



Sonopant Dandekar Shikshan Mandal's

Sonopant Dandekar Arts, V. S. Apte Commerce
& M. H. Mehta Science College, Palghar

(Best College - University of Mumbai)

(Amongst Top 100 Colleges in India by 'India Today - MDRA Survey 2019')

Sonopant Dandekar Shikshan Mandal's

Sonopant Dandekar Arts, V.S. Apte Commerce and
M.H. Mehta Science College, Palghar

PROGRAMME OUTCOMES, PROGRAMME SPECIFIC OUTCOMES AND COURSE OUTCOMES

Academic Year: 2022-23

DEPARTMENT OF HINDI

Program outcome and Program specific outcomes offered by the Department Name of the Programme specialization:

Name of the Programme	PROGRAM OUTCOMES	PROGRAM SPECIFIC OUTCOMES
Bachelor of Arts (B.A.)	<p>Student seeking admission for B.A. programme is expected to imbue with following quality which helps them in their future life to achieve the expected goals.</p> <ol style="list-style-type: none"> 1. Realization of human values. 2. Sense of social service. 3. Responsible and dutiful citizen. 4. Critical temper 5. Creative ability. 6. Describe the knowledge, skills and attitude. 	<ul style="list-style-type: none"> ● Creating an interest in literature. ● To understand the basic concept and subject of Hindi & its origin. ● To make or not the importance of subject Hindi & its Branches. ● To understand various aspect of Hindi literature with a process to reach method and giving new mode and direction. ● To make attempt in different area and theory such as vocabulary and vice versa. ● To understand in the Literature more in a border area then Mary confined to subjects. ● To know about Hindi Literature its roots cause perspectives and method. ● Elaboration and understanding its philosophical method of Hindi Literature. ● Evaluating the concept of Hindi from past to present and making the society more closely through literature.

B. Course Outcomes of all courses offered by the Department Name of the Course : B.A . HINDI

CLASS	SEM	PAPER NO	PAPER CODE	PAPER	LEARNING OUTCOMES
F.Y.B.A	I & II	Compulsory	UAHINCOM 101	COMPULSORY HINDI	<p>To introduce student to the popular works of prose, story, essay, etc. beside autobiography ,biography, memoir ,travelogue and sketches etc.</p> <p>On completion of the course, student are able to</p> <p>1) To able to understand "Kavya Sarita" by Editorial</p>





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					<p>–Hindi Adhyayan Mandal, Mumbai University, Mumbai under creations.</p> <p>2) To able to understand “Katha Darpan” by Editorial –Hindi Adhyayan Mandal, Mumbai University, Mumbai under creations.</p> <p>3) To able to understand Grammar-Letter writing Essay writing, Knowledge of Linguistic, Process of Translation.</p>
F.Y.B.A	I § II	Optional	UAHIN 101	ANCILLARY HINDI	<p>To introduce student to the popular works of prose, story, essay, etc. beside autobiography ,biography, memoir ,travelogue and sketches etc.</p> <p>On completion of the course, student are able to</p> <p>1) To able to understand ‘Katha Sanchyan’by Editorial –Hindi Adhyayan Mandal,Mumbai University,Mumbai under creations.</p> <p>2) To able to understand ‘Gadya ke Vividh Ayaam’by Editorial –Hindi Adhyayan Mandal,Mumbai University,Mumbai under creations.</p> <p>3) To able to understand ‘Katha Sanchyan’by Editorial –Hindi Adhyayan Mandal,Mumbai University,Mumbai under creations.</p> <p>4) To able to understand Novel ‘Jangal ke Jugnu’ by Devesh Thakur ,Vaani Prakashan ,New Delhi.</p>
SYBA	III & IV	PAPER II	UAHIN 301	Madhyakalin evm Aadhunikalin Kavya	<p>On completion of the course, student are able to</p> <p>1) Introduce Medieval and modern poetry. ” by Editorial –Hindi Adhyayan Mandal, Mumbai University, Mumbai under creations.</p> <p>2) To able to understand “Parshuam ki Pratiksha ” Khand Kavya by Ramdharisingh Dinkar</p> <p>3) To able to understand “Pratiniddhi Kavitaayen-Kunvar Narayan ” Editorial by Purushottam Agrawaal .</p> <p>4) To able to understand Novel “Jangal Tantram ” by Shravan Kumar Goswaami.</p> <p>5) To able to understand Essays “Aaj bhi khare hai taalaab” by Anupam Mishra.</p> <p>6) To able to understand Drama “Katha ek kans ki ” by Dyaprakash Sinha.</p>





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S.Y.B.A	III & IV	PAPER III	UAHIN 302	Prayojan Mulak Hindi	<p>On completion of the course, student are able to</p> <ol style="list-style-type: none">1) To able to understand the meaning, concept and importance of Functional Hindi.2) To able understand various forms of Functional Hindi according to its area of application.3) To able understand the importance of translation .4) To able understand various forms og translation and Advertising .5) To introduce and understand Functional Words in Hindi. <p>S.Y.B.A- Hindi III (Sem VI) On completion of the course, student are able to</p> <ol style="list-style-type: none">1) To able to understand various forms of Mass media.2) To able to understand use of Functional Hindi language for newspaper ,cinema and radio.3) To able understand the concept of Fundamental Rights of Indian Constitution.4) To able to understand the concept of Right to Information.
T.Y.B.A	V & VI	PAPER IV	UAHIN 501 &502	* HISTORY OF HINDI LITERATURE * HISTORY OF MODERN HINDI LITERATURE	<p>History of Hindi Litratre- IV – On completion of the course, student are able to</p> <ol style="list-style-type: none">1) To able to understand the origin of Hindi language and litratre.2) To able to understand isentifying the dielects of Hindi language family.3) To able to understand the concept of History of litratre.4) To able to understand period of Adikaal, Bhaktikaal and Ritikaal. <p>T.Y.B.A – (Sem VI) History of Hindi Litratre- IV – On completion of the course, student are able to</p> <ol style="list-style-type: none">1) To able to understand the basis of the classification of Hindi litratre.2) To able to understand the importance and basis of the names given to each period of Hindi litratre.3) To able to understand the Bhartendu yug,dwiwedi yug,chayawaad ,pragatiwaad,prayogwaad ,nayee kavita,samkaalin kavita etc.4) To able to understand Evolution and development of Novel,story and essay..
T.Y.B.A	V & VI	PAPER V	UAHIN 502	POST INDEPENDENCE HINDI LITERATURE	<p>On completion of the course, student are able to</p> <p>To study poetic drama,sketches ,memories,poetry genres etc.</p>





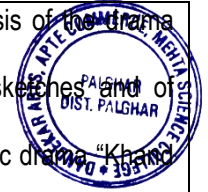
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					<p>1) To able to understand the basis of the drama literature.</p> <p>2) To able to understand the sketches and of Hindi literature.</p> <p>3) To able to understand the poetic drama "Khand khand Agni" by Divik Ramesh.</p> <p>1) To able to understand the " Gadya Garima-Sketches and memoirs" by Editorial –Hindi Adhyayan Mandal,University of Mumbai under creations.</p> <p>T.Y.B.A – (Sem VI)</p> <p>POST INDEPENDENCE LITRATURE -V On completion of the course, student are able to</p> <p>To study poetic drama,sketches ,memories,poetry genres etc.</p> <p>1) To able to understand the 'Geet- Punj ' ' by Editorial –Hindi Adhyayan Mandal, University of Mumbai under creations</p> <p>2) To able to understand the "Nibandh Manjusha" by Editorial –Hindi Adhyayan Mandal, University of Mumbai under creations</p> <p>3) To able to understand the concept of "GEET".</p> <p>4) To able to understand the types of Essays.</p>
T.Y.B.A	V & VI	PAPER VI	UAHIN 503	<p>INFORMATION TECHNOLOGY IN HINDI SOCIAL MEDIA</p> <p>On completion of the course, student are able to</p> <p>1) To able to understand the concept of Information Technology.</p> <p>2) To able to understand the Familiarize yourself with how computers work.</p> <p>3) To able to understand the types of media.</p> <p>4) To able to understand the concept of digitalization.</p> <p>5) To able to understand – contribution of information technology to education sector.</p> <p>T.Y.B.A – (Sem VI) SOCIAL MEDIA -VI On completion of the course, student are able to</p> <p>1) To able to understand the importance of social media .</p> <p>2) To able to understand the impact of social media on society.</p> <p>3) To able to understand the relation between social media and law.</p> <p>4) To able to understand the problems of social media and their rem</p>	





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DEPARTMENT OF ZOOLOGY

NAME OF THE DEPARTMENT: B.Sc. (Zoology) ACADEMIC YEAR:

Name of the Programme	Programme Outcome	Program Specific Outcome
	Students will be able to	Students will be able to have
Bachelor of Science in Zoology	Students gain knowledge and skill in the fundamentals of animal sciences, understands the complex interactions among various living organisms. Student will analyze complex interactions among the various animals of different phyla, their distribution and their relationship with the environment.	After completion of this programme student will be able to have career opportunity in public as well as private sectors or could pursue higher post-graduation or doctoral degree.

B1. Course Outcomes of all courses offered by the Department Name of the course : B.Sc. (Zoology)

Sr. No.	Name of The Course	Course Code	Course Outcomes (After completing this course, the students will be able to)
F.Y.B.Sc. (Zoology)			
Semester - I			
1	Wonders of Animal World, Biodiversity and its Conservation	USZO101	Understand how morphological change due to change in environment helps drive evolution over a long period of time. The project assignment will also give them a flavour of research to find the process involved in studying biodiversity and taxonomy besides improving their writing skills. It will further enable the students to think and interpret individually due to different animal species chosen. It enlightens how each group of organisms arose and how did they establish themselves in the environment with their special characteristics. It also deals with the differences and similarities between organisms on the basis of their morphology and anatomy which led to their grouping into taxa and clades. 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.
2	Instrumentation And Animal Biotechnology	USZO102	To make learners aware of risks involved in handling of different hazardous chemicals, sensitive (electrical/electronic) instruments and infectious biological specimens especially during practical sessions in the laboratory and to train them to avoid mishap. 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





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Semester – II			
1	Ecology and Wild Life management	USZO201	Students will understand the factors affecting the need to find sustainable practices for production of food, feed and fiber crops and how to implement them. Students will be competent in basic forest management principles and evaluation of forest stands for health, wildlife habitat and lumber use. Students will understand how the environment influences plant growth and crop yields, and ways to modify the environment to improve plant growth and yields. Students will understand how to propagate, plant, and sustainably grow, manage and harvest grain or forage crops within various environmental, marketing and financial conditions. Students will be able to identify soil types and how they are formed and ways to modify soil structure and drainage to reduce erosion and improve water quality. Students will understand how soil fertility is determined and means of improving soil fertility and adding nutrients for plant growth. Students will know how to identify and sustainably manage insects in various plant production systems. Students will have a good understanding of cellular and organism-level plant and animal structures, taxonomy and metabolic processes. Students will be able to identify plant vegetative and floral structures and be able to identify native and non-native herbaceous and woody plants. Students will understand the general principles of ecology as how they related to terrestrial and/or aquatic plant and animal conservation and management.
2	Nutrition Public Health and Hygiene	USZO202	To make learners understand the importance of balanced diet and essential nutrients of food at different stages of life. 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
S.Y.B.Sc. (Zoology)			
Semester - III			
1			Understanding of how genetic concepts affect broad societal issues including health and disease, food and natural resources, environmental sustainability, etc. Understanding the role of genetic mechanisms in evolution. The knowledge required to design, execute, and analyse the results of genetic experimentation in animal and plant model systems. The ability to recognize the experimental rationale of genetic studies as they are described in peer-reviewed research articles and grant proposals to federal and other funding agencies. The ability to evaluate conclusions that are based on genetic data. Insight into the





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		USZO301	mathematical, statistical, and computational basis of genetic analyses that use genome-scale data sets in systems biology settings. Understanding the role of genetic technologies in industries related to biotechnology, pharmaceuticals, engineering, and other fields. Communication skills required in the discipline including oral presentations of research data, published research articles, grant proposals, and poster presentations at conferences.
2	Study of Nutrition and Excretion , Respiration and circulation, Control and coordination, Locomotion and Reproduction	USZO302	Learners would be acquainted with various reproductive strategies present in animals. Understand about the importance and scope of biochemistry. Understand the structure and biological significance of carbohydrates, amino acids, proteins, lipids and nucleic acids. Draw a diagram showing the location of endocrine glands in the body and describe the functions of hormonal glands namely the thyroid, adrenal, pituitary and pancreas. Relate the knowledge gained and explain the changes in their own bodies; become aware about the changes that occur during adolescence and how to manage the emotional and physical changes Explain the techniques used in the management of stress; draw diagrams of the neuron and reflex action list out the functions of the heart, nervous system, RBC and WBC. Outline of the main components of the heart: the main events in the cardiac cycle. Myogenic nature of the heart. Relationship between the structure of cardiac muscle and the co-ordination of electrical activity. Explain the roles of the sinoatrial node, the atrioventricular node, the bundle of His and the Purkinje fibres in the control of the cardiac cycle: location and action of the SA node and the AV node in atrial contraction. Location and action of the bundle of His and the Purkinje fibres in ventricular contraction. Recognize an abnormal ECG trace. ECG: function of electrocardiograms; structure of an ECG wave; common abnormal traces
3	Amazing animals, Ethology, And Conservation Biology, Applied Zoology	USZO303	Students are now sensitized to protect and manage Biodiversity in a sensible and sustainable manner. Students were taught about useful the science of vermin-composting and dairy. They are now taught how to take care of different pet animals. Students will now appreciate and respect domestic pets through proper care.





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Semester - IV			
1	Comparative Embryology, Aspects Of Human Reproduction and Scientific attitude, Methodology Writing And Ethics	USZO401	The College will increase the number of quality high wage, high-demand CTE programs offered to students. At least 30 students per semester will enroll in the newly implemented programs .Be very clear about what you are trying to assess. The expected outcome should be the result of the activity described for the element in order to meet the goals of the principle. Learner will be able to understand and compare the different pre- embryonic stages → Learner will be able to appreciate the functional aspects of extra embryonic membranes and classify the different types of placentae. Learners will able to understand human reproductive physiology → Learners will become familiar with advances in ART and related ethical issues Instructors will be able to integrate and employ an aligned and integrated curriculum, while enhancing and forming a stronger relationship. (Method of Measurement: Use feedback and evaluations from sessions to improve programming)
2	Cell Biology, Endomembrane System and Biomolecules	USZO402	Develop an understanding of concepts, mechanisms and evolutionary significance and relevance of molecular biology in the current scenario. Get well versed in recombinant DNA technology which holds application in biomedical & genomic science, agriculture, environment management, etc. Therefore, a fundamental understanding of Molecular Biology will help in career building in all these fields. Apply their knowledge in problem solving and future course of their career development in higher education and research. Get new avenues of joining research in related areas such as therapeutic strategies or related opportunities in industry. Know the theory behind fundamental bioinformatics analysis methods. Be familiar with widely used bioinformatics databases. Know basic concepts of probability and statistics. Describe statistical methods and probability distributions relevant for molecular biology data. Know the applications and limitations of different bioinformatics and statistical methods. Perform and interpret bioinformatics and statistical analyses with real molecular biology data.





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3	Holistic Health, Neurological and Genetic Disease and pollution	USZO403	<p>Students were made to understand the importance of diet and life style in holistic health management to live healthy life. Students were taught the basic concept of genetic disorders, neurological disorders importance of genetic counseling its necessity. Students were made to understand the importance of diet and life style in holistic health management to live healthy life. Students are now aware of the fact that genetic and environmental factor govern the health of human being.</p> <p>Students were made aware of the various critical environmental issues using various case studies. Now students have become more sensitive towards environmental issues.</p>
T.Y.B.Sc.(Zoology)			
Semester - V			
1	Taxonomy Invertebrates and Type Study 2019-20	-USZO501	<p>Student are able to understand the fundamental principles of systematic in which the animals are how to classify according to their characters and what are the theories which have to followed for classification is studied. International rules of nomenclature and classification is studied. Demonstrated a broad understood of animal diversity, including knowledge of the scientific classification and evolutionary relationships of major groups of animals.</p>
2	Haematology and Immunology	USZO502:	<p>To acquaint the student with the physiology of blood clotting and clinical aspects of haematology. To introduce immunopathology to the student to introduce the concept of vaccines and vaccination. To familiarize the student to immunological perspectives of organ transplantation. The student shall understand immunopathology and the principles and applications of vaccines. The student will develop basic understanding of immunology of organ transplantation. It give a clear picture of its function. Another part includes immunology which deals with a system of defense by some internal secretions antibody antigen reaction.</p>





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3	Histology, Toxicology, Pathology and Biostatistics	USZO503	<p>Students were made familiar cellular architecture of the various organs in the body. And now they understand the need and importance of different types of tissues in the vital organs and their functions. Students were made educated about principles of toxicology with particular emphasis on toxic responses to chemical exposures, nature and effect of toxicity and toxicity testing. This will help them develop introductory understanding of regulatory affairs in toxicology. The course will prepare learner to develop broad understanding of the different areas of toxicology. It will develop critical thinking and assist students in preparation for employment in pharmaceutical industry and related areas. Basic general pathology was taught to them now they understand how diseases are caused by different pathogens and how they transfer. They were made familiar with various medical terminology pertaining to pathological condition of the body caused due to diseases. Now they have background of genetics, pathology, toxicology and with this knowledge they will be able to choose their future career in pathology, toxicology and genetic counselling.</p>
4	Anatomy and Developmental Biology	USZO504	<p>To introduce the student to the basics of developmental biology with reference to chick embryo model and also familiarize with experiments related to it. Student will be able to understand the processes involved in embryonic development and practical applications of studying the chick embryology.</p>
Semester - VI			
1	Taxonomy - Chordates and Type Study	USZO601	<p>To introduce basic concepts of modern Chordate classification with evolution point of view and to understand the concept of taxonomy in higher animal kingdom. 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>
2	Physiology and Tissue Culture	USZO602:	<p>To introduce to the student the fundamental concepts of tissue culture and guide them progressively to certain areas of animal tissue culture. Understood about the composition of food and mechanism of digestion absorption and assimilation. The student shall understand the significance of tissue culture as a tool in specialized areas of research. The student will appreciate its applications in various industries. Understood the menstrual cycle and the role of contraceptive in population control.</p>





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3	Genetics and informatics	Bio US ZO603	<p>Students were introduced to chemical and molecular processes that affect genetic material. To make learner understand the concept of DNA damage and repair, and how gene control is necessary for cell survival. Students were given insight into the intricacies of chemical and molecular processes that affect genetic material. The course has prepared students to recognize the significance of molecular biology as a basis for the study of other areas of biology and biochemistry. They were taught related areas in relatively new fields of genetic engineering and biotechnology.</p>
4	Environmental Biology and Zoopharmacognosy	USZO604:	<p>To introduce the learner to the concepts of bioprospecting and zoopharmacognosy. To introduce learner to the geographic distribution (present and past) of animal species. Learner will be made aware of the process of discovery and commercialization of new products based on biological resources. To introduce learner with various ethological aspects by which non-human animals apparently self-medicate themselves. Student will be able to conduct background research and apply fundamental zoological science principles to make informed decisions on socio-scientific issues.</p>





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DEPARTMENT OF ZOOLOGY - MSC

Name of the Programme	Programme Outcome	Program Specific Outcome
	Students will be able to	Students will be able to have
Master of Science in Zoology	<p>The overall objective of this programme is to offer students the advancements in the different components of the subject. The syllabus is framed and designed to include the recent developments useful for the students to shape their career.</p> <p>This programme is designed to upkeep the student with the necessary theory and practical, so that the learner can progress with confidence for his further independent fields into specialized areas such as research.</p> <p>It will also embraces objectives and desired outcomes which will provide clear idea to the teacher as well as learner about the expected depth of the topic</p>	<p>The pedagogy supports a self-motivated learner to gain knowledge of the subject and prolong the borders of a classroom. The pedagogy recommends projects, assignments, visits etc. which is an extension to the regular classroom methodologies. It deals with the additional suggestions for bringing the objectives into actual instructional activities. The suggested resources in the reference lists would be useful in achieving the desired outcome.</p>

B1. Course Outcomes of all courses offered by the Department Name of the course : M.Sc. (Zoology)

Sr. No.	Name of The Course	Course Code	Course Outcomes (After completing this course, the students will be able to)
F.Y.B.Sc. (Zoology)			
Semester - I			
1	Non - Chordates	PSZO101	<p>The learner will be able to differentiate anatomical and physiological modification in respiratory and circulatory systems of non-chordates like Protostomes and Deuterostomes. Know the broad phylogenetic relationships of animal phyla and some of the traits used to support our current understanding of these evolutionary relationships (e.g. diploblasts vs triploblasts, deuterostomes vs protostomes {ecdysozoa and lophotrochozoa}, radial vs bilateral symmetry).</p> <p>Different groups of invertebrate animals are studied in this course including Protozoa, Porifera, Coelenterate, Platyhelminthes, Aschelminthes, Annelida, Arthropoda, Mollusca and Echinodermata. General characters and classification upto order are studied. Some special features, organs, pathogenicity, life history and significance is studied here.</p>





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			<p>The learner will be able to differentiate anatomical and physiological modifications of nervous systems and chemical co-ordination of non-chordates. Prepared slides are studied in this part to understand the structures and arrangement of different Muscular regions.</p> <p>The learner will be able to differentiate modifications of reproductive systems of non-chordates. The learner will be able to understand the evolution of non-chordates and their phylogenetic relationships by means of paleontological evidences.</p> <p>Identified and classified the specimens which are present the departmental museum by the students for a practical knowledge of them.</p>
2	Developmental Biology -I	PSZO102	<p>The learner will understand the mechanism of fertilization and its molecular events in non-chordates. • The learner will appreciate the process of formation of germ layers and coelom in animals and understand the difference in these processes between Protostomes and Deuterostomes. Students would understand basic concepts and aspects of embryogenesis and stem cell therapy.</p> <p>Students will understand the mechanism of early development and able to correlate the various differences observed in the pattern of embryonic development in non-chordates.</p> <p>Be familiar with the events that led up to and comprise the process of fertilization. Be able to discuss the critical contributions of the sperm and the egg to the zygote, and how structure informs function. Be able to describe the mechanism of the acrosomal reaction and understands its function. Be able to describe the mechanisms responsible for the fast block and slow block topolyspermy during fertilization in sea urchins; know the mammalian equivalent mechanisms.</p> <p>Students will understand the role of certain genes in early development Students will acquire knowledge about the diversities in reproduction and development in invertebrates and the process of regeneration in lower animals. •Students will understand how principles of developmental biology can be applied in forensics and IPM</p>
3	Genetics Evolution and	PSZO103	<p>The learners will understand the genetic analysis at the gene, genome and population level.</p> <p>The learner would realize the flow of genetic information and complex networking of genes in biological system leading to major phenotypic changes.</p>





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			<p>The learner will understand the molecular processes that occur in and between the cells</p> <p>The learner will gain insight in most significant molecular and cell based methods used to expand the understanding of modern Biology</p> <p>Learner will be able to gain knowledge of altruism, co-evolution and the racial distribution of animals in evolutionary time scale</p> <p>The learner will be able to apply evolutionary principles to research and understand aspects of evolution.</p> <p>Learner will be acquainted with techniques of dating fossils and formation of fossils.</p> <p>The learner will understand the concept of frozen zoo and will foster the need of hour for conservation of endangered species.</p>
4	Frontiers In Zoology	PSZO104	<p>Learners will get the introductory knowledge of emerging areas correlated with Zoology.</p> <p>Learners will understand the different types of biological clocks and their importance.</p> <p>Learner would be able to explain the basic principles, applications of the major imaging and DNA bar coding techniques.</p> <p>Learner will get acquainted with brain regions that form the basis of emotions and stress.</p> <p>Learner will also understand the health problems caused due to prolong emotion and stress on the body.</p> <p>The learner will understand current challenges of climatic changes and environmental issues.</p> <p>Learner will understand the importance of the sustainable development.</p>
Semester - II			
1	Chordates	PSZO201	<p>Students would be equipped with the understanding of morphology and phylogeny of Protochordates.</p> <p>Students would be equipped with the understanding of morphology and phylogeny of Protochordates.</p> <p>Students would understand evolution, morphology and phylogeny of chordates.</p> <p>It should be able to describe unique characters of urochordates, cephalochordates and fishes. It should be able to recognize life functions of urochordates to fishes.</p> <p>To understand the ecological role of different groups of chordates.</p>





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			To understand the diversity of chordates. Students would obtain additional knowledge of diverse characteristics of various chordates
2	Developmental Biology – II	PZO202	<p>The learner will gain knowledge of reproductive systems in chordates.</p> <p>The students will get an idea of reproductive physiology in chordates.</p> <p>The learner shall comprehend details of germ cell migration and understand the importance of stem cells.</p> <p>The learner will be acquainted with environmental impact on development and evolution of animals.</p>
3	Biochemistry and Biotechnology	PZO203	<p>Learners will have in-depth understanding of the fundamentals of chemical basis of life.</p> <p>Learners will have knowledge of the structures, interactions, and importance of complex biomolecules and their significance in living system.</p> <p>Learners' will have in depth understanding of the bioenergetics and metabolic pathways of various biomolecules.</p> <p>Learners will gain knowledge of the regulatory mechanisms underlying various metabolic pathways.</p> <p>Learners will be able to understand the processes for harnessing the potentials of living systems for betterment of mankind.</p> <p>Learners will have an understanding of the processes and techniques used in development of biotechnology products</p>
4	Research Methodology	PZO204	<p>Learners will get the introductory knowledge of emerging areas correlated with Zoology.</p> <p>Learners will understand the different types of biological clocks and their importance.</p> <p>Learner would be able to explain the basic principles, applications of the major imaging and DNA bar coding techniques.</p> <p>Learner will get acquainted with brain regions that form the basis of emotions and stress.</p> <p>Learner will also understand the health problems caused due to prolonged emotion and stress on the body.</p> <p>The learner will understand current challenges of climatic changes and environmental issues.</p> <p>Learner will understand the importance of the sustainable development.</p>





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DEPARTMENT OF ACCOUNTANCY

Program outcome and Program specific outcomes offered by the Department Name of the Programme specialization

Name of the Programme		PROGRAM OUTCOMES			PROGRAM SPECIFIC OUTCOMES
B.com					
B. Course Outcomes of all courses offered by the Department Name of the Course : B.com Accountancy					
CLASS	SEM	PAPER NO	PAPER CODE	PAPER	LEARNING OUTCOMES
F.Y.B.COM	I			Accountancy and financial management - I	To learn about accounting standards, final accounts of companies, final a/c of departmental ac and accounting for hire purchase
F.Y.B.COM	II			Accountancy and financial management - II	To learn how to complete incomplete records from incomplete record, maintain consignment account, maintain branch a/c, compute fire insurance claim
S.Y.B.COM	III			Accountancy and financial management - III	To learn maintain partnership final ac, distribution of cash at the time of dissolution, accounting relating to amalgamation of firm, conversion of partnership firm into limited company
S.Y.B.COM	III			Introduction to management accounting	To learn calculation of financial ratio, prepare of cash flow statement, calculate working capital
S.Y.B.COM	IV			Accountancy and financial management - IV	To learn accounting related issue of debenture, redemption of preference share, redemption of debentures, calculate profit prior to incorporation.
S.Y.B.COM	IV			Auditing	To learn auditing concept, audit planning , procedure, and documentation, auditing techniques
T.Y.B.COM	V			Financial accounting	To learn preparation final accounts of companies, accounting relating internal reconstruction, accounting of buy back of shares, investment accounting.
T.Y.B.COM	V			Cost accounting	To learn classification of cost and cost sheet, reconciliation of cost and financial accounts, contract and process costing
T.Y.B.COM	VI			Financial accounting	To learn accounting of amalgamation, absorption and external reconstruction, accounting of transaction of foreign currency, accounting of liquidation of companies, accounting of underwriting of share and debenture, accounting for limited liability partnership
T.Y.B.COM	VI			Cost accounting	To learn cost control accounts, contract costing, process costing, marginal costing and standard costing





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DEPARTMENT OF CHEMISTRY

Name of the Programme	Programme Outcome	Program Specific Outcome
UG (B.Sc.): BACHELOR OF SCIENCE	<ul style="list-style-type: none">• Demonstrate, solve and an understanding of major concepts in all disciplines of chemistry.• Employ critical thinking and the scientific knowledge to design, carry out, record and analyze the results of chemical reactions.• Create an awareness of the impact of chemistry on the environment, society, and development outside the scientific community.• Find out the green route for chemical reaction for sustainable development.• Use modern techniques, decent equipment and Chemistry software's• To inculcate the scientific temperament in the students and outside the scientific community.• Solve the problem and also think methodically, independently and draw a logical conclusion.	<ul style="list-style-type: none">• To explain nomenclature, stereochemistry, structures, reactivity, and mechanism of the chemical reactions.• Identify chemical formulae and solve numerical problems.• To make the learner capable of acquiring or pursuing a source of livelihood like jobs in chemical industry.• Use modern chemical tools, Models, Chem-draw, Charts and Equipments• Gain the knowledge of Chemistry through theory and practical's.• Understand good laboratory practices and safety.• Develop research oriented skills. Know structure-activity relationship.• Make aware and handle the sophisticated instruments/ equipment.

B. Course Outcomes of all courses offered by the Department

Name of the Course : B.Sc.

CLASS	SEM	PAPER NO	PAPER CODE	PAPER	LEARNING OUTCOMES
F.Y.B.Sc.	I	I	USCH101	Physical, Organic, Inorganic	At the end of this course students should be able to: <ul style="list-style-type: none">• Understand basic thermodynamics terms with basic knowledge of zeroth and first law of thermodynamics.• Acquire knowledge of different types of concentrations of solutions and calculations for preparing the solution.• Understanding the basic concept of structure of an atom with relevant terminologies.• Recapitulation of certain concepts.• Exploring the periodic table and its various periodic properties.• Learn IUPAC nomenclature & basic of organic molecules, structure, bonding, and reactivity reaction mechanisms.





