, need, objectives and steps of working capital. Determinants. Determinants and assessment of working capital requirement.
CO4	To know the definition and concept of Debtors management. Discount policy and cost of bill discounting. Calculation of Debtors Turnover Ratios and Average Collection Period. To Acquaint with the concept of creditors management, calculation of Creditors Turnover Ratio & Average Payment period. Explore the concept of venture capital financing.

B.Com. Sem. VI Financial Accounting- V

S. No	Course Outcomes
CO1	Understand terms of Insurance Claims and To know how to calculate the Amount of claims to be submitted to General Insurance Company
CO2	Identify the methods of preparing Final accounts of Holding Co. To calculate Minority Shareholder's interest and revenue.
CO3	Capital profit of shareholders of Holding Companies.
CO4	To understand the terms Cum-Interest & Ex-Interest purchase & Sale of Investment. Learn the methods of Investment Accounts.

Management Accounting

S. No	Course Outcomes
CO1	Understand the Meaning, Scope, Importance, Role and Limitations of Management Accounting. Difference of Cost Accounting and Management Accounting, Break - Even Point Analysis (Theory & Numericals)

CO2	To know Meaning, Characteristics, Objectives, Advantages, Limitations. Classification & Types of Budgets. Problems on Cash Budget and Flexible Budget Only (Theory & Numericals)
CO3	Explore Meaning, Importance and Limitations of Ratio Analysis, its Classification, Computation of Profitability Ratio, Financial Ratio with special reference to Current Ratio, etc.
CO4	To learn Meaning, Sources of fund, Uses of fund, Distinguish between fund flow statement and Balance Sheet. Preparation of Statement showing Changes in Working Capital, Profit from operation, Fund flow Statement (Theory & Numericals)

Advanced Statistics

S. No	Course Outcomes
CO1	To gain the knowledge of Correlation and its types and also its methods like Karl Pearson's coefficient of Bivariate frequency table, probable error, interpretation of 'r' and Rank Correlation Method.
CO2	Explore the knowledge about Regression Analysis and its related terms like- Line of regression/ Regression Equation coefficient of regression for a Bivariate frequency table.
CO3	Understand the term Index Number, its uses, methods and types and also test of consistency of Index No.- unit test time reversed test, factor cost of living Index No.
CO4	To learn the term Time Series its introduction components-a) Trend b) Short Term Variation c) Irregular variation d) Measurement of trend and know about Graphic Methods, Methods of Seminar, Methods of Curve by the square Methods of Moving Average.

Indian Economy-II

S. No	Course Outcomes
CO1	Understand the role of Agriculture in Indian Economy and how the green revolution has increased productivity. Acquire the knowledge of crop and live stock insurance.
CO2	Understand industrial policy 1991 and public sector, private sector, small scale, cottage industries and their sickness and measures.
CO3	Understand the trend and importance of service sector in India like banking, insurance etc. and about employment generation and opportunities etc.
CO4	Understand the concept of India's International trade, SEZ, MNC, LPG, WTO etc.

Human Resource Management

S. No	Course Outcomes
CO1	The course is designed to introduce Human Resource Management, its Definition, Objectives, Functions, Scope, Importance and Quality of an ideal Human Resource Manager.
CO2	To give knowledge to students about recruitment selection and training, selection process and importance, placement and induction, career planning v/s manpower planning.
CO3	The course is designed to enable students to know the terms Labour welfare and Collective Bargaining, its Features, Successful Participation of workers in Management.

CO4	To have knowledge of Human Resource Planning, Human Capital Investment - Expenditure vs. Productivity, Meaning and Definition of Human Resource Accounting, Importance; Human Resource Accounting - Measurement of Human Value addition into Money Value, etc.
-----	--

Business Finance-II

S. No	Course Outcomes
CO1	To know the financial market in India. To understand the concept of money market, capital market, their features, functions and composition.
CO2	To know the concept of primary market, secondary market. Functions, scope and significance of primary market, Development and intermediaries in primary market capital budgeting, calculation of capital various methods.
CO3	To gain the knowledge about NBFC's. To know the concept of Dividend policies and credit rating. Calculation of dividend by various methods.
CO4	To understand the concept of cash flow, significance and limitations and preparation of cash flow statement.

Section B - Non-Grant (Self-Financed) Courses (UG)

1. Faculty of Science & Technology

1.1 DEPARTMENT OF BIOTECHNOLOGY

Three Years Six Semesters B. Sc. Program

Program Specific Outcomes:

S. No	Program Specific Outcomes
PSO1	To help students to understand various aspects of Biology and related chemistry and to apply and evolve new aspects to benefit mankind
PSO2	To develop practical skills for application
PSO3	Students are given freedom to handle various instruments so that they develop confidence in using them
PSO4	The syllabus itself aims at creating scientific temperament amongst students
PSO5	To emerge out as a skilled personnel to take up any research work once they step out of the portal

