

HSNC Board's
Smt. Chandibai Himathmal Mansukhani College, Ulhasnagar – 3

LEARNING OUTCOMES

FACULTY OF ARTS

Link to Syllabus Page on the University of Mumbai Website:
<https://mu.ac.in/syllabus#1548829931199-d8403820-647e>

(Note: This compilation is based on the information provided by the Head of the Departments.)

DEPARTMENT OF ECONOMICS AND BUSINESS ECONOMICS

- **Programme Specific Outcomes:**

- Learning & reading Economics critically.
- Understanding why economic phenomenon occurs & how economic performance can improve.
- Enhancing the skills through problem solving & critical thinking.
- Reasoning skills develops by understanding the economic phenomenon.
- Employability skills develop.

- **Course Outcomes:**

Course code	Title of the course	Course credit	Course outcome
1.FYBA UBA 1.35	Micro Economics I	03 per sem	1.Helps to understand the economic Behaviour of the people in the society
UBA 1.36	Micro Economics II		
SYBA Paper III SEM III- 4.25	Macro Economics I	03	http://mu.ac.in/syllabus#1548829931199-d8403820-647e Enables the students to understand the Macroeconomics 2. Helps the students to understand the working of economy as a whole
SYBA Paper III SEM IV- 4.26	Public Finance	03	1.The paper exposes the students to public budget through the issues of taxation, public expenditure, debt & concepts of deficits.2. Enables the students to understand the Indian Public Finance
SYBA Paper IV SEM V- 4.27	Macro Economics II	03	1. Students become aware of Macro Economic Terminologies 2.Helps the students to understand the Macro Economics at an aggregate level.
SYBA Paper IV SEM VI- 4.28	Indian Economy	03	1.The learners are able to understand the problems & prospects of Indian Economy.2.The content orients the learners about recent development in the economy

Course code	Title of the course	Course credit	Course outcome
TYBA Economics 1.ECOMIE501	SEM V Microeconomics III	4	1.To provide an understanding in Micro economic theory 2.To understand the concepts related to economic growth
2.ECODEV502	Economics of Development	4	3. To equip the students with the knowledge about the fundamentals of

3.ECOILE503	Industrial & Labour Economics	3	Industrial economics & also the changing policies related to the Indian Industry in the globalized era. 4.To introduce the concepts, principles & methods of economic research based on qualitative & quantitative data 5. To understand the economic causes of environmental problems & environmental improvements. 6. It provides the basic understanding about the celebrated economists & their contribution starting from classical period & recent period too.
4.ECORMB504	Research Methodology	4	
5.ECOENV505	Environmental Economics	4	
6.ECOHET506	History of Economic Thought	3	
1.ECOMA601	SEM VI Macro Economics III	4	1. Helps to understand the formal modeling of macro-economic theory with analytical tools. 2.Helps to develop a systematic exposition of models of international trade 3. Helps to understand the issues in labour markets. Wage policy, trade unions & amicably solutions to industrial disputes. 4. Strengthen the critical thinking and listening skills in conducting economic research and to device research outcomes. 5. The course helps to understand the economic development sequence. 6. The course helps to understand the changing phase of International Trade Policy & Practice.
2. ECOINT602	International Economics	4	
3. ECOILE603	Industrial & Labour Economics	3	
4.ECORMC604	Research Methodology	4	
5.ECODTE605	Development theory & Experience	4	
6.ECOITPP606	International Trade, policy & Practice	3	

Business Economics

• **Course Outcomes:**

Course code	Title of the course	Course credit	Course outcome
UBCOMFSI	Business Economics I	03	To equip the students to understand the working of a business unit in the economy
UBCOMFSI	Business Economics II	03	
UBCOMSSI	Business Economics II	03	Helps the students to understand Macro Economic Theories
UBCOMSSI	Business Economics III	03	
UBCOM	Economics Systems(App. Comp)	03 Per sem	Helps the students to understand Economic Systems
UBCOMTSI	Business Economics IV	03	Helps the students to understand policy changes in India
UBCOMTSI	Business Economics V	03	
	Labour Welfare & Practices	03 Per sem	Understands the labour policies & Acts

DEPARTMENT OF ENGLISH

- **Program Specific Outcomes:**

After completing the programme student will be able to

- PSO1: Students will be able to apply critical and theoretical approaches to the reading and analysis of literary and cultural texts in multiple genres by understanding the evolution of criticism and its application in language and literature
- PSO2: Students will be able to comprehend variety of prose and poetry in English Literature to enrich their understanding through various textual perspectives
- PSO3: A greater understanding of the human communicative action through an objective study of language will help the students to apply their knowledge of English language to improve active listening, speaking, reading and writing skills.

- **Course Outcomes:**

Course Code	Title of the Course	Objective	Outcome
FYBA UAENG-101	English (Optional) Introduction to Literature	1. To acquaint students with the characteristics of various literary genres 2. To develop analytical skills and critical thinking through close reading of literary texts 3. To cultivate appreciation of language as an artistic medium and to help them understand the importance of forms, elements and style that shape literary works 4. To enable students to understand that literature is an expression of human values within a historical and social context	1) To write clearly, coherently and effectively about various genres of literature 2) To recognize the culture and context of the work of literature 3) To develop sensitivity to nature and fellow human beings
FYBA UACS101	Communication Skills in English	1) To enhance language proficiency by providing adequate exposure to reading and writing skills 2) To orient the learners towards the functional aspects of language 3) To increase the range of lexical resource through a variety of exercises	1) Students will be able to Understand the process of communication and its effect on giving and receiving information 2) They will learn to apply effective communication skills in a variety of public and interpersonal settings 3) They will be able to analyse the technical data such as pie charts, maps, graphs 4) Learners will become well versed with changing communication methods and digitalization of communication system 5) Become aware of the numerous

			career opportunities within the field of communication.
SYBA UAENG- 301	Indian Literature in English	<ol style="list-style-type: none"> 1. To introduce learners to the uniqueness of Indian Literature in English 2. To acquaint learners to the pluralistic dimensions of Indian Literature in English 3. To help them understand the different genres of Indian Literature in English 4. To familiarize learners with different perspectives of approaching this literature 5. To make learners aware of prominent Indian Writers in English 	<ol style="list-style-type: none"> 1) Broadens the origin of English education during British Empire in India. 2) They will be acquainted with the Dalit/ marginal/ partition and Diasporic Literatures in India 3) They will understand the glory of Indian writings in English 4) It will Inculcate the interest of Indian writing in translations 5) They will be well versed with the prominent Indian writers
SYBA UAENG- 302	American Literature	<ol style="list-style-type: none"> 1. To acquaint the learners of literature with the various genres and literary terms of twentieth century American Literature 2. To sensitize them to the themes and styles of American Literature 3. To introduce them to the socio-cultural milieu of twentieth century America through literary texts 4. To enhance their understanding of American, African American and Multicultural sensibilities by introducing them to the literary works representing them 5. To facilitate cross-cultural perspectives and discussions on American Literature 	<ol style="list-style-type: none"> 1) Students will be well versed with the various genres of American Literature 2) Learners will be able to understand the significance of American Dream and American life style 3) They will know the brief history of American Literature- Poetry, Drama and Fiction/short story 4) Students will understand culture, language and society through literature 5) Kindles to compare American writings with Indian writings in English 6) Inculcates interests among youth to study abroad, the need of the hour
SYBA UABC:30 1	Business Communication	<ol style="list-style-type: none"> 1) To develop an awareness about the complexity of communication in a dynamic business environment. 2) To develop effective oral, writing and listening skills among learners. 3) To demonstrate the effective use of communication technology. 	<ol style="list-style-type: none"> 1) After of successful completion of the course, the learner should have enhanced Listening, 2) Speaking, Reading and Writing skills and should be prepared 3) To meet the challenges of Communication in the business world
SYBA UAMASS COM -	Mass Communication	<ol style="list-style-type: none"> 1) To introduce the students to some major aspects of communication 	<ol style="list-style-type: none"> 1) By the end of the course the students should be able to receive and analyse various

301		<p>and mass communication.</p> <ol style="list-style-type: none"> 2) To develop among the students a broad perspective of the past and the present status of Mass Media in India. 3) To develop among the students a critical understanding of the Mass Media with regard to their presentation formats, roles and audiences in Indian context. 4) To develop among the students a critical understanding of some special roles of different Mass Media in India. 5) To help the students to assess the contribution of Indian mass media to national development. 6) To acquaint the students with some issues and laws related to mass media in India. 7) To introduce the students to various job and career opportunities in media industry. 	media products critically and become interested in jobs or career in Media Industry.
FYBCOM UABC: 301	Business Communication	<ol style="list-style-type: none"> 1) To develop an awareness about the complexity of communication in a dynamic business environment. 2) To develop effective oral, writing and listening skills among learners. 3) To demonstrate the effective use of communication technology 	<ol style="list-style-type: none"> 1) After successful completion of the course, the learner should have enhanced Listening, 2) To develop Speaking, Reading and Writing skills 3) To meet the challenges of Communication in the business world
TYBA UAENG: 501	16 th to 18 th Century English Literature	<ol style="list-style-type: none"> 1. To introduce students to English Literature of the 16th, 17th and 18th centuries. 2. To show them how background influences shaped the writer's thinking. 3. To present them to the literary masters who dominated the scene 4. To familiarize students with different writing styles that each age adopted. 	<ol style="list-style-type: none"> 1) To understand the distinctive features of English literature of the 16th, 17th and 18th centuries 2) To comprehend how background influences shaped the writer's thinking. 3) To recognize and appreciate the literary masters who dominated the scene. 4) To grasp the different writing styles that each age adopted.
TYBA	Literary	1) To introduce the learners to	1) use some important critical terms

UAENG: 502	Criticism	<p>important critical terms</p> <ol style="list-style-type: none"> 2) To make them aware of the nature and function of literature and criticism 3) To impart the technique of close reading of literary texts 4) To enable them to understand various literary theories and critical approaches 5) To familiarize the learners with the tenets of practical criticism 	<ol style="list-style-type: none"> 2) become aware the nature and function of literature and criticism 3) impart the technique of close reading of literary texts 4) understand the various literary theories and critical approaches 5) be familiar with the tenets of practical criticism
TYBA UAENG: 503A	Grammar and the Art of Writing	<ol style="list-style-type: none"> 1) To develop amongst learners an insight into the process of word formation and transformation 2) To develop amongst them an insight into the sounds, stress patterns and intonations in the English language to improve their speaking skills 3) To develop among them insight into the structure of the English language and to provide knowledge of the rules of grammar 4) To help them learn grammatical analysis and description and the skills of sentence transformation 5) To introduce the mechanics of writing for effective writing for various domains 	<ol style="list-style-type: none"> 1) Gain a basic understanding of phonetics, morphology and word transformation 2) Have improved speaking skills 3) Have developed adequate knowledge of the rules of grammar, grammatical analysis and sentence transformation. 4) Write effectively in various domains.
TYBA UAENG: 504	19th Century English Literature	<ol style="list-style-type: none"> 1) To introduce to students the major trends and ideas in the literature and culture of the Romantic and Victorian Eras 2) To help students understand the texts in the context of prevailing socio-cultural conditions & their historical, political location 3) To impress upon students the characteristically rebellious/ radical nature of British Romanticism and the stupendous range of changes in the socio- 	<ol style="list-style-type: none"> 1) To view literary works in their dynamic interface with the background 2) To understand the literature of the 19th century as a complex outcome of artistic, intellectual and socio-political cross-currents 3) To appreciate poetry as mirroring private personality, protest and subsequently, public concerns 4) To view the development of the Victorian Novel as informed by Victorian morality as well as by larger democratic processes 5) To contextualize the impulses

		<p>political conditions of Early (1837-1851), Middle (1851-1870) and Late (1870-1901) Victorian Era</p> <ol style="list-style-type: none"> 4) To familiarize and highlight major representative texts, genres, thematic concerns and select key concepts/terms pertaining to the respective periods 5) To help students apply a variety of critical, historical, and theoretical approaches to prescribed literary texts 6) To sensitize students to diverse sensibilities and humanitarian concerns through literature of the nineteenth century 	<p>behind the significant emergence of women writing in the 19th century</p>
TYBA UAENG: 505	20th Century British Literature	<ol style="list-style-type: none"> 1) To expose students to literary genres, trends, and literary movements of Britain in the 20th Century. 2) To enable students to create linkages between social and historical contexts and literary texts 3) To train students to develop skills for a critical and analytical understanding of the text. 	<ol style="list-style-type: none"> 1) Students will be equipped with comprehensive understanding of literary genres, trends and movements in 20th Century British Literature; thereby, enabling them to understand the valuable co – relation between the socio-cultural, economical and historical contexts; behind the literary production. 2) Students will acquire the discipline to become reflective and imaginative thinkers through a close, critical and analytical reading of the prescribed texts.
TYBA UAENG: 506B	Drama and Theatre	<ol style="list-style-type: none"> 1) To acquaint the learners of literature with various types of drama. 2) To sensitize them to the techniques and types of theatre. 3) To identify and discuss the theoretical and practical elements of drama. 4) To introduce them to drama as a performing art. 5) To enhance their understanding of the elements of theatre. 6) To enable the learners to critically watch a play, write 	<ol style="list-style-type: none"> 1) Analyse the social and artistic movements that have shaped theatre and drama. 2) Apply discipline-specific skills to the creation of drama. 3) Analyze the difference between the concepts of drama and theatre. 4) Demonstrate knowledge of the history of drama and theatre as a literature and performing art.

		a review and to put up a play.	
MA-I PAENG: 101	Literary Theory and Criticism	<ol style="list-style-type: none"> 1) To introduce the learners to a wide range of critical methods and literary theories 2) To enable them to use the various critical approaches and advanced literary theories 3) To enhance their analytical skills 4) To enable them to mobilize various theoretical parameters in the analysis of literary and cultural texts 5) To familiarize the learners with the trends and cross-disciplinary nature of literary theories 6) To introduce them to the conventions of research papers 	<ol style="list-style-type: none"> 1) Introduces to the basics of Literary Criticism 2) Widens the knowledge of literary theories and focuses on their importance 3) Helps to write a critical appreciation 4) Provides an insight of practical criticism 5) Ingrains the mind towards creative writing, appreciation, critical thinking and critical analysis 6) Accentuates expression of thoughts and views for critical appreciation and judgmental reviews 7) Enhances fluency of languages, presentation skills and creative writing
MA-I PAENG: 102	Linguistic and Stylistic Analysis of Texts	<ol style="list-style-type: none"> 1) To understand the concept of style in literature. 2) To understand the linguistic basis of literary criticism (stylistics as an input to literary criticism). 3) To understand the concept of discourse and the principles of discourse analysis. 4) To understand the use of stylistic approach in teaching literature. 5) To understand the impact of stylistic analysis on academic writing 6) To understand some major concepts in narratology 	<ol style="list-style-type: none"> 1) To expose to a range of contexts where the language is used to meet a variety of real life communication needs. 2) To equip with the practical, emotional, intellectual and creative aspects of language by integrating knowledge and skills. 3) To focus on readability, teachability and testability -to think beyond the text. 4) To enhance practice in objective and subjective writing. 5) To make them aware of British and American Vocabulary
MA-I PAENG: 103	Fiction	<ol style="list-style-type: none"> 1) To familiarize learners with different genres in fiction. 2) To familiarize them with different types of fictional narratives. 3) To provide the learners with an idea of the growth of fiction over the period of the last three centuries. 4) To make the learners aware of the social, cultural and psychological implications of fiction 	<ol style="list-style-type: none"> 1) Conceptualize the Genre of Novel and its types viz. Allegorical, Gothic, Historical, Epistolary, Picaresque, and Psychological. 2) Gain knowledge in the development of English Fiction from the 17th Century to the 21st century from man's physical adventures to social and psychological journeys. 3) Learn the elements of fiction Narrative Technique, Setting, Point of view, Style and Detective fiction. 4) Become well acquainted with

			<p>the literary genre of Novel and Short Story and literary devices of allegory and metaphor, satire, and stream of consciousness technique</p> <p>5) Enhance Reading skills and understand how to represent their experience and ideas critically, creatively, and persuasively through the medium of language.</p> <p>6) It will help to Understand the social, historical and political backgrounds of the world of the novelists and short story writers through the elaborate and allegorical descriptions in the prescribed novels.</p> <p>7) Get a wide exposure of eminent writers like George Orwell, Jane Austen and Daniel Defoe, Thomas Hardy, Jonathan Swift, and Mary Shelly.</p> <p>8) Their unique styles of writing and imagination help to enhance their creative writing skills</p>
MA-I PAENG: 303	Drama	<p>1) To introduce the learners to a wide range of theatrical practices around the world.</p> <p>2) To introduce the learners to various theories of drama</p> <p>3) To enable them to understand the elements of drama and theatre</p> <p>4) To introduce them to the conventions of research papers</p>	<p>1) Interpret literary texts in English by nurturing and utilizing their ability to understand drama in a skilled, knowledgeable, and ethical manner.</p> <p>2) Conceptualize various types of drama viz. Tragedy, Comedy, Farce, Melodrama, Historical Plays through the prescribed texts and analyze the effect they create in the audience or readers.</p> <p>3) Gain knowledge in the development of English drama from 16th Century to 21st century viz. Shakespearean drama, Sentimental Comedy, Romantic Comedy, Shavian plays and One-act plays</p> <p>4) Understand the structure of a play and learn the dramatic devices used in writing a play</p> <p>5) Become well acquainted with the rhetorical aspect of Drama, historical contexts and psycho-</p>

			social aspects
MA-II PAENG: 301	Poetry from Chaucer to the Present	<ol style="list-style-type: none"> 1) To familiarize the students with the major representative poets of every age and movements therein. 2) To help them study different genres of poetry in the context of socio- cultural background of the age 	<ol style="list-style-type: none"> 1) Will be acquainted poetry from a variety of historic periods 2) understand and appreciate poetry as a literary art form 3) They will be able to analyse various elements of poetry, such as diction, tone, form, genre, imagery, figures of speech, symbolism, theme, etc. 4) They will recognize the rhythms, metrics and other musical aspects of poetry 5) To broaden their vocabularies and to develop an appreciation of language 6) To kindle their critical thinking skills 7) To inculcate a deeper appreciation of cultural diversity by introducing them to poetry from a variety of cultures throughout the world 8) To enhance their own creativity 9) To facilitate their writing skills
MA-II PAENG: 302	Gendered Perspectives on Literature	<ol style="list-style-type: none"> 1) To open up avenues in gender studies, including women's studies, by acquainting learners with their complexities and diversity, especially in the constructs of gender and sexuality 2) To encourage learners to interrogate rigid frameworks of gender construction while sensitizing them to the process of socialization and naturalization of gender 3) To enable learners to critically evaluate literary texts from a multivalent gender perspective 4) To explore the thematic and aesthetic concerns in identifying subversive strategies employed by literary writers 	<ol style="list-style-type: none"> 1) They will be familiarized with major concepts, history, assumptions, and theories/theorists about gender studies 2) They will be able to recognize the intersections between gender and other social and cultural identities, including, but not limited to, race, ethnicity, national origin, religion, class and sexuality. 3) Engage in promoting social justice and human rights. 4) They will be to articulate how women's studies and gender studies is a distinct field connected to other interdisciplinary fields of study. 5) Identify the interactions and intersections of identities (e.g., gender, race, ethnicity, class, sexuality, and so on) and assess the ways in which they contribute to instances of privilege and power dynamics across cultures, space, and time. 6) They will be able to Evaluate,

			compare, and critique gender and feminist theories and methodologies.
MA-II PAENG: 303	Twentieth Century American Literature	<ol style="list-style-type: none"> 1) To acquaint the learners of literature with the various genres and literary terms of twentieth century American Literature 2) To sensitize them to the themes and styles of modern and postmodern American Literary works 3) To introduce them to the socio-cultural milieu of twentieth century America through literary texts 4) To enhance their understanding of multicultural sensibilities by introducing them to the literary works representing them 5) To facilitate cross-cultural perspectives and discussions on American Literature of multiple ethnicities 6) To enable them to write projects and research papers on American literature 	<ol style="list-style-type: none"> 1) Instils the background of civil war and Transcendentalism. 2) Emphasizes on the meaning and the significance of American Dream, then and now 3) Aids to comprehend the effects of racism 4) Extends an opportunity to study a brief history American Literature –Poetry, Drama and Fiction 5) Paves way to know the life, culture language and society through literature 6) Kindles to compare American writings with Indian writings with English 7) Inculcates interests among youth to study abroad, the need of the hour
MA-II PAENG: 304	Shakespeare	<ol style="list-style-type: none"> 1) To familiarize the learner with timeless dimensions of Shakespeare's works. 2) To help the learner understand the contemporary relevance of Shakespeare with reference to modern versions and films based on his plays. 3) To sensitize the learner to development of the genres of comedy, tragedy and history plays in the Elizabethan era. 4) To acquaint the learner with changing responses to Shakespeare's plays 	<ol style="list-style-type: none"> 1) Will be acquainted with the intellectual and socio-economic climate of Shakespeare's age 2) They will gain an insight into the contemporary relevance of Shakespeare's work 3) Students will be able to analyze Shakespeare's works critically 4) They will be able to identify the manner in which Shakespeare differed from his fellow dramatists and poets
MA-II PAENG: 305	Indian Writing in Translation	<ol style="list-style-type: none"> 1) To offer an exhaustive study of Indian literatures in the various Indian languages through English translation. 2) To acquaint the students with major movements, trends and tendencies 	<ol style="list-style-type: none"> 1) Comparative & Translations study broadens the horizon of knowledge 2) Deepens knowledge in English literature for higher studies 3) Kindles creative mind with innovative thoughts 4) Enable them to enjoy life

		<p>beside major authors and literary texts in multiple languages in India through English translation.</p> <p>3) To equip the students with enough knowledge about literary translations in English from Indian languages and help them understand and overcome the problems and issues of literary translation.</p> <p>4) To familiarize the students with the history of translation in India from the Post-Independence</p> <p>5) To contemporary times and enable them to write research papers in the same with new views and perspectives.</p>	<p>through literature</p> <p>5) It will help for the growth of literature through translations</p>
MA-II PAENG: 306	Research Methodolog y	<p>1) To introduce the learners to the concept of 'research'</p> <p>2) To acquaint them with the stages of research</p> <p>3) To familiarize them to the procedures involved in research</p> <p>4) To introduce them to the conventions of writing research paper</p> <p>5) To acquaint them with the techniques and conventions of documentation in research</p>	<p>1) They will understand the basic framework of research process and develop understanding on various kinds of research, objectives of doing research, research process, research designs and sampling.</p> <p>2) It will help students to develop an understanding of various research designs and techniques</p> <p>3) Learners can be well versed with various sources of information for literature review and data collection.</p> <p>4) Will help to understand the ethical dimensions of conducting applied research.</p> <p>5) They will learn to appreciate the components of scholarly writings and evaluate its quality.</p>
MA-II PAENG: 307	Cultural Studies	<p>1) To familiarize the learner with terms, analytical techniques, and interpretive strategies commonly employed in cultural studies</p> <p>2) To introduce the learner to a wide range of texts from many different critical perspectives</p> <p>3) To familiarize the learners with basic concepts of</p>	<p>1) Develop an understanding and appreciation of the varying perspectives that one can bring to bear on cultural texts</p> <p>2) It will help learners to discuss and analyze cultural texts using a wide range of theoretical approaches, in particular those that consider how class, gender, sexuality, nationality and race are represented in popular texts.</p>

		<p>cultural studies: for instance, power, agency, identity ideology, and representation</p> <ol style="list-style-type: none"> 4) To enable an understanding of key approaches to the study of culture for better understanding of social and cultural changes 5) To guide the learners to the ways in which understandings and ideas about culture emerge from historical as well as theoretical perspectives 6) To orient the learner with an understanding of how are race, gender, and class produced and consumed in the mass market 7) To equip the learner with an understanding of interdisciplinary approaches in exploring how cultural products are produced, shaped, distributed, consumed and responded to in diverse ways 	<ol style="list-style-type: none"> 3) Learners will recognize cultural studies is an interdisciplinary enterprise that draws on a wide range of disciplines (e.g., English, philosophy, history, women's studies) 4) Learners will be able to view an individuality, family, education, race, gender, sexuality, class, nationality, age, and religion with cultural context. 5) Students will be able to analyze verbally and in writing Shakespeare as a product of his society. 6) They will be able to compare experiences with themes and issues brought up in Shakespeare's plays, poems, and sonnets. 7) Students will be able to assess reaction to the themes and issues brought up in Shakespeare's plays, poems, and sonnets. 8) They will learn to identify major literary characters in Shakespeare's work.
MA-II	Project Based Courses	<ol style="list-style-type: none"> 1) The objective of the Project Based Courses is to evaluate the critical competence, logical reasoning and scholarly composition of the students at the end of the M.A. Programme. At the end of the course students are expected to have sound theoretical knowledge so that they can apply it to a particular area of study selected from the Project Based Course. They should develop the skills of identifying an area of investigation, reviewing literature, analyzing concepts, comparing alternative theories and perspectives, understanding the difference between primary and secondary sources in the area of their 	<ol style="list-style-type: none"> 1) It will develop the spirit of critical and scholarly enquiry for the subject. 2) Learners will learn how to identify and evaluate appropriate research sources, 3) They will also learn to incorporate the sources into documented academic writing, 4) It will teach them to formulate original arguments in response to those sources. 5) They will learn how to apply appropriate research methodologies to specific problems

		research, collecting and organizing data and articulating their arguments coherently and clearly	
--	--	---	--

DEPARTMENT OF GEOGRAPHY

- Programme Specific Outcomes:**

After completing the programme student will be able to

- PSO1: Demonstrate the understanding of various branches of Geography such as Physical Geography, Human Geography and Practical Geography.
- PSO2: Analyse and evaluate logical reasonings and draw conclusions from qualitative & quantitative data.
- PSO3: Acquire the skills of reading maps and making maps of different kinds for different types of datasets and analyse the results effectively.
- PSO4: Make the connections based on scientific learning & experience and bring these to bear in context of social, economic and environmental changes happening in the society.
- PSO5: Contribute to the society through understanding the aspects of Geography such as - environmental geography, settlement geography, tourism geography etc.
- PSO6: Carry out Geographical research through formulation of hypothesis, analysis and deriving conclusions.
- PSO7: Avoid unethical practices like plagiarism.
- PSO8: Work in team to generate and disseminate the Geographical knowledge.

- Course Outcomes:**

Course code	Title of the course	Course credit	Course outcome
FYBA (Semester – I) UAGEO101	Human Geography (Introduced in 2021-2022) https://mu.ac.in/wp-content/uploads/2020/12/4.62-Revised-Syllabus-F.Y.B.A.F.Y.B.Sc.-in-Geography.pdf	04	1. Know about meaning, sub-branches, approaches of human geography and study various views of man-environment relationship. 2. Understand the distribution, density, patterns of population along with DTM and causes and effects of population change. 3. Understand the characteristics, types, patterns, classification, site & situation of rural and urban settlements 4. Understanding fundamentals of maps and map-scale, and develop skills of constructing choropleth map and population pyramids
FYBA (Semester – II) UAGEO201	Environmental Geography (Introduced in 2021-2022) https://mu.ac.in/wp-content/uploads/2020/12/4.62-Revised-Syllabus-F.Y.B.A.F.Y.B.Sc.-in-Geography.pdf	04	1. Know about meaning, nature, scope, importance of environmental geography, and study various views of man's interaction with environment 2. Study meaning, unction, classification of ecosystem, and understand the working of biogeochemical cycles 3. Learn concept, causes and effects of various types of pollution, world environmental issues, and also to understand major environmental movements 4. Understand concept, types of natural resources along with the causes for their depletion, and to study issues related to biodiversity 5. Imbibe map-filling skills and learn the skills of thematic maps interpretation
SYBA – II (Semester –	An Introduction to Climatology	03	1. Understand the structure and composition of atmosphere.