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					<ul style="list-style-type: none">• Concept of hybridization and geometry of atoms, Electrophile, nucleophiles, free radicals, electronegativity, resonance, and intermediates along the reaction pathways.
F.Y.B.Sc.	I	II	USCH102	Physical, Organic, Inorganic	<p>At the end of this course students should be able to:</p> <ul style="list-style-type: none">• To inculcate knowledge about rate of reactions and order of reactions study different methods to determine order of reactions.• Acquire knowledge of different structures of liquid crystals• Compare the general properties of main group elements and inculcate the knowledge in application in periodic table.• Compare the properties and understand the concept of carbides, nitrides, oxides and hydrides.• Exposure to environmental problems and solution to its adverse effects.• Identify 3-D structure of organic molecules & chiral centers.• Able to understand Stereochemistry of organic molecules. Conformation and configuration, asymmetric molecules and nomenclature.
F.Y.B.Sc.	I	I	USCHP1	Practical	<p>At the end of this course students should be able to:</p> <ul style="list-style-type: none">• Do the purification of organic compounds by crystallization using the solvents• Develop command on pipette handling• Prepare standard solutions





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F.Y.B.Sc.	I	II	USCHP2	Practical	At the end of the practical, <ul style="list-style-type: none">• Student will develop the skill of handling apparatus and use of chemicals.• Skill of standardization.• Determine the melting points of given organic compounds and unknown organic compounds.• Purification techniques for organic compounds
F.Y.B.Sc.	II	I	USCH201	Physical, Organic, Inorganic	At the end of this course students should be able to: <ul style="list-style-type: none">• Understand kinetic theory of gaseous• Students acquire knowledge about Maxwell- Boltzmann distribution theory.• To develop fundamental knowledge of chemical equilibrium and thermodynamics parameter• Gain knowledge about reversible and irreversible reactions, Le-Chatelier principle.• Acquiring the basics of qualitative analysis and developing an understanding on different terms in qualitative analysis.• Problem solving skill development on various numericals.• Comparing the differences between acids and bases on the basis of various theories.• Learn preparation & reactions of alkanes, alkenes & alkynes.
F.Y.B.Sc.	II	II	USCH202	Physical, Organic, Inorganic	At the end of this course students should be able to: <ul style="list-style-type: none">• Have knowledge of various types of electrolytes and factors affecting to it. Students are able to understand concept of buffer solution.• Learn the concept of laws of crystallography• Understand the general types of bonds.• Learn concepts of VSEPR theory and its application in various molecules.• Recapitulation and learning of oxidation and reduction reactions.• Explain various conformations and conformational analysis of cyclohexane.





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					<ul style="list-style-type: none">Understand concept of aromatic compounds and aromaticity, mechanism of aromatic reactions.
F.Y.B.Sc.	II	I	USCHP1	Practical	<p>At the end of this course students should be able to:</p> <ul style="list-style-type: none">Learn good laboratory practices and its applicationsUnderstand the use of personal protective and other safety equipment's, handling of chemicals in laboratory
F.Y.B.Sc.	II	II	USCHP2	Practical	<p>At the end of the practical, student will be able to</p> <ul style="list-style-type: none">Identify the cations and anions by qualitative analysis through basic chemical tests.Learn characterization of single organic compounds.
S.Y.B.Sc.	III	I	USCH301	Physical	<p>At the end of this course students should be able to:</p> <ul style="list-style-type: none">Gain knowledge of concept of free energy FunctionsUnderstand the concept of Fugacity and activityAcquire knowledge of determination of quantum efficiency by Actinometer.Assimilate concept of thermal chain reactionsDevelop knowledge about conductivity concept, Understand Kohlrausch Law and its application in various fields.Gain knowledge of Arrhenius theory of electrolyte dissociationStudents came across the new concept Debye-Huckel's theory, electrophoresis and relaxation effect.Assimilate about Complexometric titration, metallochromic indicators.Acquire knowledge of types of separation techniques.Understand concept solvent extraction thoroughly.





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S.Y.B.Sc.	III	II	USCH301	Organic	<p>At the end of this course students should be able to:</p> <ul style="list-style-type: none">• Understanding the concept of Valence Bond Theory and Molecular Orbital Theory.• Learning the formation of ionic bond.• Comparing properties of transition metals.• To understand organic chemistry reactions and reaction mechanisms of alkyl arenes, haloarenes, phenols & aromatic nitro compounds.• To learn preparation & reactions of alkanes, alkenes & alkynes.• To Recognize IUPAC nomenclature and aromaticity of aromatic compounds.• To understand various mechanisms of aromatic reactions.
S.Y.B.Sc.	III	III	USCH301	Environmental and Industrial Chemistry	<p>At the end student will learn</p> <ul style="list-style-type: none">• The sources of organic compounds like coal, petroleum, natural gas, Biomass• To learn unit process like Nitrogen, sulphonation• To acquire the knowledge of unit operations like distillation• To study physico chemical principles involved in chemical reaction• To learn the concept of manufacturing of ammonia, sulphuric acid• To learn the concept of environmental chemistry• To get the knowledge of chemistry of water & importance of water.
S.Y.B.Sc.	III	I	USCHP1	Physical Practical	<ul style="list-style-type: none">• At the end student will learn to master in qualitative & quantitative analysis of inorganic compounds• To study organic compounds analysis• To learn the concept of water analysis like hardness, pH, conductivity• To learn the use of Conductometer, chemical kinetics concepts in daily life.
S.Y.B.Sc.	III	II	USCHP2	Inorganic Practical	<ul style="list-style-type: none">• At the end of this practical course, students will acquire the basic training of handling the apparatus and learn to identify the inorganic compound through qualitative and quantitative analysis.





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S.Y.B.Sc.	III	III	USCHP3	Organic Practical	<ul style="list-style-type: none">At the end of this course students should be able to:Do organic estimation and organic reactions of various organic compounds.
S.Y.B.Sc.	IV	I	USCH401	Physical	<p>At the end of this course students should be able to:</p> <ul style="list-style-type: none">Gain the knowledge of transport number and its determination by Moving boundary method.Understand the concept of Liquid Crystals, phases of liquid crystals, application of Liquid CrystalsDistinguish between different types of liquid mixtures.Assimilate thorough concept of Beer Lambert's LawKnow different instrumentation of single beam and double beam photoelectric colorimeter, photometric titration.Able to measure central tendency and dispersionStudy of performance characteristics of Analytical method
S.Y.B.Sc.	IV	II	USCH401	Organic	<p>At the end of this course students should be able to:</p> <ul style="list-style-type: none">Introduction and understanding about the new concept of coordination chemistry.Pursuing the knowledge of bioinorganic chemistry where the learning will be interlinked between biological and inorganic chemistry concepts.Gaining the knowledge of organometallic compounds.Identify and name different IUPAC nomenclature, organic reactions and reaction mechanisms of Aldehyde, Ketones, and Carboxylic acid & Amino compounds.Understand the reactions and mechanisms of diazonium compounds.Acquire knowledge of Stereochemistry of organic molecules – R/S nomenclature, Resolution of stereoisomers.





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S.Y.B.Sc.	IV	III	USCH401	Environmental and Industrial Chemistry	At the end of this course students should be able to: <ul style="list-style-type: none">To learn chemistry of oil, fats, soapsTo learn the concept corrosion & Protection of metalAcquire the knowledge of metallurgical & metallurgical process with toxicologyTo study the sources, effects, treatment of water pollution.
S.Y.B.Sc.	IV	I	USCHP1	Physical Practical	At the end of this course students should be able to: <ul style="list-style-type: none">Develop skill in handling instruments like pH meter, ConductometerApply knowledge of redox titration.Able to find out molar absorptivity by photometricallyLearn good laboratory practices.
S.Y.B.Sc.	IV	II	USCHP2	Inorganic Practical	At the end of this practical course <ul style="list-style-type: none">Students will develop the skill of using particular reagents used during practical process and understand the necessary conditions to be maintained during preparation of inorganic complexes.Connecting the theoretical knowledge to practical work.
S.Y.B.Sc.	IV	III	USCHP3	Organic Practical	At the end of this course students should be able to: <ul style="list-style-type: none">Characterize single organic compounds.To learn how to use pH meter, spectrophotometerTo study the concept of gravimetric analysis in the determination of particular ion like NiTo study the concept of formation of complexes
T.Y.B.Sc.	V	I	USCH501	Physical Chemistry	At the end of this course, students will be able, <ul style="list-style-type: none">To explain various colligative properties of solution and to determine the molecular weight using the properties.To know the meaning of phase, component and degree of freedom and phase rule.





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					<ul style="list-style-type: none">To study concept of surface adsorption and to study the B.E.T equation for multilayer adsorption.To understand the electrical properties of Colloids.To learn the basic concepts involved in electrochemistry.To learn the basic terminologies involved in polymer chemistry.
T.Y.B.Sc.	V	II	USCH502	Inorganic Chemistry	<p>At the end of this course, students will be able to:</p> <ul style="list-style-type: none">Acquire knowledge on importance of Molecular symmetry and relate to the symmetry around nature.Understand the basics of structure of solids and superconductivity.Acquire the knowledge on different inner transition elements with their individual separation process.Gathering the concept of Non-aqueous solvents and its importance.
T.Y.B.Sc.	V	III	USCH503	Organic Chemistry	<p>At the end of this course students should be able to:</p> <ul style="list-style-type: none">Write mechanism of elimination reaction, reaction of carbonyl compound with nucleophile and rearrangement reactions.Acquire knowledge of Stereochemistry of organic molecules – Element of symmetry, conformations of cyclohexane, stereo selective & stereospecific reactions, stereochemistry of substitution and addition reaction.Able to aware with various terms related with carbohydrates.Write IUPAC nomenclature of bicycle compounds.Understand heterocyclic compounds and their reactions.
T.Y.B.Sc.	V	IV	USCH504	Analytical Chemistry	<p>At the end of this course students should be able to:</p> <ul style="list-style-type: none">Use statistical methods in chemical analysis.Learn different calculations used in





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					<p>different interpretation of data obtained from instrument.</p> <ul style="list-style-type: none">To learn different techniques of sampling of solid, liquid, and gasesMore emphasis on the detail study of TLC, HPLC, HPTLC and PC with their applicationLearn principle of instrumentation, application of FES, AAS, Fluorescence phosphorescence spectroscopy, Turbidimetry, and Nephelometer.Assimilate basic terms involved in solvent extraction and factors affecting solvent extractionComparative study of solid phase extraction and solvent extraction
T.Y.B.Sc.	V	Applied component	USACDD501	Drugs and Dyes	<p>At the end of this course students should be able to:</p> <ul style="list-style-type: none">To study the various dosage forms available for medications and the routes of administration.To understand the chemistry of drugs with respect to their pharmacological activity.To understand the drug metabolic pathways, adverse effect and therapeutic value of drugs.To learn the drugs which are used as antiamebic drugs, antitubercular drugs, anti-HIV drugs.
T.Y.B.Sc.	V	I	USCHP01	Physical Chemistry Practical	<ul style="list-style-type: none">To enable the student to use techniques such as potentiometer and colorimeter for studying redox reaction and acid base titration.How to test the validity of Freundlich adsorption isomer.To study the empirical formula of complex.
T.Y.B.Sc.	V	II	USCHP02	Inorganic chemistry Practical	<ul style="list-style-type: none">At the end of this practical course, students will learn to prepare inorganic complexes with understanding of structure and role of metal and ligands.Skill based learning of qualitative preparation.





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T.Y.B.Sc.	V	III	USCHP03	Organic Chemistry Practical	<ul style="list-style-type: none">At the end of this course students should be able to:Do Separation of a mixture of two solid organic compounds by using chemical method.Able to synthesis various organic compounds in laboratory.
T.Y.B.Sc.	V	IV	USCHP04	Analytical Chemistry Practical	<ul style="list-style-type: none">To study redox titration by determination Fe in tabletDetermination of Vitamin C by redox titrationTo understand the concept of direct and blank titration in estimation of persulphate.To become master in handling of the instruments like Colorimeter, spectrophotometer, TurbidimeterTo apply the concept of Calibration curve method studied in Theory during use of above instruments.
T.Y.B.Sc.	V	Applied component	USACDD5P1	Drugs and Dyes Practical	<ul style="list-style-type: none">At the end of this course students should be able to:Synthesis of various commercial dyes as per pharmacopeiaMake useful arrangements for synthesis of drugs and dyesCalculate theoretical yield of the product.
T.Y.B.Sc.	VI	I	USCH601	Physical Chemistry	<ul style="list-style-type: none">At the end of this course, students will be able toAt the end of this course, students will be to learn the basic terminologies involved in electrochemistry.Able to have a firm foundation in the fundamental and molecular spectroscopy.To study the concepts classical mechanics and its limitations.To understand polarization process and its elimination and concepts like decomposition potential and overvoltage.To study the principle, instrumentation, working and application of NMR.





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T.Y.B.Sc.	VI	II	USCH602	Inorganic Chemistry	<ul style="list-style-type: none">At the end of this course, students will be able to learn Molecular Orbital Theory for coordination compounds and will practice by drawing MOT diagrams.Assimilating knowledge on different aspects in Organometallic compounds.Understanding of polymers which will expose to further studies.Awareness of liquid effluents which will help in studying the waste treatment in larger scale.Pharmaceutical studies of inorganic compounds.
T.Y.B.Sc.	VI	III	USCH603	Organic Chemistry	<ul style="list-style-type: none">At the end of this course students should be able to:Use of reagents in various organic transformation reactions.Understand concepts in Organometallic compounds and their uses.Identify Structure of compounds through IR, NMR and Mass spectroscopic data.Absorb knowledge of various basics concepts of polymers, photochemistry and natural products.
T.Y.B.Sc.	VI	IV	USCH604	Analytical Chemistry	<ul style="list-style-type: none">At the end of this course students should be able to:To understand the potentiometric titration and to learn the different types of potentiometric titration curveIntroduction of electroanalytical technique with reference to polarography and Amperometric titration.To get the knowledge of basic terms, principle and application of polarography and amperometry.To learn about the food industry with respect to food preservation and processing techniquesStudy and analysis of food products and adulterant in milk , honey , tea, coffeeTo acquire the principle , instrumentation and application of GSC and GLCTo study principle, mechanism and





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					<p>factors affecting Ion exchange chromatography, size exclusion chromatography with application with respect industry and biology</p> <ul style="list-style-type: none">• To know what is method of validation and various methods used for validation.• To understand the classification of electroanalytical method and emphasis on detail study of NAA with advantages , disadvantages and application
T.Y.B.Sc.	VI	Applied component	USACDD601	Drugs and Dyes	<ul style="list-style-type: none">• At the end of this course students should be able to:• To acquire knowledge about natural colouring matter and their limitations.• To study the non-textile uses of dyes.• To learn preparation of the intermediate which are used to prepare dyes.• Master the morphology, chemical structure and morphological structure of cellulose fibers, protein fibers and synthetic fibers.
T.Y.B.Sc.	VI	I	USCHP01	Physical Chemistry Practical	<ul style="list-style-type: none">• At the end of this course students should be able to:• To learn how to determine the energy of activation by chemical kinetics experiment.• To learn how to determine equilibrium constant by partition coefficient method.• To enable the student to use techniques such as potentiometer, Conductometer for studying redox, acid base titration and Complexometric titration.
T.Y.B.Sc.	VI	II	USCHP02	Inorganic chemistry Practical	<ul style="list-style-type: none">• At the end of this practical course, students will learn the technique of standardization.• Skill of preparation through step-wise systematic methodology.• Linking with the theoretical concept of iodometric and Complexometric with practical performance.
T.Y.B.Sc.	VI	III	USCHP03	Organic Chemistry Practical	<ul style="list-style-type: none">• At the end of this course students should be able to:• Do Separation of a mixture of two solid/liquid organic compounds by





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					using physical method. <ul style="list-style-type: none">• Able to prepare various organic compounds.
T.Y.B.Sc.	VI	IV	USCHP04	Analytical Chemistry Practical	<ul style="list-style-type: none">• At the end of this course students should be able to:• To become master in the use and Standardization of pH meter, potentiometer.• Understanding of principle and application of these instrument in the analysis of vinegar sample and cola sample ,which student have learned in their second year of degree• To understand the concept of reducing sugar in the determination these sugar in honey• To learn Complexometric study in the analysis of talcum powder i.e determination of Ca in presence of Mg• How to do Standardization of secondary standard like sodium hydroxide.
T.Y.B.Sc.	VI	Applied component	USACDD6P1	Drugs and Dyes Practical	<ul style="list-style-type: none">• At the end of this course students should be able to:• Synthesis of various drugs as per pharmacopeia• Calculate practical yield of the product





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DEPARTMENT OF CHEMISTRY - MSC

Name of the Programme	Programme Outcome	Program Specific Outcome
PG MASTER SCIENCE (M.Sc.): OF	<ul style="list-style-type: none"> Demonstrate, solve and an understanding of major concepts in all disciplines of Chemistry. Solve the problem and also think methodically, independently. Create an awareness of the impact of chemistry on the society, and development outside the scientific community. Become professionally trained in the area of Industry, material science, lasers and Nano-Technology. Employ critical thinking and the scientific knowledge to design, carry out, record and analyze the results of Chemistry experiments. To inculcate the scientific temperament in the students and outside the scientific community. Apply modern methods of analysis to chemical systems in a laboratory setting. 	<ul style="list-style-type: none"> Learn about the potential uses of analytical industrial chemistry. Carry out experiments in the area of organic analysis, estimation, separation, derivation process, conduct metric and potentiometric analysis. Learn the classical status of thermodynamics. Gathers attention about the physical aspects of atomic structure, various energy transformation, molecular assembly in nanolevel and significance of electrochemistry. Understand good laboratory practices and safety. Introduce advanced techniques and ideas required in developing area of Chemistry. Make aware and handle the sophisticated instruments /equipments. Enhance students" ability to develop mathematical models for physical systems

B. Course Outcomes of all courses offered by the Department

Name of the Course : M.Sc.

CLASS	SEM	PAPER NO	PAPER CODE	PAPER	LEARNING OUTCOMES
M.Sc.	I	I	PSCH 101	Physical Chemistry	<p>After completion of these course students should be able to</p> <p>Learn the thermodynamic description of exact, inexact differential, state function and Joule Thomson experiment.</p> <p>To study the advance concepts in chemical Thermodynamics and study Gibbs Duhem Margules equation, Laplace equation and (Kelvin equation), Gibbs adsorption isotherm, BET isotherm.</p> <p>Able to understand the concepts of</p>





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					<p>bioenergetics.</p> <p>To study application of phase rule to Three component system.</p> <p>To study the Laplace equation and Kelvin equation, Gibbs adsorption isotherm, BET isotherm.</p> <p>To study the advance concepts of electrochemistry and learn various effect related to electrolytic conductance.</p>
M.Sc.	I	II	PSCH 102	Inorganic Chemistry	<p>At the end of this course, students will be able to</p> <p>Understand the mechanism involved during inorganic reactions.</p> <p>Detailed study of Organometallic compounds with the concept clearing of structure and bonding involved with various examples.</p> <p>Conceptual study of emerging nanomaterials and applications of it.</p> <p>Further learning based on spectral studies and its applications.</p>
M.Sc.	I	III	PSCH 103	Organic Chemistry	<p>At the end of this course students should be able to:</p> <p>Use of various oxidising and reducing agents in organic transformation reactions.</p> <p>Acquire advanced knowledge of Stereochemistry of organic molecules – Symmetry, Axial and planar chirality & Prochirality.</p> <p>Understand basic concepts and terms in physical organic chemistry.</p> <p>Apply Molecular Orbital Theory to organic molecules</p>
M.Sc.	I	IV	PSCH 104	Analytical Chemistry	<p>To learn and classify analytical methods with the study of basic terms.</p> <p>To learn about analytical problems in analysis , an overview of analytical methods with emphasis on selection of analytical methods , accuracy, precision , selectivity , sensitivity, detection limit , dynamic range</p> <p>Types of error with their minimization by</p>





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					<p>calibration curve method, standard addition method , internal standard method</p> <p>To become master in quality concept, quality accuracy , quality in laboratories</p> <p>To learn about concept of concentration term with numerical problems</p> <p>To study limiting reactant, excess reactant , oxidation number concept and numerical on them</p> <p>To study and classify separation techniques and different mode of separation ,</p> <p>To study solvent extraction with reference to Craig counter current extraction and crown ether</p> <p>More study of detectors used in HPTLC</p> <p>To concentrate on the rate theories including Van Deemter equation. Concept of resolution, sensitivity. Detector used in chromatography</p> <p>Detail study of detectors used in GC and HPLC . by learning this student will able to use a specific detector for specific sample</p>
M.Sc.	I	I	PSCHP10 1	Physical Chemistry Practical	<p>To learn the heat of solution (ΔH) of a sparingly soluble acid.</p> <p>To determine the thermodynamic solubility product of CaSO_4 at room temperature.</p> <p>To study the variation in the solubility of Ca(OH)_2 in presence of NaOH.</p>
M.Sc.	I	II	PSCHP10 2	Inorganic chemistry Practical	<p>At the end of this course students should be able to:</p> <p>Do analysis of alloy / ore and find out their constituents.</p>
M.Sc.	I	III	PSCHP10 3	Organic Chemistry Practical	<p>At the end of this course students should be able to:</p> <p>Prepare various organic compounds and check purity using TLC.</p>
M.Sc.	I	IV	PSCHP10 4	Analytical Chemistry Practical	<p>To learn how you will prepare solution required for your experiment with preparation of laboratories reagent.</p> <p>To study Volhard's method used in</p>





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					precipitation titration. Practical study of efficiency and exchange capacity and break through capacity of cation exchanger resin studied in third year of bachelor of science. To determine the nitro group present in the given organic compound.
M.Sc.	II	I	PSCH 201	Physical Chemistry	To understand advance study in quantum mechanics and basic term involved in it. To study the advance concepts of Quantum Chemistry such as Rigid rotor, spherical coordinates and various equation involved in it. To learn basic concepts in Chemical Kinetics and Molecular Reaction Dynamics and various term involved in it. To understand collision theory of reaction rates for bimolecular reaction. To learn elementary reaction in solution, enzyme catalysis, inhibition and kinetics of reaction in solid state.
M.Sc.	II	II	PSCH 202	Inorganic Chemistry	At the end of this course, students will be able to learn MOT concepts and skill development of drawing MOT diagrams. New concepts of group theory. Awareness about pollution and its remedial measures. Gaining the further understanding on the topic of bioinorganic chemistry with the role of some important elements which help in various functions happening in the human body system.
M.Sc.	II	III	PSCH 203	Organic Chemistry	At the end of this course students should be able to: Acquire knowledge of chemistry of enolates. Understand Rearrangement reactions, uses of various reagents and the





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					<p>mechanism of their action.</p> <p>Apply theory concepts of UV-Visible, IR, NMR and Mass spectroscopy to identify Structure of organic compounds</p>
M.Sc.	II	IV	PSCH 204	Analytical Chemistry	<p>To learn the basic component of instruments used in spectroscopic techniques</p> <p>Details learning of different factors affecting molecular UV- visible spectroscopic techniques</p> <p>To learn about us of FTIR and its instrumentation</p> <p>Student will get idea about advance instrumental techniques including X-ray spectroscopy, mass spectroscopy.</p> <p>To learn about the electroanalytical techniques like electrogravimetry, coulometry.</p> <p>Different types of ion selective electrodes including solid state, gas sensing, liquid-liquid, enzyme based biosensor).</p> <p>To study advance voltammetry techniques like Differential pulse polarography ,cyclic voltammetry , stripping voltammetry</p> <p>To study organic polarography</p> <p>To learn Bio amperometric titration and to learn how to detect moisture by Karl – Fischer method</p>
M.Sc.	II	I	PSCHP201	Physical Chemistry Practical	<p>Able to learn to draw a phase diagram of three component system.</p> <p>To enable to use techniques such as potentiometer, conduct meter, PH-meter and spectrophotometer for studying redox, acid base titration and complexometric titration.</p>
M.Sc.	II	II	PSCHP202	Inorganic chemistry Practical	<p>At the end of this practical course, students will learn the technique of standardization.</p> <p>Skill of preparation through step-wise systematic methodology.</p> <p>Linking with the theoretical concept of iodometric and complexometric with practical performance.</p>





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M.Sc.	II	III	PSCHP20 3	Organic Chemistry Practical	At the end of this course students should be able to: Do Separation of a mixture of two solid/liquid organic compounds by using physical & chemical method and derivative preparation of purified product.
M.Sc.	II	IV	PSCHP20 4	Analytical Chemistry Practical	To master in the principle and standardization of different instrument like pH meter, potentiometer, Conductometer. Student will learn how to prepare primary standard how to do standardization of secondary standard like sodium hydroxide learn to draw best fitting line. Plotting of first derivative and second derivative graph. Handling of spectrophotometer, Simultaneous determination of two analyte in the given sample by spectrophotometry.
M.Sc. (organic)	III	I	PSCHO 301	Theoretical organic chemistry-I	To study the formation of organic reactive species, their stability and related name reaction and its applications. To understand the NGP. To learn the role of FMOs in organic reactivity. To acquire the knowledge of classification of pericyclic reaction. To understand classification of point groups based on symmetry elements with examples. To study the basic principles of photochemistry. Study of photochemistry of carbonyl compounds, alkenes, dienes, polyenes and aromatic compounds. To study the photochemistry of olefin.
M.Sc.	III	II	PSCHO	Synthetic	Learn the mechanism of name reactions and





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(organic)			302	organic chemistry-I	its applications. Gain knowledge about protection and deprotection concept in organic synthesis. Learn the concept of enamines and ylides. Learn the basic concept of metals and non-metals in organic synthesis.
M.Sc. (organic)	III	III	PSCHO 303	Natural products and spectroscopy-I	At the end of this course, students will be able to learn the detail study and classification of heterocyclic compounds. Further learning of natural products will enhance the exposure to various components in the topic. Development of skills in solving spectroscopic techniques.
M.Sc. (organic)	III	IV	PSCHO 304	Medicinal and bioorganic chemistry	At the end of this course students should be able to: Grasp knowledge about drugs, its discovery and development. Understand various concepts of biomolecules. Acquire knowledge of natural products, their biosynthesis.
M.Sc. (organic)	III	I	PSCHO 3P1	Separation of a solid ternary mixture using micro-scale technique	At the end of this course, students will be able To separate ternary mixtures.
M.Sc. (organic)	III	II	PSCHO 3P2	Estimation of drugs	At the end of this practical course, students will develop the skill of estimation of various drugs. Enhance the skill of standardization and titration methods. Hands on experience in usage of instruments required for estimation.
M.Sc. (organic)	III	III	PSCHO 3P3	Organic preparations (1.0 g scale)	At the end of this course, students will develop the skill of planning of synthesis, reaction parameters and safety measures to be taken during performance of practical. Learning the information on spectral methods. Knowledge of Purification methods.
M.Sc. (organic)	III	IV	PSCHO 3P4	Techniques of purification	At the end of this course students should





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				and green methods of synthesis	be able to: Do the purification of organic compounds by various distillation process and column chromatography. Understand microwave assisted green synthesis.
M.Sc. (organic)	IV	I	PSCHO 401	Theoretical organic chemistry-II	To understand basic concept of Physical organic chemistry. To learn various terms associated with supramolecular chemistry and preparation of supramolecules. To acquire advance knowledge of Stereochemistry such as racemisation and resolution of racemates and determination of enantiomer and diastereomer of composition. To introduce basic principles of asymmetric synthesis such as Synthesis of L-DOPA.
M.Sc. (organic)	IV	II	PSCHO 402	Synthetic organic chemistry-II	Learn the applications of radicals in organic synthesis. Understand the concept of retro analysis. Acquire knowledge of newer methods in organic synthesis. Learn applications of transition and rare earth metals.
M.Sc. (organic)	IV	III	PSCHO 403	Natural products and spectroscopy-II	At the end of this course, students will be able to further continue the learning about heterocyclic compounds and their synthesizaton. Connect the necessity of vitamins in our body and role of steroids. Problem solving skills in spectral problems will develop the knowledge for identification of compounds.
M.Sc. (organic)	IV	IV	PSCHO 404	Medicinal, bioorganic and green chemistry	At the end of this course students should be able to: Grasp knowledge about drugs synthesis. Understand various concepts of





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					biomolecules. Acquire basic knowledge of green chemistry.
M.Sc. (organic)	IV	I	PSCHO 4P1	Separation of solid-liquid/ liquid-liquid ternary mixture using micro- scale technique	At the end of this course, students will be able to separate solid, liquid ternary mixtures.
M.Sc. (organic)	IV	II	PSCHO 4P2	Identification of any unknown organic compound with preparation, purification and physical constant of derivative	At the end of this practical course, students will be able to identify unknown organic compounds through different practical methods.
M.Sc. (organic)	IV	III	PSCHO 4P3	Isolation / Estimation of natural products	At the end of this course, students will develop the skill of isolation and estimation of few natural products.
M.Sc. (organic)	IV	IV	PSCHO 4P4	Interpretation of spectral data of organic compounds	At the end of this course students should be able to: Determine structure of organic compounds using UV-Visible, IR, NMR and Mass spectra.





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DEPARTMENT OF - POLITICAL SCIENCE

Name of the Programme	Programme Outcome	Program Specific Outcome
	Students will be able to	Students will be able to have
UG (B.A.) : BACHELOR OF ARTS -POLITICS	<ol style="list-style-type: none"> 1. Program Specific Outcomes 2. Knowledge about political system of the nation. 3. Study of national and international political affairs. 4. Study from competitive examination point of view. 5. Understanding the government mechanism, its functions, duties and responsibilities. 6. Creating appropriate and efficient political leaders. 7. Getting knowledge of political law. 8. Getting knowledge of Constitution of India. 	<ol style="list-style-type: none"> 1. Have fundamental knowledge of Indian Political System, National and International Political affairs, Government mechanism, its functions, duties and responsibilities, Political law and Constitution of India. 2. Develop study from competitive examination point of view 3. Motivate to student for creating appropriate and efficient political leadership

B1. Course Outcomes of all courses offered by the Department Name of the course : B.A. (Politics)			
Semester – I		F. Y. B. A.	
Sr. No.	Name of The Course	Course Code	Course Outcomes (After completing this course, the students will be able to)
1	PAPER I INDIAN POLITICAL SYSTEM		<ol style="list-style-type: none"> 1. Acquiring the knowledge about Indian Constitution. 2. Getting awareness about one's rights and duties. 3. Getting information about political parties and judicial system in India. 4. Knowing about the problems and challenges in Indian politics.