B.Sc. (All Semesters) Course Outcomes

S. No	Course Outcomes
CO1	In Semester-I, students learn the basics of Microbiology, Biomolecules and basic estimation techniques in both Microbiology and Biochemistry
CO2	In Semester-II, students learn advanced aspects in Microbiology, Cell Biology, cell constituents and enzymology which gives them an idea regarding the behavior of biomolecules and their kinetics
CO3	In Semester-III they learn Biophysical techniques and Metabolism which is very essential for Biotechnology students. This enhances Student's ability to comprehend and master the skills in instrumentation
CO4	Semester-IV is dedicated to Immunology, Biostatistics and Biophysical techniques. This syllabus helps in understanding deeper aspects of Cell Biology as immune cells and molecules and various techniques related to it. Biostatistics is very important for research data interpretation. So the basics of statistics as applied to Life Sciences is taught
CO5	Semester-V deals with Molecular Biology and rDNA technology which is core Biotechnology and the knowledge gained in the previous semesters helps the students to comprehend these subjects with ease
CO6	Semester-VI comprises Applications of Biotechnology like Industrial, Food,

2. Faculty of Commerce and Management

2.2 Bachelor of Business Administration (B. B. A.) Program: Three Years, Six Semesters PROGRAM SPECIFIC OUTCOMES

Course Outcomes

B.B.A. Sem. I English

S. No	Course Outcomes
CO1	To introduce the basic concepts of English grammar, to understand the nuances of business correspondence, importance of business manners.
CO2	To acquaint students with English comprehension, verbal reasoning enriching vocabulary, essay writing, press releases and news article writing, precise writing to enable them to go a long way.

Fundamentals of Business Management

S. No	Course Outcomes
CO1	To educate with the fundamentals of business management and organization which enables one to manage key business function and to develop intellectual ability, leadership qualities and managerial skills required to manage business functions successfully.
CO2	To get insights deep in concepts of management, administration, planning process, decision making, organizing, directing controlling staffing in understanding organization and its structure.

Computer Applications for Business

S. No	Course Outcomes
CO1	To provide basic knowledge of computers and to make aware of importance and benefits of use computer technology in today's business world.
CO2	To have a basic introduction of E-learning-business, M-commerce, web page designing languages, consulting services like outsourcing functions, processes in order to understand and cope with current trends in IT.

Accounting

S. No	Course Outcomes
CO1	To provide basic concepts of costs, different techniques of costing in various industries, application of cost accounting in business and to understand implication of cost in business decision making in order to know the practicability of the subject.
CO2	To give valuable information and make attempt to alleviate the complex problem regarding the cost methods and technique as well as position of one's business.

B.B.A. Sem. II

Principles of Marketing Management

S. No	Course Outcomes
CO1	To have a basic introduction to the core and modern concepts of marketing management and to study various elements of marketing plan, marketing mix

	including product, price, place and promotion mix.
CO2	To impart modern marketing skills which aim at customer satisfaction through the process of pricing, promotion and distribution of ideas to satisfy goals.

Financial & Management Accounting

S. No	Course Outcomes
CO1	To develop conceptual understanding of the fundamentals of financial accountingsystem from book keeping mechanism for preparation of financial statements of a company.
CO2	To learn skills in management accounting tools that facilitate management decision making in various kinds of business transactions.

Micro-Economic Fundamentals

S. No	Course Outcomes
CO1	To familiaize with the concepts of economics, laws of demand and supply, production function, cost theory, types of markets in order to capable one tounderstand economic environment of an economy
CO2	To understand the current economic situations in relation to the basic concepts.

Introduction of Sociology and Psychology

S. No	Course Outcomes
CO1	To learn the concept of psychology and its key elements and gain an insight of social behavior, socialization and social traits.
CO2	To study the scope and applications of psychology, various models of information integration, cultural aspects etc.

B.B.A. Sem. III

Principles of Financial Management

S. No	Course Outcomes
CO1	An introduction to the concept of basic principles of financial management, conceptof working capital in a business, its key components and calculations, to facilitate a business.
CO2	To be aware of the various sources of financing, its' cost structure, approaches of financing, different financial instruments present in markets to cater financial needs of an organization.

Basic Statistical Techniques

S. No	Course Outcomes
CO1	To provide an understanding of important statistical tools and their elementary applications to business problems.
CO2	Be proficient in various statistical techniques like averages, dispersion methods, and correlation calculations to deal with data.

Evolution of Business & Commercial Geography

S. No	Course Outcomes
CO1	To provide deeper understanding about evolution and history of business process and attain effective decision making.
CO2	To know geographical environment of business, determinants of location of industries and a brief overview of role of major industries in economic developmentof a country.

Environment Management

S. No	Course Outcomes
CO1	To have knowledge of concept of environment management, various types of pollutions, causes and solutions to environment depletion in order to create a socialawareness of contemporary issues related to the environment.
CO2	To have knowledge of social issues in environment, environmental ethics, sustainable development to make aware of importance and conservation of environment as socialresponsibility of each individual.

B.B.A. Sem. IV

Principles of Human Resource Management

S. No	Course Outcomes
CO1	To develop understanding the concept of human resource development and to gain an insight of the factors which go into the making of an efficient HRD manager.
CO2	To understand the concept of job analysis, job design, human resource planningprocess, induction and training, placement, promotion, etc. to understand human resource management.

Money, Banking & Finance

S. No	Course Outcomes
CO1	To enable students to relate the concepts of money as an economic commodity,working of banks and various economic policies to order to study economic environment of a country.
CO2	To know about the origin of money, role of banks in an economy, national incomeconcepts, monetary and economic policies to understand the working of a country's' economy.