III) UAGEO30 1	(Introduced in 2017-2018) http://mu.ac.in/porta1/wp-content/uploads/2016/06/4.243-S.Y.B.A.-Geography-Paper-II-Climatology.pdf		2. Understand pressure belts and planetary winds, regional winds and local winds. 3. Learn about humidity, condensation and precipitation, cyclones and anticyclones. 4. Understand the causes and effects of Global warming, El Nino and La Nina. 5. Learn to read weather maps and draw climatic diagrams.
SYBA – III (Semester – III) UAGEO30 2	Physical Geography of India (Introduced in 2017-2018) http://mu.ac.in/porta1/wp-content/uploads/2016/06/4.235-S.Y.B.A.-B.Sc.-Geography-Paper-III-Physical-geography-of-India.pdf	03	1. Understand the physiographic divisions of India. 2. Know about the climate and water resources of India 3. Learn about richness of forest, soil, energy and mineral resources of India. 4. Acquire skills of map filling of physical features of India. 5. Learn to draw map scale.
SYBA – II (Semester – IV) UAGEO40 2	Introduction to Oceanography (Introduced in 2017-2018) http://mu.ac.in/porta1/wp-content/uploads/2016/06/4.244-S.Y.B.A.-Geography-Paper-II-Oceanography.pdf	03	1. Know the features of major oceans. 2. Understand ocean floor relief and physical and chemical properties of sea water. 3. Know about the ocean water movements i.e., waves, currents and tides. 4. Understand the problems of oceans w.r.t. coral reefs, pollution and climate change. 5. Acquire skills of world map filling w.r.t. ocean features and reading bathymetric maps and hydrographic charts.
SYBA – III (Semester – IV) UAGEO40 1	Agriculture Geography of India (Introduced in 2017-2018) http://mu.ac.in/porta1/wp-content/uploads/2016/06/4.245-S.Y.B.A.-Geography-Paper-III-Agriculture-Geography-of-India.pdf	03	1. Understand the factors affecting Indian agriculture. 2. Know the agro-climatic regions, types of farming and major crops in India, and problems associated with Indian agriculture. 3. Understand the significance of Green Revolution in India. 4. Know the recent trends in agriculture. 5. Learn to read agriculture related thematic maps and draw graphs.
TYBA – IV (Semester – V) 97022 / UAGEO50 1	Geography of Settlements (Introduced in 2018-2019) http://mu.ac.in/porta1/wp-content/uploads/2018/06/4.246-S.Y.B.A.-Geography-Paper-IV-Settlements-Geography-of-India.pdf	04	1. Understand types of settlements and factors affecting their growth and distribution. 2. Learn types of rural settlements. 3. Know about rural settlements in India. 4. Know the origin, growth, types and hierarchy of urban settlements.

	<u>content/uploads/2016/06/4.28-T.Y.-B.A-B.Sc.-Geography-2-5-18-2.pdf</u>		4. Understand urbanisation in India and need of smart cities.
TYBA – V-A (Semester – V) 97054 / UAGEO50 2-A	Geography of Maharashtra (Introduced in 2018-2019) <u>http://mu.ac.in/porta1/wp-content/uploads/2016/06/4.28-T.Y.-B.A-B.Sc.-Geography-2-5-18-2.pdf</u>	04	1. Understand the geographical setting of Maharashtra. 2. Know about the resource base of Maharashtra. 3. Understand population dynamics in Maharashtra. 4. Learn about various economic activities in Maharashtra
TYBA – V-B (Semester – V) 97055 / UAGEO50 2-B	Population Geography (Introduced in 2018-2019) <u>http://mu.ac.in/porta1/wp-content/uploads/2016/06/4.28-T.Y.-B.A-B.Sc.-Geography-2-5-18-2.pdf</u>	04	1. Know about various sources of population data. 2. Understand the distribution, growth and structure of population. 3. Critically study various theories related to population. 4. Understand types, causes and consequences of migration; and migration in India. 5. Understand problems related to population such as ageing, gender issues, poverty, unemployment and rapid urbanization.
TYBA – VI (Semester – V) UAGEO50 3	Tools and Techniques in Geography for Spatial Analysis – I (Practicals) (Introduced in 2018-2019) <u>http://mu.ac.in/porta1/wp-content/uploads/2016/06/4.28-T.Y.-B.A-B.Sc.-Geography-2-5-18-2.pdf</u>	03	1. Understand the science of map making, map basics and map projections. 2. Develop skill in topographical map reading w.r.t. SOI toposheets of India. 3. Learn to draw thematic maps. 4. Learn to use statistical softwares to represent geographical data.
TYBA – VII (Semester – V) 97125 / UAGEO50 4	Regional Planning and Development (Introduced in 2018-2019) <u>http://mu.ac.in/porta1/wp-content/uploads/2016/06/4.28-T.Y.-B.A-B.Sc.-Geography-2-5-18-2.pdf</u>	04	1. Understand the concept of regional planning and its relation with geography. 2. Understand the concept of region in planning. 3. Understand regional development and disparities. 4. Know about five year plans, multi-level planning, planning regions and planning mechanism of India. Study regional planning in India w.r.t. various programmes.
TYBA –	Geography of	04	1. Know types of resources and issues related with

VIII-A (Semester – V) 97155 / UAGEO50 5-A	Resources (Introduced in 2018-2019) http://mu.ac.in/porta1/wp-content/uploads/2016/06/4.28-T.Y.-B.A-B.Sc.-Geography-2-5-18-2.pdf		renewable and non-renewable resources. 2. Understand over exploitation and conservation of resources. 3. Understand the problems and conservation of water, forest, soil, mineral and energy resources. 4. Know about human resources and the distribution of population and population-resource regions.
TYBA – VIII-B (Semester – V) 97156 / UAGEO50 5-B	Geography of Health (Introduced in 2018-2019) http://mu.ac.in/porta1/wp-content/uploads/2016/06/4.28-T.Y.-B.A-B.Sc.-Geography-2-5-18-2.pdf	04	1. Understand Significance of geography of health. 2. Know causes, effects and remedial measures of air, water, plastic and radioactive pollution. 3. Understand geography of diseases. 4. Understand linkage of health with environment. 5. Know health care facilities in India.
TYBA – VIII-C (Semester – V) 97157 / UAGEO50 5-C	Geography of Disaster Mitigation and Management (Introduced in 2018-2019) http://mu.ac.in/porta1/wp-content/uploads/2016/06/4.28-T.Y.-B.A-B.Sc.-Geography-2-5-18-2.pdf	04	1. Understand concepts of Disaster, Hazard, Vulnerability and Risks; types of hazards and disasters and their impacts. 2. Know elements of disaster management. 3. Understand methods and approaches of disaster management. 4. Understand causes, effects and managements of natural disasters in India. 5. Understand causes, effects and managements of anthropogenic disasters in India.
TYBA – IX (Semester – V) 97189/ UAGEO50 6	Geospatial Technology (Practicals) (Introduced in 2018-2019) http://mu.ac.in/porta1/wp-content/uploads/2016/06/4.28-T.Y.-B.A-B.Sc.-Geography-2-5-18-2.pdf	03	1. Mapping of Thematic Layers and Visual Image Interpretation of Physical and Manmade Features from Satellite Imageries. 2. Digital Image Analysis – classification of landforms and 3D viewing using DEM (Digital Elevation Model). 3. Visual Image Interpretation of Physical and Manmade Features from Aerial Photographs. 4. Ground Survey and Demarcation of Point, Line and Polygon Features with GPS Device and Transfer GPS Data to Computer with Softwares like Easy GPS. 5. Importing Image into GIS Software and Geo-referencing and creating Layers by Digitization of Point, Line and Polygon Features 6. Using Map-Composer for map layout and design and preparation of thematic maps.
TYBA – IV (Semester – VI) 86509 /	Environmental Geography (Introduced in 2018-2019)	04	1. Know the components of environment and understand man-environment relationship. 2. Understand the types, structure and functioning of ecosystem.

UAGEO60 1	http://mu.ac.in/porta1/wp-content/uploads/2016/06/4.28-T.Y.-B.A-B.Sc.-Geography-2-5-18-2.pdf		<p>3. Know about biodiversity hotspots, threats to biodiversity and conservation of biodiversity.</p> <p>4. Study environmental challenges and movements in India.</p> <p>5. Learn about sustainable development, environmental management and environmental impact assessment.</p>
TYBA – V-A (Semester – VI) 86539 / UAGEO60 2-A	<p>Geography of Tourism and Recreation (Introduced in 2018-2019)</p> <p>http://mu.ac.in/porta1/wp-content/uploads/2016/06/4.28-T.Y.-B.A-B.Sc.-Geography-2-5-18-2.pdf</p>	04	<p>1. Study factors affecting tourism development.</p> <p>2. Know about types and impacts of tourism.</p> <p>3. Know types of accommodation and transport in tourism.</p> <p>4. Understand the need of planning in tourism and role of tourism organizations.</p> <p>5. Identify potential tourism sectors in Maharashtra.</p>
TYBA – V-B (Semester – VI) 86540 / UAGEO60 2-B	<p>Political Geography (Introduced in 2018-2019)</p> <p>http://mu.ac.in/porta1/wp-content/uploads/2016/06/4.28-T.Y.-B.A-B.Sc.-Geography-2-5-18-2.pdf</p>	04	<p>1. Understand basic concepts in political geography.</p> <p>2. Know various approaches in political geography.</p> <p>3. Understand concepts and disputes related to boundaries w.r.t. India.</p> <p>4. Know geostrategic and geopolitical views.</p> <p>5. Know basic concepts in electoral geography.</p>
TYBA – VI (Semester – VI) UAGEO60 3	<p>Tools and Techniques in Geography for Spatial Analysis – II (Practicals) (Introduced in 2018-2019)</p> <p>http://mu.ac.in/porta1/wp-content/uploads/2016/06/4.28-T.Y.-B.A-B.Sc.-Geography-2-5-18-2.pdf</p>	03	<p>1. Calculate measures of central tendency and to know the nature of data</p> <p>2. Calculate measures of dispersion and deviation</p> <p>3. Calculate correlation and regression</p> <p>4. Learn the techniques of hypothesis testing</p> <p>5. Learn various methods of geographic sampling</p> <p>6. Learn collection of geographical data with fieldwork</p>
TYBA – VII (Semester – VI) 86609 / UAGEO60 4	<p>Economic Geography (Introduced in 2018-2019)</p> <p>http://mu.ac.in/porta1/wp-content/uploads/2016/06/4.28-T.Y.-B.A-B.Sc.-Geography-2-5-18-2.pdf</p>	04	<p>1. Learn basic concepts in economic geography with reference to economy and resources</p> <p>2. Understand characteristics and geographical factors affecting economic activities</p> <p>3. Learn the factors affecting industrial location</p> <p>4. Learn major patterns of transport routes and international trade</p> <p>5. Know concepts and issues related to economic development in India</p>

	<u>2.pdf</u>		
TYBA – VIII-A (Semester – VI) 86642 / UAGEO60 5-A	Biogeography (Introduced in 2018-2019) http://mu.ac.in/porta1/wp-content/uploads/2016/06/4.28-T.Y.-B.A-B.Sc.-Geography-2-5-18-2.pdf	04	<ol style="list-style-type: none"> 1. Learn basic concepts, approaches and importance of biogeographical studies 2. Understand concepts and components of ecosystem and biosphere 3. Learn concept, classification and formation of plant communities 4. Study specific marine biogeographical areas like ocean, islands and estuaries 5. Learn concepts and issues related to biodiversity and its conservation
TYBA – VIII-B (Semester – VI) 86643 / UAGEO60 5-B	Geography of Transport (Introduced in 2018-2019) http://mu.ac.in/porta1/wp-content/uploads/2016/06/4.28-T.Y.-B.A-B.Sc.-Geography-2-5-18-2.pdf	04	<ol style="list-style-type: none"> 1. Learn basic concepts like distance related to transport geography 2. Understand structure and properties of transport network 3. Study the evolution of modes of transport w.r.t. locational factors 4. Learn theories related to connectivity and accessibility 5. Explore various issues related to transport in India
TYBA – VIII-C (Semester – VI) 86644 / UAGEO60 5-C	Social Geography (Introduced in 2018-2019) http://mu.ac.in/porta1/wp-content/uploads/2016/06/4.28-T.Y.-B.A-B.Sc.-Geography-2-5-18-2.pdf	04	<ol style="list-style-type: none"> 1. Study basic concepts and processes related to social geography 2. Learn elements of social geography w.r.t. race, religion, language and tribes with reference to world and India 3. Understand social geography of urban areas 4. Study contemporary social issues in India
TYBA – IX (Semester – VI) UAGEO60 6	Research Methodology in Geography (Practicals) (Introduced in 2018-2019) http://mu.ac.in/porta1/wp-content/uploads/2016/06/4.19-Final-Sem-VI-paper-VI-and-IXResearch-methodology-in-Geography.pdf	03	<ol style="list-style-type: none"> 1. Know significance and types of research methodology. 2. Learn methods of data collection and processing. 3. Analyse data using statistical softwares and hypothesis testing techniques. 4. Analyse digital data in GIS softwares. 5. Acquire practical knowledge of research methodology by doing research project.

Environmental Studies

- **Course Outcomes:**

Course code	Title of the course	Course credit	Course outcome
FYBCom	Environmental Studies – I (Introduced in 2016-2017) http://mu.ac.in/porta1/wp-content/uploads/2016/06/F.-Y.-B.Com-Sem-I-II.pdf	03	1. Understand the components of environment and functioning of ecosystem. 2. Understand problems associated with natural resources and their management. 3. Become aware about various issues related to population and development. 4. Comprehend environmental issues in urban areas. 5. Acquire skills of map reading and world map filling.
FYBCom	Environmental Studies – II (Introduced in 2016-2017) http://mu.ac.in/porta1/wp-content/uploads/2016/06/F.-Y.-B.Com-Sem-I-II.pdf	03	1. Understand the role of solid waste management for sustainable society. 2. Understand environmental problems associated with agricultural and industrial development. 3. Understand challenges and impacts of tourism. 4. Know environmental movements in India and various aspects of environmental management. 5. Acquire skills of Konkan and Mumbai map filling.

DEPARTMENT OF HINDI

• Program Specific Outcomes:

- Having command over Language: Listen, Speak, Read and Write effectively
- Effective Communication and Expression of their Views.
- Develop Critical and Analytical Thinking for identifications of problem and resolutions.
- Understanding of interpersonal and Social relationships.
- Learned about Human Values and become responsible citizens.
- Learned about rich heritage of Indian Culture.
- Acquainted with Research Skills
- Become eligible for Creative Writing through understanding of Literature.

• Course Outcomes:

Course Code	Title of the Course	Credit	Course Outcome
UAHINCOM 101 (FYBA SEM I)	Compulsory Hindi	3	Learners got Knowledge of Hindi Poems, Story, Translation and letter Writing
UAHINCOM 102 (FYBA SEM II)	Compulsory Hindi	3	Learners got Knowledge of essay writing. Improve their writing skills and grammar
UAHIN 101 FYBA SEM I	Ancillary Hindi	3	Learners become familiar with Hindi Story, Essay (Prose) Auto- Biography and memories
UAHIN 201 FYBA SEM II	Ancillary Hindi	3	Learners Gained knowledge of evolution of Hindi Story and Hindi Novels
UAHIN 301 SYBA SEM III	SYBA Hindi Paper II	3	विद्यार्थियों में मानवीय संवेदनाओं के विकास के साथ नवीन सामाजिक सांस्कृतिक बोध और जीवन मूल्यों का विकास होगा। विद्यार्थियों में साहित्य के माध्यम से कलात्मक गुणों की अभिव्यक्ति होगी। कला की साहित्यिक विधाओं के प्रति अभिरुचि जागृत होगी तथा रचनात्मक कौशल को बढ़ावा मिलेगा। विद्यार्थियों में नए वैश्विक मूल्यों के प्रति सजगता को बढ़ावा मिलेगा एवं पर्यावरणीय चेतना के प्रति दायित्व बोध उत्पन्न होगा।
UAHIN 401 SYBA SEM IV	SYBA Hindi Paper II	3	विद्यार्थियों में मानवीय संवेदनाओं के विकास के साथ नवीन सामाजिक सांस्कृतिक बोध और जीवन मूल्यों का विकास होगा। विद्यार्थियों में साहित्य के माध्यम से कलात्मक गुणों की अभिव्यक्ति होगी। कला की साहित्यिक विधाओं के प्रति अभिरुचि जागृत होगी तथा रचनात्मक कौशल को बढ़ावा मिलेगा। विद्यार्थियों में नए वैश्विक मूल्यों के प्रति सजगता को बढ़ावा मिलेगा एवं पर्यावरणीय चेतना के प्रति दायित्व बोध उत्पन्न होगा।
UAHIN 302 SYBA SEM III	SYBA Hindi Paper III	3	विद्यार्थियों को व्यावहारिक हिंदी भाषा -दक्षता की प्रवीणता की प्राप्ति होगी। विद्यार्थियों का व्यावसायिक रूप से आत्मनिर्भरता के योग्य बनाना। विद्यार्थी जनसंचार माध्यमों में रोजगार के अवसरों व अन्य क्षेत्रों से अवगत होंगे।
UAHIN 402 SYBA SEM IV	SYBA Hindi Paper III	3	विद्यार्थियों को व्यावहारिक हिंदी भाषा -दक्षता की प्रवीणता की प्राप्ति होगी। विद्यार्थियों का व्यावसायिक रूप से आत्मनिर्भरता के योग्य बनाना। विद्यार्थी जनसंचार माध्यमों में रोजगार के अवसरों व अन्य क्षेत्रों से अवगत होंगे।
UAHIN 501 TYBA SEM V	History of Hindi Literature Paper IV	4	Learners got Knowledge of History Ancient and Medieval Hindi Literature (Poetry Form)
UAHIN 601 TYBA SEM VI	History of Modern Hindi Literature Paper IV	4	Learners got knowledge of modern Hindi literature Poetry and Prose in various eras of modern times.
UAHIN 502 TYBA	Post-Independence	4	Learners got Knowledge of Play KhandKavya

SEM V	Hindi Literature (Paper V)		(Epic), sansmarn rekhachitra- Prose
UAHIN 602 TYBA SEM VI	Post-Independence Hindi Literature (Paper V)	4	Learners got Knowledge of various forms of Hindi poetry, definition and elements of GeetKavya, Essays
UAHIN 503 TYBA SEM V	Information Technology in Hindi (Paper VI)	4	Learners got knowledge of translation with use of Computer Information technology, Internet, Print Media etc.
UAHIN 603 TYBA SEM VI	Social Media Paper VI	4	Learners got Knowledge of use of Social Media like Facebook, WhatsApp, Twitter etc.
UAHIN 504 TYBA SEM V	Literary Criticism prosody and rhetoric Paper VII	4	Learners got Knowledge of Definition of Literature, elements of various forms of Literature, Prosody
UAHIN 604 TYBA SEM VI	Literary Criticism prosody and rhetoric Paper VII	4	Learners got Knowledge of Rasa, Shabd Shakti, forms of Prose and rhetoric's
UAHIN 505 TYBA SEM V	Linguistics Hindi Language and Grammar Paper VIII	4	Learners Learned Hindi grammar, evolution of language , Science of Language
UAHIN 605 TYBA SEM VI	Linguistics Hindi Language and Grammar Paper VIII	4	Learners got information about ancient & medieval Indian Aryan Languages, forms of modern Hindi language , dialects and language Khadi boli Hindi
UAHIN 506 TYBA SEM V	Ideological Background of Modern Hindi Literature	4	Learners became Knowledgeable of ideological background of Modern Hindi Literature, impact of Gandhian thoughts etc. on modern Hindi Literature
UAHIN 606 TYBA SEM VI	Ideological Background of Modern Hindi Literature	4	Learners Learned about impact of psychology, Dalit Chetna and journals, on Hindi Literature
TYBCOM SEM V	Hindi Optional	4	Learners got Knowledge of Modern Poetry and novel
TYBCOM SEM VI	Hindi Optional	4	Learners got Knowledge of short stories of specific author and Hindi Poetry

Course Code	Title of the Course	Credit	Course Outcome
PAHIN-101 MA-I SEM-I	History of Hindi Literature	3	Learners got Knowledge of tradition of writing of History of Hindi Literature and various era of Hindi Literature
PAHIN-102 MA-I SEM-II	History of Hindi Literature (Modern Age)	3	Learners got Knowledge of Characteristics features of Modern Hindi poetry and Prose
PAHIN-103 MA-I SEM-I	Poetics and Literary Criticism	3	Learners became familiar of Indian Literary Criticism
PAHIN-104 MA-I SEM-II	Poetics and Literary Criticism	3	Learners got Knowledge of Concept of various theories of Criticism
PAHIN-105 MA-I SEM-I	Linguistic and Hindi Language	3	Learners got Knowledge of Type of linguistics, Science of Language etc.
PAHIN-106 MA-I SEM-I	Linguistic and Hindi Language	3	Learners got Knowledge of Roop Vigyan, Vakya Vigyan, Aarth Vigyan etc.
PAHIN-107	Ancient and medieval	3	Learners got Knowledge of

MA-I SEM-I	poetry		Ancient and medieval poetry of Kabir, Jayasi, Tulsidas
PAHIN-108 MA-I SEM-II	Ancient and medieval poetry	3	Learners got Knowledge of medieval poetry of Surdas, Meerabai, Bhushan
PAHIN-109 MA-II SEM-III	Modern Prose	6	Learners got Knowledge of Novel, essays and short stories of modern Hindi literature
PAHIN-110 MA-II SEM-III	Modern Poetry	6	Learners got Knowledge of Epic and Special Authors
PAHIN-111 MA-II SEM-III	Various Discourse and literature	6	Learners got Knowledge of issue of Women Dalit and Adivasi through Hindi Novel and poetry
PAHIN-112.3 MA-II SEM-III	Hindi Poetry of Marathi Sant	6	Learners got Knowledge of Poetry of Sant Namdev and Sant Tukaram
PAHIN-113.1 MA-II SEM-III	Special Study Jaishankar Prasad	6	Learners got Knowledge of novel of Jaishankar Prasad along with Stories
PAHIN-114.2 MA-II SEM-IV	Study of Hindi Literature, Translation of Marathi	6	Learners got Knowledge of Marathi Literature translation into Hindi
PAHIN-115.2 MA-II SEM-IV	Functional Hindi	6	Learners got Knowledge of Rajbhasha Hindi Language and its importance at Global Level
PAHIN-116 MA-II SEM-IV	Project Writing	10	Learners got Knowledge of Research Methodology

DEPARTMENT OF HISTORY

- **Programme Specific Outcomes:**

- B.A History students develop a logical understanding because they have to study causes and effects of events.
- B.A History student develop a greater knowledge of Indian History and World History.
- BA History programme will help the student to appear for the various competitive exams.
- B.A History programme makes the students more employable.

- **Course Outcomes:**

Course code	Title of the course	Course credit	Course outcome
	I. History of Modern India (1857 to 1947) Paper I - Sem I & II	3	1) To be proficient in History of Modern India. 2) To be proficient in the Indian National Movement Syllabus link: http://old.mu.ac.in/wp-content/uploads/2016/06/4.21-FYBA-History-Archeology.pdf
	II. Landmarks in World History(1300 to 1945 AD) Paper II. Sem III and IV	3	1. To be proficient in World History 2. .To understand the impact of landmark events in World History Syllabus link: http://old.mu.ac.in/wp-content/uploads/2016/06/4.66-SYBA-History-History-Archeology-Sem-III-Sem-IV2.pdf
	III. History of Ancient India. Paper III. Sem III and IV	3	1. To be proficient in the history of ancient India. 2. To acknowledge the influence of ancient India on Modern India. Syllabus link: http://old.mu.ac.in/wp-content/uploads/2016/06/4.66-SYBA-History-History-Archeology-Sem-III-Sem-IV2.pdf
	IV. Semester V Core Course IV. History of Medieval India (1000 CE – 1526 CE)	4	1. To be proficient in the History of Medieval India. 2. To have a grasp of Delhi Sultanate Syllabus link: http://old.mu.ac.in/wp-content/uploads/2016/06/4.1-TYBA-Syllabus-History-Archaeology-Sem-V-Sem-VII1.pdf
	V. Semester V Course V. History of Modern Maharashtra (1818 CE-1960 CE)	4	1. To gain insight into the history of Modern Maharashtra. 2. To acquaint students with regional history. Syllabus link: http://old.mu.ac.in/wp-content/uploads/2016/06/4.1-TYBA-Syllabus-History-Archaeology-Sem-V-Sem-VII1.pdf
	VI. Semester V Course VI Core Course VI A – Introduction to Archaeology	4	1. To understand the basic facets of Archaeology. 2. To evaluate the importance of Epigraphy. Syllabus link: http://old.mu.ac.in/wp-content/uploads/2016/06/4.1-TYBA-Syllabus-History-Archaeology-Sem-V-Sem-VII1.pdf

VII. Semester V Core Course VII- History of the Marathas (1630 CE – 1707CE)	4	1. To familiarize students with the literary sources of the history of the Marathas. 2. To help students to understand the forces leading to the establishment of Maratha power under Chhatrapati Shivaji Maharaj. Syllabus link: http://old.mu.ac.in/wp-content/uploads/2016/06/4.1-TYBA-Syllabus-History-Archaeology-Sem-V-Sem-VII.pdf
VIII. Semester V Core Course VIII: History of Contemporary World (1945 CE – 2000 CE)	4	1, To trace some of the major events of post- World War II period. 2.. To comprehend the ways in which events of the latter half of the twentieth century have influenced the present. Syllabus link: http://old.mu.ac.in/wp-content/uploads/2016/06/4.1-TYBA-Syllabus-History-Archaeology-Sem-V-Sem-VII.pdf
IX. Semester V Elective Course IX A - Research Methodology and Sources of History	4	1.To teach students basics of research methodology in history with a view to promote historical research. 2. To understand the various kinds of sources of history and its interpretation. Syllabus link: http://old.mu.ac.in/wp-content/uploads/2016/06/4.1-TYBA-Syllabus-History-Archaeology-Sem-V-Sem-VII.pdf
X. SEMESTER – VI Core Course IV History of Medieval India (1526 CE – 1707 CE)	4	1 To acquaint the students with the history of India since the emergence of the Mughal rule. 2. To understand administration of the Mughal Empire. Syllabus link: http://old.mu.ac.in/wp-content/uploads/2016/06/4.1-TYBA-Syllabus-History-Archaeology-Sem-V-Sem-VII.pdf
XI. SEMESTER – VI Core Course V History of Contemporary India (1947 CE- 2000 CE)	4	1.To understand the process of making the Constitution and the Integration and Reorganization of Indian States. 2.To acquaint the students with the political developments in India after Independence. Syllabus link: http://old.mu.ac.in/wp-content/uploads/2016/06/4.1-TYBA-Syllabus-History-Archaeology-Sem-V-Sem-VII.pdf
SEMESTER – VI Core Course VI-A Introduction to Museology and Archival Science	4	1. To inform the students about the role of Museums in the preservation of Heritage. 2. To understand the importance of Archival Science in the study of History. Syllabus link: http://old.mu.ac.in/wp-content/uploads/2016/06/4.1-TYBA-Syllabus-History-Archaeology-Sem-V-Sem-VII.pdf
SEMESTER – VI Core Course VII History of the Marathas (1707 CE – 1818 CE)	4	1.To enable the students to understand the processes that led to the expansion of the Maratha Power. 2.To appreciate the contribution of the Marathas in the national politics of the 18th century.

			Syllabus link: http://old.mu.ac.in/wp-content/uploads/2016/06/4.1-TYBA-Syllabus-History-Archaeology-Sem-V-Sem-VII.pdf
	SEMESTER – VI Core Course VIII History of Asia (1945 CE-2000 CE)	4	1.To acquaint the students with some of the major changes that occurred in Asia after World War II. 2.To understand the ways in which Asian nations resisted and defied the control of the West. Syllabus link: http://old.mu.ac.in/wp-content/uploads/2016/06/4.1-TYBA-Syllabus-History-Archaeology-Sem-V-Sem-VII.pdf
	SEMESTER – VI Core Course IX A - Research Methodology and Sources of History	4	1. To teach students basics of research methodology in history with a view to promote historical research. 3. To understand the various kinds of sources of history and its interpretation. Syllabus link: http://old.mu.ac.in/wp-content/uploads/2016/06/4.1-TYBA-Syllabus-History-Archaeology-Sem-V-Sem-VII.pdf

Foundation Course

• **Course Outcomes:**

Course code	Title of the course	Course credit	Course outcome
	F.C I. Semester I	3	1. To orient students about social issues. 2. To orient students about the Constitution of India and certain political processes.
	F.C . Semester II	3	1. To orient students about Globalization. 2. To orient students about environmental issues.
	F.C. Semester III	3	1. Develop a basic understanding about issues related to Human Rights of weaker sections, ecology, and science and technology. 2. Gain an overview of significant skills required to address competition in career choices 3. .Appreciate the importance of developing a scientific temper towards technology and its use in everyday life Syllabus link: http://old.mu.ac.in/wp-content/uploads/2016/06/4.113-SYBA-SYBSC-SYBCOM-Foundation-Course-Sem-III-IV1.pdf
	F.C. Semester IV	3	1. Develop a basic understanding about issues related to Human Rights of weaker sections, ecology, and science and technology. 2. Gain an overview of significant skills required to address competition in career choices 3. .Appreciate the importance of developing a scientific temper towards technology and its use in everyday life Syllabus link: http://old.mu.ac.in/wp-content/uploads/2016/06/4.113-SYBA-SYBSC-SYBCOM-Foundation-Course-Sem-III-IV1.pdf

DEPARTMENT OF MARATHI

- Programme Specific Outcomes:**

After completing the TYBA programme in Marathi, the Student will be able to:

- PSO1: Understand the history, thoughts related to poetics, linguistics, Grammar, literature and society, new technology in Marathi literature & professional use of Marathi language.
- PSO2: Use professional skills in Marathi language like Translation, proofreading, content writing for Media, blog writing etc.
- PSO3: Carry out language research through formulation of criticism, Indian & western thought of poetics, linguistics & Grammar and different types of literature.
- PSO4: Contribute to the society through aspects of literature & Society, Feminism studies, Dalit thoughts of literature & Modern Marathi Literature.