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Semester – II		F. Y. B. A.	
1	PAPER I INDIAN POLITICAL PROCESS		<ol style="list-style-type: none">1. Acquiring the knowledge about Indian Constitution.2. Getting awareness about Indian Federal System3. Getting information about political parties and system of justice in India4. Knowing about the Social Dynamics in Indian Politics and problems and challenges in Indian National Security
S.Y.B.A.			
Semester - III			
1	PAPER II INDIAN POLITICAL SYSTEM		<ol style="list-style-type: none">1. Acquiring the knowledge about Indian Constitution.2. Getting awareness about one's rights and duties.3. Getting information about political parties and system of justice in India.4. Knowing about the problems and challenges in Indian politics.
2	PAPER III PUBLIC ADMINISTRATION		<ol style="list-style-type: none">1. Study of meaning, scope and application of Public administration2. Getting information about various concepts and theories in Public Administration.3. Study of the mechanism for the solution of problems in4. Public Administration5. To study of contemporary techniques and practices in administration
Semester - IV			
1	PAPER II INDIAN POLITICAL PROCESS		<ol style="list-style-type: none">1. Acquiring the knowledge about Indian Constitution.2. Getting awareness about Indian Federal System3. Getting information about political parties and system of justice in India.4. Knowing about the Social Dynamics in Indian Politics and problems and challenges in Indian National Security.





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2	PAPER III INDIAN ADMINISTRATION		<ol style="list-style-type: none">1. Study of the administrative system of the nation.2. Acquiring the knowledge about personal administration in Indian Administration.3. The study of financial administrative process and functioning in India4. Highlight the contemporary issues in Indian Administration.
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T.Y.B.A.

Semester - V

1	PAPER IV POLITICS MODERN MAHARASHTRA	OF	<ol style="list-style-type: none">1. Getting information about the historical survey the formation of Maharashtra State.2. To Study the sub-regionalism, regional disparity and development.3. An analytical study of political institution in Maharashtra4. Acquire knowledge of cast and politics
2	PAPER V WESTERN POLITICAL THOUGHT		<ol style="list-style-type: none">1. Getting information about western thinkers and their Political thoughts.2. Comparative study of the ancient thoughts and modern thoughts.
3	PAPER VI WORLD POLITICS		<ol style="list-style-type: none">1. Study of the international political system.2. The study of various concepts and approaches in International Politics.3. The study of Global Order4. To study conflicts, peace and security5. Getting knowledge about International Political Economy

Semester - VI

1	PAPER IV DETERMINANTS POLITICS MAHARASHTRA	OF OF	<ol style="list-style-type: none">1. Study of the local governing mechanism2. Developing leadership at local level3. Study of Political economy of Maharashtra4. Study of contemporary issues and movements in Maharashtra
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2	PAPER V INDIAN POLITICAL THOUGHT		<ol style="list-style-type: none">1. Study of the Indian Political Thinkers and their thoughts2. Study of the contribution of political thinkers in independent movements and their need for modern society3. Study of Indian Political Thinkers ideas on State, Nationalism, Rationa and Radical Reforms and Socialism
3	PAPER VI INDIA IN WORLD POLITICS		<ol style="list-style-type: none">1. Study of the International & Regional Organizations2. Study of the relations of India with neighboring countries3. The study and role of India's foreign policy and diplomacy4. Study of India's relation with Major Powers





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DEPARTMENT OF POLITICS - MA

Program outcome and Program specific outcomes offered by the Department Name of the Programme specialization: MA POLITICS

Name of the Programme	PROGRAM OUTCOMES	PROGRAM SPECIFIC OUTCOMES
PG – (M.A.) Master of Arts – Politics	<ul style="list-style-type: none"> To have fundamental knowledge about political system of the nation. Study of national and International political affairs with organization. Study from several competitive examination point of view. Understanding the government mechanism, its roles and responsibilities through its functions. Creating appropriate and efficient political leaders. Understanding several theoretical concepts and its significance in life. Understand the Constitution of India in deep way. To study the different disciplines of the vast subject systematically 	<ul style="list-style-type: none"> Have significant knowledge of Indian Political System, National and International Political affairs, Government mechanism, its functions, duties and responsibilities. To obtain knowledge of Political law and Constitution of India. Develop study from competitive examination point of view Motivate to student for creating appropriate and efficient political leadership by knowing insights of it

B. Course Outcomes of all courses offered by the Department Name of the Course : M.A. Politics Part I

CLASS	SEM	PAPER NO	PAPER CODE	PAPER	LEARNING OUTCOMES – Students will be able to
MA	I	01		POLITICAL THEORY	<ol style="list-style-type: none"> Understand the significance of political theories Acquiring knowledge about the multiple aspects of political theories Study the different ideas of political concepts with theoretical approach
	I	02		INDIAN GOVERNMENT AND POLITICS	<ol style="list-style-type: none"> Understand the situation of Indian state in Post Independence period Grasp the role of political parties





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					and the process of electoral system 3. Study the various demands for autonomy within the Indian state 4. Understand the role of social components like caste, gender, class etc and their impact on Indian politics.
	I	03		PUBLIC ADMINISTRATION	1. Acquire knowledge about the administrative theories and approaches 2. Analyze the importance of new concepts in administration 3. Make the administration more citizen friendly through various provisions and acts
	I	04		INTERNATIONAL RELATIONS	1. To study the international system 2. Gain knowledge about the various diplomatic methods to establish the relations of country with another one 3. Study of non state actors 4. Obtain knowledge about the different weaponries and their implications on world
	II	05		POLITICAL THEORY II	1. To understand various concepts of political theories 2. To study the significance of important ideas and implement those in living life 3. To study the crucial ideas of thinkers and relate to the life
	II	06		COMPARATIVE POLITICS	1. To achieve the knowledge about the state and its developmental aspects 2. Understand the necessity and role of constitution 3. Obtain knowledge about the various institutions and elements of political process that reshape the politics
		07		APPROACHES AND	1. Understand various approaches to





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				EMERGING ISSUES IN INTERNATIONAL RELATIONS	study international relations in broad way 2. To study global financial institutions and regional blocks 3. To follow the idea of human security at global level
	II	08		INDIAN CONSTITUTION	1. To grasp the minute nuances of the Indian Constitution 2. To understand the federal structure of India 3. To attain the knowledge of various organs of the government 4. Forms of governance





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DEPARTMENT OF ENGLISH

Program outcome and Program specific outcomes offered by the Department Name of the Programme specialization

:

Name of the Programme	PROGRAM OUTCOMES	PROGRAM SPECIFIC OUTCOMES
FYBA Communication Skills in English		Enhance language proficiency. Focus on functional aspect of language. Increase lexical resources
FYBCOM Business Communication		To develop awareness of the complexity of the communication process To develop effective listening skills in students so as to enable them to comprehend instructions and become a critical listener To develop effective oral skills . Effective use of electronic media

B. Course Outcomes of all courses offered by the Department Name of the Course

CLASS	SEM	PAPER NO	PAPER CODE	PAPER	LEARNING OUTCOMES
FYBA	I & II		UACS101 UACS201	& Communication Skills in English	Enhance LSRW. Voc & grammar skills to meet the challenges.
FYBCOM	I & II			Business Communication	Understanding communication process. Enhancing LSRW skills Using electronic media for effective communication

Program outcome and Program specific outcomes offered by the Department Name of the Programme specialization

Name of the Programme	PROGRAM OUTCOMES	PROGRAM SPECIFIC OUTCOMES
SYBA Eng Anc II Indian Literature in English		To introduce learners uniqueness and pluralistic dimensions of Indian Literature in English
SYBA Eng Anc III American Literature		To enhance their understanding of American, African American and Multicultural To facilitate cross-cultural perspectives and discussions on American Literature





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B. Course Outcomes of all courses offered by the Department Name of the Course

CLASS	SEM	PAPER NO	PAPER CODE	PAPE R	LEARNING OUTCOMES
SYBA	III & IV	II	UAENG 301 & UAENG 401		Understanding the different genres of Indian Literature in English Have awareness of prominent Indian Writers in English
SYBA	III & IV	III	UAENG 302 & UAENG 402		Understanding socio-cultural milieu of twentieth century America. Acquainting themselves to themes, styles and genres of Ame Lit

Program outcome and Program specific outcomes offered by the Department Name of the Programme specialization

:

Name of the Programme	PROGRAM OUTCOMES	PROGRAM SPECIFIC OUTCOMES
TYBA ENG ANC IV	•	To introduce students to English Literature of the 16th, 17th and 18th centuries as well as to the background To introduce to the literary masters and different writing styles
TYBA ENG ANC V	•	To introduce the learners to important critical terms To make them aware of the nature and function of literature and criticism To enable them to understand various literary theories and critical approaches To familiarize the learners with the tenets of practical criticism
TYBA ENG ANC VI	•	To develop amongst learners an insight into the process of word formation. To develop amongst them an insight into the sounds, stress patterns and intonations. To help them learn grammatical analysis and description and the skills of sentence To introduce the mechanics of writing for effective writing for various domains





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B. Course Outcomes of all courses offered by the Department Name of the Course :					
CLASS	SEM	PAPER NO	PAPER CODE	PAPER	LEARNING OUTCOMES
TYBA	V & VI	IV	UAENG 501 & UAENG 601	C16th to 18th Century English Literature	Understanding English Literature of the 16th, 17th and 18th centuries as well as the background Appreciating literary masters and different writing styles
TYBA	V & VI	V		Literary Criticism	Understand important critical terms Understand nature and function of literature and criticism Understand various literary theories and critical approaches Be familiar tenets of practical criticism
TYBA	V & VI	VI			Gain a basic understanding of phonetics, morphology and word transformation Have developed adequate knowledge of the rules of grammar, grammatical analysis and sentence transformation Write effectively in various domains. Have improved speaking skills





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Department of Commerce

Program outcome and Program specific outcomes offered by the Department

Name of the Programme specialization: Bachelor of Commerce B.Com.

Program Outcomes (POs)

PO-1	:	Generic and Domain Knowledge	Students will gain through generic and domain knowledge of commerce and management. This knowledge will help to them to analyze the situations of real world business and policy issues.
PO-2	:	Problem Solving & Innovation	Inculcate ability to find, analyze and provide innovative solutions to the business and societal problems by applying research skills in commerce and business.
PO-3	:	Critical Thinking	Ability to identify and investigate the business problems and finding out the reason with the help of research based knowledge and research methods to arrive at data driven decisions
PO-4	:	Effective Communication	To develop the ability to communicate effectively with the help of technology in the global competitive environments.
PO-5	:	Leadership and Team Work	Parenting attitude should be developed and inculcate in the leaders and emphasis cooperative environment in an organization to achieve organizational goals for the benefits of all the stake holders.
PO-6	:	Global Orientation and Cross-Cultural Appreciation	Think globally approach should be developed and all the relevant business issues should be handled from a global perspective and exhibit an appreciation of Cross Cultural aspects of business and management.
PO-7	:	Entrepreneurship	Rather than job sicker be a job giver kind of approach and attitude should be developed and skills to identify entrepreneurial opportunities and leverage managerial & leadership skills for founding, leading & managing startups.
PO-8	:	Environment and Sustainability	Use the knowledge for sustainable development and take all the steps for the betterment of societal, economic and environmental aspects.
PO-9	:	Social Responsiveness and Ethics	Ability to respect ethical and values and underpinnings of managerial choices in a political, cross-cultural, globalized, digitized, socio- economic environment and distinguish between ethical and unethical behaviors & act with integrity.
PO-10	:	Lifelong Learning	Ability to operate independently in new environment, acquire new knowledge and skills and assimilate them into the internalized





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			knowledge and skills.
PO-11	:	Competitive Advantage	Apply the knowledge and mastery on technology to sustain and prove the position in the global competition.
PO-12	:	Hands on Experience	This program could provide the knowledge and experience of Salesmanship, Marketing, promotion, Industries, Banking Sectors, Insurance Companies, Financing companies, Transport Agencies, Warehousing, Human Resource Management, Inventory Management etc., well trained professionals to meet the requirements.

Program Specified Outcomes (PSOs)

In case of specializations in each academic program

PSO-1	:	To build a strong foundation of knowledge of commerce in different areas.
PSO-2	:	To develop the skills of various techniques used in commerce.
PSO-3	:	To develop an attitude for working efficiently and effectively in a business environment.
PSO-4	:	To integrate knowledge, skill and attitude of commerce that will sustain for business environment to learn creativity among the students.

B. Course Outcomes of all courses offered by the Department

Name of the Course: Bachelor of Commerce B.Com.

Class	Sem.	Paper No	Paper Code	Paper	Learning Outcomes
F.Y. B.Com	I			Commerce I: Introduction to Business (w.e.f. 2016-17)	<ol style="list-style-type: none"> To impart the basic knowledge of setting business unit To make learner aware of basic requirement and return and legal provisions for starting business To give elementary knowledge to learner about Entrepreneurship To expose them Problems and prospects of Women Entrepreneurs: To familiarize the learners with current trends in business.
F.Y. B.Com	II			Commerce II : Service Sector (w.e.f. 2016-17)	<ol style="list-style-type: none"> To acquaint the students with the fundamentals of services To develop analytical ability to plan for various services strategies To familiarize the learners with current trends in services. To make students aware of present status of E-Commerce in India.
S.Y.	III			Commerce -III	<ol style="list-style-type: none"> To make the learners aware about





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B.Com				(Management: Functions and Challenges) (w.e.f. 2017-18)	conceptual knowledge and evolution of Management. 2. To familiarize the learners with the functions in Management.
S.Y. B.Com	III			Advertising– Skill Enhancement Courses (SEC) (w.e.f. 2017-18)	1. To expose them to various tools of IMC 2. To make the learner aware of role of advertising in contemporary scenario 3. To understand and examine the growing importance of advertising 4. To acquaint students with future and career in advertising 5. To familiarize the learners with current trends in advertising.
S.Y. B.Com	IV			Commerce – IV (Management: Production & Finance) (w.e.f. 2017-18)	1. To acquaint the learners with the basic concepts of Production Management, Inventory Management & Quality Management. 2. To provide basic knowledge about Indian Financial Systems. 3. To update the learners with the recent trends in Finance.
S.Y. B.Com	IV			Advertising– Skill Enhancement Courses (SEC) (w.e.f. 2017-18)	1. To highlight the role of advertising for the success of brands and its importance within the marketing function of a company. 2. To understand the construction of an effective advertisement 3. It aims to orient learners towards the practical aspects and techniques of advertising. 4. It is expected that this course will prepare learners to lay down a foundation for advanced post-graduate courses in advertising
T.Y. B.Com	V			Commerce – V Marketing Management (w.e.f. 2018-19)	1. To understand basic concept of marketing and marketing mix 2. To understand marketing philosophy and generating ideas for Marketing Information System and Marketing Research 3. To make students aware about Marketing Challenges faced by Marketing Managers in 21st Century 4. To update the learners with Skills required for effective marketing 5. To understand Competitive Strategies for Market Leader, Market Challenger, Market





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					<p>Follower</p> <ol style="list-style-type: none"> 1. To acquaint the learners with the basic concepts of Export marketing 2. To update the learners with Global Framework for Export Marketing 3. To provide basic knowledge about Financial Incentives available to Indian Exporters 4. To familiarize the learners with current trends in Export Marketing
T.Y. B.Com	V			<p>Export Marketing-I Skill Enhancement Courses (SEC) (w.e.f. 2018-19)</p>	<ol style="list-style-type: none"> 1. understand the process of marketing research and its different processes 2. identify sources of information 3. understand different research methods 4. apply selected research methods
T.Y. B.Com	V			<p>Marketing Research I (w.e.f. 2018-19)</p>	<ol style="list-style-type: none"> 1. The Business Environment and its factors. 2. How to become a successful entrepreneur and Various Entrepreneurial opportunities. 3. The importance of entrepreneurship as career. 4. The various qualities required to become a successful entrepreneur. 5. How to enhance Entrepreneurial competencies.
T.Y. B.Com	V			<p>EMSSI I (w.e.f. 2018-19)</p>	<ol style="list-style-type: none"> 1. To familiarize the student with the fundamental aspects of various issues associated with Human Resource Management as a whole. 2. To introduce the basic concepts, functions and processes & create an awareness of the role, functions and functioning of Human Resource Management. 3. To Understand the Concept and Process of HRP 4. To understand the applications of HRIS 5. To familiarize students with different theories of leadership and motivation 6. To make students aware about Human Resource Challenges faced by HR mangers 7. To update the learners with the recent trends in HRM.
T.Y. B.Com	VI			<p>Commerce – VI (Human Resource Management) (w.e.f. 2018-19)</p>	<ol style="list-style-type: none"> 1. To acquaint the learners with Product Planning and Pricing Decisions for Export Marketing
T.Y. B.Com	VI			<p>Export Marketing-II Skill</p>	<ol style="list-style-type: none"> 1. To acquaint the learners with Product Planning and Pricing Decisions for Export Marketing





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				Enhancement Courses (SEC) (w.e.f. 2018-19)	<ol style="list-style-type: none">2. To make students aware recent trends Export Distribution and Promotion3. To familiarize students with different sources of Export Finance4. To provide basic knowledge about Export Procedure and Documentation
T.Y. B.Com	VI			Marketing Research II (w.e.f. 2018-19)	<ol style="list-style-type: none">1. analyze and interpret both qualitative and quantitative data2. conduct and analyze a focus group discussion3. build a simple questionnaire from a web-based survey administration site.
T.Y. B.Com	VI			EMSSI I (w.e.f. 2018-19)	<ol style="list-style-type: none">1. The basic concepts of entrepreneurship and preparing a business plan to start a small Industry.2. How to use Knowledge and understanding in Creating and managing new venture.3. The necessary tools and techniques to set up their own business venture.4. How to bring out their own business plan





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Department of History – BA

Name of the Programme	Programme Outcome	Program Specific Outcome
	Students will be able to	Students will be able to have
History	<ul style="list-style-type: none"> Students will be able to think critically and explore new ideas, interpretations about the Historical Sources. Students shall be able to interact with the people staying near historical places. Students shall be able to understand their responsibilities about higher education and inculcating the values, ethics etc. as a responsible citizen. Students are motivated through the inspiration of Historical personalities. To motivate students to pursue higher studies such as MA in History, MA in Archival Science. 	<ul style="list-style-type: none"> Students are trained to write unknown authentic historical facts to help the society in terms of progress, growth and possible areas of improvement. Students do understand the importance of copyrights, patents and also awareness about plagiarism issues to learn the ethics in research.

Course Outcomes of all courses offered by the Department Name of the course : BA IN HISTORY			
Sr. No.	Name of The Course	Course Code	Course Outcomes (After completing this course, the students will be able to)
FYBA HISTORY			
Semester - I			





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1	History of Modern India (1857-1947)		At the end of this course students should be able to: <ul style="list-style-type: none">• Understand the feeling of Nationalism.• Understand the importance of social reforms.• Student will eligible for government service, can attempt competitive exams. E.g. IBPS, SSC, UPSC, MPSC, Railway recruitment and many others.
Semester – II			
1	History of Modern India: Society and Economy	UA&FFSII.3	At the end of this course students should be able to: <ul style="list-style-type: none">• Understand Characteristics of Indian Constitution.• Understand about development in communication and transport system.• Understand Indian Foreign Policy and factors that influenced Indian Foreign policy.• principles of foreign policy.
SYBA			
Semester – III			
1	Landmarks in World History, 1453 A.D.-1945 A.D.	UAHIS301	At the end of this course students should be able to: <ul style="list-style-type: none">• Understand the transition of Europe from medieval to Modern times and its impact on the world.• Understand the knowledge of the most significant events and personalities of the period under study.• Understand economic, political conditions of American, French.• Understand reasons behind American revolution, French revolution and Industrial revolution and its impact on world.
2	Ancient India from Earliest Times to 1000 A.D.	UAHIS302	At the end of this course students should be able to: <ul style="list-style-type: none">• Understand different sources of Ancient Indian History.• understand the political, socio-economic and cultural developments in the period under study and appreciate the rich cultural heritage in India.• Understand the developments in the history of Ancient India from Indus Valley Civilisation to 1000 A.D.• Understand the Social and Religious developments in ancient India





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SYBASemester – IV			
1	Landmarks in World History.	UAHIS401	At the end of this course students should be able to: <ul style="list-style-type: none">• Understanding Freedom Movement of neighboring countries.• Understand factors responsible for 2nd world war.• Understand west Asian political development, oil politics and its impact to world politics.• Understand work and Importance of League of Nation and UNO for world peace. International agencies like League of Nation and UNO for peace.
1	Mauryan and Post-Mauryan Period (322 B.C. to 320 A.D.)	UAHIS402	At the end of this course students should be able to: <ul style="list-style-type: none">• Understand Military Power of king Chandragupta and king Ashoka• Understand Mauryan Administration• Understand Military power and administration of Post Mauryan Dynasties- Sungas, Kushanas and Satavahanas
TYBA			
SEM V			
1	History of Sultanate Period (1000 CE-1526CE)	UAHIS501	At the end of this course students should be able to: <ul style="list-style-type: none">• Understand the history of early Medieval India that laid the foundation of the Sultanate in India.• Understand the contribution of Vijayanagar and Bahamani kingdoms to Medieval Indian History.• Understand the administrative, socio-economic and cultural aspects of Medieval India
2	History of Modern India	UAHIS502	At the end of this course students should be able to: <ul style="list-style-type: none">• Understand Colonial impact on India.• Understand the Social Economic reforms in pre and post Independent.• Understand the process of making the Constitution and the Integration and Reorganization of Indian States.





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3	Introduction to Archaeology	UAHIS503A	At the end of this course students should be able to: <ul style="list-style-type: none">• Understand the basic facets of Archaeology.• Understand the importance of Epigraphy.• Understand the importance of Numismatics as an important source of history• Understand the basis of heritage Tourism.
Semester – VI			
1	History of Mughal rule (1526 CE-1707CE)	UAHIS601	At the end of this course students should be able to: <ul style="list-style-type: none">• To acquaint the students with the history of India since the emergence of the Mughal rule.• To understand administration of the Mughal Empire.• Understand Factors Responsible for Rising Maratha Power.
2	History of Contemporary India (1946 CE- 2000 CE)	UAHIS602	At the end of this course students should be able to: <ul style="list-style-type: none">• Understand the process of making the Constitution and the Integration and Reorganization of Indian States.• Acquaint the students with the political developments in India after Independence.• Comprehend the socio-economic changes and progress in science and technology in India.
3	Museology, Archival and library Sciences	UAHIS603A	At the end of this course students should be able to: <ul style="list-style-type: none">• Understand the Museology as an Allied Branch of History• Understand the Importance of Museum in preservation of heritage• Understand the role of library in academic and research career• Understand the management of Library.





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Department of Arts - Geography

Department of GeographyName of the Programme	Programme Outcome Students will be able to	Program Specific Outcome Students will be able to have
UG [BA] : BACHELOR OF ARTS	<ol style="list-style-type: none">1. Knowledge of the world and broadening of outlook of the students2. It aims at the development of the qualities of co-operation, generosity and sympathetic outlook.3. Geography also aims at the development of the quality of adjustment with the environment.4. It also aims at bringing about economic efficiency in the students.5. Teaching of Geography aims at development of mental faculties like power of reasoning, invention, discovery etc.6. It is also responsible for the development of balanced personality.7. It aims at development in the students love for nation, travels and knowledge about countries.8. It also helps them to acquire knowledge of natural resources.9. Teaching of Geography also aims at the study of the influence of geographical factors on man.10. It also aims at the study of geographical elements in the development of human civilization.	<ol style="list-style-type: none">1. Students can able to choose to work as a cartographer with extensive knowledge about maps and are involved in making maps, charts, globes, and models of Earth and other planets.2. Students with a degree in geography also select to work as a surveyor in government sectors and private companies3. Students can be able work as a teacher in schools and high schools4. Serve as conservator in the forest, Soil and Agriculture Departments.5. Work in disaster and water resources management.6. In recent days even the fields of GIS as well as Remote Sensing are Providing better job opportunities to people with the educational background in geography and related GPS specializations.7. It helps for Competitive exam.





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B1. Course Outcomes of all courses offered by the Department Name of the course : B.A (GEOGRAPHY)			
Sr. No.	Name of The Course	Course Code	Course Outcomes (After completing this course, the students will be able to)
FYBA			
SEMESTER - I			
1	GEOMORPHOLOGY	UAGEO101	<ol style="list-style-type: none">1. Student will gain the knowledge of physical geography.2. Student will have a general understanding about the geomorphological and geotechnical process and formation.3. They will be able to correlate the knowledge of physical geography with the human geography.4. Develop an idea about geomorphology and different types of fundamental concepts.5. Explain different types of geomorphic processes like weathering and mass wasting and cycle of erosion.6. Understand the processes of erosion, deposition and resulting landforms.7. Acquire knowledge about slope forms and processes.
FYBA			
SEMESTER - II			
1	HUMAN GEOGRAPHY	UAGEO201	<ol style="list-style-type: none">1. Students can be able to understand the relationship of man and environment.2. Study of human evolution and races of man kinds.3. Understand the concept of Determinism, Possibilism and Stop and Go determinism.4. Understand the history of population5. Study of distribution and density of





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			population. 6. Students can gain knowledge of population theories.
SYBA			
SEMESTER - III			
1	GEOGRAPHY OF INDIA	UAGEO301	<ol style="list-style-type: none">1. Students can know about their own countries land formation, climate and natural vegetation.2. Students can know about their own countries land formation, climate and natural vegetation3. They understand the economic resources of India.4. They understand the social distribution of population of their country5. Students understand globalization and Indian economy. And also understand the regional distribution of resource.6. Develop an idea about regionalisation of India.
2	HUMAN GEOGRAPHY PART-I	UAGEO 302	<ol style="list-style-type: none">1. The students will be aware of the scope and contents of human geography.2. Students will be able to acquire the knowledge of Human Geography and will correlate it with their practical life.3. Student will be able to analyse the problems of physical as well as cultural environments of both rural and urban areas.4. Moreover students will try to find out the possible measures to solve those problems.5. Gain knowledge about major themes of human geography.





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			6. Develop an idea about space and society.
SYBA			
SEMESTER - IV			
1	GEOGRAPHY OF MAHARASHTRA	UAGEO402	<ol style="list-style-type: none">1. Students can know about their own states land formation, climate and natural vegetation.2. Students can understand the economic resources of Maharashtra.3. They understand the social distribution of population of their state.4. Students can also understand the regional distribution of resource in Maharashtra.
2	HUMAN GEOGRAPHY PART-I	UAGEO401	<ol style="list-style-type: none">1. Understand the relationship of man and environment2. Study of human evolution and races of man kinds.3. Understand the concept of Determinism, Posibilism and Stop and Go determinism.4. Understand the modes of life of Bhill, gonad, Nagas and Tribes in India5. Importance of Right to Information Acts.6. Understand the history of population7. Study of distribution and density of population.8. Get knowledge of population theories.
TYBA			
SEMESTER - V			
1	GEOGRAPHY OF RURAL SETTLEMENT	UAGEO501	<ol style="list-style-type: none">1. Students can able to build an idea about urban and rural settlements, and its relationship with environment and also different theories related to settlement geography.2. Know about classification and morphology of settlements.3. Understand the trends and patterns of world urbanization4. Know about different theories of





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			urban growth
2	ENVIRONMENTAL GEOGRAPHY	UAGEO502	<ol style="list-style-type: none">1. Students can gain knowledge about concept, scope of environmental geography and components of environment2. Develop an idea about human-environment relationships3. Build an idea about ecosystem4. Know about environmental programmes and policies
3	TOPO MAP AND THEMATIC MAP INTERPRETATION	UAGEO503	<ol style="list-style-type: none">1. Students can able to measure map scales, conversion of scales.2. Understand types of projections and able to construct different projections3. Students can able to prepare various graphs and diagrams4. Understand the different surviving techniques like, plane table, prismatic survey.5. Acquire knowledge of preparation to carry out the socio economic condition of the villages.6. Students can know about topographical maps and its types7. Students can know about the interpretation of Survey of India - Topographical maps.8. Understand interpretation if weather maps9. Developing an idea about scales and how to draw different types of scales;





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			<p>conversion of scales.</p> <ol style="list-style-type: none">10. Acquire knowledge different types of map projection11. Gain knowledge about topographical maps and apply this knowledge in ground surface12. Students learn to use of various meteorological instruments and also learn to interpret of the Indian daily weather report.13. Students learn to draw many cartography diagram and apply this is in different statistical data.
TYBA			
SEMESTER - VI			
1	GEOGRAPHY OF URBAN SETTLEMENT	UAGEO601	<ol style="list-style-type: none">1. Students can able to build an idea about urban and rural settlements, and its relationship with environment.2. Students can understand different theories related to settlement geography.3. Know about classification and morphology of settlements.4. Understand the trends and patterns of world urbanization5. Know about different theories of urban growth.
2	GEOGRAPHY OF TOURISM	UAGEO602	<ol style="list-style-type: none">1. On completion of the course, students are able to understand about the tourism influencing factors: historical, natural, social cultural and economic.2. Study the tourism motivating factors for pilgrimages, leisure, recreation, elements.3. Understand the Tourism types: eco-ethonocoastal and adventure tourism, national and international tourism, globalization and tourism.