Business Communication

S. No	Course Outcomes
CO1	To learn techniques and skills of communication to inform others, inspire them and enlist their activity and willing cooperation in the performance of their job
CO2	To learn the concept of an effective communication, report writing and summarization, effective presentation skills in order to gain perfect communication skills and knowledge.

Business Legislations

S. No	Course Outcomes
CO1	To develop conceptual knowledge regarding various laws related to business and industry. To know the procedure of various laws related to business and industry

CO2	To be aware of various laws prevailing in business world which facilitate different aspects of a business like companies act, consumer protection act, Indian contract act etc.
-----	---

B.B.A. Sem. V

Entrepreneurship Development

S. No	Course Outcomes
CO1	To know the importance and role of entrepreneurship in economic development, imparts various considerations necessary to become an Entrepreneur and Government support system for the same.
CO2	To understand evolution of entrepreneurship, its' growth, study of financial institutions supporting to entrepreneurs.

Principles of Operations Management

S. No	Course Outcomes
CO1	To understand the concept of production and operations management including study of production, material management, inventory control, latest methods to understand how modern production is framed and operations are managed.
CO2	To know the principles of material management, quality management and productivity, production planning, quality management methods and techniques.

International Business Environment

S. No	Course Outcomes
CO1	To have an overview of the international business environment, its factors and components
CO2	To understand international issues and describe concepts relevant to all international markets, regardless of the extent of their international environment.

Research Methodology

S. No	Course Outcomes
CO1	To learn the concept of research with practical aspects on research methodology with basic knowledge and act as a guide to beginners for research.
CO2	To generate research ideas for research scholars and industrialists, those who are interested in researching and testing their views by applying latest technologies.

B.B.A. Sem. VI

Elective Paper –

1	S. No	Course Outcomes
	CO1	To study the fundamental concepts of business Finance/ Human resource management and Marketing management with a view to make student familiar with the subjects.
	CO2	To explore basic fundamental knowledge of Finance/ Human resource management and marketing management with a view to make student familiar with the subjects.

Elective Paper – 2

S. No	Course Outcomes
CO1	To gain the advanced knowledge of concepts of business Finance/ Humanresource management and Marketing management with a view to prepare students for higher scope.
CO2	To know the complexities in modern business world and its solutions to be explored from advanced knowledge fields of Finance/ Human resource management and Marketing management

Project Work

S. No	Course Outcomes
CO1	To consolidate and collaborate their own learning and skills such as problem solving, critical thinking, time management and correlate the theory concepts with practical real business world.
CO2	To apply what they learned in books to real life experiences and providing an all-round enriching education.

2.2 Bachelor of Commerce with Computer Applications (B. C. C. A.) Three Years, Six Semesters Program

Program Specific Outcomes:

BCCA Sem. I English & Business Communication

S. No	Course Outcomes
CO1	To develop basic skills to deal with people in business situations.
CO2	Write and read basic business reports, faxes, and memos.
CO3	Expand vocabulary related to general business situations & to Develop confidence to deal with people and basic issues in the business world.

Financial Accounting

S. No	Course Outcomes
CO1	To develop conceptual understanding of the fundamentals of financial accounting system from book keeping mechanism for preparation of financial statement.
CO2	To learn skills in accounting for various kinds of business transactions.

Fundamentals of Computers

S. No	Course Outcomes
CO1	To basic principles of using Windows operation system and learn and practice basic keyboarding and mouse use.
CO2	To be able to access the Internet, Worldwide Web, learn the basics of e-mail, such as sending, forwarding and receiving mail, attaching documents.
CO3	To learn 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.
CO4	To develop an intuitive sense of how computers work and how they can be used to make your academic work more efficient.

Programming in C

S. No	Course Outcomes
CO1	To write and execute programs in C language for commercial applications

Practical – I

Component - I: Fundamentals of Computer

Component - II: Programming in ‘C’

S. No	Course Outcomes
CO1	To provide learners hands on practice and mastery within a real job situation in computer handling and programming in C.

BCCA Sem. II

English & Business Communication – II

S. No	Course Outcomes
CO1	To develop basic skills to deal with people in business situations. Expand vocabulary related to general business situations.
CO2	Write and read basic business reports, faxes, and memos.
CO3	To confidently deal with people and basic issues in the business world.

Principles of Business Management

S. No	Course Outcomes
CO1	To understand business environment and functions of business organization relevant to commerce students.
CO2	To know how organizations adapt to an uncertain environment and identify techniques that managers use to influence and control the internal environment.
CO3	To practice the process of management’s four functions: planning, organizing, leading and controlling.

Programming in C++:

S. No	Course Outcomes
CO1	To write and execute programs in C++ language for commercial applications

E-Commerce & Web Designing

S. No	Course Outcomes
CO1	To understand the e-commerce concepts
CO2	To learn HTML and web designing concepts and the concept of CSS.
CO3	To understand how to conduct business online and manage the technical issues associated with constructing an e-commerce Web site.
CO4	To learn the similarities and differences between traditional and electronic commerce and to explore e-commerce technologies at various levels of sophistication.
CO5	Develop skills in analyzing the usability of a web site. Learn techniques of responsive web design, including media queries

Practical

Component-I: C++

Component-II: E-Commerce & Web Designing

S. No	Course Outcomes
CO1	To provide learners hands on practice and mastery within a real job situation in computer handling and programming in C.