- Course Outcomes:**

Course code	Title of the course	Course credit	Course outcome
1.UAMAR-A-506/606	व्यवसायाभिमुख मराठी	3	1) Occupational Marathi Subject for TYBA, which was helpful for the students in competitive exams, administration & Communication Skills
2. UAMAR-A-504/604	भाषाविज्ञान आणि मराठी व्याकरण	4	2) Linguistic and Grammar Subject for TYBA, which was helpful for the students in competitive exams, State gov. Administration and School level Teaching
3. . UAMAR-A-502/602	भारतीय आणि पाश्चात्य साहित्यशास्त्र	4	3)Indian & western Poetics Subject for TYBA, which was helpful for the students in Philosophical Approach and research
MA 1413/1419	सौंदर्यशास्त्र १/२	6	4) Aesthetics studies which was helpful for the students in Philosophical Approach , research and film Studies
MA 1438/1411	चित्रपट पटकथांचा अभ्यास माध्यामंतराचा अभ्यास	6 6	5) In PG (MA II) Course we have subjects script writing & film Adaptation which gave Knowledge to the students about writing and film Studies.
MA SEM 4 1419	संशोधन प्रकल्प	10	6) Minor Research project which help student for research approach and PHD research studies

DEPARTMENT OF BMM

• **Program Specific Outcomes:**

- Learners will acquire the knowledge and skills required to pursue a career in the specialization of their choice.
- Learners will comprehend the foundations, process, and practices of writing for and about the media, and demonstrate proficiency in writing across platforms.
- Learners will understand mass media as a system of interrelated forces, including historical foundations, technological advances, economic dynamics, regulatory constraints, and ethical concerns.

• **Course Outcomes:**

Sr. no.	Course Code	Title of the Course	Course Credit	Course Outcome
1	BAMMEC-101	Effective communication –I		To make the students aware of functional and operational use of language in media. To equip or enhance students with structural and analytical reading, writing and thinking skills. To introduce key concepts of communications..
2	BAMMFC-102	Foundation course –I		To introduce students to the overview of the Indian Society. To help them understand the constitution of India. To acquaint them with the socio-political problems of India.
3	BAMMVC-103	Visual communication		To provide students with tools that would help them visualize and communicate. Understanding Visual communication as part of Mass Communication To acquire basic knowledge to be able to carry out a project in the field of visual communication To acquire basic knowledge in theories and languages of Visual Communication The ability to understand and analyze visual communication from a critical perspective
4	BAMMFC-104	Fundamentals of mass communication		To introduce students to the history, evolution and the development of Mass Communication in the world with special reference to India. To study the evolution of Mass Media as an important social institution. To understand the development of Mass Communication models. To develop a critical understanding of Mass Media. To understand the concept of New Media and Media Convergence and its implications.
5	BAMMCA-105	Current Affairs		To provide learners with overview on current developments in various fields. To generate interest among the learners about burning issues covered in the media To equip them with basic understanding of politics, economics, environment and technology so that students can grasp the relevance of related news. Twenty minutes of newspaper reading and discussion is mandatory in every lecture
6	BAMMHM –	History of Media		Learner will be able to understand Media history through

	106			<p>key events in the cultural history</p> <p>To enable the learner to understand the major developments in media history.</p> <p>To understand the history and role of professionals in shaping communications.</p> <p>To understand the values that shaped and continues to influence Indian mass media.</p> <p>Learner will develop the ability to think and analyze about media.</p> <p>To sharpen the reading, writing, speaking and listening skills that will help the students to understand the development of Media</p>
7	BAMMEC-201	Effective communication –II		<p>To make the students aware of use of language in media and organization.</p> <p>To equip or enhance students with structural and analytical reading, writing and thinking skills.</p> <p>To introduce key concepts of communications.</p>
8	BAMMFC-202	Foundation course –II		<p>To introduce students to the overview of the Indian Society.</p> <p>To help them understand the constitution of India.</p> <p>To acquaint them with the socio-political problems of India.</p>
9	BAMMCW-203	Content Writing		<p>To provide students with tools that would help them communicate effectively.</p> <p>Understanding crisp writing as part of Mass Communication</p> <p>The ability to draw the essence of situations and develop clarity of thought.</p>
10	BAMMID-204	Introduction to Advertising		<p>To provide the students with basic understanding of advertising, growth, importance and types.</p> <p>To understand an effective advertisement campaigns, tools, models etc.</p> <p>To comprehend the role of advertising , various departments, careers and creativity</p> <p>To provide students with various advertising trends, and future.</p>
11	BAMMIJ-205	Introduction to Journalism		<p>To help media students to acquaint themselves with an influential medium of journalism that holds the key to opinion formation & to create awareness.</p> <p>The subject includes evolution of printing press. The student learns about reporting, editing and how to write an article. It also gives knowledge about qualities of a modern journalist.</p>
12	BAMMMGC-206	Media, Gender & Culture		<p>To discuss the significance of culture and the media industry.</p> <p>To understand the association between the media, gender and culture in the society.</p> <p>To stress on the changing perspectives of media, gender and culture in the globalised era.</p>

Sr. no.	Course Code	Title of the Course	Course Credit	Course Outcome
1	BAMMC TMC-3012	Theatre and Mass Communication-I		Individual and team understanding on theatrical Arts, Taking ownership of space, time, story-telling, characterization and kinaesthetic, Shaping young students' minds through expression of their perception, creating awareness of their role and place

				in society, their responsibilities and possibilities
2	BAMMC CCPR-302	Corporate Communication and Public Relations		<p>To provide the students with basic understanding of the concepts of corporate communication and public relations.</p> <p>To introduce the various elements of corporate communication and consider their roles in managing media organizations.</p> <p>To examine how various elements of corporate communication must be coordinated to communicate effectively in today's competitive world.</p> <p>To develop critical understanding of the different practices associated with corporate communication with the latest trends and social media tools.</p>
3	BAMMC MS- 303	Media Studies		<p>To provide an understanding of media theories</p> <p>To understand the relationship of media with culture and society</p> <p>To understand Media Studies in the context of trends in Global Media</p>
4	BAMMC IP- 304	Introduction to Photography		<p>To introduce to media learner the ability of image into effective communication.</p> <p>To help the learner understand that media photography is a language of visual communication and is far beyond just point and shoot fun moments.</p> <p>To practice how picture speaks thousand words by enlightening the learner on how.</p> <p>To develop the base of visualisation among learners in using pictures in practical projects.</p> <p>To help learner work on given theme or the subject into making a relevant picture or photo feature.</p>
5	BAMMC FCO- 305	Film Communication-I		<p>To inculcate liking and understanding of good cinema.</p> <p>To make students aware with a brief history of movies; the major cinema movements.</p> <p>Understanding the power of visuals and sound and the ability to make use of them in effective communication.</p> <p>Insight into film techniques and aesthetics.</p>
6	BAMMC CMM-306	Computers and Multimedia-I		<p>To help learners make media industry ready. This will help learners to be aware of the minimum requirement of the software when stepping out in the industry.</p> <p>To introduce the media softwares to make the learners understand what goes behind the scene and help them choose their stream.</p> <p>To prepare learners skilled enough for independency during project papers in TY sem VI.</p> <p>To help learners work on small scale projects during the academic period.</p>
7	BAMMC TMC- 4012	Theatre and Mass Communication-II		<p>Direction and the works, developing an eye for details</p> <p>Deeper understanding of theatre and how it has evolved to create human connections</p> <p>Understanding the role theatre plays as a medium of mass communication in development of society</p>
8	BAMMC WEM-402	Writing and Editing for Media		<p>Provide the ability to understand writing styles that fit various media platforms.</p> <p>It would help the learner acquire information</p>

				<p>gathering skills and techniques.</p> <p>On completion of this course, students will be able to understand similarities and differences in writing for all forms of media including internet and digital.</p> <p>The learner will gather knowledge of different news and copy formats along with appropriate style-sheets and layout.</p> <p>The learner will imbibe the importance of writing clearly, precisely and accurately for different types of audiences</p> <p>Provide acquire basic proficiency in proof-reading and editing.</p>
9	BAMMC MLE-403	Media Laws and Ethics		<p>To provide the learners with an understanding of laws those impact the media.</p> <p>To sensitize them towards social and ethical responsibility of media.</p>
10	BAMMC MMR-404	Mass Media Research		<p>To introduce students to debates in Research approaches and equip them with tools to carry on research</p> <p>To understand the scope and techniques of media research, their utility and limitations</p>
11	BAMMC FCO-405	Film Communication II		<p>Awareness of cinema of different regions.</p> <p>To understand the contribution of cinema in society and how to make technically and grammatically good films.</p> <p>The students learn everything from making to marketing of films, Economic aspects of film and careers in films.</p>
12	BAMMC CMM-406	Computer Multimedia II		<p>To help learner be media industry ready. This will help learners to be aware of the minimum requirement of the software when stepping in the industry.</p> <p>To introduce the media soft wares to make the learner understand what goes behind the scene and help them choose their stream.</p> <p>To prepare learner skilled enough for independency during project papers in TY sem.VI.</p> <p>To help learners work on small scale projects during the academic period.</p>
Sr. No.	Course Code	Title of the Course	Course Credit	Course Outcome
1.	27301	Advertising in contemporary Society		Students will be taught Ethics and rules that are to be followed while creating and publishing an advertisement in Indian market and Global market. Importance and functioning of different voluntary and non-voluntary organization like AAAI and ASCI and its importance will be taught.
2.	UBMMA505	Advertising Design		Designing of different mediums of advertisements, right and ethical way of creating advertisements will be taught. How to create influential advertisements that appeal people and create an impact on their minds is taught.
3.	27309	Media planning and Buying		A mix of different components and factors that are essential while planning and buying of media (modes of advertisements) and how to increase your reach to a larger target audience in a limited budget will be taught.
4.	27303	Copywriting		Students will be taught how to write a copy for the purpose of publicity or promotion for an

				advertisement. Vocabulary, Skills and word carpentry essential for making a good copy will be taught with the help of various activities.
5.	27307	Consumer Behaviour		The students will learn about buying behaviour of an individual and groups as well, concepts related to emotional and cultural behaviours and how they influence the society and their behaviours are made clear.
6.	27306	Brand Building		Various important factors that create, impact and influence a brand and activities that take place while building a brand/company, how does it deal with its internal public and its external public by being ethical in every aspect will be taught.
7.	55601	Advertising and Marketing Research		In this subject, the learners acquaint knowledge of the research which is mandatory in the contemporary society before implementing the advertising or marketing plan for the clients
8.	55611	Contemporary issues		To sensitise students to the environment around them ¼ Developing a perspective towards issues related to the marginalized sections of the society
9.	55605	Financial Management for marketing & Advertising		To acquaint the students with the knowledge of account settling, managing finances and keeping records of the profits and losses of the company.
10.	55609	The Principles & practice of Direct Marketing		To learn and understand : ¼ What Direct marketing is, including direct marketing terminology ¼ How direct marketing differs from “traditional marketing” ¼ Direct marketing techniques
11.	55603	Legal environment & Advertising ethics		To provide a perspective on the Legal Environment in India. ¼ To guide students of media through the various ethics connected to Advertising. ¼ Maharashtra state centric cases to be discussed in class as the situation demands.
12.	55607	Agency Management		¼ To expose students to the business of advertising ¼ To familiarize students with the different aspects of running an ad agency
13.	55613	Digital Media		Understand digital marketing platform Understand the key goals and stages of digital campaigns Understand the use of key digital marketing tools Learn to develop digital marketing plans

Sr. No.	Course Code	Title of the Course	Course Credit	Course Outcome
1.		Indian regional Journalism		History of Indian media and how it developed, Roots and pioneers of Indian Regional newspapers other than English newspapers will be discussed and students will be taught in detail about the current situation of Indian Regional media and its influence over people and how has it developed over the years.
2.		Journalism and Public Opinion		Impacts of news i.e. journalism on people and different ways in which it influences opinions of an individual or society as a whole and different ways to analyze the impact of the media and public opinion on socio political issues will be taught to students
3.		Features and Opinion		The students will understand the differences between reporting and feature writing. They will also learn various skills necessary for interviewing, writing features, opinion

				and other soft stories.
4.		Reporting		Students will be taught about reporting, its types and importance. Ethics and Fundamentals of reporting will also be taught with respect to various situation that a journalist has to face.
5.		Newspaper and Magazine Making		Students will get familiar to various important aspects like the design, elements of the newspaper & magazine and space distribution while designing it using different software. The process of planning and production of newspaper and magazine will be explained to students with practical activities.
6.		Editing		Importance of Editing, different ways and formats to edit and its usage in modern times will be explained with different activities and projects.
7.		Broadcast Journalism		Students will be explained the importance of regional journalism, the skills and techniques to investigate news stories and use of camera and sound in broadcast format.
8.		Business and Magazine Journalism		tools of business journalism and an overview of the economy will be explained in detail, Different types of magazines and its importance from journalism point will be discussed.
9.		Internet and Issues in Global Media		Students will be taught about the impacts of the global media, its evolution and structure. The role of new media will be taught in detail.
10.		News Media Management		Students will be made aware about the responsibilities, structure and functioning of responsibilities of an organization, Students will have gained a perspective on the evolution of media in the last 25 years and on key current trends.
11.		Press Laws and Ethics		Students will be taught true ethics of Journalism, Laws made for journalism and why is it important to be ethical in this field.
12.		Contemporary Issues		Students will be made familiar to environmental, political, economic and social concerns and issues, they will be guided and explained about human rights and the problems, challenges and its implications on development.
13.		Digital Media		The importance of alternate to media, digitalized media and journalism will be made familiar to students, Challenges to international journalism with increase in digital technology will be discussed.

DEPARTMENT OF POLITICAL SCIENCE

- **Programme Specific Outcomes:**

On successful completion of the BA in Political Science (BA) program, the student will be able to –

- Demonstrate their understanding of the Constitution of India and Political Process in India.
- Enhance theoretical knowledge in the major theories and concepts of political science
- Demonstrate the understanding about the role and responsibilities of a citizen and the relationship between citizen and state
- Conceptualize various foundational theories in International Relations with special emphasis on foreign policy of India.
- Explain the basic features of Indian and Western political thoughts

- **Course Outcomes:**

Course Code	Title of the course	Course credit	Course outcome
	FYBA	8 (4 per semester)	<ol style="list-style-type: none">1) To help the learners to acquaint with the theory and practice of constitutionalism in India.2) To help the learners to develop constitutional perspective to understand political system of India.3) To introduce the learners with the history of the making of Indian Constitution.4) To orient the learners about rights and duties of citizens under the constitution.5) To familiarize and acquaint with the functioning of executive, legislature and judiciary; and their mutual relationship.6) To help the learners to understand the changing nature of federal system in India.7) To understand the party politics and electoral process in India.8) So, explore social dynamics involving caste, religion and gender behind functioning of Political system in India.9) To understand and analyze the challenges to national security in India with reference to criminalization, Naxalism and global terrorism.
	SYBA- PAPER-II	6 (3 Per Semester)	<ol style="list-style-type: none">1) To introduce the learners to traditional and contemporary approaches to political theory.2) To familiarize the learners with theory of State, Nation, Civil Society, Market.3) Understand the basic concepts of Power, Authority, Legitimacy, Law, Political Obligation and Right to Resist.4) Understand the discourse on rights in political science.5) To introduce to political values of liberty, equality and justice.6) To develop the theory and practice of democracy.7) Acquaint the students with the contemporary debates across the ideologies of Marxism, Fascism and Feminism.

	SYBA- PAPER-III	6 (3 Per Semester)	<ol style="list-style-type: none"> 1) To introduce the learner to the discipline of public administration. 2) To acquaint with theories of administration. 3) To study basic principles of organization. 4) Students acquaint with concept of governance and its increasing significance in the era of Globalization 5) To introduce the learner to evolution of Indian administration since British rule. 1) To understand the recruitment system of Indian Administration. 2) To understand the financial administration of India. 3) To understand issues of integrity, corruption and citizen participation in Indian administration.
	TYBA- PAPER –IV	8 (4 Per Semester)	<ol style="list-style-type: none"> 1) Students help to identify and conceptualize the Major issues in the International Relations 2) Students help to identify the major national/international actors engaged in dealing with these issues at various levels in international Politics 3) Understand to the Nature and emerging trends of India's Foreign Policy. 4) Students acquaint with the domestic and international security concerns 5) Understand of the relations of India with neighboring countries and major powers in the world
	TYBA- PAPER –V	8 (4 Per Semester)	<ol style="list-style-type: none"> 1) To understand the major western philosophical traditions in study of politics. 2) To study the contribution of Machiavelli, John Locke, J.S. Mill, John Rawls, Karl Marx, Antonio Gramsci, Simon-de-Beauvoir and Will Kymlicka 3) Understand the Political Ideas, views and concerns of leading Indian thinkers. 4) To familiarize with richness of political ideas within discourses on nationalism, democracy and social transformations in pre and post-independence India, their need for modern society.
	TYBA- PAPER –VI	6 (3 Per Semester)	<ol style="list-style-type: none"> 1) Student familiarize with the historical basic information, analytical framework the formation of Maharashtra State 2) Students understand the changes and the new trends in Maharashtra Politics 3) Understand important issues in Current Maharashtra Politics.
	TYBA- PAPER –VII	8 (4 Per Semester)	<ol style="list-style-type: none"> 1) To make students aware of interaction and connectedness between society and political system. 2) To understand the analytical categories of caste, class, gender; and theoretical concepts of power, legitimacy and hegemony. 3) To understand the theories of political culture, political socialization and political participation
	TYBA- PAPER VIII	8 (4 Per Semester)	<ol style="list-style-type: none"> 1) To make students aware about American Political System 2) To make them understand systemic comparison of two constitutional systems 3) To understand influence of Non-State actors on the political system

	TYBA- PAPER –IX	6 (3 Per Semester)	To understand <ol style="list-style-type: none"> 1) electoral system in the Parliament setup 2) importance of free and fair election 3) Operational challenges of electoral system 4) Importance of electoral reforms
--	--------------------	--------------------------	---

DEPARTMENT OF PSYCHOLOGY

- **Programme Specific Outcomes:**

- BA Psychology provides immense career options to the students such as consultant psychologist in hospitals, career counsellors, counselling psychologists, Human Resource professionals, Teaching, NGO set up professionals etc.
- Graduation in psychology helps to develop a student's concept knowledge, Psychology as a field and its scope and psychological testing which provides a strong foundation to pursue psychology at PG level and in many other professional courses in psychology like diplomas courses, social work
- Students graduating with a degree in Psychology will know the intricacies of human thought and behaviour thereby making them sensitive, empathic and better humans
- Students with a degree in Psychology will be able to interpret, design and conduct basic psychological research
- Students graduating with a degree in Psychology will know and apply ethical standards in scientific research

- **Course Outcomes:**

Class	Course	Outcomes
FYBA	Paper I Fundamentals of Psychology	<ol style="list-style-type: none"> 1. Students develop knowledge and understanding of the basic concepts and modern trends in Psychology. 2. Students develop interest in the subject of Psychology and develop a foundation for further studies in Psychology. 3. Students are aware of the applications of Psychological concepts in different areas of day to day life.
SYBA	Paper II Social Psychology	<ol style="list-style-type: none"> 1. Students develop knowledge and understanding of the basic concepts and modern trends in Social Psychology. 2. Students develop interest in Social Psychology as a field of study and research among students. 3. Students are aware of the applications of the various concepts in Social Psychology in the Indian context
SYBA	Paper III Developmental Psychology	<ol style="list-style-type: none"> 1. Students develop knowledge and understanding of the basic concepts, principles, perspectives and modern trends in Developmental Psychology 2. Students develop interest in Developmental Psychology as a field of study and research among students. 3. Students are aware of the implications and applications of the various concepts, principles and theories of Developmental Psychology in daily life in the Indian context
SYBA	Health Psychology (Applied component)	<ol style="list-style-type: none"> 1. Students develop understanding of the basic concepts and modern trends in Health Psychology. 2. Students develop interest in Health Psychology as a field of study and research among students. 3. Students are aware of the practical applications of the various concepts in Health Psychology in the Indian context.
TYBA	Paper IV Psychological Testing and Statistics:	<ol style="list-style-type: none"> a) The learner will – <ol style="list-style-type: none"> 1. develop knowledge and understanding of the nature, uses, technical features, and the process of construction of psychological tests. 2. develop awareness about measurement of intelligence and

		<p>assessment of personality</p> <p>3. be equipped with the knowledge about the concepts in Statistics and the various measures of Descriptive Statistics - their characteristics, uses, applications and methods of calculation.</p> <p>b) The learner will build a firm foundation, which will be helpful for advanced learning of Psychological Testing, Assessment and Statistics in postgraduate studies.</p>
	Paper V Abnormal Psychology	<p>a). The learner will</p> <p>1. Develop an understanding of the basic concepts and theories of Abnormal Psychology.</p> <p>2. develop insight into various forms of Psychological Disorders – their symptoms, causes, along with the process of diagnosis and treatment.</p> <p>3. become more sensitised and equipped to deal with various issues related to Mental Health in society.</p> <p>b). The learner will build foundational knowledge of Abnormal Psychology which will help the learner for higher education and also to pursue a professional career in Clinical Psychology</p>
	Paper VI Industrial/Organizational Psychology:	<p>1. Learners will be able to</p> <p>a) describe the scope of I/O Psychology and careers related to I/O Psychology.</p> <p>b) list and describe the basic concepts of I/O Psychology.</p> <p>c) critically discuss issues related to I/O Psychology.</p> <p>2. Learners will have built a sufficient foundation in I/O Psychology to pursue postgraduate studies and/or careers related to I/O Psychology</p>
	Paper VII Cognitive Psychology	<p>a). The learner will</p> <p>1. develop understanding of the basic concepts and theories of Cognitive Psychology.</p> <p>2. develop insight into theoretical aspects of cognitive processes</p> <p>b). The learner will build foundational knowledge of Cognitive Psychology which will help the learner for higher education and also to pursue a professional career in any of the several areas of Psychology</p>
	Paper VIII Practicals in Cognitive and psychological Testing:	<p>Students will be able to</p> <p>1. Translate theoretical concepts into application-based experiments.</p> <p>2. Conduct experiments following standardized procedure.</p> <p>3. Apply statistical tests and analyze the data collected.</p> <p>4. Write reports on research conducted using APA format.</p> <p>5. Make sense of the research papers on any given topic</p>
	Paper IX Counseling Psychology	<p>Students will be able</p> <p>1. identify unique features of Counselling as a profession.</p> <p>2. understand the process to be followed while helping people and roles and responsibilities of the counselor.</p> <p>3. identify key ingredients necessary for successful helping.</p> <p>4. understand micro-skills required to practice Counselling.</p> <p>5. understand theoretical foundations underlying different counselling and psychotherapeutic approaches and critically evaluate the strengths, limitations associated with each of them.</p> <p>6. feel motivated to seek further training to practice Counselling</p>

DEPARTMENT OF SINDHI

- **Program Specific Outcomes:**

- Students will be able to apply critical and theoretical approaches to the reading and analysis of literary and cultural texts in multiple genres by understanding the evolution of criticism and its application in language and literature
- Students will be able to comprehend variety of prose and poetry in Sindhi Literature to enrich their understanding through various textual perspectives
- A greater understanding of the human communicative action through an objective study of language will help the students to apply their knowledge of Sindhi language to improve active listening, speaking, reading and writing skills.

- **Course Outcomes:**

COURSE CODE	TITLE OF THE COURSE	OBJECTIVE	OUTCOME
FYBA UBA 1.48	SINDHI (COMPLUSORY)	<ol style="list-style-type: none"> 1. To acquaint students with the characteristics of various literary genres 2. To develop analytical silks and critical thinking through close reading of literary texts 3. To cultivate appreciation of language as an artistic medium and to help them understand the importance of forms, elements and style that shape literary works. 	<ol style="list-style-type: none"> 1) To write clearly coherently and effectively about various genres of Sindhi literature. 2) To recognize the culture and context of the work of literature in Sindhi
FYBA UBA1.9	SINDHI (ANCILLARY)	<ol style="list-style-type: none"> 1. To enhance language proficiency by providing adequate exposure to reading and writing skills 2. To orient the learners towards the functional aspects of language. 	<ol style="list-style-type: none"> 1) Students will be able to understand the process of communication and its effect on giving and receiving information.
SYBA UASI301	Classical Poetry & Modern Poetry	<ol style="list-style-type: none"> 1. To familiarize the students with the major representative poets of every age and movements therein 2. To help them study different genres of poetry in the context of socio-cultural background of the age 	<ol style="list-style-type: none"> 1) Will be acquainted poetry with a variety of historic periods 2) They will recognize the rhymes, metric s and other musical aspects of poetry
SYBA UASI402	Language and its Description & Functions of Language.	<ol style="list-style-type: none"> 1. To understand the concept of style in literature and language 2. To understand the concept of discourse and the principles of discourse analysis 3. To understand the impact of stylistics analysis. 	<ol style="list-style-type: none"> 1) To expose to range of contexts where the language is used to meet a variety of real life. 2) To focus on readability teach-ability and testability to think beyond the text.
TYBA	Origin and	<ol style="list-style-type: none"> 1. To introduce the learners to 	<ol style="list-style-type: none"> 1) To become an effective

97008	Development of Sindhi Language and Grammar	wide range of critical methods and literary theories.	Sindhi Literature Teacher 2) To help Sindhi Literature students to develop Sindhi Communication Skills. 3) To help students to get the Jobs in Sindhi Linguistic Minority Institute. 4) To Understand the Concept of Business by learning Sindhi Literature at the International & National market as many of businessman are sindhi.
97038	History of Sindhi Literature from the Beginning up to 1947	2. To familiarize the students with major representative poets of every age and movements therein.	
97073	Applied Nature related to core papers	3. To help them study different genres of poetry in the context of socio- cultural background of the age.	
97108	Principles of Poetry 1798 A.D On Wards And Poet	4. To introduces students to Sindhi Literature since beginning up to 1947	
97140	Principles of Literary Criticism	5. To introduce the learners to important critical terms.	
97173	Applied Nature)Classical and Modern Poetry	6. To train students to develop skills for a critical and analytical understanding of the text	
TYBCOM 23138	Literature in Sindhi	1. To acquaint students with the characteristics of various literary genres 2. To develop analytical silks and critical thinking through close reading of literary texts 3. To cultivate appreciation of language as an artistic medium and to help them understand the importance of forms, elements and style that shape literary works.	1. To write clearly coherently and effectively about various genres of Sindhi literature. 2. To recognize the culture and context of the work of literature in Sindhi

DEPARTMENT OF SOCIOLOGY

- **Program Specific Outcomes:**

- After completion of Degree course Students get job in private sector,
- Some students pursue higher education (PG) like MA in sociology & MA in Social work
- Some students try for competitive examinations like UPSC, MPSC, Railway Recruitment Exams

- **Course Outcomes:**

Sr. No.	Paper	Outcomes
1)	Foundations Of Sociology	This Course work will help learners to understand: 1. The emergence of Sociology and its relationship with other sciences 2. And define the nature and importance of Social Institutions 3. The influence of Culture on the society 4. The process of Socialization in the development of individuals in the society
2)	Fundamentals Of Sociology	This Course work will help you to understand: 1. The context and theoretical approaches that influences Social Interaction 2. The evolutionary processes and the organizing principles of Social Stratification 3. The nature and forms of deviant behaviour and the methods of Social Control
SYBA		Outcomes
1)	Indian Society: Structure And Change	1. After learning this course students will understand complex social structure of Indian Society 2. Students shall develop understanding co-existence of different groups and communities.
2)	Emerging Issues And Concerns In Indian Contemporary Society	This course will help the student to understand: 1. The demographic variable that influence structure of the Society. 2. The environmental concerns of the society today. 3. Sensitization and create awareness with regards to health care system. 4. Critically evaluate the meaning of justice and the role of the criminal justice system of the country.
3)	Sociology Of Development	1. Students shall be able to understand what is economic development and social development. 2. Students will understand development in Indian Context.
4)	Emerging Fields In Sociological Studies	1. To create awareness among the students about various media challenges. 2. To critically analyze the new trends in Education. 3. To provide information to the students about the laws and policies of urban governance. 4. To understand the growing numbers and concerns of the ageing community.
TYBA		Outcomes
1)	Theoretical Sociology	1. Students should be able to explain social problems and issues in lieu of their Understanding of sociological theory 2. Theoretical sociological knowledge will help students to critically evaluate.