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			<ol style="list-style-type: none">4. Study tourism attraction, evolution of tourism, promotion of tourism, case studies forming India.5. Study and understand the environmental laws and tourism-current trends, spatial and recent changes,6. Tourism circuits-short and longer, accommodation and supplementary accommodation other facility, Indian hotel industry7. Know about National Tourism Policy
3	STATISTICAL TECHNIQUES, COMPUTER SURVEYING AND	UAGEO603	<ol style="list-style-type: none">1. Learn the significance of statistics in geography.2. Understand the importance of use of data in geography3. Students can be able to gain knowledge about primary and secondary data collection helps them to prepare their survey report.4. Know about different types of sampling.5. Develop an idea about theoretical distribution6. Learn to use tabulation of data.7. Gain knowledge about association and correlation.8. Learn the significance of field work in geographical studies9. Understand the meaning of field and identifying the case study10. Know about different types of field techniques





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Department of History - MA

Program outcome and Program specific outcomes offered by the Department Name of the Programme specialization : MA History

Name of the Programme	PROGRAM OUTCOMES	PROGRAM SPECIFIC OUTCOMES
MA History	<ul style="list-style-type: none"> To Study various angels in History writing and understand Important issues from historical perspective 	<ul style="list-style-type: none"> Students learn various world issues from historical perspective

B. Course Outcomes of all courses offered by the Department Name of the Course :MA History

CLASS	SEM	PAPER NO	PAPER CODE	PAPER	LEARNING OUTCOMES
MA Part I	I	1		Research Methods in History	Students get idea about basic scientific method in history writing
MA Part I	I	2		Social, economic and administrative history of Early India (up to 1000)	Students Understand the evolution of cultural, religious and political process in early India
MA Part I	I	3		Social, economic and administrative history of Medieval India (1200 to 1700)	Students Understand the evolution of cultural, religious and political process in Medieval India
MA Part I	I	4		Social, economic and administrative history of Modern India	Students Understand the evolution of cultural, religious and political process in Modern India.
MA Part I	II	5		Philosophy of history	Students Understand the relationship between philosophy and history
MA Part I	II	6		History of Contemporary India	Students get knowledge about Post Independent India
MA Part I	II	7		Milestones in World History	Students get knowledge about Important Event in world history
MA Part I	II	8		History of Emancipatory Movement in Modern World	Students get knowledge about Important Issues in World





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Department of Psychology

Program outcome and Program specific outcomes offered by the Department Name of the Programme specialization

:

Name of the Programme	PROGRAM OUTCOMES	PROGRAM SPECIFIC OUTCOMES
Psychology	<ul style="list-style-type: none"> Students get knowledge of the basic concepts and modern trends in Psychology Students became aware of the applications of the various concepts in Social Psychology in the Indian context. Students will know the theories, major concepts and mechanisms, which explain human thought and behavior. Students will be able to interpret, design, and conduct basic psychological research. 	<ul style="list-style-type: none"> Students would gain conceptual and theoretical knowledge of psychological principles and would be able to apply them in research and professional areas. Students would understand the application of psychological principles in applied areas of Psychology and would be able to apply them in professional areas.

B. Course Outcomes of all courses offered by the Department Name of the Course : B.A. Psychology

CLASS	SEM	PAPER NO	PAPER CODE	PAPER	LEARNING OUTCOMES
FY BA	I	I		Fundamentals of Psychology: Part I	1. To impart knowledge of the basic concepts and modern trends in Psychology 2. To foster interest in the subject of Psychology and to create a foundation for further studies in Psychology 3. To make the students aware of the applications of Psychological concepts in various fields so that they understand the relevance of Psychology in different areas of life.
FY BA	II	II		Fundamentals of Psychology: Part II	
SY BA	III	III		Social Psychology: Part I	1. To impart knowledge of the basic concepts and modern trends in Social Psychology 2. To foster interest in Social Psychology as a field of study and research 3. To make the students aware of the applications of the various concepts in Social Psychology in the Indian context
		IV		Developmental Psychology: Part I	
SY BA	IV	V		Social Psychology: Part II	
		VI		Developmental Psychology: Part II	





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Department of Philosophy

Program outcome and Program specific outcomes offered by the Department Name of the Programme specialization :

Name of the Programme	PROGRAM OUTCOMES	PROGRAM SPECIFIC OUTCOMES
<p>Bachelor Of Arts</p>	<p>Upon successful completion of the programme the graduate would demonstrate :</p> <ul style="list-style-type: none"> • An ability to understand various philosophical concepts, thoughts, movements and philosophers. • An ability to apply the philosophical outlook towards society, politics and human development. • Skills for a comparative study of the Indian and Western philosophy • An ability to construct programme-modules for workshops and projects related to sensitization, awareness and capacity-building. • Proficiency in philosophical investigation, including the ability to interpret texts, explain theories, and identify relevant arguments. • Proficiency in critical thinking, including the ability to ask relevant questions, examine different sides of an issue, and recognize and evaluate arguments. • Proficiency in independent thinking, including the ability to develop and defend original positions. • Proficiency in written and oral communication, understood as stating and defending a clear and substantive thesis, in writing and in conversation or presentations. 	<ul style="list-style-type: none"> • Students will have the ability to apply philosophical methods to evaluate critically and understand how Philosophers and others have interpreted it. • Students will be able to acquire basic philosophical research skills, including the effective use of libraries, archives and data bases. • Students will be able to organise and express their thoughts clearly and coherently both in writing and orally. • Students will be able to demonstrate broad knowledge of philosophical events and their significance • Students will be able to recognise whether different individuals, groups, organisations, cultures, countries and nations have affected philosophical interpretations • Philosophy gave the students wisdom and foresight for the future.

B. Course Outcomes of all courses offered by the Department Name of the Course					
: B.A. Economics					
CLASS	SEM	PAPER NO	PAPER CODE	PAPER	LEARNING OUTCOMES





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FYBA	I	I		Moral Philosophy	<ul style="list-style-type: none">• Familiarize students with significant contributions from the history of moral philosophy• Inculcate in students a sense of moral reasoning based on analytical reasoning rather than on dogmatic assertion• Provide students with an ethical framework for assessing moral decisions in different areas of life.• Encourage students to appreciate the relevance of different moral cultures and outlooks in a globalized world
	II	I			<ul style="list-style-type: none">• Familiarize students with significant contributions from the history of moral philosophy• Inculcate in students a sense of moral reasoning based on analytical reasoning rather than on dogmatic assertion• Provide students with an ethical framework for assessing moral decisions in different areas of life.• Encourage students to appreciate the relevance of different moral cultures and outlooks in a globalized world
SYBA	III	II		Social Philosophy	<ul style="list-style-type: none">• To acquaint students with the basic philosophical questions and issues that are current in social philosophy• To equip students with argumentative and analytical skills involved in philosophizing through socio-philosophical issues• To encourage a spirit of rationality in philosophizing while appreciating and respecting differing social philosophical ideas and perspectives
	IV	II		Political Philosophy	<ul style="list-style-type: none">• To acquaint students with the basic philosophical questions





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					<p>and issues that are current in political philosophy</p> <ul style="list-style-type: none">• To equip students with argumentative and analytical skills involved in philosophizing through political-philosophical issues• To encourage a spirit of rationality in philosophizing while appreciating and respecting differing philosophical ideas and perspectives
SYBA	III	III		Indian Philosophy	<ul style="list-style-type: none">• To acquaint students with the basic philosophical questions that philosophers in India have addressed.• To equip students with argumentative and analytical skills involved in philosophical reasoning.• To encourage a spirit of rationality in philosophizing while appreciating and respecting differing philosophical systems and perspectives.
	IV	III		Western Philosophy	<ul style="list-style-type: none">• To acquaint students with the basic philosophical questions that philosophers in Greek and medieval tradition have addressed.• To equip students with argumentative and analytical skills involved in philosophical reasoning.• To encourage a spirit of rationality in philosophizing while appreciating and respecting different philosophical systems and perspectives.
TYBA		IV		Classical Indian Thought	<ul style="list-style-type: none">• To introduce students to the





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					<p>nature of philosophical questions and thinking present in classical Indian thought</p> <ul style="list-style-type: none">• To provide a systematic and rational interpretation of philosophical issues addressed in classical Indian thought• To trace the development of philosophical ideas in different schools so as to evaluate their contribution to philosophical knowledge
	VI	IV		Western Philosophy	<ul style="list-style-type: none">• Students will possess a familiarity with important philosophers from the modern period of philosophy in the west• Students will gain familiarity with a few philosophers and movements in 20th century western philosophy• Students will be able to summarize with clarity some of the arguments, Vproblems and questions central to metaphysics and epistemology in modern philosophy
TYBA	V	V		Philosophy of Religion	<ul style="list-style-type: none">• To introduce students to a reasoned, systematic and critical reflection about religious beliefs• To develop in students the capacity for analytical and critical thinking about such matters.
	VI	V			<ul style="list-style-type: none">• To introduce students to a reasoned, systematic and critical reflection about religious beliefs• To develop in students the





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					capacity for analytical and critical thinking about such matters.
TYBA	V	VI		Living Ethical Issues	<ul style="list-style-type: none">To reflect on real world ethical questions and the issues they raise, and to discuss those issues in an informed way
	VI	VI			<ul style="list-style-type: none">To demonstrate an ability to recognize, articulate, and apply ethical principles in various academic, professional, social, or personal contexts
TYBA	V	VII		Philosophy Of Bhagavadgita	<ul style="list-style-type: none">To achieve an understanding of the overall structure, purpose and contents of the Bhagavad-Gita.To explore and interpret philosophical ideas of the Gita through reading of the text.To relate the social, political and ethical ideas of the Gita to the contemporary context
	VI	VII		Philosophy Of Bhagavadgita	<ul style="list-style-type: none">To achieve an understanding of the overall structure, purpose and contents of the Bhagavad-Gita.To explore and interpret philosophical ideas of the Gita through reading of the text.To relate the social, political and ethical ideas of the Gita to the contemporary context





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TYBA	V	VIII		Logic	<ul style="list-style-type: none">To equip students with the knowledge of the formal techniques of evaluating deductive argumentsTo enable students to identify flaws and fallacies in argumentsTo enable students to apply their reasoning skills to analyse reasoning in newspaper articles, books and speechesTo approach any topic with the ability to reason and think critically
	VI	VIII		Logic	<ul style="list-style-type: none">To equip students with the knowledge of the formal techniques of evaluating deductive argumentsTo enable students to identify flaws and fallacies in argumentsTo enable students to apply their reasoning skills to analyze reasoning in newspaper articles, books and speechesTo approach any topic with the ability to reason and think critically
TYBA	V	IX		Philosophy of Yoga	<ul style="list-style-type: none">To eradicate misconceptions and misunderstandings about YogaTo acquaint students with the tenets of Patanjali-YogaTo provide the theoretical structure for the practice of Yoga
	VI	IX		Philosophy of Yoga	<ul style="list-style-type: none">To explore various applications of YogaTo sensitise the learners about the advantages of taking up Yoga and to bring out how yoga enables to lead





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					<p>Quality-Life of Purity and Integrity</p> <ul style="list-style-type: none">• To develop ethico-spiritual perspective among learners
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Department of Arts – Economics

**A. Program outcome and Program specific outcomes offered by the Department Name
of the Programme specialization : B.A Economics**

	PROGRAM OUTCOMES	PROGRAM SPECIFIC OUTCOMES
UNDERGRADUATE	<ul style="list-style-type: none"> To ensure sound knowledge of the subject as prescribed by the University of Mumbai To guarantee consistent improvement in the performance of students as compared to theirs at the entry level and encourage them for further studies To instill skills like critical thinking, communication, initiative which potentially leads to long-term benefits such as higher rates of employment and educational fulfillment 	<ul style="list-style-type: none"> To equip students to succeed in an information rich, technology based society through ICT Literacy To help students understand content faster and better by improvement in teaching learning process To conduct adequate enrichment activities which will expose them to a variety of skilled careers and equip them with the tools and resources they need to build a future.

**B. Course Outcomes of all courses offered by the Department Name
of the Course : B.A. Economics**

CLASS	SEM	PAPER NO	PAPER CODE	P A P E R	LEARNING OUTCOMES
F.Y.B.A	I	I		MICROECONOMICS I	This course is designed to introduce the students to elementary concepts in microeconomics. The student should be able to use these concepts to understand the relevance of microeconomics to the real world. The student should be able to build on these concepts in the future to develop deeper understanding of the Economy.
F.Y.B.A	II	II		MACROECONOMICS I	
S.Y.B.A.	III	III		MICROECONOMICS II	The Course is designed to develop the student's understanding of basic tools of microeconomic analysis. It builds on the material covered in semester 1 and is designed
S.Y.B.A.	IV	V		MACROECONOMICS II	





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					to help the student apply microeconomics to the real world.
S.Y.B.A.	III	IV		CONTEMPORARY ISSUES OF THE INDIAN ECONOMY: ECONOMIC SURVEY	The Board of Studies in Economics has revised the syllabi of papers at the SYBA which will be made effective from the Academic Year 2017-18. In Semester III, students will study the contemporary economic issues with respect to Indian economy in the context of Economic Survey of the Government of India while in Semester IV, students will study the Development Issues of Maharashtra's Economy in the context of Report of The High Level Committee on Balanced Regional
S.Y.B.A.	IV	VI		MAHARASHTRA'S ECONOMY: DEVELOPMENT ISSUES	Development Issues in Maharashtra, Planning Department, Government of Maharashtra, 2013.
T.Y.B.A.	V	VII	ECOMI E501	MICROECONOMICS III	The course is designed to provide sound understanding in microeconomic theory. Since students have been taught perfect competition, this course focuses on three aspects, which are the study of imperfect competition, general equilibrium and welfare economics.





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	V	VIII	ECODE V502	ECONOMICS DEVELOPMENT	OF	This course is designed to inculcate diverse concepts related to economic growth and development by giving special emphasis on structural issues related to the process of development. In order to create an awareness on policy options, the pressing problems on the path of development such as inequality, poverty and technological aspects are dealt in.
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	V	IX	ECOILE C503	INDUSTRIAL & LABOUR ECONOMICS - I	There has been a paradigm shift in the structure of the Indian industrial sector and the policies governing it ever since the new era of globalisation and liberalisation has ushered in. This paper intends to equip the students with the knowledge about the fundamentals of Industrial Economics and also the changing policies related to the Indian industry in the globalised era.
	V	X	ECORM B504	RESEARCH METHODOLOGY	This paper is designed with the view to introduce the concepts, principles and methods of economic research based on qualitative and quantitative data. The course will enable the students to get an insight into the applications of modern analytical tools and techniques related economic decision making. The student gets an opportunity to learn how to collect and analyze primary and secondary data. Practical sessions will strengthen the knowledge related to computer applications to research analysis.
	V	XI	ECOEN VC505	ENVIRONMENTAL ECONOMICS	This course focuses on economic causes of environmental problems. In particular, economic principles are applied to environmental questions and their management. Economic implications of environmental policy are addressed as well as valuation of environmental improvements





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	V	XII	ECOHE T506	HISTORY OF ECONOMIC THOUGHT	This course provides basic understanding about the celebrated economists and their contributions starting from the classical period. It throws light on the contributions of Nobel Laureates of recent period too.
T.Y.B.A.	VI	XIII	ECOMA 601	MACROECONOMICS III	This course introduces the students to formal modelling of a macroeconomic theory with analytical tools. It focuses on goods market with fixed exchange rate, the money market, uncovered interest rate parity and the benefits and costs of fixed and flexible exchange rates.
	VI	XIV	ECOIN T602	INTERNATIONAL ECONOMICS	This course develops a systematic exposition of models which explain the composition, direction, and consequences of international trade, and the determinants and effects of trade policy. It then builds on the models of open economy macroeconomics focussing on national policies as well as international monetary systems. It concludes with an analytical account of the causes and consequences of the rapid expansion of international financial flows in recent years.
	VI	XV	ECOILE C603	INDUSTRIAL & LABOUR ECONOMICS - II	Issues pertaining to the labour market, wage policy, trade unions and amicable solutions to industrial disputes have become vital for developing countries, especially for India, where the bulk of the labour force is employed in the unorganised sector, and the organized sector is witnessing a phenomenon of





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					'jobless' growth. This paper intends to provide knowledge of the same and also discusses the importance of labour welfare and social security measures for the growing labour force in India.
	VI	XVI	ECORM B604	RESEARCH METHODOLOGY	This paper is designed with a goal to strengthen the critical thinking and listening skills in conducting economic research and to device research outcomes in an impeccable way. The entire course is based on the broad social sciences spectrum.
	VI	XVII	ECODT EC605	DEVELOPMENT THEORY & EXPERIENCE	This is the second paper of economic development sequence. The course begins with demographic concepts and their evolution during the process of development. Then it focuses on the theory migration and discusses the link between migration and development. The structure of markets and contracts is linked to the particular problems of enforcement experienced in poor countries. The course ends with the issues related to environment and development.
	VI	XVIII	ECOITP P606	INTERNATIONAL TRADE, POLICY & PRACTICE	This course is designed for addressing changing phase of International Trade Policy and Practice. The main purpose of this course is to expose students to current trends in International developments.





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Department of Arts - Rural Development

Name of the Programme	Programme Outcome	Program Specific Outcome
	Students will be able to	Students will be able to have
UG (BA) BACHELOR OF ARTS RURAL DEVELOPMENT	I) To create practical approach among the students II) To study the concepts and importance of agriculture in RD III) Knowledge of marketing of agriculture produce IV) to study the concept / scope and significance of applied agriculture	I) Students are acquainted with various governments schemes for RD II) Students have basic information about various laws related to rural livelihood III) Development of employability and soft skills IV) Awareness of crosscutting and contemporary issues

B1. Course Outcomes of all courses offered by the Department Name of the course : BA (Rural Development)

Sr. No.	Name of The Course	Course Code	Course Outcomes (After completing this course, the students will be able to)
FYBA			
Semester - I			
1	Rural Development (Paper no – 1)	BA – RD 1	Topic : I) Rural Development II) Rural Society III) Rural Social Institution IV) Rural Economy - Students understood about social change - Learned about rural family structure
Semester - II			
2	Rural Development (Paper no – 1)	BA – RD 2	V) Panchayatraj in Maharashtra VI) Social Change VII) Rural Infrastructure – I VIII) Rural Infrastructure – II - Students organized and planned the camp - The students went to the village and studied the survey spiritually
SYBA			





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Semester - III			
3	Rural Development (Paper no. - 2)	BA - RD 3	I) Indian Rural Society II) Rural Institutional System III) Social Change IV) Concept Related to social change - Social change took place in rural areas - Studied the basic concepts of rural society
Semester - IV			
4	Rural Development (Paper no. - 2)	BA - RD 4	I) Study of agriculture policy II) Agricultural Development III) Sources of rural development IV) Tourism Development Field Work I) Visit and study of tourism center II) Study of S. H. G. III) Agrarian policies - Visit to agro tourism - Studied self-help groups in tribal areas
Semester - III			
5	Rural Development (Paper no. - 3)	BA - RD 5	I) District administration II) Revenue administration III) Law and order administration IV) Planning for rural development - Locked at the structure of revenue administration - Rural planning should be locked
Semester - IV			
6	Rural Development (Paper no. - 3)	BA - RD 6	I) Law related to panchayatraj in Maharashtra II) Land reform legislations III) Law related to rural area IV) Right of information of act - 2005 Field Work I) Visit and study of Grampanchayat II) Study of 7/12 Land record III) Preformed RTI application - A visited the grampanchayat in the camp and studied their work





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			- Saw the necessary agricultural excerpts.
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TYBA

Semester - V

7	Rural Development (Paper no – 4)	UA- RD 501	I) Agriculture II) Land III) Significance of inputs - Explained the importance of water supplies in agricultural business - Studied the types of soils in India
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Semester - VI

8	Rural Development (Paper no – 4)	UA- RD 601	I) Review of agriculture policies II) Agriculture education extension and research IV) Agriculture related activities Field Work I) Visit to agriculture KVK II) Visit to agro based industries III) Visit to organic farm - Visited the agro-processing industry - Rahuri agricultural university visited and wrote in the report
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Semester - V

9	Rural Development (Paper no – 5)	UA- RD 502	I) Rural Marketing II) Agriculture marketing IV) Agencies in agriculture marketing - The first type of daily market type saw - The impact of hazards in the agriculture
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Semester - VI

10	Rural Development (Paper no – 5)	UA – RD 602	I) Rural finance II) Financial institution III) Micro Finance Field Work I) A Visit to weekly market II) A study self-help group III) A visit to APMC - Filled the application forms for bank loan - Visit to co-operative society
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Semester - V





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11	Rural Development (Paper no – 6)	UA – RD 503	I) Applied agriculture II) Agro – Ecology III) Horticulture IV) Forestry - Study of the need for applied agriculture in rural areas - Created awareness about natural agriculture
Semester - VI			
12	Rural Development (Paper no – 6)	UA – RD 603	I) Animal husbandry II) Poultry III) Fishery IV) Processing of agro applied products Field Work I) A study of poultry farm centre II) Visit to KVK and report writing III) Visit to horticulture nursery - Visited the fruit nursery - Hybrid cows are used in dairy farming.





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Department of Business Economics

Name of the Programme	Programme Outcome	Program Specific Outcome
	Students will be able to	Students will be able to have
UG (B.COM) : BUSINESS ECONOMICS	To provides the overall introduction to economics as dealing with the problems of allocation of scarce resources in optimum manner. It aims to build a familiarity with the basic tools of consumer and producer theory, the operation of markets and optimization in an economic context.	Have basic knowledge of basic tools of consumer and producer theory, the operation of markets and optimization in an economic context.
	To overall approach to macroeconomics is to examine the economy as a whole. This course is an introduction to the basic analytical tools of macro economics to evaluate macro economic conditions such as inflation, unemployment and growth.	This course is an introduction to the basic analytical tools of macro economics to evaluate macro economic conditions such as inflation, unemployment and growth.
	To familiarize the students with the various aspects of Banking, Growth and Structure of Banking, Financial Markets, Public Finance, International Trade and WTO and Exchange Rate Determination	Is familiarize the students with the various aspects of Banking, Growth and Structure of Banking, Financial Markets, Public Finance, International Trade and WTO and Exchange Rate Determination

B1. Course Outcomes of all courses offered by the Department Name of the course : B.Com – Business Economics

Sr. No.	Name of The Course	Course Code	Course Outcomes (After completing this course, the students will be able to)
	F.Y.B.COM		
	Semester – I		
1	Business Economics – I	UA 80907	& At the end of this course students should be able to: The studies of economics as dealing with the problems of allocation of scarce resources in optimum manner.
	Semester - II		
2	Business Economics – II	UA 76107	& At the end of this course students should be able to: Have Basic knowledge of basic tools of consumer and producer theory, the operation of markets and optimization in an economic context.
	S.Y.B.COM		
	Semester – III		
3	Business Economics – III	UA	& At the end of this course students should be able to:





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		79311	Understood the overall approach to macroeconomics is to examine the economy as a whole.
	Semester – IV		
4	Business Economics – IV	UA 77711	&At the end of this course students should be able to: Understood the basic analytical tools of macro economics to evaluate macro economic conditions such as inflation, unemployment and growth.
	T.Y.B.COM		
	Semester – V		
5	Business Economics – V	UA 23013	&At the end of this course students should be able to: Understood the students with the various aspects of Banking, Growth and Structure of Banking and Financial Markets
	Semester – VI		
6	Business Economics – VI	UA 11113	&At the end of this course students should be able to: Understood the students with the various aspects of Public Finance, International Trade and WTO and Exchange Rate Determination.





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Department of Science – Physics

A. Program outcome and Program specific outcome offered by the Department Name
of the Programme specialization : B.Sc. Physics

Program	Program outcomes	Program specific outcomes
Under graduate B.Sc Physics	3. To develop analytical abilities towards real world problems	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. To familiarize with current and recent scientific and technological developments	2. The ability to analyze and interpret quantitative results, both in the core areas of physics and interdisciplinary areas.
	3. To enrich knowledge through problem solving, hands on activities, study visits, projects etc.	3. The ability to use contemporary experimental apparatus and analysis tools to acquire, analyze and interpret scientific data.





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**B. I. Course outcomes for all the courses offered by the department Name of the course:
B.Sc Physics**

Sl.No	Course	Name of the course	Course code	Course objectives
1.	FYBSc (Semester I & Semester II)	Semester I Paper-I (Classical Physics) Paper-II (Modern Physics) Semester II Paper-I (Mathematical Physics) Paper-II (Electricity and Electronics)	USPH101, USPH102, USPH201, USPH202, USPHP1 USPHP2	<ul style="list-style-type: none">• Understand Newton's laws and apply them in calculations of the motion of simple systems.• Use the free body diagrams to analyze the forces on the object.• Understand the concepts of friction and the concepts of elasticity, fluid mechanics and be able to perform calculations using them.• Understand the concepts of lens system and interference.• Apply the laws of thermodynamics to formulate the relations necessary to analyze a thermodynamic process.• Demonstrate quantitative problem solving skills in all the topics covered• Understand the type isotopes and their applications.• Demonstrate and understand the quantum mechanical concepts.• Demonstrate quantitative skills in all the topics covered.• Understand the basic mathematical concepts and applications of them in physical situations. • Understand the diffraction and polarization processes and applications of them in





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				<p>physicssituations.</p> <ul style="list-style-type: none">• Understand the applications of interference in design and working of interferometers.• Understand the resolving power of different opticalinstruments.\• Understand the working of digitalcircuits• Use IC 555 time for various timingapplications.• Understand the postulates of quantum mechanics and to understandits importance in explaining significant phenomena inPhysics. <p>Practicals:</p> <ul style="list-style-type: none">• Understand and practice the skills while doing physicspractical.• To understand the use of apparatus and their use withoutfear.• To correlate their physics theory concepts throughpractical.• Understand the concepts of errors and their estimation.
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2.	SYBSc (Semester III & Semester IV)	Semester III Paper-I (Mechanics and thermodynamics) Paper-II (Vector calculus, Analog Electronics) Paper III (Applied Physics I) Semester IV Paper-I (Optics and Digital Electronics) Paper-II (Quantum Physics) Paper III (Applied Physics II)	USPH301, USPH302, USPH303 USPH401, USPH402, USPH403, USPHP1 to USCHP6	<ul style="list-style-type: none">• Understand the concepts of mechanics & properties of matter & to apply them to problems.• Comprehend the basic concepts of thermodynamics & its applications in physical situation.• Learn about situations in low temperature.• Demonstrate tentative problem solving skills in all above areas.• Understand the basic physics and their concepts of mathematical applications in physical situations.• Understand the basic laws of electrodynamics and be able to perform
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				<p>calculations using them.</p> <ul style="list-style-type: none"> • Understand the basics of transistor biasing, operational amplifiers, their applications • Understand the basic concepts of oscillators and be able to perform calculations using them. • Students will appreciate the role of Physics in 'interdisciplinary areas related to materials, Bio Physics, Acoustic etc. • Understand the scope of the subject in Industry & Research.
3.	<p>TYBSc (Semester V & Semester VI) 6 Units</p>	<p>Semester V Paper-I (Mathematical, Thermal and Statistical Physics) Semester VI Paper-I (Classical Mechanics)</p>	<p>USPH501 USPH601 USPHP01 USPHP02</p>	<ul style="list-style-type: none"> • Learn some mathematical techniques required to understand the physical phenomena at the undergraduate level and get exposure to important ideas of statistical mechanics. • Skill to solve simple problems in probability, understand the concept of independent events and work with standard continuous distributions. • Understand the concept of microstates, Boltzmann distribution and statistical origins of entropy • Understand the kinds of motions that can occur under a central potential and their applications to planetary orbits. • Learn the concepts needed for the important formalism of Lagrange's equations and derive the equations using D'Alembert's principle. • Understand simple concepts from fluid mechanics and understanding of the dynamics of rigid bodies • Understand the effect of adding nonlinear corrections to usual problems of mechanics and nonlinear mechanics





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	Semester V Paper-II (Solid State Physics) Semester VI) Paper-II (Electronics)	USCH502 USCH602 USCHP03 USCHP04	<ul style="list-style-type: none">• Understand the basics of crystallography, Electrical properties of metals, Band Theory of solids, demarcation among the types of materials, Semiconductor Physics and Superconductivity.• Understand the basic concepts of Fermi
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				<p>probability distribution function, Density of states, conduction in semiconductors and BCS theory of superconductivity.</p> <ul style="list-style-type: none">• Develop quantitative problem solving skills in all the topics covered.• Understand the basics of semiconductor devices and their applications.• Understand the basic concepts of operational amplifier: its prototype and applications as instrumentation amplifier, active filters, comparators and waveform generation.• Understand the basic concepts of timing pulse generation and regulated power supplies• Understand the basic electronic circuits for universal logic building blocks and basic concepts of digital communication.• Develop quantitative problem solving skills in all the topics covered.
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	<p>Semester V Paper-III (Physics Atomic and Molecular) Semester VI (Nuclear Physics)</p>	<p>USCH503 USCH603 USCHP05 USCHP06</p>	<ul style="list-style-type: none">• Understand the application of quantum mechanics in atomic physics• Understand the importance of electron spin, symmetric and antisymmetric wave functions and vector atom model• Understand effect of magnetic field on atoms and its application• Learn Molecular physics and its applications.• This course will be useful to get an insight into spectroscopy• 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.• Acquire 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
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				oriented topics.
		Semester V Paper-IV (Electrodynamics) Semester VI Paper-IV (Special Theory of Relativity)	USCH504 USCH604 USCHP07 USCHP08	<ul style="list-style-type: none">• Understand the laws of electrodynamics and be able to perform calculations using them.• Understand Maxwell's electrodynamics and its relation to relativity• Understand how optical laws can be derived from electromagnetic principles.• Develop quantitative problem solving skills.• Understand the significance of Michelson Morley experiment and failure of the existing theories to explain the null result• 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.• Understand the transformation equations for: Space and time, velocity, frequency, mass, momentum, force, Energy, Charge and current density, electric and magnetic fields.• Solve problems based on length contraction, time dilation, velocity addition, Doppler effect, mass energy relation and resolve paradoxes in relativity like twin paradox etc.