BCCA Sem. III
Environmental Studies

S. No	Course Outcomes
CO1	To understand the concept of environment management.
CO2	To know various types of pollution present in environment.
CO3	To know about human population, its cause and effect also covering the social issues in environment.
CO4	To understand the importance of various aspects of environment, become aware of various contemporary issues related to the environment.

Business Economics

S. No	Course Outcomes
CO1	To learn the principles of business economics as are applicable in business.
CO2	To understand concept of economics and its important.
CO3	To Know and understand theories of economics

Visual Basic Programing

S. No	Course Outcomes
CO1	To understand and use the user interface environment.
CO2	To have skill of Programming using this language.
CO3	To build Windows applications using structured and object-based programming techniques in visual basic

Database Management System

S. No	Course Outcomes
CO1	To know and understand the database management systems concepts, with an emphasis on how to organize, maintain, retrieve efficiently and effectively the information from a DBMS.
CO2	To study and understand basic concept of database management system and it's Architecture.
CO3	To differentiate concept of DBMS and RDBMS, practical knowledge of SQL (Oracle Command) for handling of database.
CO4	To create and maintain Database in Oracle.

Practical-I

Component-I: Visual Basic

Component-II: DBMS

S. No	Course Outcomes
CO1	To provide learners hands on practice and mastery within a real job situation in computer handling and programming in VB, DBMS and SQL.

BCCA Sem. IV
Mathematics

S. No	Course Outcomes
CO1	Develop abstract, logical and critical thinking and the ability to solve problems.
CO2	To be aware about the various key mathematical theories, concepts and methods
CO3	To understand concepts of mathematics and the various statistical tools.
CO4	To apply mathematics in business environment

Business Law

S. No	Course Outcomes
CO1	To understand laws relating to commercial contract.
CO2	To apply legal concepts while drafting a contract.
CO3	To understand the legal aspect of trade in goods in physical as well e-commerce industry.
CO4	To develop understanding related to status of partner and firm with respect to LLP, and legal aspects of dealing with negotiable instruments.

Core Java

S. No	Course Outcomes
CO1	To Understand fundamentals of object-oriented programming in Java.
CO2	To know the structure and model of the Java programming languages (Knowledge).
CO3	To create and execute a java program that solve simple business problems
CO4	To Write Java programs to implement error handling techniques using exception handling, Perform a test plan to validate a Java Program, Use the Java programming language for various programming technologies (Understanding).

PHP & MySQL

S. No	Course Outcomes
CO1	To create the Dynamic Pages & to use various Tags of HTML & PHP using server side programming.
CO2	To know how database works and how to design one, as well as how to use PHP My Admin to work with MySQL
CO3	To implement different ways of connecting to MySql through Php and create tables, enter data, select data, change data and delete data.

Practical-I

Component-I: Core Java

Component-II: PHP & MySQL

S. No	Course Outcomes
CO1	To write java programs that solve simple business problems, implement error handling techniques using exception handling, Perform a test plan to validate a Java Program.
CO2	Use the Java programming language for various programming technologies (Understanding)

CO3	To create the Dynamic Pages & to use various Tags of HTML & PHP using server side programming.
-----	--

BCCA Sem. V

Computerized Accounting (Tally)

S. No	Course Outcomes
CO1	To understand concept and Basics of Accounts and the usage of Tally for accounting purpose.
CO2	To use the tally software, creating new company, voucher entry.
CO3	To use voucher entry.
CO4	To understand concepts of voucher entry, budget, and inventory.

VB.Net

S. No	Course Outcomes
CO1	To understand .NET Framework and describe some of the major enhancements to the new version of Visual Basic
CO2	To describe the basic structure of a Visual Basic.NET project and use main features of the integrated development environment (IDE).
CO3	To create applications using Microsoft Windows Forms and Create applications that use ADO. NET Working with XML Documents Using Crystal Reports

Management Information Systems:

S. No	Course Outcomes
CO1	To Understand the role of Management Information Systems in achieving business competitive advantage through informed decision making.
CO2	Analyze and synthesize business information and systems and facilitate evaluation of strategic alternatives.
CO3	To Effectively communicate strategic alternatives to facilitate decision making.

System analysis & Design

S. No	Course Outcomes
CO1	To understand the application of computer technology, modern materials and construction techniques to the overall design of structures, including project planning, costs estimates and management of the project.
CO2	To have a sound background in the analysis, design, testing and construction of civil structures.

Cost & Management Accounting

S. No	Course Outcomes
CO1	To understand the basic concepts and processes used to determine product costs
CO2	To interpret cost accounting statements
CO3	To analyze and evaluate information for cost ascertainment, planning, control and decision making and solve simple cases.

Corporate Accounting

S. No	Course Outcomes
CO1	To understand the techniques of restructuring and liquidating the corporate entities.
CO2	To know of recent developments in corporate accounting.
CO3	Be aware of various requirements of Corporate Reporting.