		3. Help students to make theoretically- informed recommendations to address social problems.
2)	Sociology Of Work	<p>1.The Course will help the students to get proper jobs for themselves and keep in pace with recent developments like automation.</p> <p>2. The students will also understand the values of work ethics, work culture, decent work etc.</p> <p>3. The course further helps the students to respect decent work Agenda and assist the seniors in implementing the same in their organizations.</p>
3)	Sociology Of Gender	<p>The learner will be able to:</p> <p>1. An understanding of the debates that have shaped the discourse on gender</p> <p>2. An enhanced understanding of perspectives both global and local</p>
4)	Sociology Of Human Resource Development	<p>The learner will be able to:</p> <p>1. To create an awareness of the various issues involved in the development of human resources with particular emphasis on social and cultural factors.</p> <p>2. To familiarise students and the recruitment and selection process</p> <p>3. To understand the importance of network and building an image of the company</p>
5)	Urban Sociology	<p>The learner will be able to:</p> <p>1. Students will be able to explain the various concepts nature and dynamics of urbanization in India.</p> <p>2. Students will be able to reflect on theoretical perspectives in urban Sociology</p>
6)	Quantitative Social Research	<p>This course will help learners –</p> <p>1. To appreciate the nature and significance of social research</p> <p>2. To learn about the basic tools and techniques in social research</p> <p>3. To equip themselves to conduct and analyse simple research projects</p>

LEARNING OUTCOMES

FACULTY OF COMMERCE

Link to Syllabus Page on the University of Mumbai Website:
<https://mu.ac.in/syllabus#1548829931222-2e1d42b6-4304>

(Note: This compilation is based on the information provided by the Head of the Departments.)

DEPARTMENT OF ACCOUNTANCY

- Programme Specific Outcomes:**

After completing the program student will be able to:

- PSO1: get a working knowledge in respected of Financial Accounting, Cost Accounting, Management Accounting, Auditing and Taxation.
- PSO2: learn relevant accounting career skills, applying both quantitative and qualitative knowledge to their future careers in finance.
- PSO3: acquire practical skills to work as tax consultant, audit assistant and other financial supporting services.
- PSO4: demonstrate progressive learning of various tax issues and tax forms related to individuals.
- PSO5: identify, analyze and solve the problems of various issues in accounting and finance through different tools and techniques.
- PSO6: have analytical skills to critically evaluate the scope and importance of accounting information for effective decision making in business.

- Course Outcomes:**

Course Code	Title of the course	Course credit	Course outcome
First Year (Semester – I & II)			
UBCOMFSI.1	Accountancy and Financial Management – I	03	Be proficient in the financial accounting systems with specialized practical knowledge on preparing annual financial statement of a Manufacturing Organization ,understanding of assets, liabilities, capital and revenue expenditure & Hire purchase system,
UBCOMFSII.1	Accountancy and Financial Management - II	03	
Second Year (Semester – III)			
UBMSFSIII.1	Accountancy and Financial Management III	03	Be Proficient in Financial Accounting system of partnership firms also understand the concept of Conversion of Partnership firm into a Company
UBCOMFSIII.2.1	Financial Accounting and Auditing - Introduction to Management Accounting	03	Ability to analyze the financial statements of an enterprise using vertical approach and various techniques like Comparative statements, common size, trend analysis, ratios, and other management accounting techniques of working capital management, cash flow statement and Receivables management.
Second Year (Semester – IV)			
UBMSFSIV.1	Accountancy and Financial Management IV	03	Understanding Concept of redemption of Preference shares and Debentures and to understating calculation of claim in case of fire insurance.
UBCOMFSIV.2.1	Financial Accounting and Auditing - Auditing	03	Ability to understand basic concept of Auditing and SAP of Auditing. Understanding of various techniques of auditing .
Third Year (Semester – V)			
23101	Financial Accounting and	04	This course aims to enlighten the students on the accounting procedures followed by the Companies. To

	Auditing VII - Financial Accounting		enable the students to be aware on the Corporate Accounting in conformity with the provision of the Companies Act.
23107	Financial Accounting and Auditing VIII - Cost Accounting	04	Ability to understand basic concept of cost , various elements of cost and preparation of cost sheet.
23115	Direct & Indirect Taxation Paper I	03	Ability to calculate taxable income of an individual and file the income tax returns independently.
<i>Third Year (Semester – VI)</i>			
83001	Financial Accounting and Auditing IX - Financial Accounting	04	Understanding Concept of Amalgamation , absorption and liquidation in case of companies also understanding of accounting in case of Foreign transaction in convergence with Accounting Standards issued by ICAI.
83007	Financial Accounting and Auditing X - Cost Accounting	04	Ability to understand various techniques of costing like marginal costing, process costing , standard costing and Contract costing.
83015	Direct and Indirect Taxation Paper II	03	Ability to calculate various types of GST and learn to calculate GST of business organization..

DEPARTMENT OF BCBI

- **Programme Specific Outcomes:**

- Students are gaining Professional and depth knowledge about banking industry.
- Students get well-versed knowledge about financial markets also
- This course helps in fostering financial literacy knowledge.

- **Course Outcomes:**

Course code	Title of the course	Course credit	Course outcome
FYBCBI (Sem I)			
UBIFSL.1	EMFS	03	Giving the knowledge about financial system of the country.
UBIFSL.2	PRINCIPLES OF MANAGEMENT	03	Impart knowledge about management practices.
UBIFSL.3	FINANCIAL ACCOUNTING-II	03	Knowledge about financial accounting practices
UBIFSL.4	BUSINESS COMMUNICATION-II	03	Developing the personality of students by communication in effective manner
UBIFSL.5	FOUNDATION COURSE-I	02	Sensitize students towards social issues and gender equity.
UBIFSL.6	BUSINESS ECONOMICS-I	03	To study about Indian economics.
UBIFSL.7	QUANTATIVE METHODS-I	03	Developing mathematical skills.
SEM II			
UBIFSL.1	PPBI	03	Imparting knowledge about principles and practices of B & I
UBIFSL.2	BUSINESS LAW	03	Imparting knowledge about laws governing B & I
UBIFSL.3	FINANCIAL ACCOUNTING-II	03	Imparting knowledge about financial practices relating to business.
UBIFSL.4	BUSINESS COMMUNICATION-II	03	Giving knowledge to students about letter writing and communication.
UBIFSL.5	FOUNDATION COURSE-II	02	Developing the students knowledge with basics of social values.
UBIFSL.6	ORGANIZATIONAL BEHAVIOUR	03	Imparting knowledge about organisational behaviour
UBIFSL.7	QUNANTATIVE METHODS-II	03	How to apply stastical methods while investment and financial management
SYBCBI (SEM III)			
UBIFSIII.1	FINANCIAL MANAGENT-I	03	How to do analysis and interpretation of financial statements.
UBIFSIII.2	MANAGEMENT ACCOUNTING	03	How to represent the financial statements to make policy decisions by managers
UBIFSIII.5	MUTUAL FUND MANAGEMENT	03	To give training about awareness about capital market and investing in the same.
UBIFSIII.6	IT IN BANKING AND INSURANCE	-03	To develop technological awareness among students.

UBIFSIII.7	FOUNDATION COURSE-III	02	Giving the students knowledge of banking and insurance rules and regulations.
UBIFSIII.8	FINANCIAL MARKETS	03	Students learn about Indian financial system and finance
UBIFSIII.9	DIRECT TAXATION	03	To get knowledge about taxation laws and where they are applicable
SEM IV			
UBIFSIV.1	FINANCIAL MANAGEMENT-II	03	Giving knowledge about how to apply financial practices in business.
UBIFSIV.2	COST ACCOUNTING	03	How to control over the cost and to find the cost per unit of production.
UBIFSIV.5	CUSTOMER RELATIONSHIP MANAGEMENT	03	Imparting information about how to satisfy the customer by giving offers.
UBIFSIV.6	INFORMATION TECHNOLOGY IN BANKING & INSURANCE-II	03	To develop technological knowledge among students
UBIFSIV.7	FOUNDATION COURSE-IV	02	Impart knowledge about different types of Insurance in market and how it works.
UBIFSIV.8	CORPORATE AND SECURITIES LAW	03	Give knowledge about corporate laws.
UBIFSIV.9	BUSINESS ECONOMICS-II	03	Imparting knowledge about national income and its impact on growth and development of nation.
TYBCBI (SEM V)			
44301	INTERNATIONAL BANKING&FINANC E	04	Imparting knowledge about the impact of currency difference on the business
44302	RESEARCH METHODOLOGY	04	To inculcate the knowledge of research and how the research work is done.
44303	FINANCIAL REPORTING & ANALYSIS	03	How to make financial statements of Banking & Insurance Co. as per regulation Act.
44304	AUDITING-I	03	Providing the information about Auditing of
44305	STRATEGIC MANAGEMENT	03	Impart knowledge about management practices and strategy formulation
44306	FINANCIAL SERVICES MANAGEMENT	03	Impart knowledge about services and capital market
Sem VI			
85501	CENTRAL BANKING	04	Impart knowledge about the central banking system in India and its role
85502	SECURITY AND PORTFOLIO MANAGEMENT	03	Impart knowledge about how to do practical analysis of securities before investment is done by investors
85503	AUDITING-II	03	Imparting knowledge about accountants, professionalism, ethics, rules and regulations relating to auditing.
85504	HUMAN RESOURCE MANAGEMENT	03	Imparting knowledge about human resource practices and the challenging role

			of HR manager
85505	TURNAROUND MANAGEMENT	03	How to recover sick company by different methods
UBIFS VI.8	PROJECT WORK-I	04	Develop Research abilities

DEPARTMENT OF BFM

- **Programme Specific Outcomes:**

After completing the programme B.Com. (Financial Markets) , the student should be able to:

- PSO1: Acquire skills needed to develop and simulate live market conditions, trading, and investment software so that they are market-ready.
- PSO2: Understand the field of Financial Market by way of interaction, projects, presentations, industrial visits, practical training, job orientation, and placements.
- PSO3: Aspired to make a career in the ever-evolving and growing field of the Financial Market.
- PSO4: Perceive higher professional education and research work related to Financial Market

- **Course Outcomes:**

FYBFM SEM-I				
Sr. No.	Sub. Code	Nomenclature	Credit point	Course outcome
1	UFMFSI.1	Financial Accounting – I	3	1) To familiarize the students with the basic accounting principles and techniques of preparing and presenting the accounts 2) This course provides the underlying framework & concepts of financial accounting , in the context of how accounting fits into overall business environment of contemporary society
2	UFMFSI.2	Introduction to Financial System	3	1) To explore knowledge about Financial System. 2) To understand various avenues of investments.
3	UFMFSI.3	Business Mathematics	3	1. This course prepares students to learn to apply commonly used mathematical concepts and statistical methods in business contexts and how to interpret analyses performed by others 2. To equip the student with a broad based knowledge of mathematics with emphasis on business application
4	UFMFSI.4	Business Communication – I	3	1) Get exposure to business writing, preparation of reports and presentations. 2) To develop basic communication skills in the students and enable them to communicate appropriate & responsibly in the corporate and social world

5	UFMFSI.5.1	Foundation Course – I	2	<ol style="list-style-type: none"> 1) To sensitize the students regarding numerous social issues 2) The course deals with creating basic awareness amongst the students regarding various social issues ranging from gender, religion, caste, social justice etc.
6	UFMFSI.6	Business Environment	3	<ol style="list-style-type: none"> 1) To understand how internal and external environment affecting business activities. 2) To know about importance of business components.
7	UFMFSI.7	Business Economics – I	3	<ol style="list-style-type: none"> 1. To have a grasp over the General Principles of Economics 2. To prepare students to apply the various theories and principles of Economics in Business and Commercial Environments
FYBFM SEM-II				
Sr. No.	Sub. Code	Nomenclature	Credit Point	Course outcome
1	UFMFSII.1	Financial Accounting – II	3	<ol style="list-style-type: none"> 1) To provide comprehensive understanding of all aspects relating to the presentation of financial statements of companies. 2) This course provides comprehensive understanding of corporate accounting practices and presentation of financial statements as per legal requirements in the organizations
2	UFMFSII.2	Principles of Management	3	<ol style="list-style-type: none"> 1) To introduce the theory and practice of management and its development phases till date. – 2) To discover, nourish and nurture managerial traits and talents among the students. – 3) To enable students to learn about business management and its development 4) – Inculcating basic management principles and application 5) This course is designed to introduce the theory and practice of management& business organization
3	UFMFSII.3	Business Statistics	3	<ol style="list-style-type: none"> 1. This course prepares students to learn to apply commonly used mathematical concepts and statistical methods in business contexts and how to interpret analyses performed by others 2. Outcomes: To equip the student with a broad based knowledge of mathematics with emphasis on business application.

4	UFMFSII.5.1	Foundation Course – II	2	<ol style="list-style-type: none"> 1) To understand human rights 2) To understand concept of liberalization 3) To understand human behaviour 4) Students will be able to understand various concepts and theories of organizational behaviour to apply them in predicting and influencing individual and group behaviour in organizations
5	UFMFSII.4	Business Communication – II	3	<ol style="list-style-type: none"> 1) Get exposure to business writing, preparation of reports and presentations. – 2) Get hands on experience of group discussions, personal interview – 3) Basic knowledge of Verbal ability skills to help with competitive exams. 4) Outcomes: To develop advanced communication skills in the students and enable them to communicate appropriately in the corporate and social world
6	UFMFSII.6	Environmental Science	3	<ol style="list-style-type: none"> 1) The key issues covered in this course are life supporting resources and role of biodiversity, urbanization and associated problems, sustainable energy resources, environmental protection in Indian legal system, tools for pollution control and striving for a better environment and e- waste and its management. – 2) The students will benefit from this study and practice these in their daily life to make our planet to continue as a safe and healthy place to live in. 3) Outcomes: – The course aims to provide basic environmental awareness and tackle various current issues such as climate change
7	UFMFSII.7	Computer Skills – I	3	<ol style="list-style-type: none"> 1. Inculcates computer operating skills 2. Increase knowledge about information technology
SYBFM SEM-III				
Sr. No.	Sub. Code	Nomenclature	Credit Point	Course outcome

1	UFMFSIII.1	Debt Market – I	3	<ol style="list-style-type: none"> 1) This course helps to develop the relevant knowledge and understanding of fixed income instruments and interest rate models for students aiming for a career in the fixed income field. The course will provide an overview of the major institutions, organisations and investors, and the recent developments in fixed income, covering both theoretical background and practical implementation. 2) The course will take a closer look at the interdependencies and the roles of the different players in the debt markets. 3) In particular, it will examine the role of and the instruments available to the central bank in setting interest rates. 4) The major focus of the course will be on economic intuition and on understanding the products and interrelationships in the fixed income market
2	UFMFSIII.2	Equity Market – I	3	<ol style="list-style-type: none"> 1) To learn about basics of capital market. 2) Develop knowledge of primary and secondary market.
3	UFMFSIII.4	Portfolio Management	3	<ol style="list-style-type: none"> 1. To gain knowledge of different securities available for investment. 2. To understand the role of portfolio diversification. 3. To know how to measure risk and return of securities.
4	UFMFSIII.6	Business Law-I	3	<ol style="list-style-type: none"> 1) This course intends to make the students familiar with the essential laws governing various sectors of our economy. 2) To provide exposure to the students about Business Law 3) To provide them with the fundamental knowledge of the use of Law 4) To understand the various concepts & Acts governing the Indian Judiciary System
5	UFMFSIII.7.1	Foundation Course in Financial Markets FC-III Money Market	2	<ol style="list-style-type: none"> 1) To gain knowledge about Money Markets its instruments and its working 2) Understand the basic principles of Money Market 3) Identify various money market instruments 4) Knowledge about regulatory issues in money market

6	UFMFSIII.8	Management Accounting	3	<ol style="list-style-type: none"> 1. This course Provides understanding about how to measure the performance of company. 2. Helps in understanding the role of management accounting 3. To understand and interpretation of financial performance.
7	UFMFSIII.9	Computer Skills-II	3	<ol style="list-style-type: none"> 1. Students able to prepare presentation and analyze data using excel and other tools 2. Inculcates computer operating skills. 3. Increase knowledge about information technology

SYBFM SEM-IV

Sr. No.	Sub. Code	Nomenclature	Credit point	Course outcome
1	UFMFSIV.1	Debt Market-II	3	<ol style="list-style-type: none"> 1) To learn about fixed income securities. 2) To gain about valuation of fixed income securities.
2	UFMFSIV.2	Equity Market-II	3	<ol style="list-style-type: none"> 1) To understands technical and fundamental analysis of equity market. 2) Develop advance knowledge of equity market.
3	UFMFSIV.4	Merchant Banking	3	<ol style="list-style-type: none"> 1) To gain knowledge about services provided by merchant banks 2) To gain knowledge about regulation related to merchant bank.
4	UFMFSIV.6	Business Law-II	3	<ol style="list-style-type: none"> 1) To understand companies law 2013 2) To gain knowledge about securities law
5	UFMFSIV.7.1	Foundation Course in Financial Market FC-IV Foreign Exchange Markets	2	<ol style="list-style-type: none"> 4. Inculcates Forex trading 5. Increase knowledge about various currencies in forex market.
6	UFMFSIV.8	Corporate Finance	3	<ol style="list-style-type: none"> 1) To understand importance of finance for corporate. 2) To learn how to take financial decision with the help of different methods.
7	UFMFSIV.9	Business Economics-II	3	<ol style="list-style-type: none"> 1) To understand theory and issues of International Trade. 2) To know about the constituents of fiscal policy.

TYBFM SEM-V

Sr. No.	Sub. Code	Nomenclature	Credit Point	Course outcome
---------	-----------	--------------	--------------	----------------

1	UFMFSV.1	Marketing of Financial Services	3	<ol style="list-style-type: none"> 1. To know role of marketing in financial services. 2. To know the issues in marketing of services. 3. To understand importance of service marketing.
2	UFMFSV.2	Technical Analysis	3	<ol style="list-style-type: none"> 1) This course is designed to offer the basic understanding of Technical Analysis. The applicability of Technical analysis from Investment Prospective, its advantage over Fundamental Analysis. The course will acquaint the students with different Charting techniques, indicators and Oscillators. 2) Ability to apply technical analysis to different Asset Classes. 3) Ability to read and analyse- Bar, Line and Candle Stick Charts 4) Ability to analyse the Trend and make investment Decision based on the Chart analysis.
3	UFMFSV.3	Corporate Accounting	3	<ol style="list-style-type: none"> 1. To learn about the accounting for redemption of preference shares & debentures. 2. To learn about the incorporation of partnerships into companies.
4	UFMFSV.5	Direct Tax – Income Tax	3	<ol style="list-style-type: none"> 1. To understand the provision of determining residential status of individual. 2. To compute taxable income of individuals.

5	UFMFSV.7	Financial Derivatives	4	<p>1) This course is designed to offer the fundamental understanding and clear conceptual knowledge of Derivative Dealing. The course will establish a clear understanding about different Derivative products, their Global presence on exchanges and OTC as well, the pricing of derivative products. The course will further enlighten the students on the practical aspect of Trading and settlement of Futures and Options, different entities involved and their roles with Risk management systems.</p> <p>2) Creates understanding of Derivatives and its applicability.</p> <p>3) Creates understanding about Derivative trading terminologies and different models.</p> <p>4) Ability to understand whether a Derivatives contract is overpriced or underpriced.</p>
6	UFMFSV.8	Business Ethics and Corporate Governance	4	<p>1) To understand the importance of ethics</p> <p>2) To understand the role of corporate governance</p>

TYBFM SEM-VI

Sr. No.	Sub. Code	Nomenclature	Credit point	Course outcome
1	UFMFSVI.1	Venture Capital and Private Equity	3	<p>1. Understand the strategies of private equity firm.</p> <p>2. To know about importance of venture capital</p>
2	UFMFSVI.2	Mutual Fund Management	3	<p>1) To learn about the classifications and working of mutual fund.</p> <p>2) Understand the trading opportunities in mutual fund.</p>
3	UFMFSVI.3	Organisational Behaviour	3	<p>1) Gain knowledge about different types of personality</p> <p>2) Understand how to handle stress and conflict.</p>
4	UFMFSVI.5	Indirect Tax – GST	3	<p>1. To know about how is GST beneficial for the country.</p> <p>2. To understand what is the need of GST</p>
5	UFMFSVI.7	Risk Management	4	<p>1) Understand the various trading tools to hedge the risk.</p> <p>2) To learn how to manage risk management strategies.</p>
6	UFMFSVI.8	Project Work	4	

DEPARTMENT OF BCAF

- **Programme Specific Outcomes:**

After completing the programme B.Com. (Accounting & Finance) , the student should be able to:

- PSO1: Acquire skills needed to develop and simulate financial accounting concepts, cost accounting basics, taxation, management
- PSO2: Understand the field of Financial by way of interaction, projects, presentations, industrial visits, practical training and internships
- PSO3: Aspired to make a career in the finance
- PSO4: Perceive higher professional education and research work related to finance

- **Course Outcomes:**

FYBAF SEM 1

Course code	Title of the course	Course credit	Course outcome
UA_FFSI.1	Financial Accounting (Elements of Financial Accounting) I	03	Helps in basic concepts of accounts, accounting standards, basics of hire purchase.
UA_FFSI.2	Cost Accounting (Introduction and Element of Cost) I	03	Basic understanding of costs, types of costs, materials, labour and overheads.
UA_FFSI.3	Financial Management (Introduction to Financial Management) I	03	Helps in making investment decisions and raising of funds after considering cost and benefits
UA_FFSI.4	Business Communication I	03	Works towards development of the student with aspects like written correspondence, learning to overcome barriers in communication, listening skills and oral communication, presentation skills, building of confidence, public speaking.
UA_FFSI.5.1	Foundation Course I	02	This course is introduced with the purpose of imparting the importance of values and culture for the development and sustainability of a nation.
UA_FFSI.6	Commerce (Business Environment) I	03	Helps in understanding various aspects associated with business and in starting new venture
UA_FFSI.7	Business Economics I	03	Provides basic concepts of micro economics helps to develop analytical skills useful for students of commerce. It provides insight on production ,demand and cost concepts and behaviours

FYBAF SEM II

Course code	Title of the course	Course credit	Course outcome
UA_FFSII.1	Financial Accounting (Special	03	To give overview of specific accounting of branch, consignment, fire insurance and double entry.

	Accounting Areas) II		
UA_FFSII.2	Auditing (Introduction and Planning) I	03	Provides knowledge of basics in verifying the books of accounts and duties of auditor in the instances of various types of errors and frauds.
UA_FFSII.3	Innovative Financial Services	03	Helps in gaining insights of different financial services that have remained in dim light in the minds of upcoming generation
UA_FFSII.4	Business Communication II	03	This course is more practical based focussing on overall personality development of the student with oral communication, presentation skills, building of confidence, interview skills, and group discussions public speaking.
UA_FFSII.5.1	Foundation Course II	02	The course focuses on making student aware of aspects in practical life regarding Human rights, management of stress , conflicts and impact of globalisation ,privatisation and liberalisation
UA_FFSII.6	Business Law (Business Regulatory Framework) I	03	Educates the learner towards the basic laws of the land pertaining to their practical application in the field of commerce. The course is intended to impart basics of Contract Act, Sale Of Goods Act, and Negotiable Instruments Act And Consumer Protection Act, required for a commerce student.
UA_FFSII.7	Business Mathematics	03	The course helps the student develop mathematical skills relating to calculation of ratio and proportion, interest and annuity, shares and mutual funds valuation and also calculation of profit and loss of business.

SYBAF SEM III

Course code	Title of the course	Course credit	Course outcome
UA_FFSIII.1	Financial Accounting (Special Accounting Areas) III	03	It covers basics of partnership accounts, amalgamation and conversion of firms, foreign currency transaction.
UA_FFSIII.2	Cost Accounting (Methods of Costing) II	03	It covers methods of cost, cost classification, cost sheet, contract costing, and process costing.
UA_FFSIII.4	Taxation II (Direct Taxes Paper I)	03	It covers direct tax, detailed knowledge of heads of income, deductions, GTI
UA_FFSIII.6	Information Technology in Accountancy I	03	Provides understanding of various emerging tools and technologies and ease provided to business due to introduction of electronic techniques.
UA_FFSIII.7.1	Foundation Course in Commerce (Financial Market Operations) - III	02	The course focuses on the various aspects of financial system and its importance in the development of an economy. It covers aspects regarding all the components of a financial system, as well as the contemporary aspects of the financial markets.
UA_FFSIII.8	Business Law (Business Regulatory Framework) II	03	The course is intended to impart basics of Partnership Act, LLP Act and Factories Act required for a commerce student. Educates the learner towards the basic laws of the land

			pertaining to their practical application in the field of commerce.
UA_FFSIII.9	Business Economics II	03	Helps in making economic analysis by providing in-depth knowledge of various aspects of economy like National Income, Demand and Supply, Trade Cycles, Union Budget and more

SYBAF SEM IV

Course code	Title of the course	Course credit	Course outcome
UA_FFSIV.1	Financial Accounting (Special Accounting Areas) IV	03	This gives detailed knowledge related to company accounts, final account of company, redemption, shares, debentures, branches.
UA_FFSIV.2	Management Accounting (Introduction to Management Accounting)	03	Introduces the aspects required by managers in the field of accounts for presentation, tabulation, interpretation and analysis of data for decision making with the help of various tools like, Cash flow analysis, Working capital requirements and Ratio analysis.
UA_FFSIV.4	Taxation III (Direct Taxes II)	03	It covers provisions of TDS, Clubbing, taxation of firm, DTAA
UA_FFSIV.6	Information Technology in Accountancy II	03	Provides understanding of various emerging tools and technologies and ease provided to business due to introduction of electronic techniques.
UA_FFSIV.7.1	Foundation Course in Commerce (Introduction to Management) - IV	02	Provides a deeper outlook of various functions of managing the big sized organisations.
UA_FFSIV.8	Business Law (Company Law) III	03	The course is intended to impart basics of Company's Act 2013 with the objective of helping the learner to know the practical application of the laws in the field of commerce.
UA_FFSIV.9	Research Methodology in Accounting and Finance	03	Provides a base of conducting the research and things to be considered before starting actual research.

TYBAF SEM V

Course code	Title of the course	Course credit	Course outcome
44801	Financial Accounting -V	03	This subject gives an understanding of underwriting of shares debentures, liquidation, internal reconstruction, buy back.
44802	Financial Accounting - VI	03	It covers specific accounting special accounting for banking, insurance company, non banking financial cos, LLP
44803	Cost Accounting III	03	Detailed knowledge of methods of costing, operating costing, Uniform costing, process cost, integrated and non integrated system
44804	Financial Management II	03	Provides knowledge of managing the credit sales in company, planning the capital structure and techniques of selecting the best

			project for investment.
44806	Taxation IV (Indirect Taxes II)	04	Understanding of basic concepts of GST, Levy, calculation, registration
44809	Management II (Management Applications)	04	The course is intended to impart skills with a view to help practical applications of the managerial functions and theories professed by various management experts. the course covers Production management, Promotion Management, Financial Management and Human Recourse Management.

TYBAF SEM VI

Course code	Title of the course	Course credit	Course outcome
85601	Financial Accounting - VII	03	Special accounting for electricity cos, mutual fund, cooperative society, investment accounting.
85602	Cost Accounting IV	03	Cost techniques, budgetary, marginal, standard costing, decision making
85603	Financial Management III	03	Helps in making decisions of dividend policy, analysis of mutual funds and aspects on foreign exchange management.
85604	Taxation V (Indirect Taxes III)	03	GST and customs act are covered. GST payment, returns, FTP
85607	Economics Paper III (Indian Economy)	04	The course imparts knowledge regarding the current scenario of the country in terms of sectors contributing to development and the policies developed by the government for the same. It also studies the role of India in various international organisations.
UA_FFSVI.8	Project Work II	04	Project is of 100 marks. To give a experience of research or internship. Project can be based on research or internship.