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Department of Science - Mathematics

A. Program outcome and Program specific outcome offered by the Department Name of the Programme specialization : B.Sc. Mathematics

Program	Program outcomes	Program specific outcomes
Under graduate B.ScMaths	<p>Mathematics has been fundamental to the development of science and technology. In recent decades, the extent of application of Mathematics to real world problems has increased by leaps and bounds. It is imperative that the content of undergraduate syllabi of Mathematics should support other branches of science such as Physics, Statistics and Computer Science. Enough exposure to Applications of Mathematics needs to be included in the curriculum.</p> <p>The courses are designed to develop mathematical reasoning and algorithmic thinking and have applications in Science and Technology.</p>	<p>This course is focused on concepts Algebra, Analysis, Calculus and Topology.</p> <p>The Applied Component course focuses Algorithms and Concepts of programming</p> <p>The present syllabi has been designed so that the students learn Mathematics needed for these branches, learn basic concepts of Mathematics and are exposed to rigorous methods gently and slowly.</p>

B. I. Course outcomes for all the programmes offered by the department Name of the course: B.Sc Mathematics

Sl.No	Course	Name of the course	Course code	Course objectives
1.	FYBSc (Semester I & Semester II)	Paper-I Calculus – land II Paper-II Algebra- land II	USMT101, USMT102, USMT201, USMT202, USMTP01 USMTP02	<ul style="list-style-type: none"> □ To teach Basic Calculus needed in every conceivable branch of science. □ To teach Basic Algebra that lays foundations to Linear





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				Algebra, Number Theory and Discrete Mathematics'.
2.	SYBSc (Semester III & Semester IV)	Paper-I Calculus –III and IV Paper-II Algebra III and IV Paper III Discrete Mathematics and Differential Equations	USMT301, USMT302, USMT303 USMT401, USMT402, USMT403, USMTP03 USMTP04	<ul style="list-style-type: none"> ▪ To introduce Differential and Integral Calculus of one and multi-variable in nature ▪ To develop skills for tackling Mathematical Problems of finding area under a curve, surface area of revolution, solving System of Equations, ▪ Use matrix as a tool to solve Linear Algebra Problems ▪ To introduce abstract structure of Group and study its properties ▪ To learn all the concepts relating to linearity of ODE's and computational solution methods for ODE's and the real world applications of ODE's
3.	TYBSc (Semester V & Semester VI) 6 Units	Sem-V Paper-I Integral Calculus Paper II Linear Algebra Paper III Topology of Metric Spaces Paper IV Number Theory and Applications –I	USMT501 USMT502 USMT503 USMT5B4 USMT601 USMT602 USMT603 USMT6B4	<ul style="list-style-type: none"> ▪ Study of Metric spaces , Notion of sequences continuity, Compactness Connectedness and Completeness and Applications ▪ Introductions to Abstract structures like Rings Fields, Integral Domains and its applications to solve Polynomial Equations.





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		Sem-VI Paper-I Complex Analysis		
		Paper II Algebra Paper III Metric Topology Paper IV Number Theory and Applications –II		<ul style="list-style-type: none">▪ To expose applications to Cryptography via Number Theory, Solutions to r Diaphantine Equations▪ Basics of Complex Analysis like Complex integration, Cauchy Integral Formula, Singularities, poles Residues and Complex Power series and its Applications To develop skills for tackling Mathematical Problems which are abstract in nature.
		Applied Component in Sem V and VI:	USACCA501 USACCA601 USACCA5P1 USACCA6P1	At the end of Semester VI a student will be proficient in <ul style="list-style-type: none">▪ Building backend Web programs using Python.▪ Writing applets in Java▪ Data analysis and handling Databases using Oracle▪ Python programming for scientific computing using Computer Assisted Systems like- SAGEMATH





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Department of Bio-Tech

ACADEMIC YEAR : 2016- 2017

Name of the Programme	Programme Outcome	Program Specific Outcome
	Students will be able to	Students will be able to have
UG Biotechnology) (B.Sc.	<p>The syllabus is aimed at equipping the students with basic knowledge in various branches of life sciences , chemical sciences and applied sciences such as Microbial Genetics, Molecular Biology, Virology, Medical Microbiology, Immunology, Microbial Biochemistry and Industrial Microbiology, chemistry, Cell Biology</p> <p>Additionally, it also makes students aware of interdisciplinary sciences such as Bioinformatics, Biostatistics, fermentation technology, biophysics and Bioinstrumentation., enzymology, tissue culture technology and analytical sciences syllabus aims at inculcating a spirit of learning and kindling curiosity towards the subject in the minds of learners, resulting in their pursuit of higher education in Biotechnology as well as make the student capable of entering in the industries applying biotechnology.</p>	<p>The student will be able to have -- basic knowledge in various branches of life sciences , chemical sciences and applied sciences such as Microbial Genetics, Molecular Biology, Virology, Medical Microbiology, Immunology, Microbial Biochemistry and Industrial Microbiology, chemistry, Cell Biology</p> <p>--awareness of interdisciplinary sciences such as Bioinformatics, Biostatistics, fermentation technology, biophysics and Bioinstrumentation., enzymology, tissue culture technology and analytical sciences</p> <p>--will be able to utilize the skills learnt and understanding developed for- higher education,</p> <p>-will be equipped with knowledge and skills to incorporate in industry for human welfare.</p>

B1. Course Outcomes of all courses offered by the Department

Name of the course : B.Sc. Biotechnology

Sr. No.	Name of The Course	Course Code	Course Outcomes (After completing this course, the students will be able to)
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FYBiotech			
Semester - I			
1	BASIC CHEMISTRY-I	USBT 101	The learner will be able to: <ul style="list-style-type: none">➤ assign nomenclature as per IUPAC rules of different chemical compounds on the basis of their functional groups➤ Learn to determine the rate of the reactions to the reaction taking place with different reacting species.➤ Understand basic concept of types of chemical bonding in chemistry.➤ Learn the structure and nature of each chemical bond.➤ Analyze basic properties, nature, function and structure of water.➤ Kocrot of Buffers and concept of acids and bases.➤ Understand the relationship between concentration, volume and moles.
2	BASIC CHEMISTRY-II	USBT 102	The learner will be able to: <ul style="list-style-type: none">➤ Understand the basic concepts of Stereochemistry.➤ Have knowledge of configuration and conformation of various compounds.➤ Understand concepts of chirality and representation of configuration by various formulas.➤ Get knowledge of Titrimetic and Volumetric Estimations.➤ Learn various factors that affect the gravimetric Analysis.➤ Understand the principle of various analytical techniques like precipitation, centrifugation, and Chromatography.➤ Gain the knowledge to apply these techniques for Analysis of various samples.
3	BASIC LIFE SCIENCES-I : BIODIVERSITY AND CELL BIOLOGY	USBT 103	The learner will be able to: <ul style="list-style-type: none">➤ Identify different possible scientific explanations of the origin of life on Earth.➤ Explain how each of the possible scientific explanations of the origin of life on Earth could be possible.➤ Understand the features of Animal, Plant and Microbial diversity➤ Study the general characteristics and classification of bacteria and viruses➤ Identify cell as basic unit of life.➤ Describe the architecture and function of cytoplasmic membrane.





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			<ul style="list-style-type: none">➤ Have a comprehensive understanding of the ultrastructure, function of various cellular structures present outside and inside the cell with respect to cell membrane.➤ Key Distinguishing features between prokaryotic cell and eukaryotic cell.
4	BASIC LIFE SCIENCES-II : MICROBIAL TECHNIQUES	USBT 104	The learner will be able to: <ul style="list-style-type: none">➤ Gain knowledge about basic working and principle of a light microscope and other advanced microscopes.➤ Have knowledge of various microbial staining techniques and their principle.➤ Technically differentiate between sterilization and disinfection and different ways of sterilization techniques➤ Acquaint with the basics of microbial growth and nutrition.➤ Get knowledge of media preparation for growth, isolation and enrichment of microbes.
5	BASIC BIOTECHNOLOGY- I : INTRODUCTION TO BIOTECHNOLOGY	USBT 105	The learner will be able to: <ul style="list-style-type: none">➤ Understand basic concept of biotechnology and its branches.➤ Know the importance of research and various institutes of biotechnology in India.➤ Understand applications of biotechnology in➤ Know agriculture and issues related to genetic engineering in plant biotechnology.➤ Understand the theory and rationale behind the production of genetically modified animals, including ethical issues and possible environmental impacts.➤ Learn about examples of genetically modified organisms.➤ Analyze and determine the contamination in food and apply the knowledge of fermentation technology for preservation of food and in production of commercially important products like antibiotics.





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6	BASIC BIOTECHNOLOGY-II : MOLECULAR BIOLOGY	USBT 106	The learner will be able to: <ul style="list-style-type: none">➤ Get acquainted with the basic understanding of molecular biology techniques.➤ Get the knowledge about DNA replication in prokaryotes and eukaryotes.➤ Learn the concept of DNA mutation and various types of mutation.➤ Understand different DNA repair mechanisms.➤ Explain various tools of genetic engineering.➤ Acquaint with the steps involved in genetic engineering.
7	PRACTICALS-BASIC CHEMISTRY	USBTP 101	The learner will be able to acquire skill of/on: <ul style="list-style-type: none">➤ Practising Safety measures in laboratory, handling and care of Instruments➤ theoretical as well as practical knowledge of handling chemicals.➤ Study about The concept of the mole; Converting moles to grams; Converting grams to moles; Defining concentration;➤ Know Dilution of Solutions; Making different molar concentrations.➤ Understand the concept of the titration is the determination of the concentration or the mass of the minimum formula from the titrated chemical material composing a pure liquid or a solution.➤ Concept of pH and preparation of buffer➤ Learn the main objective of volumetric analysis is to determine the amount of a substance in a given sample. When dealing with volumetric analysis the concept of concentration cannot be avoided.➤ Learn Principle, methodology and application of chromatographic techniques.
8	PRACTICALS-BASIC LIFE SCIENCE	USBTP 102	The learner will be able to acquire skill of: <ul style="list-style-type: none">➤ Construct in terms of arrangements if different lenses, principle and application of various types of Microscopy.➤ Simplr differential and special staining technique yo differentiate the organisms by its cell structure.➤ Staining technique to identify different stages of cell division.➤ Understanding principles on methods of sterilization➤ Understand nutritional requirements and preparation of various Bacteriological, Algal, and Fungal Media➤ enumerate microorganisms from fiffrent environmental samples using viable and non viable count method





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			<ul style="list-style-type: none">➤ Understand growth phases of microorganisms and to determine growth rate and generation time
9	PRACTICALS- BASIC BIOTECHNOLOGY	USBTP 103	The learner will be able to: <ul style="list-style-type: none">➤ Learn staining technique for Microscopic examination of organisms present in food.➤ Different technique microbial isolations techniques on solid media➤ Choice of selective media used for isolation of different food spoilage organisms.➤ Understand technique of analysis of quality of milk by using various dye reduction methods.➤ Titrimetrically estimate alcohol in given sample by dichromate method➤ Learn the technique of isolation, digestion and separation of genomic and plasmid DNA by using Agarose Gel electrophoresis.
Semester - II			
1	CHEMISTRY-I: BIOORGANIC CHEMISTRY	USBT 201	The learner will be able to: <ul style="list-style-type: none">➤ Understand structure, classification and function of carbohydrates and lipids.➤ Learn biological processes such as carbohydrate metabolism, lipid synthesis.➤ Learn general structure of amino acid, physical and chemical properties, classification of amino acids based on chemical nature and structure.➤ Have a detailed overview of Proteins and its classification and can describe different levels of proteins structure and the formation of the peptide bond.➤ Know about two most important molecules of cell biology known as genetic material that is DNA and RNA.➤ Understand basic building blocks of DNA and RNA with its structure and functions
2	CHEMISTRY PHYSICAL CHEMISTRY II-	USBT 202	The learner will be able to: <ul style="list-style-type: none">➤ Learn the basic concepts in Thermodynamics.➤ Understand concepts of enthalpy, entropy, internal energy.➤ Understand the application of laws of thermodynamics in





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			<p>biological system.</p> <ul style="list-style-type: none">➤ Learn the rules of IUPAC nomenclature and the concept of the rate of reaction.➤ Apply the IUPAC rules for the nomenclature of different chemical compounds on the basis of their functional groups and to assign the rate of the reactions to the reaction taking place with different reacting species.➤ Recognize oxidation reduction reactions.➤ Assign oxidation numbers to atoms in molecules and ions.➤ Balance redox reactions.
3	LIFE SCIENCE I: PHYSIOLOGY AND ECOLOGY	USBT 203	<p>The learner will be able to:</p> <ul style="list-style-type: none">➤ Understand various systems in animals as well as plants➤ Recognize various organs involved in human systems➤ Understand the relationship between the environment and organisms➤ Understand and apply the knowledge of physiology to study plant water relations, abiotic stress and interactions in the environment➤ Identify the importance of nutrient cycles and biodiversity➤ Understand different kind of interactions between organisms.➤ Gain the knowledge of importance of balance in an ecosystem.
4	LIFE SCIENCE II: GENETICS	USBT 204	<p>The learner will be able to:</p> <ul style="list-style-type: none">➤ Get knowledge of the basic concepts of Mendelian genetics.➤ Get the better understanding of Mendel's laws and principle.➤ Get knowledge on different aspects in genetic analysis of a bacteria.➤ Have a knowledge about process and different ways of gene exchange between bacterial cells.➤ Get better understanding about the concepts of population genetics.➤ Acquaint with different aspects that lead to variations in genetic structure.
5	BIOTECHNOLOGY-I: TISSUE CULTURE & SCIENTIFIC WRITING AND COMMUNICATION SKILLS	USBT 205	<p>The learner will be able to:</p> <ul style="list-style-type: none">➤ Acquaint students with techniques of Plant and Tissue Culture.➤ Understand nutritional requirements of plant Tissue and significance of plant growth regulators.➤ Learn aseptic techniques involved in handling of animal Cell cultures.





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			<ul style="list-style-type: none">➤ Understand media constituents and media formulation Strategies for animal cell culture.➤ Learn the techniques of animal cells culture and maintenance of cell lines.➤ Understand basic need of communication skills in professional as well as in normal life.➤ Know the basic components of communication and importance of effective communication skills.➤ Study the process of scientific writing and its importance.
6	BIOTECHNOLOGY II: ENZYMOLOGY, IMMUNOLOGY AND BIOSTATICS	USBT 206	<p>The learner will be able to:</p> <ul style="list-style-type: none">➤ Get the knowledge about the concepts of enzymology and its applications in industries.➤ Get better understanding about immune system and its mechanism to fight against diseases.➤ Have a knowledge of vaccines and its types.➤ Get knowledge of importance of statistics in biology➤ Get acquainted with different types of data <p>Apply different representation of given data using graphs.</p>
7	PRACTICALS-CHEMISTRY	USBTP 201	<p>The learner will be able to:</p> <ul style="list-style-type: none">➤ Study the Qualitative analysis of each sample in laboratory.➤ Learn how to test for the presence of biomolecules using various reagents➤ principle and working of Colorimeter.➤ Chemical Tests to identify reducing sugars➤ Learn different qualitative as well as quantitative method for protein estimation.➤ Understand the process and principle of saponification.➤ Learn about the concept of enthalpy➤ Learn the process of titration and importance of titration..➤ Study about the transfer of electrons from one species to another➤ Study about rate constant and hydrolysis process.
8	PRACTICALS- LIFE SCIENCE	USBTP 202	<p>The learner will be able to:</p> <ul style="list-style-type: none">➤ Learn the use and application of colorimeter➤ Determination of alpha amylase activity➤ Different methods to analyze urine.➤ Based on antigen antibody reaction to determine blood group. Differential staining to identify different cells of blood.➤





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			<ul style="list-style-type: none"> ➤ Learn how to estimate hemoglobin content in blood ➤ Get the knowledge of the structure and function of kidney and heart. ➤ Understand extra nuclear inheritance, linkage & crossing over. ➤ Learn various interactions among microorganisms
9	PRACTICALS- BIOTECHNOLOGY	USBTP 203	<p>The learner will be able to:</p> <ul style="list-style-type: none"> ➤ Understand principle, working and applications of instruments viz, pH meters, spectrophotometer, centrifuge, viscometer, and laminar air flow ➤ Understand principles of animal culture, media preparation. ➤ Describe meristem culture and clonal propagation of plants on a commercial scale. ➤ Develop skill to learn the technique of trypsinization used in ATC and viability counting ➤ Determine relation between antigens by Ouchterlony method ➤ Practically determine the effect of various factors that affect enzyme activity. ➤ applications of biostatistics in representing and analyzing data by calculation of mean, Median and mode.

SYBiotech

COURSE	NAME OF THE PAPER / PAPER CODE	LEARNING OUTCOMES
S.Y.BIOTECHNOLOGY SEMESTER III	Immunology and Medical Biotechnology- USBT301	<p>Learner will-</p> <ul style="list-style-type: none"> ● Recognize the cells and organs of the immune system and their functions. ● Understand the action and regulation of the complement system. ● Understand the structure and role of B and T cell receptors and their interactions. ● Get better understanding about immune system and its mechanism to fight against diseases. ● understand host parasite relationship and various infections and diseases, and the various factors playing a role in causing a disease. ● Know the different types of infections with respect to the morphology, cultural characteristics, epidemiology and pathogenesis





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T.Y. B.Sc. Biotechnology Semester V Outcomes 2017-2018

Course	Name of the course and Course code	Course outcomes
T.Y. B. Sc. Biotechnology SEMESTER V	Cell Biology and Medical Biotechnology USBT 501	Learner will- <ul style="list-style-type: none"> • Understand the process and the phases of cell cycle and apoptosis, significance Cell signalling proteins, role of G-proteins in cell signalling and various mechanisms of cell signalling. • Know Microtubules Structure, Composition, MAPs, Functions- Role in mitosis, Structural support • Understand Phosphoglycerides, Sphingolipids, Cholesterol, Membrane Carbohydrates- Sugars, Oligosaccharides. • Get familiar with different approaches that have been used to study concepts of developmental biology • Introduce to viruses-Position in biological spectrum Virus properties, General structure of viruses Baltimore Classification and Taxonomy
	Biochemistry, Immunology and Instrumentation USBT 502	The learner will be able to: <ul style="list-style-type: none"> • Learner will get better understanding in students about the difference between primary, secondary, tertiary, and quaternary protein structure • Explain Carbohydrates metabolism • Explain viral replication mechanisms, compare and contrast human and plant viruses. • Discuss principles of virus pathogenesis • Understand the characteristics of chemotherapeutic drug. • Differentiate between different types of antibacterial, antiviral and antifungals. • Know the mechanism and application, effect and side effects of different chemotherapeutic drug. • Understand the importance of drug resistance and ideas on how to overcome it. • Understand the working and instrumentation of different types of spectroscopy • Determine the concentration of the macro molecules; differentiate between two proteins on the basis of absorbance. • Get the knowledge of principle and working of various analytical instruments and their applications
	Genetics and Molecular Biology USBT503	The learner will be able to- <ul style="list-style-type: none"> • Gain knowledge of the gene construct required for transgenic construction of gene. • Understand different methods of transgenesis both naturally and artificially and its advantages and disadvantages • Study application of transgenic plants and animals using different examples.





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		<ul style="list-style-type: none"> Understand of gene cloning techniques used <i>in vivo</i> DNA amplification along with construction of genomic libraries Understand DNA sequencing methods in molecular biology & gain knowledge of advanced tools of gene editing for human welfare & their uses in gene therapy.
	Industrial Biotechnology USBT504	<p>The learner will be able to:</p> <ul style="list-style-type: none"> Understand different industrial processes Understand different industrial applications of biotechnology. Understand microbial bio-prospecting in industry. Study various fermentation technology and structure. Understand the concept of pharmaceutical industry, dairy, textile and paper industry.

Practicals

Course	Name of the course and course code	Course outcomes
T.Y.B.Sc. Biotechnology Practicals	USBTP05	<p>Learner will-</p> <ul style="list-style-type: none"> be able to enumerate the RBC and WBC using hemocytometer be able to perform differential staining to identify different cells of blood.. Acquire proficiency in aseptic handling of microbial specimens and carry out common procedures for isolation and diagnostics of micro-organisms. be able to identify unknown microorganisms using appropriate microbiological techniques presented in laboratory exercises. will acquire hands on training to estimate biomolecules such as glucose in clinical samples using standard methods and able to correlate test results with patient conditions
	USBTP06	<p>Learner will be able to develop skills in</p> <ul style="list-style-type: none"> Various molecular biology techniques like DNA extraction, Transformation, PCR etc. Restriction mapping bioassay and chemical assay of antibiotic to find the concentration of the same in the crude extract. Learn growth kinetics of bacteria. Transformation of organism using calcium precipitation method





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T.Y. B.Sc. Biotechnology Semester VI Outcomes

Course	Name of the course and course code	Course outcomes
T.Y. B.Sc. Biotechnology	Cell Biology, Medical and Biostatistics USBT601	<ul style="list-style-type: none">• Learner will get knowledge of cell structure and function.• Learner will understand about different diseases and preventive measures to be taken.• Learner will get the idea about statistics that can be used in biology.
	Biochemistry, Immunology and Instrumentation USBT602	The learner will be able to Understand <ul style="list-style-type: none">• Understand the importance of drug resistance and ideas on how to overcome it.• Understand the working and instrumentation of different types of spectroscopy• Learner will get better understanding in students about the difference between primary, secondary, tertiary, and quaternary protein structure• Explain Protein and lipid metabolism
	Molecular Biology and Bioinformatics USBT603	The learner will be able to Understand <ul style="list-style-type: none">• The basic concepts of pharmacology, lethal dose and lethal concentration and its derivations and different types of antagonists and agonists and their use in pharmacology.• The biology, computer science, information engineering, mathematics and statistics to analyze and interpret the biological data
	Industrial Biotechnology	The learner will be able to Understand <ul style="list-style-type: none">• Types of renewable energy sources like biogas technology and their applications, types of biogas





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	USBT604	<p>plants.</p> <ul style="list-style-type: none">• To describe the unit processes associated with the municipal solid waste and industrial wastewater treatment systems understand methods for biodegradation of waste water from different industries.• Biosorption of heavy metals from industrial effluents by bacteria, fungi and algae.• Fermentation process for dairy products with defects that are developed in product.• The processes involved in separation of product at the end of fermentation by using various techniques such as filtration centrifugation solvent extraction etc.• Various production processes of high value products as well as the similarities and differences between bacterial and fungal inoculum development
Practical	USBTP07	<p>Learner will able to-</p> <ul style="list-style-type: none">• will acquire hands on training to estimate biomolecules such as cholesterol in clinical samples using standard methods and able to correlate test results with patient conditions.• Understand the importance of antibiotic sensitivity testing and able to conduct experiments using different agar diffusion methods and bioassays.• Able to identify sensitivity and resistance of bacteria towards antibacterial drugs.• understand the applications of biostatistics in representing and analyzing data by calculation of standard deviation, chi square, t test, z test regression etc.• Learn antigen antibody reactions using methods like ouchterlony, mancini etc
	USBTP08	<p>Learner will get the knowledge of-</p> <ul style="list-style-type: none">• Various parameters used for checking the quality of milk and water• Techniques used in treatment of industrial waste• Techniques to identify contaminants present in the sample• enumerate microorganisms and comment on quality of milk sample and efficiency of pasteurization using different methods• Learner will acquire the knowledge of Effluent treatment and parameters and get hands on training in testing the water for potability using methods such as BOD, COD.





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		<ul style="list-style-type: none"> Using online databases like NCBI and tools like BLAST
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Department of Management Studies

The University of Mumbai launched the Bachelor of Management Studies or BMS programme from the academic year of 1999-2000. Bachelor of Management Studies or BMS is a full-time course of three-year duration.

This full-time three-year degree Programme has been introduced in several institutes of the country. This degree Programme comprises six semesters having 52 modules, 51 theory papers and 01 project. The Bachelor of Management Studies was introduced with the aim of producing trained management professionals in today's competitive market. The course curriculum has been practically designed in order to meet the increasing demand for a greater number of professionally certified management executives in the global market. This degree Programme is handled by experienced full-time as well as visiting faculty pulled from various service and industrial sectors. The course structure of Bachelor of Management Studies or BMS includes an exhaustive training with the help of latest technological devices, industrial visits, and practical experience and summer placements wherever possible. Academic year 2015-16 Mumbai University have RE-STRUCTURED and introduced specialization in Finance, Marketing and Human Resource from Second Year.

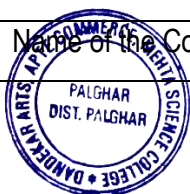
Programme Specific Outcome

Make effective and efficient managerial decisions. Face the ground realities that are present corporate world. Generate new ideas with the help of both academic knowledge and practical exposure.

Solve specialized problems in their area of specializations like Marketing, Finance, and Human Resource. Identify the key areas in the management where improvements and innovations are needed. Construct an inter-functional working model for the various projects of the organization.

Set high academic and intellectual standards based upon the latest academic research in the field. Transform from students to professional managers, by providing them with the fundamental knowledge needed in a management career. Develop their collaborative leadership skills and business creativity. Provide a good grounding in academic knowledge is an invaluable prerequisite for a managerial career. Exhibit their knowledge from the mathematical skills to the interpersonal skills. Perform well in their future research career by means of good understanding in the current research trends.

Name of the Course- BMS			
Sr.No.	Name of the Course	Course Code	Course Outcome





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F.Y.BMS			
Semester-I			
1	Core 1: Introduction to Financial Accounts	UBMSFSI.1	To enable students to learn principles and fundamentals of accounting at basic level, Understanding Accounting Standards, Rectification of Errors and Finalization of Accounts.
2	Core 2: : Business Law	UBMSFSI.2	To enable students to learn acts like Contract Act 1872, Sale of Goods Act 1930, Negotiable Instrument Act 1981, Consumer Protection Act 1986, Company Law, Intellectual Property Rights at basic level.
3	Core 3: Business Statistics	UBMSFSI.3	To make students understand statistical concepts like Dispersion, Co-Relation, Linear Regression, Time Series, Index Number, Probability and Decision Theory in a lucid and best practical way.
4	Business Communication – I	UBMSFSI.4	To develop the communication skills like writing, listening, reading & speaking considering the industrial requirements. Understanding the objectives of communication, learning various types of business correspondence.
5	Foundation Course – I	UBMSFSI.5	To make students aware about the diversified Indian Society, inculcate knowledge of the Constitution of India, understanding political process in India, Learning the fundamental duties and rights provided by the Constitution.
6	Foundation of Human Skills	UBMSFSI.6	To enable the students to learn about understanding human nature, group behavior, organizational culture, motivation at





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			workplace.
7	Business Economics – I	UBMSFSI.7	To enable the students to understand concepts with regards to demand, supply and pricing from the point of view of the businesses, Understanding various types competitions in the market.
Semester-II			
1	Principles of Marketing	UBMSFSII.1	To understand the basic concepts of marketing, analyzing marketing environment i.e. micro and macro environment, learning importance of market research, understanding marketing mix – product, price, place and promotion, analyzing trends in marketing
2	Industrial Law	UBMSFSII.2	To make students understand crucial rules and regulations listed under following acts: Industrial Disputes Act 1947, The Trade Union Act 1926, The Factories Act 1948, The Workmen's Compensation Act 1923, Employee State Insurance Act 1948, Payment of Wages Act 1948, Payment of Bonus Act, 1965 and Payment of Gratuity Act 1972
3	Business Mathematics	UBMSFSII.3	To make students learn mathematical calculations with regards to Simple and Compound Interest, Depreciation of Assets, Algebraic functions used in business. To understand Matrices and Determinants, Derivatives and Applications of Derivatives
	Business Communication – II		To enhance students' presentations skills, promoting group communication, importance of interview and meetings, learning





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4		UBMSFSII.4	trade letters like inquiry letter, complaint letter, RTI letter, grievance letter, sales letters etc.
5	Foundation Course – II	UBMSFSII.5	To make students knowledgeable with the Human Rights, understanding concepts of Liberalisation, Privatisation and Globalisation and its impact on employment, understanding environment and its causes of degradation, promoting sustainable development, promoting socialization, reducing stress and conflicts in the society.
6	Business Environment	UBMSFSII.6	To enable students to understand micro and macro environment, understanding political, legal, social, cultural, technological, competitive and international environment affecting businesses.
7	Principles of Management	UBMSFSII.7	To inculcate managerial skills by understanding functions and levels of management, to understand importance of planning, organizing, decision making, directing, leadership, co-ordination and controlling.
S.Y.BMS			
Semester-III			
1	Core I : Information Technology in Business Management – I	UBMSFSIII.1	To learn basic concepts of Information Technology, its support and role in Management, for managers Module II comprises of practical hands on training required for office automation. It is expected to have practical sessions of latest MS-Office software





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			<p>To understand basic concepts of Email, Internet and websites, domains and security therein</p> <p>To recognize security aspects of IT in business, highlighting electronic transactions, advanced security features</p>
2	Core II : Foundation Course – III	UBMSFSIII.2	<p>To enable students to understand causes for environmental degradation, various concepts of environment, promoting sustainability and innovations in business. To promote waste management and disaster management. To promote eco-friendly practices</p>
3	Core III : Business Planning & Entrepreneurial Management	UBMSFSIII.3	<p>Entrepreneurship is one of the major focus areas of the discipline of Management. This course introduces Entrepreneurship to budding managers.</p> <p>To develop entrepreneurs & to prepare students to take the responsibility of full line of management function of a company with special reference to SME sector</p>
4	Core IV : Accounting for Managerial Decisions	UBMSFSIII.4	<p>To acquaint management learners with basic accounting fundamentals</p> <p>To develop financial analysis skills among learners.</p> <p>The course aims at explaining the core concepts of business finance and its importance in managing a business.</p>
5	Core V : Strategic Management	UBMSFSIII.5	<p>The objective of this course is to learn the management policies and strategies at every Level to develop conceptual skills in this area as well as their application in the corporate world. The focus is to critically</p>