Practical-I

Component-I: Tally ERP.9

Component-II: VB.net

S. No	Course Outcomes
CO1	To use the tally software, creating new company, voucher entry.
CO2	To use voucher entry and concepts of voucher entry, budget, and inventory.
CO3	To know the basic structure of a Visual Basic.NET project and use main features of the integrated development environment (IDE).
CO4	To create applications using Microsoft Windows Forms and Create applications that use ADO. NET Working with XML Documents Using Crystal Reports

BCCA 6th Semester C#.Net

S. No	Course Outcomes
CO1	To understand why Python is a useful scripting language for developers.
CO2	To design and program Python applications, to use lists, tuples, and dictionaries in Python programs and to identify Python object types.
CO3	To use indexing and slicing to access data in Python programs.
CO4	To define the structure and components of a Python program, design object oriented programs with Python classes, to use exception handling in Python applications for error handling.

S. No	Course Outcomes
CO1	To know and understand Dot Net Frameworks along with C# Learning .
CO2	To use the features of Dot Net Framework along with the features of C#.

Ruby on Rails

S. No	Course Outcomes
CO1	To write a Program in Ruby . Understand the Rails Framework.
CO2	Harness the speed and ease of developing a Rails application.
CO3	Create and use XML in Rails applications. Build dynamic database-driven web sites

Entrepreneurship Development:

S. No	Course Outcomes
CO1	To acquire necessary knowledge and skills for organizing and carrying out entrepreneurial activities.
CO2	To analyze and understand business situations in which entrepreneurs act and to master the knowledge necessary to plan entrepreneurial.

Company Law and Secretarial Practice

S. No	Course Outcomes
CO1	To know Companies Act - formation of company, documents required and Acts pertaining to it.

Practical-I

Component-I: C#.net

Component-II:

Python

S. No	Course Outcomes
CO1	To use the features of Dot Net Framework along with the features of C#.
CO2	To design and program Python applications.
CO3	To use lists, tuples, and dictionaries in Python programs.
CO4	To identify Python object types and use indexing and slicing to access data in Python programs.

Project

S. No	Course Outcomes
CO1	To consolidate and collaborate their own learning and skills such as problem solving, critical thinking, time management and correlate the theory concepts with practical real business world from those covered in the previous semesters including C programming, Web designing, Visual Basic, DBMS, Tally, VB.net, C#.net or Python..
CO2	To use the software development process through the project work.
CO3	To understand the importance of testing and quality assurance of the system underdesign before delivery and to understand the needs of after sales services

Non-Grant (Self-Financed) Courses (PG)

1. Faculty of Humanities and Social Sciences

1.1 M. A. Political Science

S. No	Course Outcomes
	Sem I
	POL 1T1 Modern Indian Political thought
CO1	Study of various political thinkers and their Political thoughts/ theories
CO2	Study of various theories
	POL 1T2 Indian Government and Politics
CO1	Study of Indian Constitution
CO2	Knowledge of Political Culture
CO3	Knowledge of issues and challenges in contemporary Indian Politics
	POL1T3 Modern Political Ideologies
CO1	Knowledge about various political Ideologies
CO2	To create awareness about women development, Environment
	POL1T4.3 International Law
CO1	Develop Knowledge of development & sources of International Law
CO2	Study of state laws.
CO3	To create awareness of the International treaty, agreements & its impact on world Politics.
	Sem II
	POL 2T1 Comparative politics

CO1	Comparative study of various constitutions legislature, Executive & Judiciary.
CO2	Historical development of various constitutions.
CO3	Develop sense about political participation & political culture.
	POL2T2 Western Political thought
CO1	Study of various political thinkers and their Political thoughts/ theories
CO2	Study of various thinkers and their
	POL 2T3 International Relations
CO1	Study of International concepts security, National Power act.
CO2	Study of Global Regional originations and related issues (WTO SAARC)
CO3	To promote Human Security.
	POL2T4.1 Political Sociology
CO1	To create sense of social responsibility
CO2	To create Political leadership in students
CO3	Study of Political institutions (political parties, pressure groups)
	M.A. II Sem III
	POL3T1 Research Methodology
CO1	Study of Research Design.
CO2	Develop Knowledge of tools & techniques of data collection.
CO3	Study of field survey method & library research.
CO4	Acquiring Knowledge of Thesis & Report writing
	POL3T2 Public Administration
CO1	Study of public Administration its function
CO2	Knowledge about Budget & Planning Commission.
CO3	To achieve Knowledge of Financial & personnel Administration
CO4	To promote E- governance awareness.
	POL3T3.1 Politics of Maharashtra
CO1	Acquiring historical Knowledge of Politics of Maharashtra.
CO2	Study of cooperative sector, sub- regional backwardness.
CO3	Study of politics of Rural & Urban Maharashtra.
	POL3T4.3 Local Self Government
CO1	Study of Local Self Government & Indian Political process
CO2	Acquiring Knowledge of local Political institutions
CO3	Study of Local Self Government its functions & responsibilities in Maharashtra.
	Sem IV
	POL 4T1 State Politics in India
CO1	Acquiring Knowledge about State Politics
CO2	To promote awareness about State elections & party system.
CO3	To develop sense of responsibilities about various Human Development issues
	POL 4T2 Indian Administration
CO1	Acquiring Knowledge of about Indian Administration & Indian Constitution
CO2	To promote civil services awareness & its functions.
	POL 4T23.1 Pressure Groups & Social Movement
CO1	Comparative Study of various Pressure Groups & Social Movement & its functions.
CO2	To create awareness of the Environment issues.
	POL4T4.4 International Human Rights
CO1	Acquiring Knowledge about Human Rights
CO2	Study of Individual Rights & Collective Rights
CO3	To promote awareness about civil, Political, social and economic rights.