DEPARTMENT OF COMMERCE AND BUSINESS MANAGEMENT

- Programme Specific Outcomes:**

- PSO1: Ability of understand the concepts used in Business
- PSO2: Develop Managerial skills to be used in Business
- PSO3: Undertake Marketing research to address various Marketing issues
- PSO4: Apply knowledge and set up business thereby generating employment and contributing to economic growth
- PSO5: Awareness about various ethical concerns to be addressed in the business

- Course Outcomes:**

Course code	Title of the course	Course credit	Course outcome
FYBCOM	<u>Commerce I & II</u> <u>(Introduction to Business & Service sector)</u>	03	<ol style="list-style-type: none"> 1. To familiarize the students with basic concepts of business & Service sector. 2. To develop knowledge and understanding of business & Service sector. 3. To make students aware of current trends in business & service sector.
SYBCOM	<u>Commerce III & IV</u>	03	<ol style="list-style-type: none"> 1. To make the learners aware about conceptual knowledge and evolution of Management & Production Management, Inventory Management & Quality Management 2. To provide basic knowledge of Indian Financial System 3. To familiarize the learners about the functions of Management, the recent trends in Management & Finance
	<u>Advertising</u>	03	<ol style="list-style-type: none"> 1. To highlight the role of advertising for the success of brands and its importance within the marketing functions of a company. 2. It aims to orient learners towards the practical aspects and techniques of advertising. 3. To lay down foundation for advanced post-graduate courses in advertising.
	<u>Company Secretarial Practice (CSP)</u>	03	<ol style="list-style-type: none"> 1. To provide the learners an insight about Company Secretarial Practices. 2. To make the learners understand the role of Company Secretary towards Company's statutory provisions, rules and regulations. 3. To make the learners understand the various aspects of Company Management, meetings and reports
	<u>Field Sales Management (FSM)</u>	03	<ol style="list-style-type: none"> 1. To understand the concept of Field Sales Management 2. To make learners aware about practical implications of Sales Management

TYBCOM	Commerce V & VI	03	<ol style="list-style-type: none"> 1. To make the learners aware about conceptual knowledge and evolution of Marketing & Human Resource Management 2. To make the learners understand the various aspects of Marketing and Human Resource Management 3. To familiarize the learners about the functions of Management, the recent trends in Marketing & Human Resource Management.
	<u>Marketing Research</u>	03	<ol style="list-style-type: none"> 1. To understand the role of Research in making marketing decisions 2. To understand the process of marketing research 3. To be familiar with both print and electronic sources of secondary data 4. To exhibit an understanding of qualitative and quantitative research methods and their application to marketing research
	<u>Export Marketing</u>	03	<ol style="list-style-type: none"> 1. To acquaint students with India's export Marketing potential. 2. To make them aware about the practical significance of Export Marketing. 3. To give them conceptual understanding and clarity of terminology used in Export Marketing.
	<u>BM paper Management and organization development</u>	03	<ol style="list-style-type: none"> 1. To enable the students to obtain the knowledge and skills required in the field of organization and management. 2. To enable the students to understand the importance of management, management thoughts and its relevance. 3. To acquaint students with different concepts of management like MBO, MBE, MIS etc.
	<u>BM paper II Financial Management Sem V and VI</u>	03	<ol style="list-style-type: none"> 1. It enables the students to understand the acquisition and use of funds by business organization. 2. It enables the students to understand the methods and devices used in analysis of financial statements, which can be used by firms depending upon the nature of information required. 3. It makes the students to learn ratio analysis by which the relationship of items or groups of items in the financial statements are computed, determined and presented. 4. Students would become familiar with the techniques used in capital budgeting. 5. They would understand the need and importance of working capital management. 6. They would understand the basic principles of

Business Law

• **Course Outcomes:**

Course Code	Title of the Course	Course Credit	Course outcome
A) SYBCom. III	Business Law	03 per/sem.	<ul style="list-style-type: none"> ➤ To impart the basic knowledge of different types of contract. ➤ To learn the different Negotiable Instruments for transfer of value in terms of money. ➤ To know the sale transaction of moveable property.
B) SYBCom. IV	Business Law	03 per/sem.	<ul style="list-style-type: none"> ➤ To impart knowledge of different types of business like company, partnership and Limited Liability Partnership. ➤ To help students to know the various rights of a consumer and redressal of consumer before District Forum, State Commission and National Commission.

LEARNING OUTCOMES

FACULTY OF SCIENCE

Link to Syllabus Page on the University of Mumbai Website:
<https://mu.ac.in/syllabus#1548848029418-4f01e655-210d>

(Note: This compilation is based on the information provided by the Head of the Departments.)

DEPARTMENT OF BIOTECHNOLOGY

- Programme Specific Outcomes:**

- Learner should be strong in his/her basic concepts of biotechnology as a science both theoretically and practically.
- Should be aware of the history of science, especially biology, which led to the advancement of the subject.
- Learner should have developed an interest in the subject because of the exposure to subject related competitions, seminars, workshops and conferences
- Learner should have a scientific aptitude and a spark to be able to conceive a promising career in science.

- Course Outcomes:**

BSc BIOTECHNOLOGY

SEMESTER I			
COURSE CODE	COURSE TITLE	COURSE CREDIT	COURSE OUTCOME
USBT101	BASIC CHEMISTRY-I	2	For Sem I and Sem II Strengthen the basic concepts in each of the courses i.e. in chemistry, life sciences and Biotechnology (both theoretically and practically) Also imbibe a social responsibility in them by the social topics covered in the societal awareness course
USBT102	BASIC CHEMISTRY-II	2	
USBT103	BASIC LIFE SCIENCES-I : BIODIVERSITY AND CELL BIOLOGY	2	
USBT104	BASIC LIFE SCIENCES-II : MICROBIAL TECHNIQUES	2	
USBT105	BASIC BIOTECHNOLOGY-I : INTRODUCTION TO BIOTECHNOLOGY	2	
USBT106	BASIC BIOTECHNOLOGY-II : MOLECULAR BIOLOGY	2	
USBT107	SOCIAL AWARENESS	2	
USBT101 , USBT102 , USBT103	PRACTICALS OF USBT101, USBT102, USBT103, USBT104, USBT105, AND USBT106	6	
SEMESTER-II			
COURSE CODE	COURSE TYPE	COURSE CREDITS	COURSE OUTCOME
USBT201	CHEMISTRY-I : BIOORGANIC CHEMISTRY	2	For Sem I and Sem II Strengthen the basic concepts in each of the courses i.e. in chemistry, life sciences and Biotechnology (both theoretically and practically) Also imbibe a social
USBT202	CHEMISTRY-II : PHYSICAL CHEMISTRY	2	
USBT203	LIFE SCIENCES-I : PHYSIOLOGY	2	

	AND ECOLOGY		responsibility in them by the social topics covered in the societal awareness course
USBT204	LIFE SCIENCES-II : GENETICS	2	
USBT205	BIOTECHNOLOGY-I : TISSUE CULTURE & SCIENTIFIC WRITING AND COMMUNICATION SKILLS	2	
USBT206	BIOTECHNOLOGY-II : ENZYMOLOGY, IMMUNOLOGY AND BIOSTATISTICS	2	
USBT207	GLOBALIZATION, ECOLOGY, AND SUSTAINABLE DEVELOPMENT	2	
USBT201, USBT202, USBT203, USBT204, USBT205, AND USBT206	PRACTICALS OF USBT201, USBT202, USBT203, USBT204, USBT205, AND USBT206	6	

SEMESTER III

COURSE CODE	COURSE TITLE	COURSE CREDIT	COURSE OUTCOME
USBT301	BIOPHYSICS	2	For Sem III and Sem IV Introduce students to the concepts of Cell biology and cytogenetics as well as research methodology, thus imparting the concept of basic research methodology and introducing the fundamentals of research In sem IV, the fundamentals of Biostatistics and Bioinformatics is introduced. In addition the students are required to understand the concept of entrepreneurship, thus setting the platform for future entrepreneurs
USBT302	APPLIED CHEMISTRY-I	2	
USBT303	IMMUNOLOGY	2	
USBT304	CELL BIOLOGY AND CYTOGENETICS	2	
USBT305	MOLECULAR BIOLOGY	2	
USBT306	BIOPROCESS TECHNOLOGY	2	
USBT307	RESEARCH METHODOLOGY	2	
USBT301	PRACTICALS OF USBT_301 AND USBT_302		
USBT303	PRACTICALS OF USBT_303 AND USBT_304	2	
USBT305	PRACTICALS OF USBT_305 AND USBT_306	2	

SEMESTER-IV

COURSE CODE	COURSE TITLE	COURSE CREDITS	COURSE OUTCOME
USBT401	BIOCHEMISTRY	2	For Sem III and Sem IV Introduce students to the concepts of Cell biology and cytogenetics as well as research methodology, thus imparting the concept of basic research methodology and introducing the
USBT402	APPLIED CHEMISTRY-II	2	
USBT403	MEDICAL MICROBIOLOGY	2	
USBT404	ENVIRONMENTAL	2	

	BIOTECHNOLOGY		fundamentals of research In sem IV, the fundamentals of Biostatistics and Bioinformatics is introduced. In addition the students are required to understand the concept of entrepreneurship, thus setting the platform for future entrepreneurs
USBT405	BIostatISTICS AND BIOINFORMATICS	2	
USBT406	MOLECULAR DIAGNOSTICS	2	
USBT407	ENTERPRENEURSHIP DEVELOPMENT	2	
USBTP401	PERACTICALS OF USBT_401 AND USBT_40		
USBTP402	PERACTICALS OF USBT_403 AND USBT_404	2	
USBTP403	PERACTICALS OF USBT_405 AND USBT_406	2	

SEMESTER V			
COURSE CODE	COURSE TITLE	COURSE CREDIT	COURSE OUTCOME
USBT501	CELL BIOLOGY	2.5	Sem V: Advanced knowledge on medical microbiology and cell biology makes students understand the depth of these subjects. Instrumentation, genomics and mol. Biological concepts makes them understand the applications of the subject
USBT502	MEDICAL MICROBIOLOGY & INSTRUMENTATION	2.5	
USBT503	GENOMES AND MOLECULAR BIOLOGY	2.5	
USBT504	MARINE BIOTECHNOLOGY	2.5	
USBTP 501 + 502	CELL BIOLOGY + MEDICAL MICROBIOLOGY & INSTRUMENTATION	3.0	
USBTP 503 + 504	GENOMES AND MOLECULAR BIOLOGY + MARINE BIOTECHNOLOGY	3.0	
APPLIED COMPONENT	BIOSAFETY	2.0	
APPLIED COMPONENT (P)	BIOSAFETY	2.0	

SEMESTER-VI			
COURSE CODE	COURSE TITLE	COURSE CREDITS	COURSE OUTCOME
USBT601	BIOCHEMISTRY	2.5	Sem VI: Students are exposed to advanced topics like neurochemistry and pharmacology. Topics of industrial microbiology enables the students to understand the
USBT602	INDUSTRIAL MICROBIOLOGY	2.5	
USBT603	PHARMACOLOGY AND NEUROCHEMISTRY	2.5	

USBT604	ENVIRONMENTAL BIOTECHNOLOGY	2.5	actual working in industry. Marine biotechnology and agricultural biotech gives them a view of applications and vast scope of biotechnology. A live project done individually by students exposes them to basics of how to define a research problem, do literature search, write a research proposal, design and plan experiments, execute research projects, interpret and analyse results and draw conclusions based on which scientific discussions and deliberations can be conducted. They also get trained to presents their research work in the form of a ppt as well as encouraged to publish their work in the form of posters or papers
USBTP 601 + 602	BIOCHEMISTRY & INDUSTRIAL MICROBIOLOGY	3.0	
USBTP 603 + 604	PHARMACOLOGY-NEUROCHEMISTRY AND ENVIRONMENTAL BIOTECHNOLOGY (50M) + PROJECT WORK (50M)	3.0	
APPLIED COMPONENT	AGRIBIOTECHNOLOGY	2.0	
APPLIED COMPONENT (P)	AGRIBIOTECHNOLOGY	2.0	

MSc BIOTECHNOLOGY:

- Programme Specific Outcomes:**

1. The learner will be well versed in all the theoretical and practical concepts of Biotechnology.
2. The learner would be equipped for their future be it in research or in other areas like entrepreneurship.
3. The learner will be also well trained in the practical aspects such that his/her knowledge is in vogue with the current trends in the Indian as well as International scenario.
4. The learner would be more confident in communication skills and writing as well as be a mature citizen of the nation, capable of independent decision making, with high moral values and ethics. He/she will be a responsible citizen fully aware of the Biosafety norms essential for product, personnel and environment safety and will strive to keep this world a more safer place.

- Course Outcomes:**

SEMESTER I

COURSE CODE	TITLE	COURSE CREDIT	COURSE OUTCOME
PSBT 101	Biochemistry	4	Learner will be knowledgeable about various physiological and metabolic aspects of the biological macromolecules
PSBT 102	Immunology	4	
PSBT 103	Cell Biology	4	Learner will know about immunological aspects of the biological system and would have gained knowledge regarding vaccines and its clinical aspects Learners will be aware of the dynamics and organization of cell, cellular signaling transport and trafficking, Cellular processes and genetic instability leading to cancer
PSBT 104	Emerging technologies and molecular diagnostics	4	
Practicals I, II, III and		8	Learner will be conversant with emerging technologies of

IV			genomics, proteomics and microscopy, as well as aware of modern and contemporary molecular diagnostic methods
----	--	--	---

SEMESTER II

COURSE CODE	TITLE	COURSE CREDIT	COURSE OUTCOME
PSBT 201	Bioinformatics and Biostatistics	4	Learners get exposed to various aspects of Bioinformatics tools and Biostatistics for analysis of complex biological data. They also learn about applications of Biotechnology in the agricultural and medical fields. The learner gets knowledge about industrial processes and manufacturing of Biotech product to make him industry ready. Finally, the IPR and Bioethics makes the learner a complete Biotechnologist by inculcating values, morals, ethics and rights for the inventions and innovations in this emerging field
PSBT 202	Plant and Animal Biotechnology	4	
PSBT 203	Bioprocess Engineering and technology	4	
PSBT 204	Intellectual property rights and Bioethics	4	
Practicals I, II, III and IV		8	

SEMESTER III

COURSE CODE	TITLE	COURSE CREDIT	COURSE OUTCOME
PSBT 301	Applied Virology and Microbiology	4	Learner will be knowledgeable about the new emerging diseases and their diagnosis, emerging environmental threats and problems and the solutions Biotechnology will offer. Learners will also become aware of the most promising future of medical field, Biologics and the future of human treatment.
PSBT 302	Environmental Biotechnology	4	
PSBT 303	Biologics and Regulatory Affairs	4	
PSBT 304	Molecular Enzymology and Enzyme Technology	4	
Practicals I, II, III and IV		8	

SEMESTER IV

COURSE CODE	TITLE	COURSE CREDIT	COURSE OUTCOME
PSBT 401	Nanobiotechnology	4	The learner will be well versed with the applications and diversity of emerging technologies like nanobiotechnology, omics. The drug discovery and clinical study chapters will make the learner aware of the process a drug or molecule goes through before it can be licenced, approved and sold in the market. The learner will be thorough in his scientific writing skill and will be with the least amount of training adaptable to the industry.
PSBT 402	OMICS & Systems Biology	4	
PSBT 403	Drug Discovery & Clinical Study	4	
PSBT 404	Scientific Writing & Food Biotechnology	4	
Practicals I, II, III and IV		8	

DEPARTMENT OF BOTANY

- **Programme Specific Outcomes:**

- To recognize and identify major groups of non-vascular and vascular plants and their phylogenetic relationships.
- To understand the phylogeny of plants and study various systems of classification.
- To explore the morphological, anatomical, embryological details as well as economic importance of algae, fungi, bryophytes, pteridophytes, gymnosperms and angiosperms.
- To understand physiological processes and adaptations of plants.
- To provide knowledge about environmental factors and natural resources and their importance in sustainable development.
- To be able to carry out phytochemical analysis of plant extracts and application of the isolated compounds for treatment of diseases.
- To be able to deal with all microbes and the technologies for their effective uses in industry and mitigation of environmental concerns.
- To explain how current medicinal practices are often based on indigenous plant knowledge and to get introduced to different perspectives on treating ailments according to ethnomedicinal principles.
- To understand patterns of heredity and variation among individuals, species and populations and apply principles for improvement of quality and yield.
- To be able to apply statistical tools to gain insights into significantly different data from different sources.
- To acquire recently published knowledge in molecular biology, such as rDNA technology; PTC and bioinformatics and their applications.

- **Course Outcomes:**

Course code	Title of the course	Course credit	Course outcome
USBO501	PLANT DIVERSITY – III	2.5 Credits	The students would be able : <ul style="list-style-type: none">• To gain knowledge about microbial diversity and techniques for culturing and visualization.• To understand the salient features of three major groups of algae, their life cycle patterns with a suitable example; to be able to identify them.• To learn the general characteristics and classification of two major groups of fungi along with life cycles of each group; to be able to identify them.• To understand the scope and importance of Plant Pathology and apply the concepts of various control measures of commonly widespread plant diseases.
USBO502	PLANT DIVERSITY – IV	2.5 Credits	The students would be able : <ul style="list-style-type: none">• To acquire knowledge of different fossil forms and understand their role in evolution.• To provide plant description, describe the morphological and reproductive structures of seven families and also identify and classify according to Bentham and Hooker's system.

			<ul style="list-style-type: none"> • To gain proficiency in the use of keys and identification manuals for identifying any unknown plants to species level. • To relate anomalies in internal stem structure with function and appreciate the salient features of the root stem transition zone. • To get exposure to pollen study and learn to apply it in various fields.
USBO503	FORM AND FUNCTIONS- II	2.5 Credits	<p>The students would be able :</p> <ul style="list-style-type: none"> • To acquire knowledge about two important organelles and molecular mechanisms of translation • To understand water relations of plants, inorganic and organic solute transport, and apply the knowledge to manage mineral nutrition and survival in challenging abiotic stresses. • To understand succession in plant communities and study remediation technologies in order to apply knowledge acquired for cleanup of polluted sites. • To get exposure to principles and techniques of plant tissue culture and apply these studies for improving agriculture and horticulture and to become an entrepreneur.
USBO504	CURRENT TRENDS IN PLANT SCIENCES – II	2.5 Credits	<p>The students would be able :</p> <ul style="list-style-type: none"> • To get exposure to the technique of mushroom cultivation and explore the possibility of entrepreneurship in the same. • To learn ethnobotanical principles, applications and utilize indigenous plant knowledge for the cure of common human diseases and improvement of agriculture. • To gain knowledge about the latest molecular biology techniques for isolation and characterization of genes. • To learn principles and application of commonly used techniques in instrumentation. • To gain proficiency in the monograph study and pharmacognostic analysis of six medicinal plants.
USBO601 2.5 Credits	PLANT DIVERSITY – III	2.5 Credits	<p>The students would be able :</p> <ul style="list-style-type: none"> • To identify, describe and study in detail the life cycles of three Bryophytes. • To and study in detail classification and general characters of three classes of Pteridophytes and identify as well as describe the life cycles of one example from each class. • To study evolutionary aspects and economic utilization of Bryophytes and Pteridophytes. • To identify, describe and study in detail the life cycles of three Gymnosperms.
USBO602	PLANT DIVERSITY – IV	2.5 Credits	<p>The students would be able :</p> <ul style="list-style-type: none"> • To study contribution of Botanical gardens, BSI to Angiosperm study and provide plant description, describe the morphological and reproductive

			<p>structures of seven families.</p> <ul style="list-style-type: none"> • To gain exposure to a phylogenetic system of classification. • To gain insight into the anatomical adaptations of different ecological plant groups. • To understand development plant of male and female gametophytes, embryonic structure and development. • To understand the different aspects and importance of Biodiversity and utilize them for conservation of species so as to prevent further loss or extinction of Biodiversity and preserve the existing for future generations.
USBO603	FORMS AND FUNCTION – III	2.5 Credits	<p>The students would be able :</p> <ul style="list-style-type: none"> • To study various plant biomolecular structures and appreciate the structures, role, functions and applications of enzymes. • To gain insight into the Nitrogen and plant hormone metabolism with applications of the same in agriculture and horticulture. • To understand principles of genetic mapping , mutations and solve problems based on them, gain knowledge of various metabolic disorders and their implications. • To generate and test hypotheses, make observations, collect data, analyze and interpret results, derive conclusions, and evaluate their significance within a broad scientific context, using suitable statistical techniques.
USBO604	Current Trends in Plant Science – II	2.5 Credits	<p>The students would be able :</p> <ul style="list-style-type: none"> • To gain insight into recent molecular biology techniques for DNA analysis and amplification and Barcoding techniques and applications therein. • To understand and apply tools of Bioinformatics for data retrieval and phylogenetic analysis. • To learn about the sources of economically important plants in the field of fats and oils and apply it for extraction, dealing with entrepreneurship in the field. • To gain knowledge and proficiency in preservation of post harvest produce and explore the possibility of entrepreneurship in the field.

University syllabus link: <http://old.mu.ac.in/wp-content/uploads/2016/06/4.26-T.Y.B.Sc.-University-Botany-Syllabus-2019-20-WORD-updated.pdf>

DEPARTMENT OF CHEMISTRY

- Programme Specific Outcomes:**

1. To infuse in the learner a spirit of inquiry into the fundamental aspects of the various core areas of Chemistry.
2. To make the learner capable of solving problems in the various units of the mentioned course
3. To give the learner an opportunity to get hands on experience of the various concepts and process in various branches of chemistry

- Course Outcomes:**

Class: FYBSC (Chemistry)

Sr. No.	Semester	Course Code	Title of Course	Course Credit	Course Outcome
1	Semester I	USCH101	Physical, Inorganic, Organic Chemistry	2	To introduce learner to some basic aspects in various core branches of Chemistry like Physical Chemistry, Inorganic Chemistry & Organic Chemistry
		USCHP1	Chemistry Practicals	2	
2		USCH102	Physical, Inorganic, Organic Chemistry	2	
		USCHP2	Chemistry Practicals	2	
3	Semester II	USCH201	Physical, Inorganic, Organic Chemistry	2	
		USCHP1	Chemistry Practicals	2	
4		USCH202	Physical, Inorganic, Organic Chemistry	2	
		USCHP2	Chemistry Practicals	2	

Class: SYBSC (Chemistry)

Sr. No.	Semester	Course Code	Title of Course	Course Credit	Course Outcome
1	Semester III	USCH301	Physical, Inorganic, Organic Chemistry	2	The syllabus is designed to retain the interest of the serious learner of Chemistry as well as be helpful to non-chemistry learners.
		USCHP1	Chemistry Practicals	1	
2		USCH302	Physical, Inorganic, Organic	2	For those students who would want to pursue other branches of science but would want to acquire a basic appreciation and

			Chemistry		experience of chemistry, a separate Analytical Chemistry Paper is designed.
		USCHP2	Chemistry Practicals	1	
3		USCH303	Analytical Chemistry	2	
		USCHP3	Chemistry Practicals	1	
4	Semester IV	USCH401	Physical, Inorganic, Organic Chemistry	2	
		USCHP1	Chemistry Practicals	1	
5		USCH402	Physical, Inorganic, Organic Chemistry	2	
		USCHP2	Chemistry Practicals	1	
6		USCH403	Analytical Chemistry	2	
		USCHP3	Chemistry Practicals	1	

Class: TYBSC (Chemistry)

Sr. No.	Semester	Course Code	Title of Course	Course Credit	Course Outcome
1	Semester V	USCH501	Physical Chemistry	2	This course will provide an insight into some of the fundamental concepts and Principles those are very essential in the study of chemistry. To learn atomic structure, basics of thermodynamics and the concept of equilibrium.
		USCHP01	Physical Chemistry Practicals	2	
2		USCH502	Inorganic Chemistry	2	The students will get training for systematic qualitative analysis and preparation & estimation of simple inorganic complexes.
		USCHP05	Inorganic Chemistry Practicals	2	
3		USCH503	Organic Chemistry	2	To understand the basic concepts and mechanism in organic chemistry, To know stereochemistry and various possible conformations of organic compounds and how it affects the reaction outcome, To be familiarize with the important photochemical reactions in Organic Chemistry, To learn the separation and purification of an organic mixture by chemical/physical separation methods.
		USCHP09	Organic Chemistry Practicals	2	

4		USCH504	Analytical Chemistry	2	This course will provide an insight into some of the fundamental concepts and principles of Analytical Chemistry.
		USCHP13	Analytical Chemistry Practicals	2	
5		USACDD501	Drugs and Dyes	2	In this course, the synthesis and usefulness of different dyes is discussed. This course further deals with the structural determination, synthesis and uses of some drugs.
		USACDD5P1	Drugs and Dyes Practicals	2	
6		USCH601	Physical Chemistry	2	To get an overview about the structure and properties of solid crystals and liquid crystals, to know the characterisation of crystals using X-Ray diffraction, to learn the important aspects of gaseous state and electrochemistry, to study the principle, instrumentation and applications of diffraction method, fluorescence spectroscopy, atomic spectroscopy & electroanalytical techniques Enable the students to determine the various physical properties using simple instrumental methods like polarimetry, refractometry etc.
		USCHP02	Physical Chemistry Practicals	2	
7	Semester VI	USCH602	Inorganic Chemistry	2	To understand the applicability of group theory in coordination chemistry, to know the utility of spectroscopic methods such as IR, Raman, EPR and Mossbauer techniques for the characterisation of inorganic complexes, to understand the photochemistry of inorganic compounds, to introduce the students the emerging field of nanochemistry and its fascinating aspects, to study the acid –base concept in non-aqueous media and reactions in non-aqueous media
		USCHP06	Inorganic Chemistry Practicals	2	
8		USCH603	Organic Chemistry	2	To get a brief idea about emerging branches in chemistry like supramolecular chemistry, nanochemistry, medicinal chemistry, polymer chemistry & its applications, to learn the principles of green chemistry and to know the various green protocols in organic synthesis, to study the important stereoselective transformations in organic synthesis, to know the basic aspects of natural product chemistry, to get an overview about research process and to gain the ability to apply various research methods
		USCHP10	Organic Chemistry Practicals	2	
9		USCH604	Analytical	2	<ul style="list-style-type: none"> To get a basic idea about

10		USCHP14	Chemistry Analytical Chemistry Practicals	2	<p>polarography, its theory and applications</p> <ul style="list-style-type: none"> To get basic knowledge about amperometry and its applications in various titration curves To get an outline about the types as ligands for chelating agents and various types of complex metric titrations To learn about estimation of hardness of water through complex metric titrations To know about the various radio analytical methods for learning the reaction rates, the age of the materials, to develop tracers for various organs and tissues To obtain a detailed knowledge about Atomic absorption spectroscopy for studying the concentration of various elements To study about the stages of thermal degradation patterns of materials using TGA & DTA techniques
		USACDD605	Drugs and Dyes	2	In this course, the synthesis and usefulness of different dyes & drugs is discussed. This course further deals with the synthesis of the same.
		USACDD6P1	Drugs and Dyes Practicals	2	

Class: M.Sc. (Chemistry)
Sem-I & Sem-II

Sr. No.	Semester	Course Code	Title of Course	Course Credit	Course Outcome
1	Semester I	PSCH101	Physical Chemistry		To learn the concepts of the activity coefficients and electrochemical cell. To learn the determination of IR and Raman activity of vibrational modes in non linear molecules □□To study selection rules for electronic transitions.
		PSCHP101	Physical Chemistry Practicals		
2		PSCH102	Inorganic Chemistry		To learn about bonding in polyacids, inorganic polymers, formation, factors that affect stability of complexing stereo isomerism of inorganic complexes and crystal field theory and its limitations.
		PSCHP102	Inorganic Chemistry Practicals		
3		PSCH103	Organic Chemistry		<ul style="list-style-type: none">To learn the concept

		PSCHP103	Organic Chemistry Practicals		<p>stereochemistry and its importance</p> <ul style="list-style-type: none"> To know what is aliphatic nucleophilic substitution To understand the various types of aliphatic nucleophilic substitution To learn what is aromatic substitution reaction To familiarize the various types of aromatic substitution reaction and their Mechanism To understand the concept & various types of aromaticity To learn the stereochemistry substitution and aromaticity To learn familiar name reactions, to identify the stereochemical notation
4		PSCH104	Analytical Chemistry		<p>To learn about several methods of analytical techniques. This course gives detail knowledge to the student about the analysis of statistical data they got through from different chemical experiment. Data analysis is very important for modern chemical sciences. This course gives a detail knowledge to the student about the analysis of statistical data they got through from different chemical experiment.</p>
		PSCHP104	Analytical Chemistry Practicals		
5	Semester II	PSCH201	Physical Chemistry		<ul style="list-style-type: none"> To study the theory of Debye Huckel rule, limitations and its applications. To know the structure of electrical double layers of Helmholtz, perrin-guoy-chapman. To know the adsorption of electrolyte interface. To practice the mechanism of hydrogen and oxygen evolution reaction. To study the Butler Volmer equation for one step and multi step electron transfer reaction
		PSCHP201	Physical Chemistry Practicals		

					<ul style="list-style-type: none"> To study symmetry elements and symmetry operations To know the orthogonality theorem and its consequences
6		PSCH202	Inorganic Chemistry		<ul style="list-style-type: none"> To know the structure and bonding in molecules / ions and predict the structure of molecules / ions. To learn the periodic properties of the different groups of compounds focusing on production methods and application of selected elements and compounds. To know the different definitions of acids / bases and predict the reactions between acids and bases
		PSCHP202	Inorganic Chemistry Practicals		
7		PSCH203	Organic Chemistry		<ul style="list-style-type: none"> To learn the mechanism of addition and elimination reaction, oxidation of methylene to carbonyl, oxidation of aryl methanes, allylic oxidation of olefins, reduction and coupling reaction. To get a clear picture about the nucleophilic and electrophilic groups To learn the addition reactions which are happening through the nucleophiles and electrophiles To learn about the addition reactions between a hetero atom and double bonded carbon compounds To gain knowledge about some specific compounds like Grignard reagents, nitrenes etc To obtain an outline about elimination reactions and rules used to study elimination reactions To learn about some specific examples of elimination reactions
		PSCHP203	Organic Chemistry Practicals		