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			examine the management of the entire enterprise from the Top Management viewpoints. This course deals with corporate level Policy & Strategy formulation areas. This course aims to developing conceptual skills in this area as well as their application in the corporate world.
Finance Electives			
1	Basics of Financial Services		<p>The course aims at explaining the core concepts of business finance and its importance in managing a business</p> <p>The objectives of develop a conceptual framework of finance function and to acquaint the participants with the tools, types, instruments of financial system in the realm of Indian</p> <p>Financial Market</p>
2	Corporate Finance		<p>The objectives of develop a conceptual framework of finance function and to acquaint the participants with the tool's techniques and process of financial management in the realm of financial decision making</p> <p>The course aims at explaining the core concepts of corporate finance and its importance in managing a business</p>
Human Resources Electives			
1	Recruitment & Selection		<p>The objective is to familiarize the students with concepts and principles, procedure of Recruitment and Selection in an organization.</p> <p>To give an in-depth insight into various aspects of Human</p>





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			Resource management and make them acquainted with practical aspect of the subject
2	Motivation & Leadership		<p>To gain knowledge of the leadership strategies for motivating people and changing organizations</p> <p>To study how leaders, facilitate group development and problem solving and work through problems and issues as well as transcend differences</p> <p>To acquaint the students about practical approaches to</p> <p>Motivation and Leadership & its application in the Indian context</p>
Marketing Electives			
1	Consumer Behavior	UBMSFSIII.7	<p>The basic objective of this course is to develop an understanding about the consumer decision making process and its applications in marketing function of firms</p> <p>This course is meant to equip undergraduate students with basic knowledge about issues and dimensions of Consumer Behaviour.</p>
2	Advertising	UBMSFSIII.8	<p>To understand and examine the growing importance of advertising</p> <p>To understand the construction of an effective advertisement</p> <p>To understand the role of advertising in contemporary scenario</p> <p>To understand the future and career in advertising</p>
Semester-IV			
1	Information Technology in Business Management		<p>To understand managerial decision-making and to develop perceptiveness of major functional area of MIS</p> <p>To provide conceptual study of</p>





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			<p>Enterprise Resource Planning, Supply Chain Management, Customer Relationship Management, Key issues in implementation. This module provides understanding about emerging MIS technologies like ERP, CRM, SCM and trends in enterprise applications.</p> <p>To learn and understand relationship between database management and data warehouse approaches, the requirements and applications of data warehouse</p> <p>To learn outsourcing concepts. BPO/KPO industries, their structures, Cloud computing</p>
2	Foundation Course –IV Ethics & Governance		<p>To understand significance of ethics and ethical practices in businesses which are indispensable for progress of a country To learn the applicability of ethics in functional areas like marketing, finance and human resource management</p> <p>To understand the emerging need and growing importance of good governance and CSR by organizations</p> <p>To study the ethical business practices, CSR and Corporate Governance practiced by various organizations</p>
3	Business Research Methods		<p>The course is designed to inculcate the analytical abilities and research skills among the students. The course intends to give hands on experience and learning in Business Research.</p>
4	Production & Total Quality Management		<p>To acquaint learners with the basic management decisions with respect to production and quality management</p>





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			<p>To make the learners understand the designing aspect of production systems</p> <p>To enable the learners, apply what they have learnt theoretically.</p>
5	Business Economics-II		<p>To enable the students to understand concepts with regards to demand in business, supply and pricing from the point of view of the businesses, Understanding various types competitions in the market.</p>
Finance Electives			
1	Financial Institutions & Markets		<p>The Course aims at providing the students basic knowledge about the structure, role and functioning of financial institutions and markets in the financial system in India.</p> <p>To inculcate understanding relating to managing of financial System</p>
2	Corporate Restructuring		<p>To impart knowledge relating to legal, accounting and practical implementation of corporate restructuring. The subject covers the complex facets of corporate restructuring process</p>
Human Resources Electives			
1	Human Resource Planning & Information System		<p>To Understand the Concept and Process of HRP</p> <p>To Understand Ways of matching Job Requirements and Human Resource Availability</p> <p>To Explore the concept of Strategic HRP</p>





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2	Training & Development in HRM		<p>This paper is not pure academic oriented, but practice based. It has been designed, keeping in view the needs of the organizations. Successful managerial performance depends on the individual's ability to observe, interpret the issues and modify his approach and behavior. All organizations need to pay adequate attention to equip their employees. Rapid progress in technology has changed not only in the physical facilities but also in the abstract qualities required of the men who are using them. This paper will attempt to orient the students to tailor themselves to meet the specific needs</p> <p>of the organizations in training and development activities</p>
Marketing Electives			
1	Integrated Marketing Communication		<p>To equip the students with knowledge about the nature, purpose and complex construction in the planning and execution of an effective Integrated Marketing Communication (IMC) program.</p> <p>2 To understand the various tools of IMC and the importance of co-ordinating them for an effective marketing communication program.</p>
2	Tourism Marketing		<p>The objective of this course is to explore the students to the Tourism Marketing environment so that they can understand consumer's and marketing characteristics of the same for understanding and contributing to the emerging challenges in the upcoming global economic scenario.</p>





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Semester-V			
Semester-V			
1	Logistics & Supply Chain Management		<p>To provide students with basic understanding of concepts of logistics and supply chain management</p> <p>To introduce students to the key activities performed by the logistics function</p> <p>To provide an insight into the nature of supply chain, its functions and supply chain systems</p> <p>To understand global trends in logistics and supply chain management</p>
2	Corporate Communication & 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 organizations</p> <p>To examine how various elements of corporate communication must be coordinated to communicate effectively</p> <p>To develop critical understanding of the different practices associated with corporate communication</p>
Finance Electives			
1	Investment Analysis & Portfolio Management		<p>To acquaint the learners with various concepts of finance</p> <p>To understand the terms which are often confronted while reading newspaper, magazines etc. for better correlation with the practical</p>





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			world To understand various models and techniques of security and portfolio Analysis
2	Wealth Management		To provide an overview of various aspects related to Wealth Management
3	Financial Accounting		To acquaint the learners in preparation of final accounts of companies To study provisions relating to underwriting of shares and debentures To study accounting of foreign currency and investment To understand the need of ethical behavior in accountancy
4	Direct Taxes		To understand the provisions of determining residential status of individual To study various heads of income To study deductions from total income To compute taxable income of Individuals
Human Resources Electives			
1	Finance for HR Professionals & Compensation Management		To orient HR professionals with financial concepts to enable them to make prudent HR decisions To understand the various compensation plans To study the issues related to compensation management and understand the legal framework of compensation management





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2	Strategic Human Resource Management		<p>To understand human resource management from a strategic perspective</p> <p>To link the HRM functions to corporate strategies in order to understand HR as a strategic resource</p> <p>To understand the relationship between strategic human resource management and organizational performance</p> <p>To apply the theories and concepts relevant to strategic human resource management in contemporary organizations</p> <p>To understand the purpose and process of developing Human Resource Policies</p>
3	Industrial Relations		
4	Performance Management & Career Planning		<p>To understand the concept of performance management in organizations</p> <p>To review performance appraisal systems</p> <p>To understand the significance of career planning and practices</p>
Marketing Electives			
1	Sales & Distribution Management		<p>To develop understanding of the sales & distribution processes in organizations</p> <p>To get familiarized with concepts, approaches and the practical aspects of the key decision making variables in sales management and distribution channel management</p>
2	Services Marketing		To understand distinctive features of services and key elements in





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			<p>services marketing</p> <p>To provide insight into ways to improve service quality and productivity</p> <p>To understand marketing of different services</p> <p>in Indian context</p>
3	Customer Relationship Management		<p>To understand concept of Customer Relationship Management (CRM) and implementation of Customer Relationship Management</p> <p>To provide insight into CRM marketing initiatives, customer service and designing CRM strategy</p> <p>To understand new trends in CRM, challenges and opportunities for organizations</p>
4	E-Commerce & Digital Marketing		<p>To understand increasing significance of E-Commerce and its applications in Business and Various Sectors</p> <p>To provide an insight on Digital Marketing activities on various Social Media platforms and its emerging significance in Business</p> <p>To understand Latest Trends and Practices in E- Commerce and Digital Marketing, along with its Challenges and Opportunities for an Organization</p>
Semester-VI			
1	Operations Research		<p>To help students to understand operations research methodologies</p> <p>To help students to solve various problems practically 3 To make students proficient in case analysis and interpretation</p>
2	Project Work		<p>To inculcate the element of research</p>





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			analysis and scientific temperament among learners. To Create awareness among learners regarding methodology of formulation and preparation of the project work.
Finance Electives			
1	Strategic Financial Management		To gain in-depth knowledge of Financial Management & its functions
2	International Finance		It deals with the analysis of selected macro-economic issues in open economies
3	Project Management		To gain in-depth knowledge of Financial Management & its functions related to projects
4	Indirect Taxes		To acquaint the students with basic principles underlying the provisions of Indirect tax laws
Human Resources Electives			
1	HRM in Global Perspective		To introduce the students to the study and practice of IHRM To understand the concepts, theoretical framework and issues of HRM in Global Perspective To get insights of the concepts of Expatriates and Repatriates To find out the impact of cross culture on Human Resource Management To provide information about Global Workforce Management To study International HRM Trends and Challenges
2	Organizational Development		To understand the concept of Organizational Development and its





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			<p>Relevance in the organization</p> <p>To Study the Issues and Challenges of OD while undergoing Changes</p> <p>To get an Understanding of Phases of OD Programme</p> <p>To Study the OD Intervention to meet the Challenges faced in the Organization</p> <p>To get an Insight into Ethical Issues in OD</p>
3	HRM in Service Sector Management		<p>To understand the concept and growing importance of HRM in service sector</p> <p>To understand how to manage human resources in service sector</p> <p>To understand the significance of human element in creating customer satisfaction through service quality</p> <p>To understand the Issues and Challenges of HR in various service sectors</p>
4	Indian Ethos in Management		<p>To understand the concept of Indian Ethos in Management</p> <p>To link the Traditional Management System to Modern Management System</p> <p>To understand the Techniques of Stress Management</p> <p>To understand the Evolution of Learning System in India</p>
Marketing Electives			
1	Brand Management		<p>To understand the meaning and significance of Brand Management</p> <p>To Know how to build, sustain and</p>





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			<p>grow brands</p> <p>To know the various sources of brandequity</p>
2	International Marketing		<p>To understand International Marketing, its Advantages and Challenges.</p> <p>To provide an insight on the dynamics of International MarketingEnvironment.</p> <p>To understand the relevance of International Marketing Mix decisions and recent developments in Global Market</p>
3	Retail Management		<p>To familiarize the students with retail management concepts andoperations</p> <p>To provide understanding of retail management and types ofretailers</p> <p>To develop an understanding of retail management terminology including merchandize management, store management and retailstrategy.</p> <p>To acquaint the students with legal and ethical aspects of retailmanagement</p> <p>To create awareness about emerging trends in retail management</p>
4	Sports Marketing		<p>To familiarize the students with sports marketing concepts andoperations</p> <p>To acquaint the students with legal and ethical aspects of sports marketing</p> <p>To create awareness about emerging trends in sports marketing.</p>





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Department of Computer Science

Name of the Programme	Programme Outcome	Program Specific Outcome
	Students will be able to	Students will be able to have
UG(BSc(CS)) Bachelor of Computer Science	1)To understand the structure and operation of modern processors and their instruction sets.	Form strong foundation of Computer science Introduce emerging trends to the students in gradual way,
	2)to learn various concepts of programming to the students using Python.	Knowledge of emerging trends to the students in gradual way,
	3) learn Open Source methodologies and ecosystem to students.	Ready for challenges of ICT industry
	4)to understand creation, manipulation and querying of data in databases	
	5) study or describe objects or problems in computer algorithms and programming languages.	





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B1. Course Outcomes of all courses offered by the Department

Name of the course: Bsc(Computer Science)

Sr. No.	Name of The Course	Course Code	Course Outcomes (After completing this course, the students will be able to)
FYBSC(CS)			
Semester-I			
1	Computer Organization and Design	USCS101	At the end of this course students will able to 1) To learn about how computer systems, work and underlying principles 2) To understand the basics of digital electronics needed for computers. 3) To understand the basics of instruction set architecture for reduced and complex instruction sets. 4) To understand the basics of processor structure and operation 5) To understand how data is transferred between the processor and I/O devices
2	Programming with Python- I	USCS102	At the end of this course students will able to 1)Understand the concepts of programming before actually starting to write programs. 2)Develop logic for Problem Solving. 3)Made familiar about the basic constructs of programming such as data, operations, conditions, loops, functions etc. 4) Apply the problem-solving skills using syntactically simple language i.e. Python (version: 3.X or higher)
3	Free and Open-source Software	USCS103	At the end of this course students will able to 1)Have a good working knowledge of Open Source ecosystem, its use, impact and importance. 2) learn Open Source methodologies, case studies with real life examples.
4	Database Systems	USCS103	At the end of this course students will able to





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			<p>1) evaluate business information problem and find the requirements of problem in terms of data.</p> <p>2) design the database schema with the use of appropriate data types for storage of data in database.</p> <p>3) create, manipulate, query and back up the databases.</p>
5	Discrete Mathematics	USCS104	<p>At the end of this course students will able to</p> <p>1) provide overview of theory of discrete objects, starting with relations and partially ordered sets.</p> <p>2) Study about recurrence relations, generating function and operations on them.</p> <p>3) Give an understanding of graphs and trees, which are widely used in software.</p> <p>4) Provide basic knowledge about models of automata theory and the corresponding formal languages</p>
6	Descriptive Statistics and Introduction to Probability	USCS105	<p>At the end of this course students will able to</p> <p>1) Enable learners to know descriptive statistical concepts</p> <p>2) Enable study of probability concept required for Computer learners</p>
7	Soft Skills Development	USCS107	<p>At the end of this course students will able to</p> <p>1) know about various aspects of soft skills and learn ways to develop personality</p> <p>2) Understand the importance and type of communication in personal and professional environment.</p> <p>3) Provide insight into much needed technical and non-technical qualities in career planning.</p> <p>4) Learn about Leadership, team building, decision making and stress management.</p>
Semester-II			
1	Programming with C	USCS201	<p>At the end of this course students will able to</p> <p>1) write, compile and debug programs in C language.</p> <p>2) use different data types in a computer program.</p> <p>3) design programs involving decision structures, loops and functions.</p> <p>4) explain the difference between call by value and call by reference</p> <p>5) understand the dynamics of memory by the use of pointers.</p> <p>6) use different data structures and create/update basic data files.</p>





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





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			management of green IT
SYBSC(CS)			
Semester-III			
1	Discrete Mathematics	USCS301	At the end of this course students will able to 1) 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.
2	Object Oriented Design using UML and Python	USCS302	At the end of this course students will able to 1) Gain knowledge about principles, components and structure of object-oriented programming methodology. 2) Understand the behaviour and interaction between the software modules through object-oriented design. 3) Study about various representations, behavioural and architectural modelling techniques. 4) Explore use of UML in Object Oriented design and implementation of software designs using Python.
3	Data Structures and Algorithms Using Python	USCS303	At the end of this course students will able to 1) understand the meaning of data structures and its different types. 2) understand the algorithm of different data structures before implementing it using Python. 3) develop the logic for implementing data structures
Semester-IV			
1	Operating Systems and Linux	USCS401	At the end of this course students will able to 1) Enable the learner to gain extensive knowledge on principles, functioning and structure of operating systems. 2) Appreciate the importance of Operating system as resource manager and gain insight into how computing resources (such as CPU and memory) are managed by the operating system. 3) Learn about process management, process scheduling, threads,





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			<p>synchronization, memory management, virtual memory concepts, cause and effect of deadlocks, and file system</p> <p>4) Learn about Linux system, basic shell command, environmental variables, shell script, structured commands.</p>
2	Java Programming	USCS402	<p>At the end of this course students will able to</p> <p>1) Object oriented programming concepts using Java.</p> <p>2) Knowledge of input, its processing and getting suitable output.</p> <p>3) Understand, design, implement and evaluate classes and applets.</p> <p>4) Knowledge and implementation of AWT package.</p>
3	Web Technologies	USCS403	<p>At the end of this course students will able to</p> <p>1) gain knowledge about Mark-up Languages for developing web applications.</p> <p>2) Enhance Presentation of contents using Style Sheets.</p> <p>3) understand and implement the Client-side validations using Scripting language.</p> <p>4) understand and implement the Sever side validations using Scripting language.</p>





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Department of Information Technology

Name of the Programme	Programme Outcome	Program Specific Outcome
	Students will be able to	Students will be able to have
UG (B.Sc [Information Technology]) BACHELOR OF INFORMATION TECHNOLOGY	<ul style="list-style-type: none"> To apply highly maintainable technological solutions to simple and complex problems, by thinking analytically, creatively & critically. 	<ul style="list-style-type: none"> Equipped with the programming languages, database concepts, graphic designing and hardware knowledge the students are job ready in the respective career field and use their knowledge for the betterment of the society.
	<ul style="list-style-type: none"> To encourage students to work efficiently as a part of the team to achieve common goals. 	<ul style="list-style-type: none"> The students are able to work and handle the public relations as they were subjected to various types of communication activities in their course duration.
	<ul style="list-style-type: none"> To interact with different types of 	<ul style="list-style-type: none"> Students are ready to step up in the





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	audiences.	competitive world equipped with communication skills polished and implemented in various activities.
	<ul style="list-style-type: none"> To develop an aptitude for professional development. 	<ul style="list-style-type: none"> Students are career oriented by the completion of the course and ready to take on many different courses and further studies to develop an aptitude for learning.

B1. Course Outcomes of all courses offered by the Department Name of the course : B.Sc. (Information Technology)			
Sr. No.	Name of The Course	Course Code	Course Outcomes (After completing this course, the students will be able to)
FYB.Sc (I.T)			
Semester - I			

1	Imperative Programming	USIT101	<p>At the end of this course students should be able to:</p> <ul style="list-style-type: none"> Create algorithms and flowcharts to solve simple programming problems. Describe and employ strategies that are useful in debugging. Design, implement, test and debug programs that use calculations and selections. Design, implement, test and debug programs that use loops and arrays. Able to use different in-built functions such as Math functions, String functions etc. Design, implement, test and debug programs that use functions. Design, implement, test and debug programs that use arrays for character strings and that use pointers for character strings.
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			<ul style="list-style-type: none">Design, implement, test and debug programs that use different data types, such as simple variables, arrays, structures and unions.
2	Digital Electronics	USIT102	<p>After successful completion of the course student will be able to:</p> <ol style="list-style-type: none">Develop a digital logic and apply it to solve real life problems.Analyze, design and implement combinational logic circuits.Classify different semiconductor memories.Analyze, design and implement sequential logic circuits.Analyze digital system design using PLD.Simulate and implement combinational and sequential circuits using VHDL systems.Design and implement hardware circuit to test performance and application.
3	Operating Systems	USIT103	<p>At the end of the course, the students will be able to understand the different operating systems and its history. They will be able to distinguish between processes & threads, understand how the memory management systems & file systems works in the computer. They will be able to understand the software & hardware components & cloud architecture & the concepts of virtualization along with the allocation of resources in the memory.</p>
4	Discrete Mathematics	USIT104	<p>At the end of this course students should be able to: Understood</p> <ol style="list-style-type: none">Write an argument 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. <ul style="list-style-type: none">





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5	Communication Skills	USIT105	<p>At completion of the course the students will be able to understand and implement the 7Cs of communication, understand the nonverbal communication and will be using technology as a means of communicating.</p> <p>The cooperate writing skills of the students will be developed & they will be fluently writing the reports, business correspondence, resumes and many types of business letters. They will be confident in appearing interviews and public speaking. The students will be able to persuade a potential customer or client by their persuasion skills and will be able to create a attractive and content specific presentation and confidently present it, securing job opportunities, appraisal and cracking interviews thus leading a successful life.</p>
Semester – II			
1	Object oriented Programming	USIT201	<p>After completion of the course, the students will understand the concept of object and classes. They can implement programs using multiple objects. Students can learn different types of constructors. They can use different overloading operators while writing the program. Students can understand how data transfer from parent to child which shows the concept of inheritance. They can also handle the exception occur during the program. Students will work with different file operation and also understand the concept of templates.</p>
2	Microprocessor Architecture	USIT202	<p>At the end of this course students should be able to:</p> <ul style="list-style-type: none">• Describe the general architecture of a microcomputer system and architecture & organization of 8085 Microprocessor• Understand and realize the Interfacing of memory & various I/O devices with 8085 microprocessor• Understand and classify the instruction set of 8085 microprocessor and distinguish the use of different instructions and apply it in assembly language programming.• Understand the architecture and operation of Programmable Interface Devices and realize the programming & interfacing of it with 8085 microprocessor.• Understand the difference between 8085 and latest processors (i3,i5 and i7) <p>Understand the architecture of Sun SPARC</p>
3	Web Programming	USIT203	<p>After the completion of this course a student will be able to</p> <ul style="list-style-type: none">• Develop a web page with basic html features and the complex javascript functions.• Internet and the World Wide web will be introduced and the basic concepts of web programming will be familiar• Will be able to develop complex javascript functions for computing and taking variables. <p>Will be able to develop webpages in PHP and store data in backend like MySQL.</p>





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4	Numerical and Statistical Methods	USIT204	<p>At the end of this course students should be able to:</p> <p>Understand the mathematical models and helps in solving engineering problems.</p> <p>Quickly solve iterative methods with the help of different types of methods.</p> <p>Easily understand the problems of management such as production, refinery operations, advertising, transportation, distribution and investment analysis with the help of linear programming.</p> <p>Understand the concept of statistical methods which help them to understand the internet variability in the collected data, and facilitate the appropriate analysis.</p>
5	Green Computing	USIT205	<p>Learn Environmental Concerns and Sustainable Development, Environmental Impacts of IT all over the world. Students will know the Approach to Greening IT, Applying IT for enhancing Environmental sustainability, Green IT Standards and Eco-Labeling of IT, Enterprise Green IT strategy, using machines emitting less carbon, low power consuming devices, cooling techniques in a natural way, to go paperless, recycling the scrap of devices, etc. After learning all these different techniques, students can use Laws, Standards and Protocols regulating in their workplaces (organizations, I.T. companies, etc.).</p>

S.Y.B.Sc (I.T)

Semester - III

1	Logic and Discrete Mathematics	USIT301	<p>At the end of this course students should be able to: Understood</p> <ol style="list-style-type: none">1. Write an argument using logical notation and determine if the argument is or is not valid.2. Demonstrate the ability to write and evaluate a proof or outline the basic structure of and give examples of each proof technique described.3. Understand the basic principles of sets and operations in sets.4. Prove basic set equalities.4. Apply counting principles to determine probabilities.5. Demonstrate an understanding of relations and functions and be able to determine their properties.6. Determine when a function is 1-1 and "onto". <p>Demonstrate different traversal methods for trees and graphs</p>
2	Computer Graphics	USIT302	<p>After completion of this course, students will understand about pixels, bitmaps and different applications used in the computer graphics. They will different algorithms for drawing line, circle ellipse. Students will learn to apply 2-D and 3-D transformation using multiple coordinates. They can also apply the clipping and different scan-conversion concepts. Different curve designs can also learn from this course. Students can apply different algorithms on surfaces and can use</p>





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			different color models. Basic animation is also learn from this.
3	Advanced SQL	USIT303	After the completion of this course, the students will be able to <ul style="list-style-type: none">• Create tables, insert data and modify data from the tables• Understand the datetime functionality in SQL, subqueries and set operators and grouping functions.• Creating a PL/SQL block, running a program, rectify errors in the block, using data manipulation operations• Using control structures in the PL/SQL block, Cursors and exception handling in the PL/SQL blocks• Understand the stored procedure, inserting & modifying data via a stored procedure and creating and manipulating packages in SQL.• Will be familiar with the data Definition Language (DDL) and Data Manipulation language (DML), understand triggers.
4	Object Oriented Programming with C++	USIT304	After completion of the course, the students will understand the concept of object and classes. They can implement programs using multiple objects. Students can learn different types of constructors. They can use different overloading operators while writing the program. Students can understand how data transfer from parent to child which shows the concept of inheritance. They can also handle the exception occur during the program. Students will work with different file operation and also understand the concept of templates.
5	Modern Operating Systems	USIT305	At the end of the course, the students will be able to understand the different operating systems and its history. They will be able to distinguish between processes & threads, understand how the memory management systems & file systems works in the computer. They will be able to understand the software & hardware components & cloud architecture & the concepts of virtualization along with the allocation of resources in the memory.
Semester - IV			
1	Software Engineering	USIT401	After this course, students will understand the software and different tools that used in the software. They can also learn about the safety and security of the system. Students can also understand how to gather requirements from customer for implementing software. They also study different models which is used to implementing in different projects. They also understand the design concept of components. Students will use different component based software engineering, verify and validate and test that. For developing any software cost estimation and quality of software is most important which is understood them by this course.
2	Multimedia	USIT402	After completing this course the students will be able to understand <ul style="list-style-type: none">• Multimedia and its software & hardware components and the scope of multimedia.• The representation of data from analog to digital and digital





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			<p>to analog data, and the sampling and quantization techniques</p> <ul style="list-style-type: none">• Understanding how fonts and images are represented in the multimedia and their patterns of representations.• The audio and video editing using different software and the voice and data quality and different file formats.• Will be able to understand the advantage and disadvantages of compression and its effect on data.• Presenting multimedia in the form of a presentation/audio/video/movie format by using various softwares.
3	Java and Data Structures	USIT403	<p>On completion of the course the student should be able to:</p> <ol style="list-style-type: none">1. Read and make elementary modifications to Java programs that solve real-world problems.2. Will understand the OOPs concepts with classes and objects and tracing the error by exception handling mechanisms.3. Will understand the different libraries available in java class library related to input/output, stream classes and many math and string related classes.,4. Will understand the data structures and its complexity by programming the functions of data structures.5. Will understand the structures like heaps, stacks, linked lists and hashtable methods and trees.
4	Quantitative Techniques	USIT404	<p>At the end of this course students should be able to:</p> <p>Quickly solve iterative methods with the help of different types of methods.</p> <p>Easily understand the problems of management such as production, refinery operations, advertising, transportation, distribution and investment analysis with the help of linear programming.</p> <p>Understand the concept of statistical methods which help them to understand the internet variability in the collected data, and facilitate the appropriate analysis.</p>
5	Embedded Systems	USIT405	<p>At the end of this course students should be able to:</p> <ul style="list-style-type: none">• Know what an embedded system is.• Understand hardware and software design requirements of embedded systems.• Understand the general process of embedded system development• Comprehend important embedded system terminology• Experience common aspects of embedded system development• Understanding of what an embedded system R&D project is, and the activities it involves





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			<ul style="list-style-type: none">• Ability to use ANSI C to develop embedded software• Interface to peripherals, knowledge of typical interfacing standards• Development of prototype circuit on breadboard (including interfacing to microcontroller, and control from software)
T.Y.B.Sc (I.T)			
Semester - V			
1	Network Security	USIT501	At the end of this course students should be able to: Understand the concept of basic security. Understand the different types of security. Different types of algorithm give better solution for security with the help of practical approach. Students can do various advanced topics such as Information security analysts, cyber security analyst, ethical hackers, and computer forensic analyst.
2	Asp.Net With C#	USIT502	At the end of this course students should be able to: <ul style="list-style-type: none">• Understand .Net framework• Understand the concepts of C#• Understand the database connectivity using ADO.Net• Understand the concepts and use of JQuery• Able to develop an application using .Net framework
3	Software Testing	USIT503	After completion of the course, the students will be able to understand the concept of project and they can implement the project. Students can understand how to plan for any project and multiple techniques implemented in project. Students can use different models and different methods while implementing project. They also can handle the risk. Students will work in team to get success in the project and also implement the quality software
4	Advanced Java	USIT504	On completion of the course the student should be able to: <ol style="list-style-type: none">6. Use an integrated development environment to write, compile, run, and test simple object-oriented Java programs.7. Read and make elementary modifications to Java programs that solve real-world problems.8. Validate input in a Java program.9. Identify and fix defects and common security issues in code.10. Document a Java program using Javadoc.11. Use a version control system to track source code in a project.





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5	Linux Administration	USIT505	Upon completion of this course, the students will be able to handle the entire linux administration, which includes creating users, setting firewalls, creating and maintaining file logs, DNS server and internet and intranet setting. The students will also be able to secure the server as well as maintain the services and update the packages required by the server to be updated.
Semester - VI			
1	Internet Technology	USIT601	At the end of this course students should be able to: Understand the networking system. Students can do various advanced topics like network administrator, Information Technology Manager, System Administrator, Information Technology Director.
2	Project Management	USIT602	At the end the students will be familiar with the documentation process before actually starting any real time process. All the prerequisites, ER diagram, need, front end design & testing process, back end designing and many more aspects are covered in the project management.
3	Data Warehousing	USIT603	At the end of this course students should be able to: 1. Understand Data Warehouse fundamentals, Data Mining Principles 2. Design data warehouse with dimensional modelling and apply OLAP operations. 3. Identify appropriate data mining algorithms to solve real world problems. 4. Compare and evaluate different data mining techniques like classification, prediction, clustering and association rule mining. 5. Describe complex data types with respect to spatial and web mining. 6. Benefit the user experiences towards research and innovation.
4	Geographic Information Systems	USIT606	After the course, the students will be able to understand the basic principles of vector and raster data and their storage in the database management system. The students will be able to practical map the places on the map, create a map with all the components, analyze and classify the data in the maps as well as present the final maps and graphs in the form of visualization of data.

Department of Accounts and Finance

Name of the Programme	Programme Outcome	Program Specific Outcome
	Students will be able to	Students will be able to have





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UG (BAF) : BACHELOR OF COMMERCE – ACCOUNTING & FINANCE	To develop fundamental knowledge about the fields of finance, accountancy, audit, taxation, law, technology and innovative practices by adopting learner centric pedagogy.	Have fundamental knowledge of finance, accountancy, audit, taxation, law, technology and innovative practices.
	To motivate students to pursue higher studies such as chartered accountancy, cost accountancy, Bachelor of Accounts & Finance (B.A.F) (Programme) chartered financial analyst, Business administration and company Secretary ship.	Communicate effectively with all stakeholders.
	To nurture students' ability to work as consultants.	Work at both individual and team level.
	To arouse students' interest in research.	