S. No	Program Specific Outcomes
PSO1	Theoretical and practical knowledge of Indian Administration ,its functions and responsibilities
PSO2	Theoretical and practical knowledge of International organizations & its functions
PSO3	Knowledge of World politics & Indian Politics.
PSO4	To inculcate competitive exams temperament in students.
PSO5	Knowledge of various theories.

S. No	Program Outcomes
PO1	Develop the ability to use critical, analytical and reflective thinking and reasoning.
PO2	Develop sense & social responsibility.
PO3	To create sense of citizenship and & social human values.
PO4	Develop a thorough knowledge of theories, concepts, and research methods in the Field and apply them in research design and data analysis.
PO5	To achieve administrative professionalism in their respective fields.
PO6	Assess the impact of the economic, social and political environment from global, National and regional level.

1.2 M. A. Home Economics

S. No	Program Specific Outcomes
PSO1	to manage family resources, understand and solve diet related health and other social issues, to apply knowledge of Home Economics in everyday life, to generate their own employment or earning sources
PSO2	To develop the research skills and can go for further research study.
PSO3	To learn importance of nutritious food and will able to take care family health, study of child development student will able to develop good parent child relation and teacher - child relation

S. No	Course Outcomes
CO1	acquire essential skills for self employment
CO2	to choose right qualities in the spouse and better understanding in marriage and relations
CO3	Knowledge of consumer and market gives them better understanding of current trends in market

2. Faculty of Science and Technology

2.1 M. Tech Cosmetic Technology

S. No	Course Outcomes Sem – I
CO1	Core-I- Formulation & Development –I (FDI) Learn about the mechanisms and various techniques of preparing and developing advance formulations of cosmetic products like soaps, colour cosmetic, astringents and tonics, face packs etc.
CO2	Core-II- Quality Assurance Technique-I (QAT I) Learn the importance of quality control in cosmetic preparations, its guidelines, ISO significance,

	validation of cosmetic manufacturing stability study of cosmetic and evaluation of raw material by proper analytical method using BIS standers
CO3	Core-IV- Advanced Cosmetic Technology –I (ACT I) Encompasses all the fundamental physico-chemical properties and concepts of cosmetic ingredients with their methods of determination and their effects on cosmetic products.
CO3	Core-III-Research Methodology (RM) To understand the basics of statistics and research hypothesis and application thereof in practice.
S. No	Course Outcomes Sem – II
CO1	Core-I- Formulation & Development –II (FDII) This subject aims to study all sort of sophisticated cosmetic preparations which include hair, deodorants, shaving and eye preparation, its formulation and development, study of various machineries used in plants, its process evaluation, plant location, site, factory building and scale up of product to intermediate and large scale production.
CO2	Core-II- Advance Cosmetics Technology II (ACT II) Teaches all the fundamental physico-chemical properties and concepts of cosmetic ingredients with their methods of determination and their effects on cosmetic products.
CO3	Core-III-Statistics and Qualitative Techniques (SQT) To understand the concept of statistical measurement and application of hypothesis.
CO4	Core-IV- Natural Products (NP) Study of Natural ingredients for example herbs and other materials of natural sources and their logical applications in cosmetic industries.
	SEM III
CO1	Core-I- Advance Cosmetics Technology III (ACT III) To make students understand the concept of delivery system and different encapsulation techniques and their application in the field of cosmetics and study of safety and regulatory aspects.
CO2	Elective – I Skin Care Cosmetics (HCC) Study the herbs used in skin care preparation with respect to its biological source, chemical constituents, extraction, isolation and phytochemical screening of their constituent and their incorporation in cosmetics. Also study the stability at different storage condition. Thus student gain detailed knowledge of herbs and their application in various skin care cosmetics
CO3	Elective – II Hair Care Cosmetics (SCC) Study the herbs used in Hair care preparation with respect to its biological source, chemical constituents, extraction, isolation and phytochemical screening of their constituent and their incorporation in cosmetics. Also study the stability at different storage condition. Thus student gain detailed knowledge of herbs and their application in various Hair care cosmetics
CO4	Core-II- Quality Assurance Technique II (QAT II) Teaches regulation, rules and laws schedules related to cosmetics that is Drug and Cosmetic Act, Quality assessment of packaging material and skin testing and hair testing as per BIS IP and performance evaluation of cosmetic products using sophisticated instruments.
CO5	Research Designing and Planning (RDP) Teaches data management and analysis along with method to prepare research proposals and projects.