					<ul style="list-style-type: none"> • To learn the basic mechanism of oxidation in organic compounds • To acquire knowledge about the reagents which causes oxidation in various compounds • To learn about the two types of reduction reactions like complete reduction and selective reduction • To know the reagents that causes selective and complete reduction
8		PSCH204	Analytical Chemistry		<ul style="list-style-type: none"> • To get a basic idea about polarography, its theory and applications • To use the polarographic technique for studying the chemical equilibrium and rates of reactions in solutions • To get basic knowledge about amperometry and its applications in various titration curves • To study about applications of cyclic voltammetry in electron transfer reactions • To get an outline about the types as ligands for chelating agents and various types of complex metric titrations • To know about the various radio analytical methods for learning the reaction rates, the age of the materials, to develop tracers for various organs and tissues • To obtain a detailed knowledge about Atomic absorption spectroscopy for studying the concentration of various elements • To study about the stages of thermal degradation patterns of materials using TGA and DTA techniques
		PSCHP204	Analytical Chemistry Practicals		

Class: M.Sc. (Chemistry)
Sem-III & Sem-IV

Sr. No.	Semester	Course Code	Title of Course	Course Credit	Course Outcome
1	Semester III	PSCH301	Theoretical Organic Chemistry-I		<ul style="list-style-type: none"> To impart the students a thorough knowledge about the chemistry of some selected functional groups with a view to develop proper aptitude towards the study of organic compounds and their reactions.
		PSCH3P1	Practicals		
2		PSCH302	Synthetic organic Chemistry-I		<ul style="list-style-type: none"> Synthesis of organic reaction is itself involves a large part of organic chemistry. This is called synthetic organic chemistry. This is discussed in a simple way for some simple molecule to the students. This includes fragmentation and retrosynthetic analysis and also finding synthon or reactive starting molecule of a target molecule.
		PSCH3P2	Practicals		
3	Semester III	PSCH303	Natural Products and spectroscopy		<ul style="list-style-type: none"> To impart the students thorough idea in the chemistry of carbohydrates, heterocyclic compounds, amino acids, proteins and nucleic acids. To study the fundamentals of terpenoids, alkaloids, vitamins, lipids and steroids. To determine the structure is very important for organic chemist. Various spectroscopic methods are available like NMR, IR, UV absorption spectroscopies are few of them. The students are given a very preliminary idea on in this course.
4		PSCHOEC-I 304	Medical Biogenesis and Green Chemistry		<ul style="list-style-type: none"> To understand the connection at the chemical level between all matter and will develop your inquiry based activities to explore best practices related to organic farming and resource management. □□To about the advance technology in green

					chemistry <ul style="list-style-type: none"> □□How they impact the human body, to develop your particular interests on the topic. □□To describe how Green chemistry and sustainability developments affect society, the environment and economic development □□To explain how Green chemistry and sustainability relates to problems of societal concern
5		PSCHOEC-II 305	Biorganic Chemistry		Not Applicable
6	Semester IV	PSCHO401	Theoretical Organic Chemistry-II		<ul style="list-style-type: none"> To enable the students to understand and study Organic reaction mechanisms.
		PSCHO4P1	Practicals		
7		PSCHO402	Synthetic organic Chemistry-II		<ul style="list-style-type: none"> Synthesis of organic reaction is itself involves a large part of organic chemistry. This is called synthetic organic chemistry. This is discussed in a simple way for some simple molecule to the students. This includes fragmentation and retrosynthetic analysis and also finding synthon or reactive starting molecule of a target molecule.
		PSCHO4P2	Practicals		
8		PSCHO403	Natural Products and Heterocyclics		<ul style="list-style-type: none"> Heterocyclic compounds are very interesting due to their distinct structure and the availability of this kind of heterocyclic structures in medicinal drugs. So the technique of synthesis of heterocyclic compounds is important in the synthesis of different drugs. This course gives the quantitative ideas about the synthesis, properties and uses of such heterocyclic compounds like pyrole, pyridine quonolene, thiophene, furan etc.
9		PSCHOOC-I 404	Intellectual Prop. Rights and Cheminformatics		Not Applicable

10		PSCHOOC-II 404	Research methodology		<ul style="list-style-type: none"> To get an overview about research process and to gain the ability to apply various research methods and techniques.
----	--	----------------	----------------------	--	---

DEPARTMENT OF COMPUTER SCIENCE

• **Programme Specific Outcomes:**

At the end of three year Bachelor of Computer Science the students will be able:

- To formulate, to model, to design solutions, procedure and to use software tools to solve real world problems
- To design and develop computer programs/computer -based systems in the areas such as networking, web design, security, cloud computing, IoT, data science and other emerging technologies
- To familiarize with the modern-day trends in industry and research based settings and thereby innovate novel solutions to existing problems.
- To apply concepts, principles, and theories relating to computer science to new situations
- To use current techniques, skills, and tools necessary for computing practice
- To apply standard Software Engineering practices and strategies in real-time software project development
- To pursue higher studies of specialization and to take up technical employment.
- To work independently or collaboratively as an effective team member on a substantial software project
- To communicate and present their work effectively and coherently
- To display ethical code of conduct in usage of Internet and Cyber systems.
- To engage in independent and life-long learning in the background of rapid changing IT industry.

• **Course Outcomes:**

Course code	Title of the course	Course credit	Course outcome
USCS101	Computer Organization and Design	02	<ol style="list-style-type: none">1) To learn about how computer systems work and underlying principles2) To understand the basics of digital electronics needed for computers3) To understand the basics of instruction set architecture for reduced and complex instruction sets4) To understand the basics of processor structure and operation5) To understand how data is transferred between the processor and I/O devices
USCS102	Programming with Python- I	02	<ol style="list-style-type: none">1) Students should be able to understand the concepts of programming before actually starting to write programs.2) Students should be able to develop logic for Problem Solving.3) Students should be made familiar about the basic constructs of programming such as data, operations, conditions, loops, functions etc.4) Students should be able to apply the problem solving skills using syntactically simple language i.e. Python (version: 3.X or higher)
USCS103	Free and Open-source Software	02	<ol style="list-style-type: none">1) Upon completion of this course, students should have a good working knowledge of Open Source ecosystem, its use, impact and

Course code	Title of the course	Course credit	Course outcome
			importance. 2) This course shall help student to learn Open Source methodologies, case studies with real life examples.
USCS104	Database Systems	02	1) Students should be able to evaluate business information problem and find the requirements of a problem in terms of data. 2) Students should be able to design the database schema with the use of appropriate data types for storage of data in database. 3) Students should be able to create, manipulate, query and back up the databases.
USCS105	Discrete Mathematics	02	1) To provide overview of theory of discrete objects, starting with relations and partially ordered sets. 2) Study about recurrence relations, generating function and operations on them. 3) Give an understanding of graphs and trees, which are widely used in software. 4) Provide basic knowledge about models of automata theory and the corresponding formal languages.
USCS106	Descriptive Statistics and Introduction to Probability	02	1) Enable students to know descriptive statistical concepts 2) Enable study of probability concept required for Computer students
USCS107	Soft Skills Development	02	1) To know about various aspects of soft skills and learn ways to develop personality 2) Understand the importance and type of communication in personal and professional environment. 3) To provide insight into much needed technical and non-technical qualities in career planning. 4) Learn about Leadership, team building, decision making and stress management
USCSP101	Practical of USCS101 + USCS102	02	This module is to complement and achieve the objectives and outcomes outlined in the course USCS101 and USCS102
USCSP102	Practical of USCS103 + USCS104	02	This module is to complement and achieve the objectives and outcomes outlined in the course USCS103 and USCS104
USCSP103	Practical of USCS105 + USCS106	02	This module is to complement and achieve the objectives and outcomes outlined in the course USCS105 and USCS106
USCS201	Programming with C	02	1) Students should be able to write, compile and debug programs in C language. 2) Students should be able to use different data types in a computer program. 3) Students should be able to design programs involving decision structures, loops and functions.

Course code	Title of the course	Course credit	Course outcome
			4) Students should be able to explain the difference between call by value and call by reference 5) Students should be able to understand the dynamics of memory by the use of pointers. 6) Students should be able to use different data structures and create/update basic data files.
USCS202	Programming with Python – II	02	1) Students should be able to understand how to read/write to files using python. 2) Students should be able to catch their own errors that happen during execution of programs. 3) Students should get an introduction to the concept of pattern matching. 4) Students should be made familiar with the concepts of GUI controls and designing GUI applications. 5) Students should be able to connect to the database to move the data to/from the application. 6) Students should know how to connect to computers, read from URL and send email.
USCS203	Linux	02	1) Upon completion of this course, students should have a good working knowledge of Linux, from both a graphical and command line perspective, allowing them to easily use any Linux distribution. 2) This course shall help student to learn advanced subjects in computer science practically. 3) Student shall be able to progress as a Developer or Linux System Administrator using the acquired skill set.
USCS204	Data Structures	02	1) Learn about Data structures, its types and significance in computing 2) Explore about Abstract Data types and its implementation 3) Ability to program various applications using different data structure in Python
USCS205	Calculus	02	1) Understanding of Mathematical concepts like limit, continuity, derivative, integration of functions. 2) Ability to appreciate real world applications which uses these concepts. 3) Skill to formulate a problem through Mathematical modelling and simulation.
USCS206	Statistical Methods and Testing of Hypothesis	02	1) Enable students to know descriptive statistical concepts 2) Enable study of probability concept required for Computer students
USCS207	Green Technologies	02	1) Learn about green IT can be achieved in and by hardware, software, network communication and data centre operations. 2) Understand the strategies, frameworks,

Course code	Title of the course		Course credit	Course outcome
				processes and management of green IT
USCSP201	Practical of USCSP201 + USCSP202	02		This module is to complement and achieve the objectives and outcomes outlined in the course USCSP201 and USCSP202
USCSP202	Practical of USCSP203 + USCSP204	02		This module is to complement and achieve the objectives and outcomes outlined in the course USCSP203 and USCSP204
USCSP203	Practical of USCSP205 + USCSP206	02		This module is to complement and achieve the objectives and outcomes outlined in the course USCSP205 and USCSP206
USCS301	Theory of Computation	02		<ol style="list-style-type: none"> 1) Understand Grammar and Languages 2) Learn about Automata theory and its application in Language Design 3) Learn about Turing Machines and Pushdown Automata 4) Understand Linear Bound Automata and its applications
USCS302	Core Java	02		<ol style="list-style-type: none"> 1) Object oriented programming concepts using Java. 2) Knowledge of input, its processing and getting suitable output. 3) Understand, design, implement and evaluate classes and applets. 4) Knowledge and implementation of AWT package.
USCS303	Operating System	02		<ol style="list-style-type: none"> 1) To provide a understanding of operating system, its structures and functioning 2) Develop and master understanding of algorithms used by operating systems for various purposes.
USCS304	Database Management Systems	02		<ol style="list-style-type: none"> 1) Master concepts of stored procedure and triggers and its use. 2) Learn about using PL/SQL for data management 3) Understand concepts and implementations of transaction management and crash recovery
USCS305	Combinatorics and Graph Theory	02		<ol style="list-style-type: none"> 1) Appreciate beauty of combinatorics and how combinatorial problems naturally arise in many settings. 2) Understand the combinatorial features in real world situations and Computer Science applications. 3) Apply combinatorial and graph theoretical concepts to understand Computer Science concepts and apply them to solve problems.
USCS306	Physical Computing and IoT Programming	02		<ol style="list-style-type: none"> 1) Enable students to understand System On Chip Architectures. 2) Introduction and preparing Raspberry Pi with hardware and installation. 3) Learn physical interfaces and electronics of Raspberry Pi and program them using practical's

Course code	Title of the course	Course credit	Course outcome
			4) Learn how to make consumer grade IoT safe and secure with proper use of protocols.
USCS307	Web Programming	02	1) To design valid, well-formed, scalable, and meaningful pages using emerging technologies. 2) Understand the various platforms, devices, display resolutions, viewports, and browsers that render websites 3) To develop and implement client-side and server-side scripting language programs. 4) To develop and implement Database Driven Websites. 5) Design and apply XML to create a markup language for data and document centric applications.
USCSP301	USCS302+USCS303+USCS304	03	This module is to complement and achieve the objectives and outcomes outlined in the course USCS302, USCS303 and USCS304.
USCSP302	USCS305+USCS306+USCS307	03	This module is to complement and achieve the objectives and outcomes outlined in the course USCS305, USCS306 and USCS307.
USCS401	Fundamentals of Algorithms	02	1) To understand basic principles of algorithm design and why algorithm analysis is important 2) To understand how to implement algorithms in Python 3) To understand how to transform new problems into algorithmic problems with efficient solutions 4) To understand algorithm design techniques for solving different problems.
USCS402	Advanced Java	02	1) Understand the concepts related to Java Technology 2) Explore and understand use of Java Server Programming
USCS403	Computer Networks	02	1) Student will be able to understand the concepts of networking, which are important for them to be known as a 'networking professionals'. 2) Useful to proceed with industrial requirements and International vendor certifications.
USCS404	Software Engineering	02	1) Basic knowledge and understanding of the analysis and design of complex systems. 2) Ability to apply software engineering principles and techniques. 3) Ability to develop, maintain and evaluate large-scale software systems. 4) To produce efficient, reliable, robust and cost-effective software solutions. 5) Ability to perform independent research and analysis. 6) To communicate and coordinate competently by

Course code	Title of the course	Course credit	Course outcome
			<p>listening, speaking, reading and writing English for technical and general purposes.</p> <p>7) Ability to work as an effective member or leader of software engineering teams.</p> <p>8) To manage time, processes and resources effectively by prioritizing competing demands to achieve personal and team goals Identify and analyzes the common threats in each domain.</p> <p>9) Ability to understand and meet ethical standards and legal responsibilities.</p>
USCS405	Linear Algebra using Python	02	<p>1) Appreciate the relevance of linear algebra in the field of computer science.</p> <p>2) Understand the concepts through program implementation</p> <p>3) Instil a computational thinking while learning linear algebra.</p>
USCS406	.Net Technologies	02	<p>1) Understand the .NET framework</p> <p>2) Develop a proficiency in the C# programming language</p> <p>3) Proficiently develop ASP.NET web applications using C#</p> <p>4) Use ADO.NET for data persistence in a web application</p>
USCS407	Android Developer Fundamentals	02	<p>1) Understand the requirements of Mobile programming environment.</p> <p>2) Learn about basic methods, tools and techniques for developing Apps</p> <p>3) Explore and practice App development on Android Platform</p> <p>4) Develop working prototypes of working systems for various uses in daily lives.</p>
USCSP401	USCS401+USCS402+USCS403	03	This module is to complement and achieve the objectives and outcomes outlined in the course USCS401, USCS402 and USCS403.
USCSP402	USCS405+USCS406+USCS407	03	This module is to complement and achieve the objectives and outcomes outlined in the course USCS405, USCS406 and USCS407.
USCS501	Artificial Intelligence	02	<p>This course aims to introduce the student to the interesting areas:</p> <p>1) Artificial Intelligence (AI) and accompanying tools and techniques bring transformational changes in the world.</p> <p>2) Machines capability to match, and sometimes even surpass human capability, make AI a hot topic in Computer Science.</p> <p>3) After completion of this course, student should get a clear understanding of AI and different search algorithms used for solving problems.</p> <p>4) The student should also get acquainted with</p>

Course code	Title of the course	Course credit	Course outcome
			different learning algorithms and models used in machine learning.
USCS502	Linux Server Administration	02	<ol style="list-style-type: none"> 1) Demonstrate proficiency with the Linux command line interface, directory and file management techniques, file system organization, and tools commonly found on most Linux distributions. 2) Effectively operate a Linux system inside of a network environment to integrate with existing service solutions. 3) Demonstrate the ability to troubleshoot challenging technical problems typically encountered when operating and administering Linux systems. 4) Student will be able to develop Linux based systems and maintain. 5) Student will be able to install appropriate service on Linux server as per requirement. 6) Student will have proficiency in Linux server administration.
USCS504	Information and Network Security	02	<ol style="list-style-type: none"> 1) To provide students with knowledge of basic concepts of computer security including network security and cryptography. 2) Understand the principles and practices of cryptographic techniques. 3) Understand a variety of generic security threats and vulnerabilities, and identify and analyze particular security problems for a given application. 4) Understand various protocols for network security to protect against the threats in a network
USCS505	Architecting of IoT	02	<ol style="list-style-type: none"> 1) Discovering the interconnection and integration of the physical world. 2) Student should get knowledge of the architecture of IoT. 3) Students are able to design & develop IoT Devices. 4) They should also be aware of the evolving world of M2M Communications and IoT analytics.
USCS507	Game Programming	02	<ol style="list-style-type: none"> 1) Student should get the understanding of computer Graphics Programming using DirectX or OpenGL. 2) Along with the VR and AR they should also be aware of GPU, newer technologies and programming using most important API for Windows. 3) Student should study Graphics and gaming concepts with present working style of developers where everything remains on internet

Course code	Title of the course	Course credit	Course outcome
			and they need to review it, understand it, be a part of community and learn.
USCSP501	Practicals of USC501 + USC502	02	This module is to complement and achieve the objectives and outcomes outlined in the course USC501 and USC502
USCSP502	Practicals of USC504 + USC505	02	This module is to complement and achieve the objectives and outcomes outlined in the course USC504 and USC505
USCSP503	Project Implementation	01	This course is the crux of the B.Sc.(Computer Science) program as it makes student realize importance of phase-wise work and deadlines to meet the challenges of real-life situation.
USCSP504	Practicals of USC507	01	This module is to complement and achieve the objectives and outcomes outlined in the course USC507
USCS601	Wireless Sensor Networks and Mobile Communication	03	<ol style="list-style-type: none"> 1) In this era of wireless and adhoc network, connecting different wireless devices and understanding their compatibility is very important. 2) Information is gathered in many different ways from these devices. 3) Student should be able to conceptualize and understand the framework. 4) On completion, will be able to have a firm grip over this very important segment of wireless network. 5) After completion of this course, student should be able to list various applications of wireless sensor networks, describe the concepts, protocols, design, implementation and use of wireless sensor networks. 6) Also implement and evaluate new ideas for solving wireless sensor network design issues.
USCS603	Cyber Forensics	03	<ol style="list-style-type: none"> 1) To understand the procedures for identification, preservation, and extraction of electronic evidence, auditing and investigation of network and host system intrusions, analysis and documentation of information gathered 2) The student will be able to plan and prepare for all stages of an investigation - detection, initial response and management interaction, investigate various media to collect evidence, report them in a way that would be acceptable in the court of law.
USCS605	Digital Image Processing	03	<ol style="list-style-type: none"> 1) To study two-dimensional Signals and Systems. 2) To understand image fundamentals and transforms necessary for image processing. 3) To study the image enhancement techniques in spatial and frequency domain. 4) To study image segmentation and image compression techniques.

Course code	Title of the course	Course credit	Course outcome
			5) Student should review the fundamental concepts of a digital image processing system. 6) Analyse the images in the frequency domain using various transforms. 7) Evaluate the techniques for image enhancement and image segmentation. 8) Apply various compression techniques. 9) They will be familiar with basic image processing techniques for solving real problems.
USCS606	Data Science	03	1) Understanding basic data science concepts. 2) Learning to detect and diagnose common data issues, such as missing values, special values, outliers, inconsistencies, and localization. 3) Making aware of how to address advanced statistical situations, 4) Modeling and Machine Learning. 5) After completion of this course, the students should be able to understand & comprehend the problem; and should be able to define suitable statistical method to be adopted.
USCS607	Ethical Hacking	02	1) To understand the ethics, legality, methodologies and techniques of hacking. 2) Student will know to identify security vulnerabilities and weaknesses in the target applications. 3) They will also know to test and exploit systems using various tools and understand the impact of hacking in real time machines.
USCSP601	Practicals of USCS601 + USCS603	02	This module is to complement and achieve the objectives and outcomes outlined in the course USCS601 and USCS603
USCSP602	Practicals of USCS604 + USCS605	02	This module is to complement and achieve the objectives and outcomes outlined in the course USCS604 and USCS605
USCSP603	Project Implementation	01	This course is the crux of the B.Sc.(Computer Science) program as it makes student realize importance of phase-wise work and deadlines to meet the challenges of real-life situation.
USCSP604	Practicals of USCS607	01	This module is to complement and achieve the objectives and outcomes outlined in the course USCS607

DEPARTMENT OF INFORMATION TECHNOLOGY

- **Programme Specific Outcomes:**

After completing the programme B.Sc. (Information Technology) , the student should be able to:

- PSO1: Expertise to developing robust, extensible and highly maintainable technological solutions to simple and complex problems. This programme will enable them to think analytically, creatively and critically to develop such solutions.
- PSO2: Learners acquire knowledge and skills to be employed and excel in IT professional careers and/or to continue their education in IT and/or related post graduate programmes.
- PSO3: The programme will enable learners to be capable of managing complex IT projects with consideration of the human, financial and environmental factors.
- PSO4: Trained to work effectively as a part of a team to achieve a common stated goal.

- **Course Outcomes:**

Course code	Title of the course	Course credit	Course outcome
USIT101, USIT1P2	Imperative Programming, Imperative Programming Practical	2 2	<ul style="list-style-type: none">• Identify situations where computational methods and computers would be useful.• Given a computational problem, identify and abstract the programming task involved.• Approach the programming tasks using techniques learned and write pseudo-code.• Choose the right data representation formats based on the requirements of the problem.• Use the comparisons and limitations of the various programming constructs and choose the right one for the task in hand.• Write the program on a computer, edit, compile, debug, correct, recompile and run it.• Identify tasks in which the numerical techniques learned are applicable and apply them to write programs, and hence use computers effectively to solve the task.
USIT102, USIT1P2	Digital Electronics, Digital Electronics Practical	2 2	<ul style="list-style-type: none">• Have a thorough understanding of the fundamental concepts and techniques used in digital electronics.• To understand and examine the structure of various number systems and its application in digital design.• The ability to understand, analyse and design various combinational and sequential circuits.• Ability to identify basic requirements for a design application and propose a cost effective solution.• The ability to identify and prevent various hazards and timing problems in a digital design.• To develop skill to build, and troubleshoot digital circuits.

USIT103, USIT1P3	Operating Systems, Operating Systems Practical	2 2	<ul style="list-style-type: none"> Analyse the structure of OS and basic architectural components involved in OS design. Analyse and design the applications to run in parallel either using process or thread models of different OS. Analyse the various device and resource management techniques for timesharing and distributed systems. Understand the Mutual exclusion, Deadlock detection and agreement protocols of Distributed operating system. Interpret the mechanisms adopted for file sharing in distributed Applications Conceptualize the components involved in designing a contemporary OS.
USIT104, USIT1P4	Discrete Mathematics, Discrete Mathematics Practical	2 2	<ul style="list-style-type: none"> Creating arguments using logical notation and determine if the argument is or is not valid Demonstrate the ability to write and evaluate a proof or outline the basic structure of and give examples of each proof technique described. Understand the basic principles of sets and operations in sets. Prove basic set equalities. Apply counting principles to determine probabilities. Demonstrate an understanding of relations and functions and be able to determine their properties. Determine when a function is 1-1 and "onto". Demonstrate different traversal methods for trees and graphs. Model problems in Computer Science using graphs and trees.
USIT105, USIT1P5	Communication Skills, Communication Skills Practical	2 2	<ul style="list-style-type: none"> Students will be able to understand and apply knowledge of human communication and language processes as they occur across various contexts, e.g., interpersonal, intrapersonal, small group, organizational, media, gender, family, intercultural communication, technologically mediated communication, etc. from multiple perspectives. Students will be able to understand and evaluate key theoretical approaches used in the interdisciplinary field of communication. I.e., students will be able to explain major theoretical frameworks, constructs, and concepts for the study of communication and language, summarize the work of central thinkers associated with particular approaches, and begin to evaluate the strengths and weaknesses of their approaches. Students will be able to understand the research methods associated with the study of human communication, and apply at least one of those approaches to the analysis and evaluation of human communication. Students will be able to find, use, and evaluate primary academic writing associated with the communication discipline. Students will develop knowledge, skills, and judgment around human communication that facilitate their ability to work collaboratively with others. Such skills could include

			<p>communication competencies such as managing conflict, understanding small group processes, active listening, appropriate self-disclosure, etc.</p> <ul style="list-style-type: none"> Students will be able to communicate effectively orally and in writing.
USIT201, USIT2P1	Object Oriented Programming, Object Oriented Programming Practical	2 2	<ul style="list-style-type: none"> Able to understand the basics of OOP and Object oriented approach to design software. Able to design and Implement programs using classes and objects, operator overloading. Able to specify the types of inheritance and use them in programs. Able to analyse polymorphic behaviour of objects, details of friend function and virtual base class. Able to understand the command line argument and file related operations. Able to understand the class template, function template and template libraries.
USIT202, USIT2P2	Microprocessor Architecture, Microprocessor Architecture Practical	2 2	<ul style="list-style-type: none"> Write programs to run on 8086 microprocessor based systems. Design system using memory chips and peripheral chips for 16 bit 8086 microprocessor. Understand and devise techniques for faster execution of instructions, improve speed of operations and enhance performance of microprocessors. Distinguish between RISC and CISC processors. Understand multi core processor and its advantages.
USIT203, USIT2P3	Web Programming, Web Programming Practical	2 2	<ul style="list-style-type: none"> Implement interactive web page(s) using HTML, CSS and JavaScript. Design a responsive web site using HTML5 and CSS3. Demonstrate Rich Internet Application. Build Dynamic web site using server side PHP Programming and Database connectivity. Describe and differentiate different Web Extensions and Web Services. Demonstrate web application using Python web Framework-Django.
USIT204, USIT2P4	Numerical and Statistical Methods, Numerical and Statistical Methods Practical	2 2	<ul style="list-style-type: none"> Recognize the error in the number generated by the solution. Compute solution of algebraic and transcendental equation by numerical methods like Bisection method and Newton Raphson method. Apply method of interpolation and extrapolation for prediction. Recognize elements and variable in statistics and summarize qualitative and quantitative data. Calculate mean, median and mode for individual series. Outline properties of correlation and compute Karl-Pearson's coefficient of correlation.
USIT205, USIT2P5	Green Computing, Green Computing Practical	2 2	<ul style="list-style-type: none"> The student shall give an account of the concept green IT. One shall give an account of environmental perspectives on IT use. One shall give an account of standards and certifications

			<p>related to sustainable IT products.</p> <ul style="list-style-type: none"> • One shall describe green IT in relation to technology. • One shall relate green IT to sustainable development. • One shall evaluate IT use in relation to environmental perspectives. • One shall discuss how the choice of hardware and software can facilitate a more sustainable operation. • One shall use methods and tools to measure energy consumption. • Describe awareness among stakeholders and promote green agenda and green initiatives in their working environments leading to green movement. • Identify IT Infrastructure Management and Green Data Centre Metrics for software. • Recognize Objectives of Green Network Protocols for Data communication. • Use Green IT Strategies and metrics for ICT development. • Illustrate various green IT services and its roles. • Use new career opportunities available in IT profession, audits and others with special skills such as energy efficiency, ethical IT assets disposal, carbon footprint estimation, reporting and development of green products, applications and services.
USIT301, USIT3P1	Python Programming, Python Programming Practical	2 2	<ul style="list-style-type: none"> • Describe the Numbers, Math functions, Strings, List, Tuples and Dictionaries in Python. • Express different Decision Making statements and Functions. • Interpret Object oriented programming in Python. • Understand and summarize different File handling operations. • Explain how to design GUI Applications in Python and evaluate different database operations. • Design and develop Client Server network applications using Python.
USIT302, USIT3P2	Data Structures, Data Structures Practical	2 2	<ul style="list-style-type: none"> • Ability to analyse algorithms and algorithm correctness. • Ability to summarize searching and sorting techniques. • Ability to describe stack, queue and linked list operation. • Ability to have knowledge of tree and graphs concepts.
USIT303, USIT3P3	Computer Networks, Computer Networks Practical	2 2	<ul style="list-style-type: none"> • Independently understand basic computer network technology. • Understand and explain Data Communications System and its components. • Identify the different types of network topologies and protocols. • Enumerate the layers of the OSI model and TCP/IP. Explain the function(s) of each layer. • Identify the different types of network devices and their functions within a network. • Understand and building the skills of sub netting and routing mechanisms. • Familiarity with the basic protocols of computer networks,

			and how they can be used to assist in network design and implementation.
USIT304, USIT3P4	Database Management Systems, Database Management Systems Practical	2 2	<ul style="list-style-type: none"> Describe the fundamental elements of relational database management systems. Explain the basic concepts of relational data model, entity-relationship model, relational database design, relational algebra and SQL. Design ER-models to represent simple database application scenarios. Convert the ER-model to relational tables, populate relational database and formulate SQL queries on data. Improve the database design by normalization <p>Familiar with basic database storage structures and access techniques: file and page organizations, indexing methods including B tree, and hashing.</p>
USIT305	Applied Mathematics	2	<ul style="list-style-type: none"> To apply the knowledge of matrices to solve the problems. To know and to understand various types of numerical methods. Ability to interpret the mathematical results in physical or practical terms for complex numbers. Inculcate the Habit of Mathematical Thinking through Indeterminate forms and Taylor series expansion. Solve and analyse the Partial derivatives and its application in related field of engineering.
USIT3P5	Mobile Programming Practical	2	<ul style="list-style-type: none"> Mobile Application Development.
USIT401, USIT4P1	Core Java, Core Java Practical	2 2	<ul style="list-style-type: none"> Knowledge of the structure and model of the Java programming language. Use the Java programming language for various programming technologies. Develop software in the Java programming language. Evaluate user requirements for software functionality required to decide whether the Java programming language can meet user requirements. Propose the use of certain technologies by implementing them in the Java programming language to solve the given problem. Choose an engineering approach to solving problems, starting from the acquired knowledge of programming and knowledge of operating systems.
USIT402, USIT4P2	Introduction to Embedded Systems, Introduction to Embedded Systems Practical	2 2	<ul style="list-style-type: none"> Understand what is a microcontroller, microcomputer, embedded system. Understand different components of a micro-controller and their interactions. Foster ability to understand the internal architecture and interfacing of different peripheral devices with Microcontrollers. Foster ability to write the programs for microcontroller. Foster ability to understand the role of embedded systems in industry. Foster ability to understand the design concept of embedded