B1. Course Outcomes of all courses offered by the Department Name of the course : B.Com (Accounts and Finance)

Sr. No.	Name of The Course	Course Code	Course Outcomes (After completing this course, the students will be able to)
FYBAF			
Semester - I			





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1	Foundation Course	UA&FFSI.7	<p>At the end of this course students should be able to: Understood the demographic composition of India having regard to Language, Religion, and Gender etc.</p> <p>Understood stratified reasons as to differences and women problems.</p> <p>Understood the fundamental duties of Indian citizen specified in Indian Constitution.</p> <p>Understood hierarchy of local self-government and amendment to the same.</p>
2	Business Communication I	UA&FFSI.6	<p>At the end of this course students should be able to:</p> <p>Getting helpful for knowledge about what is communication, types of communication, channel and modes of communication.</p> <p>helpful for getting knowledge about how to overcome the barrier and how to improve our listings skills.</p> <p>Getting knowledge about what is ethics and how and for what it should be followed.</p> <p>Learn much more about parts, structure of letter, principal of letter writing and how to write d variety of personal letters. Learn about developing ideas of about letter writing and paragraph writing.</p>
3	Business Economics I	UA&FFSI.3	<p>At the end of this course students should be able to: Expose students of Commerce to basic Micro Economics</p> <p>Concepts and inculcate in analytical approach to the subject matter.</p> <p>Stimulate the students' interest by showing the relievable and use of various economic theories and functions.</p> <p>Apply economic reasoning to problems of business.</p>





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4	Business Environment	UA&FFSI.5	<p>At the end of this course students should be able to: Understand the concept of business environment and various tools of environmental analysis.</p> <p>Aware of business ethics.</p> <p>Aware of various consumer laws in India.</p> <p>Identify the factors of international business environment. Understand positive and negative impact of environment on business.</p> <p>Understand ethical issues in business, ethical dilemmas, procedure for registration under MSMED Act, 2006, and also the provisions related to consumer protection Act.</p> <p>Know CSR, Corporate Governance, and carbon credit and implementation of CSR activities by various companies. Know MNCs and TNCs. Implications of WTO and FDI for Indian Industries.</p>
5	Cost Accounting I	UA&FFSI.2	<p>At the end of this course students should be able to: Understand the concepts of costing and accounting procedures.</p> <p>Study practical adjustments in production with elements of cost</p> <p>Study practical approach towards cost structure of labours. Understanding formulas for calculation of cost of labours. Study practical approach towards overheads in production Study per overhead cost and apportion of elements used in production.</p>
6	Financial Accounting I	UA&FFSI.1	<p>At the end of this course students should be able to:</p> <p>Solve practical problems regarding Inventory Valuation by FIFO and Weighted Average Method.</p> <p>Classify in considering features of various transactions and able to apply structure of Final Accounts in proper manner. Accounting of Departmental Stores.</p> <p>Understood application of Hire purchase transactions in real life as regular transaction in the society.</p>
7	Financial Management	UA&FFSI.4	<p>At the end of this course students should be able to: Understand the concept of financial management. Understand different concept of valuation.</p> <p>Calculate various leverages on their own. Easily identify various sources of finance.</p> <p>Calculate cost of capital of the various firms.</p>





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Semester - II			
1	Foundation Course	UA&FFSII.3	At the end of this course students should be able to: Understand New industrial policy 1992 with its economic reform. Understand fundamental rights stated in constitution. Understood importance of environment protection in the current era. Understood significance of aggression, violence and the need to control in life. Understood conflict resolution technique and peace and harmony in society.
2	Auditing I	UA&FFSII.2	At the end of this course students should be able to: Understand the concept of auditing, errors and frauds, principles of audit and types of audit. Plan audit program and, maintain working papers and audit note book. Understand techniques of auditing. Understand concept of internal audit.
3	Financial Accounting II	UA&FFSII.1	At the end of this course students should be able to: Understand difference in between single entry system and double entry system and practically able to linking up, to prepare final accounts from incomplete record. Learn application of Branch Accounting for small branches by Debtor system and for big branches by stock and debtors system. Understand transactions between Principal/ Manufacture and agent, able to apply consignment accounting regarding these transactions. Know basic principles of insurance and able to calculate fire insurance claim regarding goods lost by fire
4	Business Mathematics	UA&FFSII.6	At the end of this course students should be able to: Demonstrate an understanding of the foundations and history of mathematics. Perform computations in higher mathematics. Read and understand middle-level proofs. Write and understand basic of Profit and loss, interest and annuity concepts. Develop and maintain problem-solving skills. Able to solve the problems based on ratio, proportion and percentage. students able to understand the practical aspects of shares and mutual





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			fund.
5	Innovative Financial Services	UA&FFSII.4	At the end of this course students should be able to know the scenario of the financial service sector in India. The various services offered, the procedures, criteria, eligibility, need of availing such services. The students would also understand the issue management & securitization process, the background of the stock market operations. The Syllabus also provides a good understanding of Credit Rating Agencies & consumer finance.
6	Business Law - I	UA&FFSII.5	At the end of this course students should be able to: Understand legality behind of making contract. Understand legality behind of making contract of sale and agreement to sale. Understand legality behind of negotiable instruments of promissory notes, bills of exchange, cheque. Understand legality and rights of consumers.
7	Business Communication	UA&FFSII.7	At the end of this course students should be able to: Deal with nerves and think more positively about public speaking. Consider ways of grabbing the listener's attention, holding their interest, and concluding strongly. Use body language and tone of voice to enhance their presentations. Use slides and visual aids effectively. Students will develop knowledge, skills, and judgment around human communication through practicing business letters that facilitate their ability to work collaboratively with others.
SYBAF			
Semester - III			





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1	Financial Operation	Market	UA&FFSIII.5	<p>At the end of this course students should be able to:</p> <p>Get proper guidance about investment, difference about banking and non-banking financial services, and inflation. Understand knowledge regarding Sensex, IPO shares, methods of raising finance by company through various financial instruments.</p> <p>Understand classification of financial instruments, derivatives. Get helpful knowledge about consumer finance, plastic money, features of financial services, underwriter.</p>
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2	Business Economics II	UA&FFSIII.4	<p>At the end of this course students should be able to: Understand the concept of Macroeconomics and various circular flows of income.</p> <p>Understand various concepts in money, prices and inflation. Aware of public finance in depth.</p> <p>Understand various sourced of public revenue and expenditure.</p> <p>An appreciation of the ethical issues in economics competition.</p>
3	Cost Accounting II	UA&FFSIII.2	<p>At the end of this course students should be able to:</p> <p>Solve cost sheet problems and acquired skill of application of cost sheet. One of the important techniques to determine prices.</p> <p>Find reasons of distinction between financial accounting and cost accounting and to solve practical problems.</p> <p>Apply calculation of pricing of large size contract by contract costing and to solve practical problems.</p> <p>Apply technique of determination of price at the time of running manufacturing process by process costing in practical manner.</p>
4	Direct Taxation	UA&FFSIII.3	<p>At the end of this course students would have a firm grip on the legal as well as the practical aspects of the subjects. Develop knowledge of various sections under Direct taxes. The students will be able to compute income from salary, deductions at various sources. Learn about capital gains, tax rates under partnership firm & Individual. The various methods & procedures of tax planning & ethics in taxation will also be learnt.</p>
5	Financial Accounting III	UA&FFSIII.1	<p>To learn structure of Final Accounts of Partnership Firms with Admission, Retirement, Death of partner.</p> <p>To learn actual implementation of dissolution of partnership firm with the technique of Piecemeal Distribution of Cash.</p> <p>To learn procedure of Amalgamation of partnership firm and conversion of partnership firm into joint stock company.</p> <p>To learn inter settlement of various transactions during the conversion of partnership firm into Joint Stock Co.</p> <p>To learn transactions and procedure of foreign currency translation in to Indian Rupees.</p>





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6	Business Law	UA&FFSIII.6	<p>At the end of this course students should be able to: Understand an insight of various beneficial social legislative measures.</p> <p>Understand rights and liabilities of partners, Outsiders. Incorporation and dissolution of partnership firm.</p> <p>Understand nature of LLP, merits of LLP and process of winding up of LLP</p> <p>Understand provisions of Health safety and welfare measures for workers and its inspection.</p> <p>Demonstrate an understanding of the Legal environment of business.</p> <p>Apply basic legal knowledge to business transactions. Communicate effectively using standard business and legal terminology.</p>
7	Information Technology I	UA&FFSIII.7	<p>At the end of this course students should be able to: Learn different parts of hardware and different types of software</p> <p>Learn and execute different commands of Ms word, Ms Excel and Ms PowerPoint</p> <p>Learn Downloading information, creating e-mail ID and sending, receiving emails.</p> <p>Learn legal issues of internet, importance of electronic data interchange and e-commerce.</p>
Semester - IV			





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1	Management	UA&FFSIV.4	<p>At the end of this course students should be able to:</p> <p>Discuss and communicate the management evolution and how it will affect future managers.</p> <p>Observe and evaluate the influence of historical forces on the current practice of management.</p> <p>Identify and evaluate social responsibility and ethical issues involved in business situations and</p> <p>logically articulate own position on such issues.</p> <p>Explain how organizations adapt to an uncertain environment and identify techniques managers use to influence and control the internal environment.</p> <p>Practice the process of management's four functions: planning, organizing, leading, and</p> <p>controlling.</p> <p>Identify and properly use vocabularies within the field of management to articulate one's own position on a specific management issue and communicate effectively with varied audiences.</p> <p>Evaluate leadership styles to anticipate the consequences of each leadership style.</p> <p>Gather and analyse both qualitative and quantitative information to isolate issues and formulate best control methods.</p>
2	Research Methodology		<p>At the end of this course students should be able to:</p> <p>Learn about sources, types of data, recognition of sources of Datta collection.</p> <p>Learn about how to design the research and types of hypothesis.</p> <p>Getting knowledge about the types of data classification of data collection, how to process the data, and learnt about the how to calculate the mean, median, mode,</p> <p>Learn about the how to write report, interpretation and submission of data/ project.</p>





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3	Financial Accounting	UA&FFSIV.1	<p>At the end of this course students should be able to:</p> <p>Apply to formats of Company Final Accounts as per Indian Company's Act, 2013 in practical manner with notes to accounts.</p> <p>Understand provisions regarding redemption of preference shares as per Company's Act, 2013 and applying practically to solve practical problems.</p> <p>Understand various types of redemption of debentures and preference share also they are able to understand provisions regarding redemption of debentures.</p> <p>Apply conversion of foreign currency into Indian currency when, to solve practical problems about foreign branches. Classify appropriate basis for allocation regarding Profit Prior to Incorporation and applying when, to solve practical problem.</p>
4	Management Accounting	UA&FFSIV.2	<p>At the end of this course students should be able to: Understand the concept of management accounting. Analyses and interpret financial statements.</p> <p>Calculate various ratios from the financial statements. Do cash flow analysis.</p> <p>Manage working capital requirement estimations of the firm.</p>
5	Business Law - III	UA&FFSIV.5	<p>At the end of this course students should be able to:</p> <p>Students have understood various definitions that are required to learn provision of company Act 2013.</p> <p>Students have understood process of incorporation of company and its importance.</p> <p>Students have understood the ways to raise capital in primary market by public companies and private company.</p> <p>Students have understood types of prospectus and it's need to issue in different situation.</p>
6	Information Technology - II	UA&FFSIV.6	<p>At the end of this course students should be able to: Learn need and importance of business process, business process management in IT, BPM lifecycle</p> <p>Learn practical knowledge of Tally software</p> <p>Learn importance and applications of information system in</p>





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			management, role of computer inMIS Learn different IT auditingtechniques
TYBAF			
Semester - V			
1	Management Application		At the end of this course students should be able to: Acquired analytical skills in solving marketing related problems and challenges and be familiar with the strategic marketing management process. Exposed to the development, evaluation, and implementation of marketing management in a variety of business environments. Understand the development, implementation, and evaluation of employee recruitment, selection, and retention plans and processes. Learn administer and contribute to the design and evaluation of the performance management program. Acquired skill to develop, implement, and evaluate employee orientation, training, and development programs. Perform analytical reviews of financial results, proposals, and plans.
2	Financial Management		At the end of this course students should be able to: understand the concept of capital budgeting, recivable management, mutul fund and bond valuation and their practical implication in the real life. Understand the concept of net present value and how to calculate payback period ofa projects.
3	Cost Accounting	UA&FFSV.2	At the end of this course students should be able to: Understand of concepts of costing and accounting procedures. Know ratios which are used in company's Get Knowledge about comparison of cost integrated and non integreted costing system Study practical activities in production with two systems Study practical approach towards in service costing Study practical approach towards process inproduction Study per unit cost and apportion of elements used in process Study practical calculations of cost with reference to activity Differentiate cost





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			between traditional and ABC approach.
4	Indirect Taxation	UA&FFSV.5	At the end of this course students should be able to: The practical aspect of GST, how it is calculated and rate of GST indetail. Students able to calculate GST on their transactions. They able to understasnd various concept of GST.





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5	Financial Accounting - V	UA&FFSV.1	<p>At the end of this course students should be able to: Calculate purchase consideration by various method of calculation and solving practical problem after considering procedure of amalgamation.</p> <p>Solve practical problems after considering adverse situation of the company and provisions regarding internal reconstruction. Prepare statement of underwriter's liability.</p> <p>Liquidate joint to stock company as per procedure.</p> <p>Apply all legal provisions regarding calculation of buyback.</p>
6	Financial Accounting - VI	UA&FFSV.3	<p>At the end of this course students should be able to:</p> <p>Apply format of final accounts as per Banking Companies Act, 1949 in practical manner.</p> <p>Verify financial position of Bank by various angle.</p> <p>Apply format of final accounts as per Insurance Companies Act, and verify actual calculation premium in practical manner.</p> <p>Practically apply procedure of valuation of personal investment in real, mostly investment in Share market and in Debentures / Bonds.</p> <p>Apply format of final accounts as per LLP Act, 2008 in practical manner.</p>
Semester - VI			
1	Indian Economics		<p>At the end of this course students should be able to: Understand the various aspects of Indian economy.</p> <p>Develop a perspective on the different problems and approaches to economic planning and development in India. Develop a perspective on the different problems and approaches to economic planning and development in India Understand the role of the Indian Economy in the global context, and how different factors have affected this process.</p>





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2	Financial Management	UA&FFSVI.6	<p>At the end of this course students should be able to:</p> <p>Describe the dimensions of performance and risk relevant to financial firms. understand the concept of business valuation , mergers and acquisition etc.</p> <p>Calculate contemporary measures of financial measures of performance and risk. understand the practical aspect of lease accounting , hirepurchase system and its accounting treatment. understand how to calculate amount of working capital.</p> <p>Describe contemporary managerial risk. Evaluate the economic environment and the impact of governmental economic policies on consumers and financial institutions.</p> <p>Describe the impact that financial innovation, advances in technology, and changes in regulations has had on the structure of the financial firms/industry.</p>
3	Cost Accounting	UA&FFSVI.2	<p>At the end of this course students should be able to:</p> <p>Prepare various types of budgets depending upon the types of activities.</p> <p>Understand the concepts of absorption costing, marginal costing, and cost volume and profit analysis.</p> <p>Take decision like make or buy, appropriate sales mix on the basis of analytical costing methods.</p> <p>Find material, labour, sales and overhead variances.</p>
4	Taxation - III	UA&FFSVI.5	<p>At the end of this course students should be able to: The practical aspect of GST, how it is calculated and rate of GST in detail. Students able to calculate GST on their transactions. They able to understand various concept of GST. They will know the Import & export procedures through the custom Act. The Students would learn the foreign trade policies and the various schemes & exemption under the same.</p>
5	Financial Accounting - VII	UA&FFSVI.4	<p>At the end of this course students should be able to:</p> <p>Prepare Final Account for Electricity Company as per Double Account System</p> <p>Prepare final accounts of Co-Operative Housing Society & Consumer Co-Operative Society.</p> <p>Get the knowledge of IFRS its Purpose & Objective of financial statement, its Frame work, its assumption, characteristics, element, recognition & measurement. understand the mutual</p>





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Department of Botany – BSc

A. Program outcome and Program specific outcomes offered by the Department
Name of the Programme specialization : B.Sc. Botany

Program	Program outcomes	Program specific outcome
Under graduate B.Sc Botany	<p><u>1. Specific core discipline knowledge</u> Students can recall details and information about the evolution, anatomy, morphology, systematic, genetics, physiology, ecology and conservation of plants and all other forms of life.</p> <p><u>2. Students unique ecological and evolutionary features of the local and Indian flora.</u></p> <p><u>Communication skills</u> Students can communicate effectively using oral and written communication skills</p> <p><u>Problems solving and research skills</u> Students can generate and test hypotheses, make observations, collect data, analyze and interpret results, drive conclusions, and evaluate their significance within a broad scientific context.</p>	<ul style="list-style-type: none"> To recognize and identify major groups of non-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





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B. Course Outcomes of all courses offered by the Department

Name of the Course : B.Sc Botany

Sr. No	CLASS	SEM	PAPER NO	PAPER CODE	PAPER	LEARNING OUTCOMES
1.	F.Y.B.Sc.	I	I	USBO101	Plant Diversity-I	Learner will get the knowledge of: ➤ Importance & diversity of algae. ➤ Mode of nutrition & economic importance of fungi. ➤ Life cycle of primitive bryophytes & general characters of class Musci.
			II	USBO102	Form & Function-I	Learner will get the knowledge of: ➤ Cell as basic unit of life with emphasis on plant cell. ➤ Structure and function of Ecology and examples of different types of ecosystem. ➤ Principles of Epistasis as non Mendelian genetics and ability to solve problem simple problems based on Epistasis.
		II	I	USBO201	Plant Diversity-I	Learner will get the knowledge of: ➤ Stellar evolution & life cycle of Nephrolepis. ➤ Systematic botany through morphological characters, types of inflorescence. ➤ Detail systematic position and life cycle of Cycas and its economic importance.
			II	USBO202	Form & Function-I	Learner will get the knowledge of: ➤ Basics of anatomy, Epidermal, mechanical & vascular tissue system, & structure of root, stem & leaves. ➤ Various pigments involved in photosynthesis, light dependent and light independent pathway of photosynthesis. C ₃ , C ₄ and CAM pathway for carbon assimilation. ➤ Concept of Primary and secondary metabolites, active constituents found in common medicinal plants included in Grandma's Pouch.
2.	S.Y.B.Sc.	III	I	USBO301	Plant Diversity	The learner will get the knowledge of ➤ Cryptogams - their general characters, structure, life cycle & economic importance. ➤ Floral morphology, general characteristics and importance of angiosperms.





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					Techniques used to study Plant Diversity.	
		II	USBO302	Form and Function -II	<p>The learner will get the knowledge of</p> <ul style="list-style-type: none"> ➤ Structure and functions of various cell organelles and different aspects of cell cycle and cell division. ➤ Mechanisms of sex determination <p>Study the modes of DNA replication and protein synthesis.</p>	
		III	USBO303	Current Trends in Plant Sciences-I	<p>The learner will get the knowledge of</p> <ul style="list-style-type: none"> ➤ Pharmacognosy and various secondary metabolites found in plants. ➤ Different types of forests in India and their economic importance. ➤ Applications of Aromatherapy & nutraceuticals. 	
		IV	I	USBO401	Plant Diversity	<p>The learner will get the knowledge of</p> <ul style="list-style-type: none"> ➤ Different Fungi - their general characters, structure, life cycle & pathogenicity. ➤ Basic features of Pteridophyta and Paleobotany. ➤ Gymnosperms-their distribution, life cycle & economic importance
			II	USBO402	Form and Function -II	<p>The learner will get the knowledge of</p> <ul style="list-style-type: none"> ➤ Mechanical tissues and secondary growth in plants. ➤ Various processes involved in respiration, Photorespiration & Photoperiodism ➤ Biogeochemical cycles and various ecological factors.
			III	USBO403	Current Trends in Plant Sciences-I	<p>The learner will get the knowledge of</p> <ul style="list-style-type: none"> ➤ Indoor gardening and various national parks and botanical gardens. ➤ Plant tissue culture and r-DNA technology. ➤ Biostatistics and Bioinformatics
3.	T.Y.B.Sc.	V	I	USBO501	Plant Diversity – III	<p>The learner will get the knowledge of</p> <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.





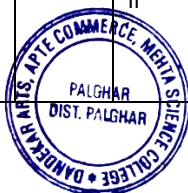
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					<ul style="list-style-type: none"> ➤ To understand the scope and importance of Plant Pathology and apply the concepts of various control measures of commonly widespread plant diseases.
		II	USBO502	Plant Diversity-IV	<p>The learner will acquire knowledge of</p> <ul style="list-style-type: none"> ➤ Fossils forms and understand their role in evolution ➤ Plant description , morphological and reproductive structures of seven families and also identify and classify according to Bentham & Hooker's System Pollen study and learn to apply it in various fields.
		III	USBO503	Form & Function- III	<p>The learner will acquire knowledge of</p> <ul style="list-style-type: none"> ➤ Two important organelles and molecular mechanisms of translation. ➤ Principles and techniques of plant tissue culture and apply these studies for improving agricultures and horticulture and to become an entrepreneur.
		IV	USBO504	Current Trends In Plant Sciences – II	<p>The learner will acquire knowledge of</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.
	VI	I	USBO601	Plant Diversity – III	<p>The learner will acquire knowledge of</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.
		II	USBO602	Plant Diversity-IV	<p>The learner will acquire knowledge of</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 structures of seven families.





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					<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.
		III	USBO603	Form & Function- III	<p>The learner will acquire knowledge of</p> <ul style="list-style-type: none"> ➤ Various plant bimolecular structures and appreciate the structures, role, functions and applications of enzymes. ➤ Nitrogen and plant hormone metabolism with applications of the same in agriculture and horticulture. ➤ principles of genetic mapping, mutations and solve problems based on them, gain knowledge of various metabolic disorders and their implications ➤ 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.
		IV	USBO604	Current Trends In Plant Sciences – II	<p>The learner will acquire knowledge of</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.
4.	T.Y.B.Sc. (Applied	Environment & Science	USACEVS5 01	Unit –I Environment and Pollution	Learners shall comprehend the impact of the interrelationship between various components of environment.





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Component)	Pollution - Applied Environmental Sciences			Learners will apply the knowledge of pollutants to undertake research projects studies.
		Unit –II Green chemistry and sustainability		Learner would be critical and creative during the designing, manufacturing and utilization of chemical products, which would reduce or eliminate the use or generation of hazardous Substances.
		Unit –III Alternate Energy Resources		Learner shall value the alternative energy resources and hence follow the 4 R's (Reduce, Reuse, Recycle & Reinvent). Learner may discover and design products, operations or processes, which conserve the energy resources. ➤ Solar energy, wind energy, tidal energy, nuclear energy. ➤ Biomass & bio-fuels, petro crops. ➤ Use of wastes: Water-based biomass, energy from waste & solid waste.
		Unit –IV Applications of analytical Methods		Learners shall develop skills in instrumentation used for the study and analysis of various substances related to the environment.
		Unit –V Green / Environment Audit		Learners and facilitator both the will develop conceptual clarity on pollution control and green environment auditing besides gaining knowledge about these programmes in the Indian scerario
		Unit –VI Industrial consultancy		Learners and facilitator both will be exposed to the various areas and facets of industrial consultancy, and shall also develop competency and confidence to explore it. Learner will be able to grasp the importance of various norms required for NPCB permits and procedure for liaison.
		Unit –VII Neo Avenues		Learners will develop an acumen to tap the potential for entrepreneurship with respect to environment related products and indoor plants.
		Unit –VIII Case studies and Simulations		Learners will comprehend and develop better acumen so as to take wise and necessary decisions while participating in environment related projects or framing polices/assessing environmental damages/ carrying out entrepreneurial activities beneficial to environment. Learners shall primarily learn to tackle real life situations with common sense.
			Environment	USACEVS601





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			Science & Pollution - Environmental Management	Environment Testing	laboratories , air , water quality and noise exposure standards and methods of physico-chemical and bacteriological sampling Learners will be exposed to the know how regarding establishing environmental testing and monitoring laboratories.
				Unit -II Ecological restoration	Learners will study and comprehend the treatment practices applied for domestic waste water and industrial effluents. Learners will be equipped with the knowledge of some alternatives to conventional resources.
				Unit -III Impact Assessment through Ecological Modelling	Learners will develop an understanding on the concept , application and limitation of modeling as a tool for summarizing or applying the research and survey findings. Learner will develop skills on the application of neural networking and statistical modeling.
				Unit -IV Finance	Learner will gain an insight into the basics of costing, book keeping and accountancy. Learners will be equipped to apply the concepts in his entrepreneurial ventures.
				Unit -V Biodiversity conservation & Ecotourism	Learners will develop aptitude to examine and assess the outcome of the framework of current biodiversity hotspots and biosphere reserves. Learners will be able to list the different aspects of wildlife photography and inspect the positive and negative aspects of it, also be able to recommend how wildlife photography can support biodiversity conservation. Learners will be able to assets the future challenges that ecotourism can generate for biodiversity conservation.
				Unit -VI Climate change	Learners will ponder upon and find out the what, why, where, whom and which of climate change and global warming Learners will be able to identify and evaluate the effects of the different sources of greenhouse substances.





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				Unit Environmental Education & Legislation	-VII	Learner will be imbibe positive changes in attitudes , commitments and civic actions required to combat harmful effects of anthropogenic activities and development on environment. Learner would inculcate ethical values and responsibilities towards protection of environment Learner will be equipped to implement goals of environment protection
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Department of Foundation Course

Program outcome and Program specific outcomes offered by the Department Name of the Programme specialization :

Name of the Programme	PROGRAM OUTCOMES	PROGRAM SPECIFIC OUTCOMES
FYBCOM	<ul style="list-style-type: none"> After the completion of the course the students will be able to – <ol style="list-style-type: none"> Build sensitivity towards the social issues and conditions which will develop deep understanding among students for the specific area. Students will gain overall general Knowledge of day today matters by learning Foundation Course. 	<ul style="list-style-type: none"> After the completion of the course the students will be able to – <ol style="list-style-type: none"> The subject will make students aware of the Indian constitution, Laws, Human Rights and Environmental science etc. Areas such as current affairs, women empowerment, Gender Disparity.

B. Course Outcomes of all courses offered by the Department Name of the Course : B. COM Foundation Course

CLASS	SEM	PAPER NO	PAPER CODE	PAPER	LEARNING OUTCOMES
FYBCOM			-		<ul style="list-style-type: none"> Students were able to gain





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					insights regarding significant aspects of political processes, Concept of disparity, Indian Constitution and Entire Overview of Indian Society.
	II	II	--	II	<ul style="list-style-type: none"> Students understood topics such as Globalization and Indian Society, Human Rights, Ecology, Understanding and Managing Stress and Conflict in Contemporary society.

Name of the Programme	PROGRAM OUTCOMES	PROGRAM SPECIFIC OUTCOMES
SYBCOM	<ul style="list-style-type: none"> After the completion of the course the students will be able to – <ol style="list-style-type: none"> Students were able to achieve personal attributes like self-awareness, confidence, self-reliance and spontaneity. Students were able to execute Leadership Qualities and Team Work. 	<ul style="list-style-type: none"> After the completion of the course the students will be able to – <ol style="list-style-type: none"> Develop a spirit of enquiry and acquire an in-depth understanding of surrounding. Students will also be in position to draw valuable lessons from Indian Constitution.

B. Course Outcomes of all courses offered by the Department Name of the Course : B. COM Foundation Course

CLASS	SEM	PAPER NO	PAPER CODE	PAPER	LEARNING OUTCOMES
SYBCOM	III	III	—	III	<ul style="list-style-type: none"> Topics such as Constitutional and Legal Rights, Human Rights Violations and Dealing with Environmental Concerns.





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	IV	IV	—	IV	<ul style="list-style-type: none"> Deep understanding was built on areas such as Rights of Consumers, Understanding Approaches to Ecology, Learning Significant Modern Technology and Soft Skills required for Competitive Examinations.
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Department of M.COM (Accountancy)

Programme Outcome:

- 1) This Programme will enable to provide a systematic and rigorous learning and exposure to Accountancy and Finance related disciplines.
- 2) This Programme will train the student to develop conceptual, applied and research skills as well as competencies required for effective problem solving and right decision making in routine and special activities relevant to financial management and Banking Transactions of a business.
- 3) Impart the students with higher level knowledge and understanding of contemporary trends in commerce and business finance
- 4) The all-inclusive outlook of the course offer a number of values based and job oriented courses ensures that students are trained into up-to-date.
- 5) The gap between the academia and industry is bridged through this programme.

Programme Specific Outcome:

- 1) Student will be able to prove proficiency with the ability to engage in professional programmes like CA, ICMA and CS.
- 2) It mould the students in such a way which will make them having over all knowledge about Commerce and in depth knowledge about core subjects of Accountancy and Finance.
- 3) Students acquire practical skills to work as Tax Consultant, Audit Assistant and other Financial Supporting Services.
- 4) Students will be able to do higher education and advance research in the field of Commerce and Finance.

M.COM. SEMESTER I

Subject	Outcome
Strategic Management	<ol style="list-style-type: none"> 1. On successful completion of this subject the learners would be able to understand new forms of Strategic Management concepts and their use in business. 2. After gaining subject knowledge the learner would develop analytical skills which would help them to solve cases and to provide





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	strategic solutions for the smooth functioning of business.
Cost and Management Accounting	<ol style="list-style-type: none">1) It enhances the abilities of students to develop the concept of Cost and Management Accounting and its significance in the business.2) It enables the students to understand, develop and apply the techniques of costing in the decision making in the business corporate.3) It enables the students to understand, develop, prepare and present the financial reports in the business corporate.
Business Ethics and Corporate Social Responsibility	<ol style="list-style-type: none">1. The students get awareness of Ethical way of doing business so that cordial relations can be maintained with employees, customers and community.2. The students learn the importance of business ethics in this modern world.3. The students understand the concept of CSR and its importance for the growth and success of business.
Economics for Business Decisions	<ol style="list-style-type: none">1. Once students have a foundational knowledge of core concepts, they can apply their understanding to contemporary economics issues.2. It will help the students to appreciate resource decisions at individual and business levels.