CO6	Seminar - Students have to give the PPT presentation to understand the historical background along with the recent concepts, trends of raw materials, herbs, actives and finished cosmetic products. Also to understand the marketing concept.
	SEM IV
CO1	Core-I- Cosmetics Microbiology (CM) Learn the importance of quality control in cosmetic preparations, its guidelines, global regulations, ISO significance, Concept of HACCP and current GMP, Microbial Contamination in cosmetic products and validation.
CO2	Core-II- Production and Marketing Management (PMM) Learn the entrepreneurial development, finance and personal management, different management development programmes.
CO3	Elective I –Perfumes in Cosmetics (PC) Teaches the knowledge of perfumery ingredients of various origins their availability and extraction, isolation, their incorporation in the product and stability studies.
CO4	Elective II – Colours in Cosmetics (CC) Learn advanced formulation with incorporation of colors and extraction, isolation, their incorporation in the product and stability studies.
CO5	Foundation OR Global Fashion Trends (GFT) Study of fashion trends complementing the use of cosmetics, perfumes, colours and cultural aspects of clothing global community and design of various clothing.
CO6	Research Project To Carry out Research projects individually within given time frame with definite aim and objective set by the students and using proper methodology to reach desired conclusion. This helps them for research and development of product for the industries. This leads to train students to think rationally and scientifically.

2.2 M. Sc. Biotechnology

S. No	Program Outcomes
PO1	In Semester-I, Cell Biology, Enzymology and Molecular Biology are dealt in detail to understand the basic concepts and kinetics to apply at the bench scale.
PO2	In Semester-II, students will study Microbiology, Immunology and Genetic Engineering in detailed aspect to know the core of the subjects
PO3	In Semester-III, they have Genetic Engineering and its Applications, Industrial/Environmental Biotechnology. In this semester they will study Genetic Engineering and Industrial/Environmental Biotechnology in detail in both theory and practical which will equip them with theory correlated to practice. Also they have Diagnostic Medical Biotechnology which will give an insight into the applications of Biotechnology in Medical Diagnostics
PO4	In Semester-IV Students will be studying Animal Biotechnology, Biostatistics and Bioinformatics and therapeutic Medical Biotechnology. Again these topics are related to research and understanding the basics of theory and practice will help them in choosing their line of research for their doctoral work or for choosing any career Biotechnology is an integrated subject. So many aspects are taught to them so that they can use their knowledge for converting Biology into Technology.

2.3 M. Sc. Human Development

S.No.	Program Outcomes
PO1	To give the student an in-depth insight of the subjects such as early childhood curriculum, assessment of human abilities, care of the elderly, psychological disorders and guidance and counseling.
PO2	To equip the students to handle the overall development of the individual.
PO3	To imbibe the importance of scientific temperament and research in the mind of the students
PO4	To work as preschool teachers and consultants, counselors, assistant to psychiatrist and work in child welfare organizations and work with children with special abilities

2.4 Master of Fashion Design

S. No	Sem I Core I-Fashion Illustration
CO1	This course will develop skill through different medias & techniques to master and explore the ideas they have visualized. This being the specialized branch of figure drawing the student will be taught to draw according to fashion conventions elongation, idealization and beautification in a simplified and sketchy manner. To evolve the budding fashion designers of future who will shape the fashion by putting up the ideas they need to communicate on paper
	Core II-Pattern Making
CO2	This course will introduce students to the world of fashion design through patternmaking, to understand, appreciate and apply the concepts and principles in garment making ,to explain important skill that enable the designer to concert a design sketch into a three dimensional form, inculcate enhanced ability and sensitivity to flat pattern and initialize a design vocabulary an essential tool for practicing as designer.
	Core III-Textile Studies
CO3	Textiles being integral part of fashion, the knowledge of different processes of production and development of textiles will be imparted with a view to apply it for identification, recommendation and using the most appropriate textile in fashion. Extensive information on indigenous textiles (Printed, Painted & Dyed) of India will become a backbone for creation of innovation in fashion.
	Core IV-History of Fashion
CO4	To familiarise students with the vocabulary, the concepts and the fashion, theories related to the history of clothing, to trace the development of indigenous clothing from ancient times to its present state, to understand the various influences that acted upon the indigenous clothing and to study the traditional costumes of different states of India.

2.5 Master of Home Science Extension Education

S. No.	Sem I and Sem II
CO1	Communication technology
CO2	Types of Media and its importance
CO3	Computer and its application and uses
CO4	Role of media in Social change
CO5	Agencies involved for communication
CO6	Community Health
CO7	Nutrition for National Development