			<p>systems.</p> <ul style="list-style-type: none"> • Become familiar with programming environment used to develop embedded systems. • Understand key concepts of embedded systems like IO, timers, interrupts, interaction with peripheral devices. • Learn debugging techniques for an embedded system.
USIT403, USIT4P3	Computer Oriented Statistical Techniques, Computer Oriented Statistical Techniques Practical	2 2	<ul style="list-style-type: none"> • Recognize the error in the number generated by the solution. • Compute solution of algebraic and transcendental equation by numerical methods like Bisection method and Newton Raphson method. • Apply method of interpolation and extrapolation for prediction. • Recognize elements and variable in statistics and summarize qualitative and quantitative data. • Calculate mean, median and mode for individual series. • Outline properties of correlation and compute Karl-Pearson's coefficient of correlation.
USIT404, USIT4P4	Software Engineering, Software Engineering Practical	2 2	<ul style="list-style-type: none"> • How to apply the software engineering lifecycle by demonstrating competence in communication, planning, analysis, design, construction, and deployment. • An ability to work in one or more significant application domains. • Work as an individual and as part of a multidisciplinary team to develop and deliver quality software. • Demonstrate an understanding of and apply current theories, models, and techniques that provide a basis for the software lifecycle. • Demonstrate an ability to use the techniques and tools necessary for engineering practice. • An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics. • An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors. • An ability to communicate effectively with a range of audiences. • An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts. • An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives. • An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions. • An ability to acquire and apply new knowledge as needed,

			<p>using appropriate learning strategies.</p> <ul style="list-style-type: none"> • An ability to use the techniques, skills, and modern engineering tools and processes necessary for software engineering practice. • An ability to apply software engineering perspective through software design and construction, requirements analysis, verification, and validation, to develop solutions to modern problems such as security, data science, and systems engineering.
USIT405, USIT4P5	Computer Graphics and Animation, Computer Graphics and Animation Practical	2 2	<ul style="list-style-type: none"> • To list the basic concepts used in computer graphics. • To implement various algorithms to scan, convert the basic geometrical primitives, transformations, Area filling, clipping. • To describe the importance of viewing and projections. • To define the fundamentals of animation, virtual reality and its related technologies. • To understand a typical graphics pipeline. • To design an application with the principles of virtual reality.
USIT501, USIT5P1	Software Project Management, Project Dissertation	2 2	<ul style="list-style-type: none"> • Identify the different project contexts and suggest an appropriate management strategy. • Practice the role of professional ethics in successful software development. • Identify and describe the key phases of project management. • Determine an appropriate project management approach through an evaluation of the business context and scope of the project.
USIT502 USIT5P2	Internet of Things Practical	2 2	<ul style="list-style-type: none"> • Interpret the vision of IoT from a global context. Determine the Market perspective of IoT. • Compare and Contrast the use of Devices, Gateways and Data Management in IoT. • Implement state of the art architecture in IoT. • Illustrate the application of IoT in Industrial Automation and identify Real World Design Constraints.
USIT503 USIT5P3	Advanced Web Programming Practical	2 2	<ul style="list-style-type: none"> • Design, develop and host a user friendly website. • Know the usage of APIs. • Layout management in line with current trend. • Understand the major areas and challenges of web programming. • Distinguish web-related technologies. • Use advanced topics in HTML5, CSS3, JavaScript. • Use a server-side scripting language, PHP. • Use a relational DBMS, MySQL. • Use PHP to access a MySQL database. • Design and implement typical static web pages and interactive web applications, dynamic web applications, web applications that use asynchronous communication, secure 3-tier data-driven web applications.
USIT505 USIT5P5	Linux System Administration Practical	2 2	<ul style="list-style-type: none"> • Demonstrate knowledge of the role and responsibilities of a Unix system administrator. • Install and configure the Linux operating system.

			<ul style="list-style-type: none"> • Manage the resources and security of a computer running Linux at a basic level. • Make effective use of Unix utilities, and scripting languages. • Configure and manage simple TCP/IP network services on a Linux system.
USIT506 USIT5P6	Enterprise Java practical	2 2	<ul style="list-style-type: none"> • Understand OOPs concepts, Java programming constructs and JVM and byte codes. • Able to write Simple java programs using Classes, Inheritance, Exception handling and applets. • Develop programs using thread concepts and swings • Develop simple Java applications with JDBC connectivity. • Demonstrate the advanced J2EE concepts using Servlets, Java RMI and EJB. • Understand, analyze and apply the role of languages like HTML, DHTML, CSS, XML, Javascript, VBScript, ASP, PHP and protocols in the workings of the web and web applications Analyze a web project and identify its elements and attributes in comparison to traditional projects. • Understand, analyze and create web pages using HTML, DHTML and Cascading Styles sheets. • Understand, analyze and build dynamic web pages using JavaScript and VBScript (client side programming). • Understand, analyze and build interactive web applications. • Understand, analyze and build web applications using PHP. • Understand, analyze and create XML documents and XML Schema.
USIT601	Software Quality Assurance	2 2	<ul style="list-style-type: none"> • The student will be able to identify benefits of and the needs to enforce software quality. • The students will be able to differentiate between quality control, quality management and quality assurance. • The students will be able to discuss the different components of SQA system. • The students will be able to discuss different software quality factors models. • The students will be able to understand the rational for the SE code of ethics and discuss them. • The student will be able to understand and discuss the benefits, needs and techniques of software reviews, software testing, configuration management and software metrics. • The students will be able to understand and discuss the needs for software process assessment and improvement and discuss the main SPI models: CMMI, ISO 15504 as well as process model ISO 12207. • The students will be able to initiate an assessment process.
USIT602 USIT6P2	Security in Computing Practical	2 2	<ul style="list-style-type: none"> • To master information security governance, and related legal and regulatory issues. • To be familiar with how threats to an organization are discovered, analysed, and dealt. • To be familiar with network security threats and countermeasures. • To be familiar with network security designs using available

			<p>secure solutions (such as PGP, SSL, IPSec, etc.</p> <ul style="list-style-type: none"> To be familiar with advanced security issues and technologies such as DDoS attack detection and containment, and anonymous communications
USIT603 USIT6P3	Business Intelligence Practical	2 2	<ul style="list-style-type: none"> Identify the major frameworks of computerized decision support: decision support systems (DSS), data analytics and business intelligence (BI). Explain the foundations, definitions, and capabilities of DSS, data analytics and BI. List the definitions, concepts, and architectures of data warehousing. Demonstrate the impact of business reporting, information visualization, and dashboards. Explain data mining, neural networks, support vector machines, text analytics, text mining, sentiment analysis, web mining, web analytics, social analytics, social network analysis. Outline the definitions, concepts, and enabling technologies of big data analytics. Apply big data technologies in business intelligence using geospatial data, location-based analytics, social networking, Web 2.0, reality mining, and cloud computing. Identify the major ethical and legal issues of analytics. Describe how analytics are powering consumer applications and creating a new opportunity for entrepreneurship for analytics. Effectively communicate course work in writing and oral presentation.
USIT604 USIT6P4	Principles of Geographic Information Systems Practical	2 2	<ul style="list-style-type: none"> Have a basic, practical understanding of GIS concepts, techniques and real world applications. Have an understanding of the technical language of GIS. Know how GIS is utilized in the larger context of business needs and IT strategies. Understand the basic concepts of geography necessary to efficiently and accurately use GIS technology. Understand basic GIS data concepts. Have an ability to perform basic GIS analysis of concepts. Have demonstrated a practical application of GIS. Have practical experience using basic GIS tools. Have an understanding of GIS and its relationship to mapping software development. Have an appreciation of GIS career options and how to pursue them.
USIT607	Cyber Laws	2	<ul style="list-style-type: none"> Students identify and analyse statutory, regulatory, constitutional, and organizational laws that affect the information technology professional. Students locate and apply case law and common law to current legal dilemmas in the technology field. Students apply diverse viewpoints to ethical dilemmas in the information technology field and recommend appropriate actions. Students distinguish enforceable contracts from non-

			<p>enforceable contracts.</p> <ul style="list-style-type: none"> Students demonstrate leadership and teamwork.
USIT6P1	Project Implementation	2	<ul style="list-style-type: none"> Application of knowledge to develop real time applications.
USIT6P6	Advanced Mobile	2	<ul style="list-style-type: none"> Mobile Application Development.
USIT6P6	Programming	2	

DEPARTMENT OF MATHEMATICS

- **Programme Specific Outcomes:**

- Enabling students to develop positive attitude towards mathematics as an interesting and valuable subject
- Enhancing students' overall development and to equip them with mathematical modeling, abilities, problem solving skills, creative talent and power of communication.
- Acquire good knowledge and understanding in advanced areas of mathematics and physics.

- **Course Outcomes:**

Semester	Course	Course Outcomes
I and II	Calculus I and II	<ul style="list-style-type: none"> • This course gives introduction to basic concepts of Analysis with rigor and prepares students to study further courses in Analysis. Formal proofs are given lot of emphasis in this course which also enhances understanding of the subject of Mathematics as a whole. The portion on first order, first degree differentials prepares learner to get solutions of so many kinds of problems in all subjects of Science and also prepares learner for further studies of differential equations and related fields.
I and II	Algebra I and Discrete Mathematics	<ul style="list-style-type: none"> • This course gives expositions to number systems (Natural Numbers & Integers), like divisibility and prime numbers and their properties. These topics later find use in advanced subjects like cryptography and its uses in cyber security and such related fields.
III	Calculus III	<ul style="list-style-type: none"> • Students will be able to prove convergence and divergence of a sequence in two, three in general in n dimension. • Students will be able to compute limits of a vector valued multivariable functions and decide continuity of them. • Students will be able to check differentiability of a multivariable function in terms of linear transformation, also can approximate functions by means of tangent planes. • Students will be able to approximate multivariable functions by means of polynomials, also can check local maxima, minima. They will also be able to find constrained maxima.
IV	Multivariable Calculus I	<ul style="list-style-type: none"> • Students will be able to understand theoretical aspects of Riemann integration and can prove standard theorems with their applications. • Students will be able to understand integration as an opposite process of derivatives. • Students will be able to evaluate improper integrals of type I and type II. • Students will be able to prove identities related to beta and gamma functions. • As an application of Riemann integration, students will be able to compute surface area of a surface and volume of solid region in three dimension.
III	Linear Algebra I	<ul style="list-style-type: none"> • Students will be able to solve system of homogeneous and non homogeneous system of linear equations using Gaussian elimination method and Gauss Jordan Elimination method • Students will be able to find inverse of a matrix using elementary

		<p>matrices</p> <ul style="list-style-type: none"> • Students will be able to express the given invertible matrix as a product of elementary matrices • Students will understand the concept of vector spaces, subspaces and quotient space. • Students will be able to compute the basis for the given vector space and find its dimension • Students will be able to compute the determinant of given matrix using Laplace Expansion and permutation. • Students will be able to compute row space, column space and rank of the given matrix • Students will be able to identify when the non homogeneous system of linear equations have no solution or unique solution or infinitely many solutions
IV	Linear Algebra II	<ul style="list-style-type: none"> • Students will be able to understand the concept of linear transformation and its elementary properties • Students will establish one to one correspondence between linear transformation and matrices for a fixed ordered basis • Students will be able to prove Rank-Nullity Theorem • Students will learn properties of associated matrix and effect of change of basis • Students will prove the equivalence of rank of linear transformation and its associated matrix • Students will be introduced to inner product space and norm associated to inner product • Students will be able to prove Cauchy Schwarz Inequality, triangle Inequality and Pythagoras Theorem. • Students will learn to compute angle between two vectors hence can test orthogonality of vectors • Students will learn some geometric Applications of inner product space in \mathbb{R}^2 • Students will be introduced to orthogonal sets, orthonormal sets, orthogonalization process to find orthogonal basis of a finite dimensional Inner product space. • Students will learn about orthogonal complement, orthogonal decomposition and orthogonal projection
III	Ordinary Differential Equations	<ul style="list-style-type: none"> • solve simple differential equations and to form equations between two variables, where a differential equation is available. • apply differential equations in solving problems related to population growth, electric circuits and radioactive decay. • get ideas about the higher order differential equations, converting higher order de to system of first order de and then solving the same.
IV	Statistical Methods and their Applications	<ul style="list-style-type: none"> • Students will be able to understand the basic concepts and the measures related to Central Tendency and Dispersion, such as Mean, Median, Mode, Range, Quartiles, Mean Deviation, Variance and Standard Deviation. • Students will be able to get the basic idea of the concepts of Probability and understand various Probability Distributions, such as, Binomial, Poisson, Normal and they will be able to form and test the hypotheses to verify certain claims, statistically.
V	Multivariable Calculus II	<ul style="list-style-type: none"> • In this course students will learn the basic ideas, tools and techniques of integral calculus.

		<ul style="list-style-type: none"> • Use them to solve problems from real-life applications including science and engineering problems involving areas, volumes, centroid, Moments of mass and center of mass Moments of inertia. • Examine vector fields and define and evaluate line integrals using the Fundamental Theorem of Line Integrals and Green's Theorem; compute arc length.
VI	Complex Analysis (Sem VI)	<ul style="list-style-type: none"> • Students Analyze sequences and series of analytic functions and types of convergence. • Students will also be able to evaluate complex contour integrals directly and by the fundamental theorem • Apply the Cauchy integral theorem in its various versions, and the Cauchy integral formula • They will also be able to represent functions as Taylor, power and Laurent series • Classify singularities and poles, find residues and evaluate complex integrals using the residue theorem.
V and VI	Group Theory(Sem V), Ring Theory, (Sem VI)	<ul style="list-style-type: none"> • Students will have a working knowledge of important mathematical concepts in abstract algebra such as definition of a group, order of a finite group and order of an element, rings, Euclidean domain, Principal ideal domain and Unique factorization domain. Students will also understand the connection and transition between previously studied mathematics and more advanced mathematics. The students will actively participate in the transition of important concepts such as homomorphisms & isomorphisms from discrete mathematics to advanced abstract mathematics.
V and VI	Topology of metric spaces (Sem V), Topology of metric spaces and real analysis (Sem VI):	<ul style="list-style-type: none"> • This course introduces students to the idea of metric spaces. It extends the ideas of open sets, closed sets and continuity to the more general setting of metric spaces along with concepts such as compactness and connectedness. Convergence concepts of sequences and series of functions, power series are also dealt with. Formal proofs are given a lot of emphasis in this course. This course serves as a foundation to advanced courses in analysis. Apart from understanding the concepts introduced, the treatment of this course will enable the learner to explain their reasoning about analysis with clarity and rigour.
V	Graph Theory (Sem V: Paper IV- Elective C)	<p>Upon successful completion of Graph Theory course, a student will be able to:</p> <ul style="list-style-type: none"> • Demonstrate the knowledge of fundamental concepts in graph theory, including properties and characterization of graphs and trees. • Describe knowledgeably special classes of graphs that arise frequently in graph theory • Describe the concept of isomorphic graphs and isomorphism invariant properties of graphs • Describe and apply the relationship between the properties of a matrix representation of a graph and the structure of the underlying graph • Demonstrate different types of algorithms including Dijkstra's, BFS, DFS, MST and Huffman coding. • Understand the concept of Eulerian graphs and Hamiltonian

		<p>graphs.</p> <ul style="list-style-type: none"> • Describe real-world applications of graph theory.
VI	Graph Theory and Combinatorics (Sem VI: Paper IV - Elective C)	<ul style="list-style-type: none"> • Understand and apply the basic concepts of graph theory, including colouring of graph, to find chromatic number and chromatic polynomials for graphs • Understand the concept of vertex connectivity, edge connectivity in graphs and Whitney's theorem on 2-vertex connected graphs. • Derive some properties of planarity and Euler's formula, develop the understanding of Geometric duals in Planar Graphs • Know the applications of graph theory to network flows theory. • Understand different applications of system of distinct representative and matching theory. • Use permutations and combinations to solve counting problems with sets and multisets. • Set up and solve a linear recurrence relation and apply the inclusion/exclusion principle. • Compute a generating function and apply them to combinatorial problems.
I	FyBCom maths and stats	<p>By learning this course, students will be able to</p> <ul style="list-style-type: none"> • grasp the concepts and calculations related to shares, mutual funds and market fluctuations. • obtain the basic statistical parameters, like mean, median, mode, variance, standard deviation of data and (based on that) compare two data sets. • get basic knowledge and techniques of deciding the best course of action, under different conditions, known as states of nature
II	FyBCom maths and stats	<p>After this course the students will be able to</p> <ul style="list-style-type: none"> • perform the calculations regarding simple and compound interest, annuity, emi and so on! • apply techniques of Calculus to problems in Economics • find out correlation between two variables, for which no definite (mathematical) relation may be known. • obtain regression equation, between the two variables.

DEPARTMENT OF MICROBIOLOGY

- Program Specific Outcomes:**

- Training the students with basic skill sets in Microbiology
- Making the students apt for Post graduate Diploma & Degree Course
- Making the student competent for jobs in market.

- Course Outcomes:**

	FYBSC	
Course code	Title of the course	Course credit
USMB101	Fundamentals of microbiology	3
USMB102	Basic techniques in microbiology.	3
USMB201	Basics of microbiology.	3
USMB 202	Exploring microbiology.	3

Course outcome

FYBSc Microbiology - Microbiology is restructure according to the CBCS pattern for its implementation from 2016-2017. While earlier revision of the syllabus took care of balancing both the basic techniques and some of the advance techniques (as remaining will be introduced phase wise at S.Y.B.Sc. and T.Y.B.Sc level) in Microbiology, the present revision is related to restructuring of syllabus as per CBCS pattern. The concepts of Biosafety, Validation, Calibration and SOPs have been introduced to make the learners aware about:-i. The biological hazards and safety measures ii. Importance of Validation and Calibration of Scientific equipment in industries and laboratories. iii. Writing of SOPs for instruments and their importance at work. The unique chemistry of living systems results in large part from the remarkable and diverse properties of Biomacromolecules. Macromolecules from each of the four major classes may act individually in a specific cellular process, where as others associate with one another to form supramolecular structures. All of these structures are involved in important cellular processes. Since the arrival of information technology, biochemistry has evolved from an interdisciplinary role to becoming a core program for a new generation of interdisciplinary courses such as bioinformatics and computational biochemistry. Hence the module of macromolecules has been included in the revised syllabus to teach students the structure and function of biomolecules at an entry level with an objective to raise the student's awareness of the applicability of microcomputers in biochemistry as they go to the higher classes.

SYBSC

Course code	Title of the course	Course credit
USMB301	• Biomolecules and Microbial taxonomy	3
USMB302	• Environmental Microbiology	3
USMB303	• Introduction to Clinical Microbiology	3
USMB401	• Metabolism & Basic Analytical Techniques	3
USMB 402	• Applied Microbiology	3
USMB403	• Soft Skills ,Advances & Applications Of Microbiology	3

Course outcome

SYBSc Microbiology: Objective is to create a curriculum where students are given a chance to learn course of their choice from other subjects, giving them opportunity to choose from a bouquet of Science Courses relevant to their curiosity and future career goal. The process was initiated with restructuring of FYBSc syllabus according to this CBCS pattern and its implementation in year 2016-2017. As a continuation of this theme, the restructured syllabus of SYBSc is prepared as per the CBCS pattern. As a part of this theme, in SYBSc Paper III in all subjects is available to any BSc student irrespective of their subject combination. So students of any subject interested in Microbiology can opt for Paper III of

Microbiology course. Likewise Microbiology Students can opt for Paper III of any subject available in their College. Since this paper is open to all students, 2 options are created to provide diversity of applied topics and choice for student and students can select any one option (provided it is offered by their college) relevant to their curiosity and future career goal.

	TYBSC	
Course code	Title of the course	Course credit
USMB501	Microbial Genetics	4
USMB502	Medical Microbiology & Immunology: Part - I	4
USMB503	Microbial Biochemistry: Part –I	4
USMB 504	Bioprocess Technology: Part - I	4
USMB 601	DNA Technology, Bioinformatics & Virology	4
SMB 602	Medical Microbiology & Immunology: Part - II	4
USMB 603	Microbial Biochemistry: Part –II	4
USMB 604	Bioprocess Technology: Part – Iiz 1a`	4

Course code	Title of the course	Course credit	Course outcome
USMB-501	Microbial Genetics	2.5 Credits	The learner will understand the sequence of events, mechanism, enzymes and proteins involved in replication of DNA in prokaryotes and eukaryotes. The student will know the central dogma of biology its two-step transcription and translation, maturation of RNA. The learner will know the concept of mutation, its types, causes and their effects.
USMB-502	Medical Microbiology and Immunology Part - I	2.5 Credits	The students should be able to give details of the virulence factors and other features of the pathogen and Correlate these virulence factors with the pathogenesis and clinical features of the disease Also they are Conceptualize how the adaptive immune responses coordinate to fight invading pathogens and the organs and tissue involved Students are also able to Correlate the structure & functions of immunoglobulin. Understand the various antigen –antibody reactions
USMB-503	Microbial Biochemistry Part - I	2.5 Credits	The students should be able to understand the architecture of the membrane and how solute is transported inside the cell. Also, they can explain the electron transport chains in prokaryotes and mitochondria and understand the mechanism of ATP synthesis. Students can discuss the experimental aspect of studying catabolism and anabolism and the various pathways for the breakdown of carbohydrates along with reactions in amphibolic pathways. Students can apply the concepts of energetics and catabolism in biodegradation of various substrates.
USMB-504	Bioprocess Technology Part – I	2.5 Credits	The students should be able to describe the applications of microbes and its strain improvement in Industrial Microbiology. They can apply kinetic formula to determine growth and productivity parameters of batch continuous, fed batch and solid substrate fermentations. Students can design media, growth conditions and

			techniques for producing and recovering different types of products of commercial value. Also, learner will be well –versed with the containment and levels of containment.
USMB-601	rDNA Technology, Bioinformatics & Virology	2.5 Credits	r DNA technology module will make the student understand the methods to construct recombinant DNA molecules, also know the tools required like vectors, restriction enzymes etc. The learner will know about applications of r DNA technology, through bioinformatics the student will understand the use of databases and software tools for understanding biological data. The student will know about gene expression in prokaryotes, operon as a unit of gene regulation, regulation of gene expression in prokaryotes and bacteriophages. The student will also understand about general structure, life cycle and classification of viruses. The learner will understand the basic structure and life cycle of different viruses and their cultivation.
USMB-602	Medical Microbiology and Immunology Part - II	2.5 Credits	Students are able to give details of the virulence factors and morphological and cultural features of the pathogen. They correlate these virulence factors with the pathogenesis and clinical features of the disease. Students understand the structure and role of T and B cells in generating adaptive immunity and thereby study effector responses in both Humoral & Cell Mediated Immunity Acquire an understanding of the role of immune system in disease. Students can apply the concept of immunity to prevention of disease by development of vaccines.
USMB-603	Medical Microbiology and Immunology Part - II	2.5 Credits	At the end of the course in Microbial Biochemistry, the learner will have an understanding of the following metabolic process and their significance. Students can understand metabolism of Lipids, Fatty acids, Nucleotides and Amino acids also catabolism of Protein and aliphatic hydrocarbons. Regulation of metabolic process at various levels and Metabolism of inorganic molecules with special reference to nitrate and sulfate.
USMB-604	Microbial Biochemistry Part - II	2.5 Credits	Students understand the actual process involved in fermentations of important products. To apply the knowledge of applications of animal and plant tissue culture techniques. Learn the applications of immobilized enzymes in various fields. Understand the working of important instruments used in biochemical analysis and bioassay. Learn the salient features of quality management and regulatory procedures.

DEPARTMENT OF PHYSICS

- **Program-Specific Outcomes:**

- Learners will attain an understanding of core knowledge in physics related to the main streams viz mechanics, optics, thermodynamics and electronics.
- Learners develop the ability of quantitative problem-solving skills.
- The laboratory practicals make them familiar to various equipment which they can skilfully use to make various working projects.
- Learners will demonstrate written and oral communication skills in communicating physics-related topics.
- Learners will demonstrate an understanding of the impact of physics and science on society.

- **Course Outcomes:**

FYB.Sc.: Physics

Objectives:

- To develop analytical abilities towards real world problems
- To familiarize with current and recent scientific and technological developments
- To enrich knowledge through problem solving, hands on activities, study visits, projects etc.

Course code	Title	Learning Outcomes:
USPH101	Classical Physics	1. Understand Newton's laws and apply them in calculations of the motion of simple systems. 2. Use the free body diagrams to analyze the forces on the object. 3. Understand the concepts of friction and the concepts of elasticity, fluid mechanics and be able to perform calculations using them. 4. Understand the concepts of lens system and interference. 5. Apply the laws of thermodynamics to formulate the relations necessary to analyze a thermodynamic process. 6. Demonstrate quantitative problem solving skills in all the topics covered
USPH102	Modern Physics	1. Understand nuclear properties and nuclear behavior. 2. Understand the type isotopes and their applications. 3. Demonstrate and understand the quantum mechanical concepts. 4. Demonstrate quantitative problem solving skills in all the topics covered.
USPHP1	Practical I	i) To demonstrate their practical skills. ii) To understand and practice the skills while doing physics practical. iii) To understand the use of apparatus and their use without fear. iv) To correlate their physics theory concepts through practical. v) Understand the concepts of errors and their estimation.
USPH201	Mathematical Physics	1. Understand the basic mathematical concepts and applications of them in physical situations. 2. Demonstrate quantitative problem solving skills in all the topics

		covered.
USPH202	Electricity and Electronics	Not Mentioned in syllabus
USPHP2	Practical II	i) To understand and practice the skills while doing physics practical. ii) To understand the use of apparatus and their use without fear. iii) To correlate their physics theory concepts through practical. iv) Understand the concepts of errors and their estimation.

SYB.Sc.: Physics

Objective:

1. a thorough quantitative and conceptual understanding of the core areas of physics, including mechanics, thermodynamics, quantum mechanics, electronics at a level compatible with graduate programs in physics at peer institutions.
2. the ability to analyze and interpret quantitative results, both in the core areas of physics and interdisciplinary areas.
3. the ability to use contemporary experimental apparatus and analysis tools to acquire, analyze and interpret scientific data.
4. the ability to apply the principles of physics to solve new and unfamiliar problems.
5. the ability to communicate scientific results effectively in presentations or posters.

Course code	Title	Learning Outcomes:
USPH301	Mechanics and thermodynamics	i) Understand the concepts of mechanics & properties of matter & to apply them to problems. ii) Comprehend the basic concepts of thermodynamics & its applications in physical situation. iii) Learn about situations in low temperature. iv) Demonstrate tentative problem solving skills in all above areas.
USPH302	Vector calculus ,Analog Electronics	1) Understand the basic concepts of mathematical physics and their applications in physical situations. 2) Understand the basic laws of electrodynamics and be able to perform calculations using them. 3) Understand the basics of transistor biasing, operational amplifiers, their applications 4) Understand the basic concepts of oscillators and be able to perform calculations using them. 5) Demonstrate quantitative problem solving skill in all the topics covered.

USPH303	Applied Physics-I	i) Students will be exposed to contextual real life situations. ii) Students will appreciate the role of Physics in 'interdisciplinary areas related to materials, Bio Physics, Acoustics etc. iii) The learner will understand the scope of the subject in Industry & Research. iv) Experimental learning opportunities will foster creative thinking & a spirit of inquiry.
USPHP3	Practical course-3 (Group A,B,C and Skill)	i) Understand & practice the skills while performing experiments. ii) Understand the use of apparatus and their use without fear & hesitation. iii) Correlate the physics theory concepts to practical application. iv) Understand the concept of errors and their estimation.
USPH401	Optics and Digital Electronics	1) Understand the diffraction and polarization processes and applications of them in physical situations. 2) Understand the applications of interference in design and working of interferometers. 3) Understand the resolving power of different optical instruments. 4) Understand the working of digital circuits 5) Use IC 555 timer for various timing applications. 6) Demonstrate quantitative problem solving skills in all the topics covered.
USPH402	Quantum Mechanics	1) Understand the postulates of quantum mechanics and to understand its importance in explaining significant phenomena in Physics. 2) Demonstrate quantitative problem solving skills in all the topics covered.
USPH403	Applied Physics-II	i) Understand the concepts of mechanics & properties of matter & to apply them to problems. ii) Comprehend the basic concepts of thermodynamics & its applications in physical situation. iii) Learn about situations in low temperature. iv) Demonstrate tentative problem solving skills in all above areas.
USPHP4	Practical course -4 (Group A,B,C and Demo)	i) Understand & practice the skills while performing experiments. ii) Understand the use of apparatus and their use without fear & hesitation. iii) Correlate their physics theory concepts to practical application. iv) Understand the concept of errors and their estimation.

TYB.Sc.: Physics

Course code	Title	Learning Outcomes:
-------------	-------	--------------------

USPH501	1. Mathematical Methods in Physics 2. Thermal and Statistical Physics	<p>From this course, the students are expected to learn some mathematical techniques required to understand the physical phenomena at the undergraduate level and get exposure to important ideas of statistical mechanics.</p> <p>The students are expected to be able to solve simple problems in probability, understand the concept of independent events and work with standard continuous distributions. The students will have idea of the functions of complex variables; solve nonhomogeneous differential equations and partial differential equations using simple methods. The units on statistical mechanics would introduce the students to the concept of microstates, Boltzmann distribution and statistical origins of entropy. It is also expected that the student will understand the difference between different statistics, classical as well as quantum.</p>
USPH502	Solid State Physics	<p>1. Understand the basics of crystallography, Electrical properties of metals, Band Theory of solids, demarcation among the types of materials, Semiconductor Physics and Superconductivity.</p> <p>2. Understand the basic concepts of Fermi probability distribution function, Density of states, conduction in semiconductors and BCS theory of superconductivity.</p> <p>3. Demonstrate quantitative problem solving skills in all the topics covered.</p>
USPH503	Atomic Physics	<p>the application of quantum mechanics in atomic physics</p> <p>the importance of electron spin, symmetric and antisymmetric wave functions and vector atom model</p> <p>Effect of magnetic field on atoms and its application</p> <p>Learn Molecular physics and its applications.</p> <p>This course will be useful to get an insight into spectroscopy.</p>
USPH504	Electrodynamics	<p>1) Understand the laws of electrodynamics and be able to perform calculations using them.</p> <p>2) Understand Maxwell's electrodynamics and its relation to relativity</p> <p>3) Understand how optical laws can be derived from electromagnetic principles.</p> <p>4) Develop quantitative problem solving skills.</p>
USPH601:	Classical Mechanics	<p>This course will introduce the students to different aspects of classical mechanics. They would understand the kinds of motions that can occur under a central potential and their applications to planetary orbits. The students should also appreciate the effect of moving coordinate system, rectilinear as well as rotating. The students are expected to learn the concepts needed for the important formalism of Lagrange's equations and derive the equations using D'Alembert's principle. They should also be able to solve simple examples using this formalism. The introduction to simple concepts from fluid mechanics and understanding of the dynamics of rigid bodies is also expected. Finally, they should appreciate the drastic effect of adding nonlinear corrections to usual problems of mechanics and nonlinear mechanics can help understand the irregularity we observe around us in nature.</p>

USPH602:	Electronics	<ol style="list-style-type: none"> 1. Understand the basics of semiconductor devices and their applications. 2. Understand the basic concepts of operational amplifier: its prototype and applications as instrumentation amplifier, active filters, comparators and waveform generation. 3. Understand the basic concepts of timing pulse generation and regulated power supplies 4. Understand the basic electronic circuits for universal logic building blocks and basic concepts of digital communication. 5. Develop quantitative problem-solving skills in all the topics covered.
USPH603:	Nuclear Physics	<p>Upon successful completion of this course, the student will be able to understand the fundamental principles and concepts governing classical nuclear and particle physics and have a knowledge of their applications interactions of ionizing radiation with matter the key techniques for particle accelerators the physical processes involved in nuclear power generation.</p> <p>Knowledge on elementary particles will help students to understand the fundamental constituents of matter and lay foundation for the understanding of unsolved questions about dark matter, antimatter and other research oriented topics.</p>
USPH604:	Special Theory of Relativity	<ol style="list-style-type: none"> 1. Understand the significance of Michelson Morley experiment and failure of the existing theories to explain the null result 2. Understand the importance of postulates of special relativity, Lorentz transformation equations and how it changed the way we look at space and time, Absolutism and relativity, Common sense versus Einstein concept of Space and time. 3. Understand the transformation equations for: Space and time, velocity, frequency, mass, momentum, force, Energy, Charge and current density, electric and magnetic fields. 4. Solve problems based on length contraction, time dilation, velocity addition, Doppler effect, mass energy relation and resolve paradoxes in relativity like twin paradox etc.

DEPARTMENT OF ZOOLOGY

- **Program Specific Outcomes:**

- Develop interest in the subject of Zoology.
- Gain knowledge of the basic and modern concepts of Zoology through theory practical and field visits.
- Analyse the relationship among animals, plants, microbes and other factors of environment and learn their conservation.
- Develop good laboratory practices and become trained in scientific handling of important instruments.
- Work safely and effectively in the field and in laboratories.
- Students learn the new developments in embryology and its relevance to human.
- Understands the importance of Intellectual property Rights and Ethics
- Broad and deep understanding on environment and influence of man on environment
- Learn the various aspects of life sciences, cell biology, genetics, taxonomy, physiology, applied zoology, general embryology and public health.
- Understands and safely, perform experimental techniques and methods of Physiology, Cell biology, pathology, Genetics, Applied Zoology, Biological techniques, Toxicology, Biochemistry and microtomy.
- Gain knowledge of communicable and non-communicable diseases and nutrition and lifestyle related diseases to improve personal and public health.
- Gain knowledge about research methodologies, data collection, statistical analysis of data, effective communication and skills of problem solving methods
- Gain computation knowledge and understands the applications of various techniques in the field of bioinformatics.
- Expose the learners to the emerging field of research and equip them the various research methodologies.
- Develop research-oriented skills and contributes the knowledge for Nation building.

- **Course Outcomes:**

Course code	Title of the course	Course credit	Course outcome
USZO101 (Course 1) http://oid.mu.ac.in/wp-content/uploads/2016/06/4.70_Zoology_fybsc.pdf	Wonders of Animal World, Biodiversity and its Conservation	02	<ul style="list-style-type: none">• Curiosity will be ignited in the mind of learners, to know more about the fascinating world of animals which would enhance their interest and love for the subject of Zoology.• Learners would appreciate treasure of Biodiversity, its importance and hence would contribute their best for its conservation.• Minds of learners would be impulse to think differently and would be encouraged ipso facto to their original crude ideas from the field of biological sciences.

USZO102 (Course 2) http://old.mu.ac.in/wp-content/uploads/2016/06/4.70_Zoology_fybsc.pdf	Instrumentation and Animal Biotechnology	02	<ul style="list-style-type: none"> Learners would work safely in the laboratory and avoid occurrence of accidents (mishaps) which will boost their scholastic performance and economy in use of materials/chemicals during practical sessions. Learners would understand recent advances in the subject and their applications for the betterment of mankind; and that the young minds would be tuned to think out of the box. Students will be skilled to select and operate suitable instruments for the studies of different components of Zoology of this course and also of higher classes including research.
USZO201 (Course 3) http://old.mu.ac.in/wp-content/uploads/2016/06/4.70_Zoology_fybsc.pdf	Ecology and Wildlife Management	02	<ul style="list-style-type: none"> This unit would allow learners to study about nature of animal population, specific factors affecting its growth and its impact on the population of other life form. Learners will grasp the concept of interdependence and interaction of physical, chemical and biological factors in the environment and will lead to better understanding about implications of loss of fauna specifically on human being, erupting spur of desire for conservation of all flora and fauna. Learners would be inspired to choose career options in the field of wild life conservation, research, photography and ecotourism.
USZO202 (Course 4) http://old.mu.ac.in/wp-content/uploads/2016/06/4.70_Zoology_fybsc.pdf	Nutrition, Public Health and Hygiene	02	<ul style="list-style-type: none"> Healthy dietary habits would be inculcated in the life style of learners in order to prevent risk of developing health hazards in younger generation due to faulty eating habits. Promoting optimum conservation of water, encouragement for maintaining adequate personal hygiene, optimum use of electronic gadgets, avoiding addiction, thus facilitating achievement of the goal of healthy young India in true sense. Learners will be able to promptly recognize stress related problems at initial stages and would be able to adopt relevant solutions which would lead to psychologically strong mind set promoting positive attitude important for academics and would be able to acquire knowledge of cause, symptoms and precautions of infectious diseases.

<p>USZO301 (Course 5)</p> <p>http://old.mu.ac.in/wp-content/uploads/2016/06/4.31-Final-Copy-S.-Y.-B.-Sc.-Zoology-Syllabus.pdf</p>	<p>Fundamentals of Genetics, Chromosomes and Heredity, Nucleic acids</p>	<p>02</p>	<ul style="list-style-type: none"> • Learner would comprehend and apply the principles of inheritance to study heredity. • Learner will understand the concept of multiple alleles, linkage and crossing over. • Learner will comprehend the structure of chromosomes and its types. • Learner will understand the mechanisms of sex determination. • Learner would be able to correlate the disorders linked to a particular sex chromosome. • Learner will understand the importance of nucleic acids as genetic material. • Learner would comprehend and appreciate the regulation of gene expressions.
<p>USZO302 (Course 6)</p> <p>http://old.mu.ac.in/wp-content/uploads/2016/06/4.31-Final-Copy-S.-Y.-B.-Sc.-Zoology-Syllabus.pdf</p>	<p>Nutrition and Excretion, Respiration and Circulation, Control and Coordination of Life Processes, Locomotion and Reproduction</p>	<p>02</p>	<ul style="list-style-type: none"> • Learner would understand the increasing complexity of nutritional, excretory and osmoregulatory physiology in evolutionary hierarchy. • Learner would be able to correlate the habit and habitat with nutritional, excretory and osmoregulatory structures. • Learner would understand the increasing complexity of respiratory and circulatory physiology in evolutionary hierarchy. • Learner will be able to correlate the habit and habitat of animals with respiratory and circulatory organs. • Learner would be amazed by various locomotory structures found in the animal kingdom. • Learner would be acquainted with various reproductive strategies present in animals.

<p>OE1303 (Course 7A) Elective 1</p> <p>http://old.mu.ac.in/wp-content/uploads/2016/06/4.31-Final-Copy-S.-Y.-B.-Sc.-Zoology-Syllabus.pdf</p>	<p>Ethology, Parasitology, Economic Zoology</p>	<p>02</p>	<ul style="list-style-type: none"> • Learner would gain insight into different types of animal behaviour and their role in biological adaptations. • Learner would be sensitized to the feelings which are instrumental in social behaviour. • Learner would understand the general epidemiological aspects of parasites that affect humans and take simple preventive measures for the same. • Learner would comprehend the life cycle of specific parasites, the symptoms of the disease and its treatment. • Learner would gain knowledge on animals useful to mankind and the means to make the most of it. • Learner would learn the modern techniques in animal husbandry. • Learner would pursue entrepreneurship as a career.
<p>USZO401 (Course 8)</p> <p>http://old.mu.ac.in/wp-content/uploads/2016/06/4.31-Final-Copy-S.-Y.-B.-Sc.-Zoology-Syllabus.pdf</p>	<p>Origin and Evolution of Life, Population Genetics and Evolution, Scientific Attitude, Methodology, Scientific Writing and Ethics in Scientific Research</p>	<p>02</p>	<ul style="list-style-type: none"> • Learner will gain insights into the origin of life. • Learner will analyse and critically view the different theories of evolution. • Learner would understand the forces that cause evolutionary changes in natural populations • Learner would comprehend the mechanisms of speciation. • Learner will be able to distinguish between microevolution, macroevolution and mega evolution. • The learner would develop qualities such as critical thinking and analysis. • The learner will imbibe the skills of scientific communication and he/she will understand the ethical aspects of research.
<p>USZO402 (Course 9)</p> <p>http://old.mu.ac.in/wp-content/uploads/2016/06/4.31-Final-Copy-S.-Y.-B.-Sc.-Zoology-Syllabus.pdf</p>	<p>Cell Biology, Endomembrane System and Biomolecules</p>	<p>02</p>	<ul style="list-style-type: none"> • Learner would acquire insight into the composition of the transport mechanisms adopted by the cell and its organelles for its maintenance and composition of cell. • Learner would appreciate the intricacy of endomembrane system. • Learner would understand the interlinking of endomembrane system for functioning of cell. • The learner will realize the importance of biomolecules and their clinical significance.

USZOE1403 (Course-10A) Elective 1 http://old.mu.ac.in/wp-content/uploads/2016/06/4-31-Final-Copy-S.-Y.-B.Sc.-Zoology-Syllabus.pdf	Comparative Embryology, Aspects of Human Reproduction, Pollution and its effect on organisms	02	<ul style="list-style-type: none"> • Learner will be able to understand and compare the different types of eggs and sperms. • Learner will be able to understand and compare the different pre- embryonic stages. • Learners will able to understand human reproductive physiology. • Learners will become familiar with advances in ART and related ethical issues. • The learners will be sensitized about the adverse effects of pollution and measures to control it.
USZO501 (Course 11) http://old.mu.ac.in/wp-content/uploads/2016/06/4-32-TYBSZSem-V-VI-Syllabus-Final-9th-April-2018-25-April-2018-1-4.pdf	Taxonomy - Invertebrates and Type Study	2.5	<ul style="list-style-type: none"> • Learners will apprehend the basis of classification and modern classification up to class of the lower invertebrate animals. • The learners will be familiarized with classification up to phylum ANNEXURE 1 • Nematoda along with their examples. • Learners will get an idea of higher groups of invertebrate animal life, their classification and their peculiar aspects. • Learners will get an idea of general characteristics and details of invertebrate animal systems.

ZO502 (Course 12) http://old.mu.ac.in/wp-content/uploads/2016/06/4.32-TYBScSem-V-VI-Syllabus-Final-9th-April-2018-26-April-2018-1-4.pdf	Haematology and Immunology	2.5	<ul style="list-style-type: none"> • The learner shall comprehend basic haematology. • The learner will be able to identify various components of haemostatic systems. • The learner will become familiar with the terminology used and diagnostic tests performed in a pathological laboratory. • The learner shall be acquainted with diagnostic approaches in haematological disorders. • The learner will be better equipped for further pathological course or working in a diagnostic laboratory. • The learner shall comprehend the types of immunity and the components of immune system. • The learner will realize the significant role of immune system in giving resistance against diseases. • The learner shall understand immunopathology and the principles and applications of vaccines. • The learner will develop basic understanding of immunology of organ transplantation.
USZO503 (Course 13) http://old.mu.ac.in/wp-content/uploads/2016/06/4.32-TYBScSem-V-VI-Syllabus-Final-9th-April-2018-26-April-2018-1-4.pdf	Histology, Toxicology, Pathology and Biostatistics	2.5	<ul style="list-style-type: none"> • Learner would appreciate the well planned organization of tissues and cells in the organ systems. • The course will prepare learner to develop broad understanding of the different areas of toxicology. • It will also develop critical thinking and assist students in preparation for employment in pharmaceutical industry and related areas. • Learner will be familiar with various medical terminologies pertaining to pathological condition of the body caused due to diseases. • The learner will be able to collect, organize and analyse data using parametric and nonparametric tests. • They will also be able to set up a hypothesis and verify the same using limits of significance.

<p>USZO504 (Course 14)</p> <p>http://old.mu.ac.in/wp-content/uploads/2015/06/4.32-TYBS-Sem-V-VI-Syllabus-Final-9th-April-2018-26-April-2018-1-4.pdf</p>	<p>Anatomy and Developmental Biology</p>	<p>2.5</p>	<p>Learner will be able to understand the:</p> <ul style="list-style-type: none"> • importance of various types of epidermal and dermal derivatives along with their functions. • structure, types and functions of human skeleton. • types of long limb muscles, its arrangement and their role in body movements. • processes involved in embryonic development and practical applications of studying the chick embryology.
<p>USZO601 (Course 15)</p> <p>http://old.mu.ac.in/wp-content/uploads/2015/06/4.32-TYBS-Sem-V-VI-Syllabus-Final-9th-April-2018-26-April-2018-1-4.pdf</p>	<p>Taxonomy - Chordates and Type Study</p>	<p>2.5</p>	<ul style="list-style-type: none"> • Learners will get an idea of origin of Chordates, its taxonomy up to class with reference to phylogeny and their special features. • Learners will understand the characteristic features and examples of class of Reptilia, Aves and Mammalia. • Learners will get an idea of vertebrate animal life after studying one representative animal - shark.
<p>USZO602 (Course 16)</p> <p>http://old.mu.ac.in/wp-content/uploads/2015/06/4.32-TYBS-Sem-V-VI-Syllabus-Final-9th-April-2018-26-April-2018-1-4.pdf</p>	<p>Physiology and Tissue Culture</p>	<p>2.5</p>	<ul style="list-style-type: none"> • The learner shall understand fundamentals of enzyme structure, action and kinetics. • The learner shall appreciate the enzyme assay procedures and the therapeutic applications of enzymes. • The learner shall comprehend the adaptive responses of animals to environmental changes for their survival. • The learner shall understand the types and secretions of endocrine glands and their functions. • The learner shall understand the significance of tissue culture as a tool in specialized areas of research. • The learner will appreciate its applications in various industries.

<p>USZO603 (Course 17)</p> <p>http://old.mu.ac.in/wp-content/uploads/2016/06/4.32-TYBScSem-V-VI-Syllabus-Final-9th-April-2018-26-April-2018-1-4.pdf</p>	<p>Genetics and Bioinformatics</p>	<p>2.5</p>	<p>Learner shall get an insight into the intricacies of chemical and molecular processes that affect genetic material.</p> <ul style="list-style-type: none"> • The course shall prepare learner to recognize the significance of molecular biology as a basis for the study of other areas of biology and biochemistry. • Learner shall also understand related areas in relatively new fields of genetic engineering and biotechnology. • The learner shall get acquainted with the vast array of techniques used to manipulate genes which can be applied in numerous fields like medicine, research, etc. for human benefit. • The learner shall become aware of the impact of changes occurring at gene level on • human health and its diagnosis. • Learner shall become aware of the computational point of view of studying the genomes.
<p>USZO604 (Course 18)</p> <p>http://old.mu.ac.in/wp-content/uploads/2016/06/4.32-TYBScSem-V-VI-Syllabus-Final-9th-April-2018-26-April-2018-1-4.pdf</p>	<p>Environmental Biology and Zoo pharmacognosy</p>	<p>2.5</p>	<ul style="list-style-type: none"> • Learner will understand the different factors affecting environment, its impact and environment management laws. • Learner will be able to understand various methods for wildlife conservation. • Learner will be able to apply knowledge to overcome the issues related to wildlife conservation and management. • Learner will understand the paradigms of discovery and commercialization of biological resources and knowledge gained from self-medication observed in animals. • The learners will become acquainted with how and why different animal species are distributed around the globe.

HSNC Board's
Smt. Chandibai Himathmal Mansukhani College, Ulhasnagar – 3

LEARNING OUTCOMES

FACULTY OF MANAGEMENT

Link to Syllabus Page on the University of Mumbai Website:
<https://mu.ac.in/syllabus#1548848059557-d934ffef-898d>

(Note: This compilation is based on the information provided by the Head of the Departments.)

DEPARTMENT OF BMS

- **Programme Specific Outcomes:**

- Ability to apply knowledge of management functions and theories to solve business problems.
- Ability to understand, analyze and communicate regional, national, global economic, legal, and ethical aspects of business.
- Comprehend, Develop and Apply a broad range of managerial capabilities, the capacity for critical thinking, communication and problem-solving skills.

- **Course Outcomes:**

Course Code	Title of the course	Course credit	Course outcome
<i>First Year (Semester – I)</i>			
UBMSFSI.1	Introduction to Financial Accounts	03	Be proficient in the financial accounting systems with specialized practical knowledge on preparing annual financial statement of a corporate body and all its facets and understanding of assets, liabilities, reconciliation, capital and revenue expenditure, depreciation and maintenance of various financial documents.
UBMSFSI.2	Business Law	03	Understand business situations from a legal perspective and apply knowledge of legal procedures related with routine business operations of an enterprise.
UBMSFSI.3	Business Statistics	03	Ability to design data collection plans, analyze data appropriately and interpret and draw conclusions from those analyses and thus employ and build a reliable platform for decision making
UBMSFSI.4	Business Communication – I	03	Have abreast knowledge of forms, Process and Principles of Communication that enable students to demonstrate the ability of evaluating, analyzing and interpreting information to make reasoned business decisions.
UBMSFSI.5	Foundation Course – I	02	Comprehend various dimensions of Indian society, knowledge regarding disparities, Philosophy of the constitution and significant aspects of political processes.
UBMSFSI.6	Foundation of Human Skills	03	Have self-knowledge and the ability to apply this knowledge to enhance effectiveness; understand and apply leadership skills, team-based knowledge, conflict management and negotiation skills required to achieve individual and institutional

			objectives.
UBMSFSI.7	Business Economics - I	03	Relate the basic economic theory and principles to current microeconomic issues and Use economic models to analyze a situation in terms of economics
First Year (Semester – II)			
UBMSFSII.1	Principles of Marketing	03	Ability to formulate general marketing strategy using 4Ps model and STP
UBMSFSII.2	Industrial Law	03	Understand business situations from a legal perspective and apply knowledge of legal procedures related with routine industrial operations of business.
UBMSFSII.3	Business Mathematics	03	Solve problems in the areas of financial and economics functions, derivatives, simple and compound interest, EMI calculations, annuity, trend line and time value of money.
UBMSFSII.4	Business Communication - II	03	Ability to apply business concepts of written communication in various related business issues
UBMSFSII.5	Foundation Course - II	02	Ability to comprehend the concept of LPG, growth and evolution of human rights, ecology and ability to understand causes and management of stress.
UBMSFSII.6	Business Environment	03	Ability to analyse the changes introduced in the components of environment of business and understanding their impact on the enterprise.
UBMSFSII.7	Principles of Management	03	Understand and apply the knowledge of management theories, functions and process in day to day business activities of an enterprise.
Second Year (Semester – III)			
UBMSFSIII.5	Accounting for Managerial Decisions	03	Ability to analyze the financial statements of an enterprise using vertical approach and various techniques like Comparative statements, common size, trend analysis, ratios, and other management accounting techniques of working capital management, cash flow statement and Receivables management.
UBMSFSIII.6	Strategic Management	03	Ability to analyse strategic micro and macro environmental issues, analyse industry factors and identify their impact on strategic positioning, evaluate SBU strategies and analyse and implement strategies at the business unit level.
UBMSFSIII.2	IT for Business - I	03	Ability to use the MS office software and also email, internet, websites domains and security therein.
UBMSFSIII.4	Business	03	Ability to apply the knowledge of preparing

	Planning & Entrepreneurship Management		project report and setting up of own business enterprise and thus exploring the opportunity of self-employment.
UBMSFSIII.3.01	Foundation Course – III (Environment Management)	02	Understand the impact of environmental issues and to apply the legal norms concerning environment into the business.
UBMSFSIII.1.01	Basics of Financial Service	03	Conceptualizing the framework of finance function and getting acquaint with the tools, types, instruments of financial system in the realm of Indian financial market.
UBMSFSIII.1.04	Corporate Finance	03	Conceptualizing the framework of finance function and getting acquaint with the tools and techniques and process of financial management in the realm of financial decision making.
UBMSFSIII.1.0	Advertising	03	Getting acquainted with the theories of advertising and latest tools for the construction of an effective advertisement and exploring opportunities of career in advertising.
UBMSFSIII.1.0	Consumer Behavior	03	Ability to understand the consumer decision making process and its applications in marketing function of firms, and analyzing consumer information for using it to create consumer-oriented marketing strategies.
<i>Second Year (Semester – IV)</i>			
UBMSFSIV.4	Research Methods	03	Demonstrate knowledge of research processes, perform literature reviews, compare and contrast quantitative and qualitative research paradigms, describe, compare, and contrast descriptive and inferential statistics, describe sampling methods, measurement scales and instruments, and appropriate uses of each and finally to conduct the research independently.
UBMSFSIV.5	Business Economics – II	03	Ability to understand the concepts of national income, calculate methods of national income, and concepts related to national income and interprets macroeconomic issues such as money, foreign exchange, inflation, unemployment, economic growth and foreign trade.
UBMSFSIV.6	Production and Total Quality Management	03	Getting acquainted with the basic management decisions with respect to production and quality management, and understand the designing aspects of production system
UBMSFSIV.2	IT for Business -	03	Understand about emerging MIS

	II		technologies like ERP, CRM, SCM and trends in enterprise applications, Understanding relationship between database management and data warehouse approaches and to understand the concepts of Outsourcing as well as cloud computing.
UBMSFSIV.3.01	Foundation Course – IV (Ethics and Governance)	02	Be aware of the concepts and principles of ethical reasoning which have been developed in ethical theory, and to be able to apply these concepts and principles to specific ethical issues and ability to describe and analyze the primary parts of corporate governance frameworks
UBMSFSIV.1.01	Financial Institutions and Markets	03	Understanding basic knowledge about the structure, role and functioning of financial institutions and markets in the financial system.
UBMSFSIV.1.04	Corporate Restructuring	03	Getting acquainted with legal, accounting and practical implementation of corporate restructuring and understand the complex facets of corporate restructuring process.
UBMSFSIV.1.0	Integrated Marketing Communication	03	Ability to use the various tools of IMC to develop effective marketing communication programme.
UBMSFSIV.1.0	Rural Marketing	03	Ability to frame marketing strategies with 4Ps model and STP for the rural markets.
Third Year (Semester – V)			
46001	Logistics & Supply Chain Management	03	Understand fundamental logistics and supply chain management concepts, apply knowledge to evaluate and manage an effective supply chain, Understand the foundational role of logistics as it relates to transportation and warehousing and other functions of logistics.
46002	Corporate Communication and Public Relations	03	focus on the role of public relations in the organization and the application of communication strategies and tools for communications planning. And Be aware of and comply with law and regulations in the field of public relations, advertising, brand communication, marketing communication, persuasive communication, communication management, corporate communications.
46003	Investment Analysis and Portfolio Management	03	Apply understanding of different avenues of investments and learning to apply the decision for making portfolios with risk and returns profile of investors.
46009	Wealth Management	03	Understanding various aspects of wealth management including insurance planning, retirement planning, real estate management

			and taxation.
46018	Direct Tax	03	Ability to calculate taxable income of an individual and file the income tax returns independently.
46015	Risk Management	03	Understand the risks associated with finance in business and the ways to mitigate and manage the same by applying various risk management tool and techniques.
46010	Sales and Distribution Management	03	Getting acquainted with the concepts of market analysis and selling, managing distribution channels and evaluation of marketing distribution channel performance.
46004	Service Marketing	03	Ability to plan and implement marketing strategies for service industries based on 7Ps model, Demand and capacity management and productivity issues in services.
46013	Customer Relationship Management	03	Getting acquainted with the CRM strategy and tools that reinforces relationship management strategy of an enterprise leading to customer satisfaction and delight.
46007	E-Commerce & Digital Marketing	03	Enables the learners to apply digital marketing tools to plan and implement ecommerce and digital marketing solutions of a business unit.
Third Year (Semester – VI)			
86001	Operations Research	03	Ability to derive optimum solutions in the area of operations using Linear programming (Graphical and Simplex methods), Transportation model, Assignment models, Game theory, Decision making and Networking with the use of CPM and PERT models.
UBMSFVI.5	Project Work	03	Ability to carry out the research project independently.
86002	International Finance	03	Ability to deal in foreign exchange markets through forex arithmetic and understand various dimensions of international finance like BOP, monetary systems, International equity markets, bond markets, Foreign capital, Tax havens, Risk management, Project appraisal,
86005	Innovative Financial Service	03	Have abreast knowledge of innovations in the BFS sector and applications of knowledge to start the financial services industry independently.
86008	Project Management	03	Ability to understand the project finance, its feasibility, environmental concerns, planning and controlling of projects, and application of capital budgeting tools to appraise the project proposals in terms of

			risk and returns associated with them.
86011	Strategic Financial Management	03	Ability to apply financial decision-making tools in order to achieve the strategic objectives of a business unit including dividend distribution models, working capital management and appraisal of investment proposals.
86009	International Marketing	03	Getting acquainted with the knowledge of marketing in the global world including areas like international branding, pricing, advertising, distribution and market entry strategies.
86003	Brand Management	03	Ability to plan and implement brand marketing programme, measuring and interpreting brand performance and growing brand equity.
860012	Media Planning	03	Getting familiar with the concepts of media mix and media strategy, media budgeting, buying and selling and media measurement and evaluation.
86006	Retail Management	03	Understand the behavior of retail consumer, framing of retail strategy, merchandise management and pricing and managing and sustaining the retail business in the contemporary times.




Coordinator, IQAC

IQAC Coordinator