CO8	Child Health and Development
CO9	Agencies involved in Nutrition Education
CO10	Teaching aids for Nutrition Education
CO11	Types of communities in India
CO12	Factors contributing to changes in communities
CO13	Rural, urban & tribal communities, their scope and problems
CO14	Women's studies
CO15	Women Education and its problem
CO16	Women Health & issues of women in India
CO17	Significance of research and statistics in Home Science Research
CO18	Types, tools. Method of data collection
CO19	Various tests & scale used for analysis of data in research
CO20	Sem III and Sem IV
CO21	Non-formal Education
CO22	Non-formal Education for National Development
CO23	Planning, implementing & evaluating non-formal Education programme
CO24	Adult Education, its impact, need and media involved
CO25	Distance Education
CO26	Distance education for National Development
CO27	Curriculum Development and its needs
CO28	Various programmes for distance education
CO29	Programme planning
CO30	Need for plan of work
CO31	Administration and co-ordination, supervision in programme planning
CO32	Importance of working with groups and its methods
CO33	Training and leadership development
CO34	Evaluation of extension programmes
CO35	Documentation- need & importance
CO36	Follow up- need & importance
CO37	Human Right- needs, laws
CO38	Violation of right of women
CO39	Women empowerment
CO40	Children's Right & Government policies related to Human & child Right
CO41	Gender equality
CO42	Gender identities
CO43	Gender & culture
CO44	Gender equality & empowerment
	Program Outcome
PO1	The prime objective of Extension Education is to impart knowledge to the community through various methods and media. People of the community need to be focused. They should be helped to use their available resources effectively and to find solution to their problems
PO2	Extension Education also focuses on communication, co-operation, participation and valuation of various developmental programmes which will benefit the community and Nation at large

PO3	Research is being done on various subjects and aspects related to problems and difficulties of the community and suggestions and recommendation are provided to the people for their development and welfare.
-----	---

2.6 POST GRADUATE DIPLOMA IN FASHION TECHNOLOGY **PROGRAMME OUTCOME**

Sr.No.	Programme Outcome
PO1	Any graduate deeply interested in learning fashion technology without any orientation of fashion can directly become a fashion person.
PO2	The program is designed for any graduate right from basics of fashion to application to its technology.
PO3	The courses of the program are designed in a systematic manner to learn fiber to fabric and fabric to fashion.
PO4	Learners can work in government, semi-government and private firms as merchandisers, designers, pattern makers, pattern graders, fashion stylist and fashion illustrators.
PO5	Learners can become entrepreneurs of boutiques, cottage industry, small scale industry and different allied units of fabrics and fashion.
PO6	Students are eligible under lateral admission for masters course in fashion design directly to second year after completion of diploma course.

2.6 POST GRADUATE DIPLOMA IN FASHION TECHNOLOGY **COURSE OUTCOMES**

S.NO.	COURSE OUTCOMES
	SEM I
1	FASHION ILLUSTRATION
CO1	Gaining skills of figure drawing according to fashion conventions-elongation, idealization and beautification in a simplified and sketchy manner.
CO2	Learning and exploring the ideas to shape the fashion with different medias and techniques of figure drawing and communicate them on paper.
2	PATTERN MAKING
CO1	Understanding, appreciating and applying various concepts and principles in garment making.
CO2	Enhancing important skills of pattern making to convert flat pattern/design into in to three dimensional form.
3	TEXTILE STUDIES
CO1	Gaining knowledge of different processes of production and development of textiles.
CO2	Exploring and applying textile in fashion for identification, recommendation and using the most appropriate fabrics for designers garments.
CO3	Gaining the extensive information on indigenous textiles (Printed, Painted & Dyed) of India.
4	HISTORY OF FASHION
CO1	Studying History of Fashion of ages from ancient time to the present days.
CO2	Learning language of fashion through terminology, fashion producers and types of fashion.
5	FASHION COMMUNICATION SKILL
CO1	Enabling students understand the fashion language and communicate effectively in the fashion world.
	SEM II
1	CAD IN FASHION

CO1	Gaining knowledge of contemporary digital technology in fashion by use of software like photo shop, Adobe illustrator, Corel draw and Marvellous designer.
CO2	Applying design ideas for creating designer garments using the software.
2	GRADING
CO1	Gaining knowledge of different grading techniques and their application on different apparel.
CO2	Understanding the sizing system and knowledge of pattern grading while working in readymade garment industry.
CO3	Gaining knowledge and skills of presenting and promoting a garment based on fashion reading.
3	WEAVING & KNITTING TECHNOLOGY
CO1	Understanding the construction and properties of different woven and knitted textiles for application in designer garments.
4	HISTORY OF WORLD COSTUME
CO1	Understanding & appreciating the Western World clothing from ancient times to modern times.
CO2	Recognizing the figure emphasis and silhouettes that developed within the chronology of each historical period.
5	FASHION PHOTOGRAPHY
CO1	Exploring fashion photography for better presentation of portfolios and garment creation.
	SEM III
1	INTERNSHIP
CO1	Training the students for practical insight and actual working of the garment industry.
2	RESEARCH SEMINAR / RESEARCH PROJECT
CO1	Preparing portfolio through research of different aspects of fashion they learnt, during the course and presenting it in a form of a collection of garment line.

3. Faculty of Commerce and Management

3.1 M. Com

S. No	Course Outcomes
CO1	To impart the students with higher level knowledge and understanding of contemporary trends in commerce and business related areas, such as Advanced Financial Accounting, Indian Financial System, Research Methodology, Advanced Cost Accounting, Advanced Management Accounting, Statistical Techniques, Computer Application in Commerce, Taxation etc.
CO2	To prepare capable professionals in Finance and Business, competent in responding to the market with the capacity to analyse the complex problems and make effective business decisions.
CO3	To develop an ability to apply knowledge acquired in solving the Business problems and taking business decisions.
CO4	To be ready for employment in functional areas like Accounting, Taxation, Banking, Insurance and Corporate as well as start entrepreneurial activities