M.COM. SEMESTER II

Subject	Outcome
E- Commerce	<ol style="list-style-type: none">1. On successful completion of this subject the learners would acquire the knowledge about the various dimensions of E commerce.2. After gaining subject knowledge the learner would develop analytical skills which would help them to understand Web- based Commerce and equip the learners to assess e-commerce requirements of a business.





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Research Methodology	<ol style="list-style-type: none">1. The students get an understanding of scope and importance of Research.2. The students understand of use of appropriate methods in their research.3. The students get knowledge of various statistical tools and techniques that can be used.4. It develops data analytical skills of the students and enables them to solve research problems.5. It gives an understanding of hypothesis, sampling, research report , research designing, etc.
Macro Economics concepts and	<ol style="list-style-type: none">1. This course is meant to give students insight into the dynamics of the national economy. The knowledge gained in the course will make





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DEPARTMENT OF B.COM BANKING AND INSURANCE

Program outcome and Program specific outcomes offered by the Department of Banking and Insurance

NAME OF THE DEPARTMENT: B.Com (Banking and Insurance)

Name of the Programme	Programme Outcome	Program Specific Outcome
	Students will be able to	Students will be able to have
UG (BBI) : BACHELOR OF COMMERCE IN BANKING & INSURANCE	To create for the students of University of Mumbai an additional avenue of self-employment and also to benefit Banks, Insurance companies and Industries by providing them with suitable trained persons in the field of Banking & Insurance.	The programme is structured in such a way that it provides training in the field of finance, banking, accounting, insurance law, and insurance regulations, among others.
	To prepare students to explore opportunities. Being newly created. In the field of Banking and Insurance due to Globalization, Privatization and Liberalization.	It covers the subjects from the banking field but also covers various subjects of commerce, and communication skills. It also helps train candidates how to efficiently handle technologies used in the field of banking and insurance.
	To give an adequate exposure to operational environment in the field of Banking & Insurance.	The main aim of BBI course is to provide students with a deep insight into the real world of banking and insurance through theory and practical sessions.
	To provide adequate basic understanding about the field of Banking and Insurance.	It is structured to give a great career choice for those who wish to pursue their career in the banking field.
	To inculcate training and practical approach among the students by using modern technologies in the field of Banking and Insurance.	It not only provides you with theoretical knowledge but also helps in its practical application and to provide ample exposure to students with market reforms, new banking policies and regulations.
	The students are trained with the help of different presentations, projects and assignments to understand the dynamics of finance in a better way.	





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Sr. No	Name of The Course	Course Code	Course Outcomes (After completing this course, the students will be able to)
FYBBI			
Semester - I			
1	Environment and Management of Financial Services	UBIFSI.1	<ul style="list-style-type: none">To enrich students with the knowledge of the functioning of banks and insurance companies.To Study the mobilization of funds by banking and insurance sector.To study Indian financial markets, financial instruments and financial regulatorsTo help students realize the quintessential role of banks and insurance in the world today
2	Principles of Management	UBIFSI.2	<ul style="list-style-type: none">To Study of leadership with live examples of business leaders. Introduction to the concept of management and its functions.To know concept of planning, decision making, controlling, staffing, organizing etc. and to understand new approaches in management
3	Financial Accounting - I		<ul style="list-style-type: none">To have knowledge of basic accounting concepts such as journal, ledger, subsidiary book, journal proper and bank reconciliation statements.To imbibe knowledge on AS -6 (depreciation) and AS 10 (fixed assets).To Understand closing of accounts at the end of the year for sole trading concern and partnership firms.
4	Business Communication-I	UBIFSI.4	<ul style="list-style-type: none">Knowledge and understanding of key communication concepts in corporate and global world.To develop communication skills and overall personality development of the studentsStudents will develop business correspondence skill..





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5	Foundation Course - I		<ul style="list-style-type: none"> To sensitize learners about Indian society. To understand multi-cultural diversity of Indian society. To Understand of India's political processes and the Indian constitution <p>Understood stratified reasons as to differences and women problems. Understood the fundamental duties of Indian citizen specified in Indian Constitution. Understood hierarchy of local self- government and amendment to the same.</p>
6	Business Economics-I	UBIFSI.3	<ul style="list-style-type: none"> To enhance knowledge on demand-supply analysis, production function, break even analysis and economies of scale. To understand markets structures such as perfect competition, monopoly, monopolistic competition and oligopoly. To acquaint the students with the economic principles as are applicable in business
7	Quantitative Methods-I	UBIFSI.5	<ul style="list-style-type: none"> To understand index numbers and application to banking and insurance sector. To provide fundamental basic knowledge of statistical techniques as applicable to business. To Develop graphical presentation
<ul style="list-style-type: none"> Semester - II 			
1	Principles and Practices of Banking & Insurance	UBIFSI.1	<ul style="list-style-type: none"> To Study banking sector in India and Insurance sector in India
2	Business Law	UBIFSI.6	<ul style="list-style-type: none"> It provides Knowledge and understanding of Indian Contract Act 1872 and special contracts. Knowledge and understanding of the sale of Goods Act 1930 and Negotiable Instruments Act 1881. It provides Knowledge of Consumer Protection Act, 1986.
3	Financial Accounting - II	UBIFSI.2	<ul style="list-style-type: none"> It helps student to understanding valuation of goodwill and Buyback of equity shares and redemption of Preference shares Redemption of debentures





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4	Business Communication-II	UBIFSII.4	<ul style="list-style-type: none">To understand of presentation skills and making of power point presentation.Understanding of group communication – interviews, meetings, conference and public relation.Understanding business correspondence, language and writing skills
5	Foundation Course - II		<ul style="list-style-type: none">It focuses on understanding the concepts of liberalization, privatization and globalization and its requirement in the economy.It focuses on importance of Environment Studies in the current developmental context.
6	Organisational Behaviour		<ul style="list-style-type: none">To Study organizational behavior with respect to motivation in banking and insurance sector.To understand group dynamics.To develop organizational culture and organizational development.
7	Quantitative Methods-II	UBIFSII.5	<ul style="list-style-type: none">It helps student to understand Testing of Hypothesis and Calculation of Ratio, Proportion and percentage Application of statistics in Investments
<ul style="list-style-type: none">SYBBI			
<ul style="list-style-type: none">Semester - III			
1	Financial Management -I	UBIFSIII.2	<ul style="list-style-type: none">To understand Concept of finance and sources of finance Knowledge and understanding of financial management Financial planning and Capital budgeting
2	Management Accounting	UBIFSIII.3	<ul style="list-style-type: none">To impart basic management accounting knowledge as applicable to business with suitable illustrations.
3	Direct Tax	UBIFSIII.5	<ul style="list-style-type: none">To impart knowledge of the basic principles underlying provisions of income tax and service tax.
4	Organizational Behavior	UBIFSIII.6	<ul style="list-style-type: none">To provide basic knowledge of key approaches and Models relating to Organizational Behavior.To identify specific steps managers can take to motivate the employees.





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5	Foundation Course- III		<ul style="list-style-type: none">To understand banking industry to Learn aspects and areas of banking like rural banking, retail banking and corporate banking and universal banking.To Study contemporary developments like technological innovations, micro finance and financial inclusion.
6	Financial Market		<p>The subject provides :</p> <ul style="list-style-type: none">Knowledge and understanding of financial markets Knowledge and understanding of commodity marketsKnowledge and understanding of derivative markets
7	Information Technology in Banking & Insurance - I	UBIFSIII.7	<ul style="list-style-type: none">To learn basic concepts of Information Technology, its support and role in Management, for managers.Module II comprises of practical hands on training required for office automation. It is expected to have practical sessions of latest MS-OfficeKnowledge and understanding of e-commerce and cyber security Learn MS- Excel and MS-Word
Semester - IV			
1	Financial Management-II	UBIFSIV.2	<p>The subject provides :</p> <ul style="list-style-type: none">Understanding Working capital management and its components.Knowledge and understanding of financial planning, Study of strategic financial management.





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2	Cost Accounting	UBIFSIV.4	<ul style="list-style-type: none">To impart basic cost accounting knowledge as applicable to banking and insurance with suitable illustrationsKnowledge and understanding the concept and classification of cost Understanding and use of Standard costing Application of Marginal costing
3	Entrepreneurship Management	UBIFSIV.5	<ul style="list-style-type: none">To explain the key ingredients to be a successful entrepreneur.To appreciate the value of entrepreneurship in daily life. <p>It provides knowledge and understanding entrepreneur and business planning. Knowledge and understanding key areas of new venture.</p>
			<ul style="list-style-type: none">To understand the evolving concepts of entrepreneurship.
4	Foundation Course- IV		<p>The subject provides :</p> <ul style="list-style-type: none">Knowledge and understanding of life, health, home and motor insurance.Knowledge and understanding the role of insurance in logistics and fire insurance
5	Information Technology in Banking & Insurance - II		<ul style="list-style-type: none">To understand basic concepts of Email, Internet and websites, domains and security therein.To recognize security aspects of IT in business, highlighting electronic transactions, advanced security featuresTo understand e-business and techno management and application of I.T in banking. <p>Knowledge of MS-Office packages for institutional automation.</p>
6	Business Economics II		<ul style="list-style-type: none">The subject is covering the major aspects of macroeconomics and international theories.It helps students to understand the basic topics like inflation, monetary policy, Balance of Payment and foreign investment.





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7	Corporate & securities Law	UBIFSIV.7	<p>The subject provides :</p> <ul style="list-style-type: none"> Understanding and overview of Company law and Study the regulatory framework of SEBI and Securities contract regulation Act, 1956. Knowledge of Depositories Act, 1996.
TYBBI			
Semester - V			
1	Business Ethics & Corporate Governance	UBIFSIV.5	<ul style="list-style-type: none"> To highlight the role of Corporate Governance practices in maintaining Transparency in business transactions. To highlight the importance of commitment to values and ethical conduct of Business.
2	Financial reporting and Analysis	UBIFSIV.4	<p>The subject provides :</p> <ul style="list-style-type: none"> To prepare financial statements of banking and insurance company. Knowledge and understanding of cash flow in banking and insurance companies.
			<ul style="list-style-type: none"> To Study the ethical aspects of accountancy.
	Research Methodology		<ul style="list-style-type: none"> The course is designed to inculcate the analytical abilities and research skills among the students The course intends to give hands on experience and learning in Business Research. It provides knowledge and understanding of research Collection and interpretation of data, testing of hypothesis and use of statistical techniques
3	Financial services Management	UBIFSIV.2	<p>The subject provides :</p> <ul style="list-style-type: none"> Knowledge and understanding of various financial services. Knowledge and understanding of various non-banking services.





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4	International Banking & Finance	UBIFSV.3	The paper will discuss the concepts and broad activities of International Banking and Finance besides studying developments in India in this context
5	Strategic Management	UBIFSV.1	<ul style="list-style-type: none">To develop an understanding of the general and competitive business environments.To enable to understand and resolve cases through strategic decision making.
6	Project Work	UBIFSV.7	
Semester - VI			
1	Marketing in Banking & Insurance	UBIFSVI.1	<ul style="list-style-type: none">To develop concepts in marketing.To explain the scope of marketing management-analyzing opportunities, selecting target segments, developing the market mix, managing the marketing effort.
2	Security Analysis & Portfolio Management	UBIFSVI.5	The subject provides : <ul style="list-style-type: none">Knowledge and understanding and valuation of portfolio management.Knowledge and understanding of fundamental and technical analysis.Understanding of efficient market theory and CAPM
3	Central Banking	UBIFSVI.2	The subject provides : <ul style="list-style-type: none">Knowledge and understanding of central banking.Knowledge and understanding of role of RBI as central bank.Comparative study of Central banks in other countries.





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4	Turnaround Management	UBIFSVI.6	<ul style="list-style-type: none">• To enable students to understand need for revival of sick and stressed business unit.• To make students aware of the different turnaround strategies.
5	Human Resource Management	UBIFSVI.4	<ul style="list-style-type: none">• To understand various processes involved in increasing the value of human assets.• To understand ways for maintaining high employees morale and sound human relations by sustaining and improving the various conditions and facilities.
6	Project Work	UBIFSVI.7	<ul style="list-style-type: none">• To inculcate the element of research analysis and scientific temperament among learners.• To create awareness among learners regarding methodology of formulation and preparation of the project work.





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DEPARTMENT OF GEOGRAPHY - MA

Program outcome and Program specific outcomes offered by the Department of Geography

NAME OF THE DEPARTMENT: GEOGRAPHY (MA)

Name of the Programme	Programme Outcome [PG]	Program Specific Outcome [PG]
	Students will be able to	Students will be able to have





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<p>PG [MA]: MASTER OF ARTS</p>	<ol style="list-style-type: none">1. Ability of Problem Analysis: Student will be able to analyses the problems of physical as well as cultural environments of both rural and urban areas. Moreover, they will try to find out the possible measures to solve those problems.2. Conduct Social Survey Project: They will be eligible for conducting social survey project, which is needed for measuring the status of development of a particular group or section of the society.3. Individual and teamwork: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.4. Application of modern instruments: Students will be able to learn the application of various modern instruments and by these; they will be able to collect primary data.5. Application of GIS and modern Geographical Map Making Techniques: They will learn how to prepare map based on GIS by using the modern geographical map-making techniques.6. Critical Thinking: Take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking	<ol style="list-style-type: none">1. Our Master's program in Geography is based on high quality research operating in some of the major fields of Geography.2. Students who graduate from the Master's program in Geography have strong theoretical and practical skills.3. The education in Geography offers a broad understanding in current Social & Environmental issues.4. Their ability to apply theoretical knowledge.5. Strong interaction skills within multidisciplinary of specialists.6. Their ability to communicate in writing, orally, geographically about Geographical phenomenon.7. Their versatile knowledge of methodology in Geography.8. Their ability to apply the newest methods in Geoinformatics and Cartography.9. The Master's program in Geography is study tracks. The study tracks offer students the opportunity to specialize in different areas of geography.10. Our students have been very successful in the job market
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	<p>at our ideas and decisions from different perspectives.</p> <p>7. <i>Development of Observation Power:</i> As a student of M.A Geography Course, they will be capable to develop their observation power through field experience and in future, they will be able to identify the socio-environmental problems of a locality.</p> <p>8. <i>Development of Communication Skill and Interaction Power:</i> After the completion of the course, they will be efficient in their communication skill as well as power of social interaction. Some of the students are being able to understand and write effective reports and design credentials, make effective demonstrations, and give and receive clear instructions.</p> <p>9. <i>Effective Citizenship:</i> Demonstrate empathetic social concern and equity centred national development, and the ability to act with an informed awareness of issues and participate in civic life through volunteering.</p> <p>10. <i>Enhancement of the ability of Management:</i> Demonstrate knowledge and understanding of the management principles and apply these to their own work, as a member and leader in a team, to manage projects.</p> <p>11. <i>Ethics:</i> Recognize different value systems including your own, understand the moral</p>	<p>after completing the program working as experts in their field.</p>
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dimensions of your decisions,
and accept responsibility for
them.

**12. Understand Environmental
Ethics and
Sustainability:** Understand the
impact of the acquired
knowledge in societal and
environmental contexts, and
demonstrate the knowledge of
need for sustainable
development.





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B1. Course Outcomes of all courses offered by the Department Name of the course : M.A. (GEOGRAPHY)			
Sr. No.	Name of The Course	Course Code	Course Outcomes (After completing this course, the students will be able to)
M A [GEOGRAPHY]			
SEMESTER - I			
1	Principles of Geomorphology	Subject Code (326) 101	<ol style="list-style-type: none">1. To understand the development of geomorphic thought throughout the time with a review of fundamental concepts of geomorphology.2. To look into the evolution of continents and ocean basins with continental drift theory.3. To know the endogenetic and exogenetic forces controlling landform development with special reference to the denudational processes.4. To see the mountain building activities through different theories
2	Principles of Climatology	Subject Code (326) 102	<ol style="list-style-type: none">7. To distinguish the weather and climate with an understanding of structure and composition of Atmosphere;8. To understand the variations of weather systems in terms of Stability and Instability of atmosphere;9. To enable the students to understand the vertical and horizontal distribution of atmospheric air;10. To get complete information about Atmospheric Disturbances in terms of cyclones and anti-cyclones;





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			11. To know the significance of synoptic Climatology in pollution studies and navigation;
3	Perspectives in Human Geography	Subject Code (326) 103	<ol style="list-style-type: none">1. Gain knowledge about major themes of human geography.2. Develop an idea about space and society.3. Build an idea about population growth and distribution of population.4. Know about population –resource relationship.
4	Spatial Organisation of Economic Activities	Subject Code (326) 104	<ol style="list-style-type: none">1. Understand the concept of economic activity, factors affecting location of economic activity. Gain knowledge about different types of Economic activities2. Assess the significance of Economic Geography, the concept of economic man and theories of choice.3. Analyze the factors of location of agriculture and industries.4. Understand the evolution of varied types of economic activities.5. Map and interpret data on production, economic indices, transport network and flows.
5	Practical components based on 101 and 102 Tools and Techniques of Spatial Analysis - I	Subject Code (326) 105	<ol style="list-style-type: none">1. Drawing Profiles: i. Longitudinal ii. Composite and Projected2. Slope Analysis: Wentworth's method of average slope determination and Robison's method of slope analysis' G. H. Smith's method of slope analysis, Construction of Block Diagram3. Altimetric Analysis: Ring contour method & Highest grid-cell elevation method4. Interpretation of Indian and foreign topographical Maps5. Climatic Data Analysis6. Index of aridity and index of moisture
6	Practical components	Subject	<ol style="list-style-type: none">1. Statistical Techniques





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	based on 103 and 104 Tools and Techniques of Spatial AnalysisII	Code (326) 106	<ol style="list-style-type: none">Measures of Central TendencyZ score – different applications and interpretations.Network Analysis:Mapping of relative accessibility and connectivity –Matrices- point of minimum Aggregate travel distanceApplication of spatial data:Computer processing of geographical data
SEMESTER - II			
1	Oceanography and Hydrology	201	<ol style="list-style-type: none">Understand the meaning, nature and scope, modern trends in Oceanography.Understand the ocean floor and relief of the ocean bottom.Understand the properties like temperature, density, salinity of ocean water.Understand the characteristics and properties of factors affecting on formation of sea waves.Understand the tides, tide generating forces, types of tides and tidal effects in coastal areas.Get knowledge about distribution of lithogenous, biogenous, and hydrogenous sediments on ocean floor.
2	Geoinformatics	202	<ol style="list-style-type: none">To understand concepts of Geographical Information System.To understand basic functioning of GPS.To know various applications of GIS and GPS in various fields.Students will be prepared to apply their skills in professional careers.To learn the representation of geographic data using various computational methods;To know about sources and uses of online educational resources and e-learning





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			<p>methods;</p> <ol style="list-style-type: none">7. To develop writing, editing, and presentation skill for representation of geographical information;8. To compute statistical parameters with the help of computer;9. To prepare and design maps and graphs with the help of computer software;10. To apply computational techniques relevant in the discipline of Geography;
3	Socio-Cultural and Political Geography	203	<ol style="list-style-type: none">1. To study and identify the philosophical base, problems associated with society & its culture.2. To know about the culture, cultural regions, hearths and their diffusion, realms, and distribution of races.3. To study and knowing of socio-cultural diversity of India, and processes of social changes.4. To understand the social justice and well-being of society, to find out the level of well-being in India5. To identify the geostrategic locations and areal extent of counties in the world6. To understand the correlation between geography and political actions and processes7. To get familiar with the electoral system in India8. To evaluate intrastate and interstate conflicts and disputes of India
4	Urban Geography	Paper 204	<ol style="list-style-type: none">1. To study the fundamentals of Urban settlement geography2. To understand the approaches to urban settlement geography; urban services; hierarchy; morphology etc.3. To know the concept and processes of urban settlement studies; urban problem & their planning; concept smart cities, urban agriculture, etc.





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			<ol style="list-style-type: none">4. To study the theories and models of settlement geography to understand the structure of settlements.
5	Tools and Techniques of Spatial Analysis III (Based on Theory Papers: 201-202)	Paper 205	<ol style="list-style-type: none">8. Aerial Photography: Construction of stereo vision, Photo Interpretation and preparation of photo map,9. To understand the basic concepts of Geographical Information System and GPS.10. To know various components of GIS and to learn about map projection and coordinate system.11. To know various applications of GIS and GPS in various fields.12. Students will become familiar with modern techniques of geography.13. Students will be prepared to apply their skills in professional careers.14. Application of Raster calculator , Drainage Network Analysis and GPS Survey
3	Tools and Techniques of Spatial Analysis IV Based on Theory Papers: (203-204)	Paper 206	<ol style="list-style-type: none">1. To study Settlement Hierarchy and population studies:2. Nearest neighbour analysis3. Population and functional4. Construction - Interpretation - application of triangular graph5. Application of Statistical and Cartographic Techniques6. Mental Maps and diagrams: Typology of distance and direction of space-7. Construction of Maps: Imagining Place and space: Perception - mapping and interpretation.8. Interpreting political context of maps, cartographic techniques, diagrams, pictures and cartoons.9. Statistical Techniques to understand the spatial pattern10. Index of concentration: location quotient and concentration.





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			<p>11. Index of similarity and dissimilarity and inequality- Construction and applicability of Lorenz curve- Interpretations</p> <p>12. Calculation of Ginni's co-efficient of concentration</p>
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**B1. Course Outcomes of all courses offered by the Department Name of the course :
M.A. (GEOGRAPHY)**

Sr. No.	Name of The Course	Course Code	Course Outcomes (After completing this course, the students will be able to)
MA			
SEMESTER - III			
1	Research Methodology in Geography	301	<p>5. Students should be able to distinguish a purpose statement, a research question or hypothesis, and a research objective.</p> <p>6. Students should be able to define the meaning of a variable, and to be able to identify independent, dependent, and mediating variables.</p> <p>7. Students should be able to distinguish between categorical and continuous measures.</p> <p>8. Students should be able to design a good quantitative purpose statement and good quantitative research questions and hypotheses.</p> <p>9. Students should understand the link between quantitative research questions and data collection and how research questions are operationalized in educational practice.</p> <p>10. Students should be familiar with the steps involved in identifying and selecting a good instrument to use in a study.</p>
2	Geography of Climate change special	302-A	12. To recognize the importance of climate on human life;





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	reference to India		<ol style="list-style-type: none">13. To identify and categorize climate types and climatic regions of the world;14. To understand the regional and seasonal variations of weather systems in India;15. To get comprehensive knowledge about causes and impacts of atmospheric pollution, GHGs emission, ozone layer depletion, acid rain and el-nino;16. To know about the history, recent trends, impacts and dynamics of climate change on earth;17. To assess future risks of climate change and the adaptation and mitigation options.
3	Geography of Tourism and Recreation	303 B	<ol style="list-style-type: none">1. To understand the concepts and components in tourism geography2. To get comprehensive knowledge of different types of infrastructure and tourism3. To know about pattern & tourism in the world and impact of globalization4. To understand different elements of marketing in tourism5. To get detail knowledge about planning process in tourism
4	Tools and Techniques of Spatial Analysis	304	<ol style="list-style-type: none">1. Quantitative Techniques for Spatial Analysis using SPSS2. To understand correlation and regression among spatio-temporal data3. To learn what is Spatial Analysis4. For The Measurement Levels and Spatial Data





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			<ol style="list-style-type: none">5. To Measures probability6. To became expert in techniques for analysis of data in research For Exploratory Data Analysis7. Environmental Indicators : Noise Pollution , Use of sound measuring device; temporal and spatial variation mapping based on primary data.8. Water Pollution: Introduction; identification, techniques used, temporal and spatial variation mapping based on primary data.
5	Tools and Techniques of Spatial Analysis-VI	305	<ol style="list-style-type: none">9. Drawing Profiles: i. Longitudinal ii. Composite and Projected10. Slope Analysis: Wentworth's method of average slope determination and Robison's method of slope analysis' G. H. Smith's method of slope analysis, Construction of Block Diagram11. Altimetric Analysis: Ring contour method & Highest grid-cell elevation method12. Interpretation of Indian and foreign topographical Maps13. Climatic Data Analysis14. Index of aridity and index of moisture15. Spatial Analysis in Development Studies16. Measuring Development- Choice and relevance of indicators
SEMESTER - IV			
1	Geographical Information System and Geographic Knowledge System	401:A	<ol style="list-style-type: none">7. To understand the basic concepts of Geographical Information System and GPS.8. To know various components of GIS and to learn about map projection and coordinate system. 3. To know various applications of GIS and GPS in various fields.9. Students will become familiar with modern techniques of geography.





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			10. Students will be prepared to apply their skills in professional careers.
2	Geography of Soils with special reference to Tropics	402: B	<ol style="list-style-type: none">11. To understand the concepts and principles of soil formation.12. To study the role of essential nutrient for plant growth and development.13. To determine the physical and chemical properties of soils.14. To enable the students to realize the Soil and environmental problems;15. To know the significance of soil conservation and methods of Soil reclamation.
3	Dissertation	403	<ol style="list-style-type: none">9. Recognize the objectives and significance of research work;10. Formulate research design and methods;11. Organize and carry out field visits, collect field data and/or conduct review of literature;12. Effective writing, maintaining research ethics and academic integrity;13. Preparation and dissemination of research output having scientific and/or social relevance.





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DEPARTMENT OF ECONOMICS - MA

Program outcome and Program specific outcomes offered by the Department of Economics - MA

NAME OF THE DEPARTMENT: Economics (MA)

Name of the Programme	Programme Outcome [PG]	Program Specific Outcome [PG]
	Students will be able to	Students will be able to have
M.A. (Economics)	PO1: Demonstrate comprehensive knowledge and understanding of fundamental concepts, theories, and principles in microeconomics, macroeconomics, agricultural economics, labor market economics, industrial economics, public finance, international trade, Indian economy, development economics, money and banking, and environmental economics.	PSO1: Apply microeconomic theories and techniques to analyze consumer behavior, producer behavior, market structures, and resource allocation.
	PO2: Apply economic theories and models to analyze real-world economic issues and problems.	PSO2: Analyze macroeconomic phenomena such as economic growth, inflation, unemployment, and fiscal and monetary policies, using macroeconomic models and tools.
	PO3: Utilize appropriate economic tools and methodologies to assess the impact of policy interventions on economic variables and outcomes.	PSO3: Evaluate agricultural, labor market, industrial, and environmental policies and their impact on sectoral performance and welfare outcomes.
	PO4: Critically evaluate economic	PSO4: Formulate and assess public





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	<p>policies, theories, and empirical evidence, identifying strengths, weaknesses, and potential implications.</p>	<p>policies related to agriculture, labor markets, industrial relations, public finance, international trade, and environmental sustainability.</p>
	<p>PO5: Analyze complex economic phenomena, considering multiple perspectives and potential trade-offs.</p>	<p>PSO5: Conduct empirical research, collect and analyze data, and draw conclusions to address economic problems and inform policy decisions.</p>
	<p>PO6: Communicate economic concepts, analyses, and findings effectively, both orally and in writing, to diverse audiences.</p>	<p>PSO6: Understand the interdependencies of the Indian economy with the global economy, analyze international economic issues, and evaluate the implications of global economic integration on domestic policies and welfare.</p>
	<p>PO7: Develop clear and coherent arguments supported by economic evidence and logical reasoning.</p>	
	<p>PO8: Recognize ethical dilemmas in economic decision-making and demonstrate a commitment to ethical behavior and social responsibility.</p>	
	<p>PO9: Apply economic principles to address socio-economic challenges and promote sustainable development.</p>	





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B1. Course Outcomes of all courses offered by the Department Name of the course : M.A. (ECONOMICS) Part – I

SEMESTER - I

Sr. No.	Name of The Course	Course Code	Course Outcomes (After completing this course, the students will be able to)
1	MICROECONOMICS – I Course Objectives: The objective of this paper is to develop an understanding of the basic microeconomic theory that has applications in other areas of Economics. At the end of this course students are expected to be familiar with basic microeconomic theory and acquire analytical skills to analyse problems of economic policy. Examples and exercises would be for strengthening the understanding.	ECOME101	<ol style="list-style-type: none">1. Develop a nuanced understanding of consumer and firm behavior along with general equilibrium theory2. Provide students with the necessary theoretical and analytical tools to study problems of economic policy
2	MACROECONOMICS – I Course Objectives: This paper is designed to	ECOME102	<ol style="list-style-type: none">1. The learners can enhance their understanding on the concepts like national income and social accounting, consumption expenditure and investment





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	<p>provide in-depth knowledge on varied concepts of Macroeconomics. The contents of the paper throws light on a range of issues like national income, social accounting, consumption expenditure, investment analysis, inflation, trade cycle as well as money supply and demand for money.</p>		<p>analysis.</p> <p>2. Students acquire knowledge on issues like inflation, trade cycle as well as money supply and demand for money.</p>
3	<p>AGRICULTURAL ECONOMICS</p> <p>Course Objectives:</p> <p>This course aims to enhance the students understanding of agricultural development. Starting from basic questions like what factors lead to agricultural development or why does the share of agriculture in GDP go down once economies start</p>	ECOAE103	<p>1. This paper enhances knowledge on the process of development of agriculture in an emerging economy.</p> <p>2. It throws light on the role and the policies as well as the competitiveness of the agricultural sector.</p>





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	developing, the course tries to enhance the students' awareness on contemporary debates in the literature, and leads them to analysis of current governmental policies and strategies for surviving in the globalizing world.		
4	ECONOMICS OF LABOUR MARKET Course Objectives: The objective of this course is to introduce the student to labour economics with an emphasis on microeconomic theory and empirics. Through the course, the student will learn basic economic forces behind employment and wages, sources of labour market imperfections, driving forces for education and skill upgradation,	ECOELM104	<ol style="list-style-type: none">1. The analysis of case studies would help the student to understand real world issues pertaining to labour markets and also to assess related public policy measures.2. The course sheds light on a range of new developments and a host of issues studied by generations of labour market experts thereby students are equipped with the skill of getting assimilated with the labour markets in real life as well.





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discrimination among the workers and public polices for labour welfare.		
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B2. Course Outcomes of all courses offered by the Department Name of the course :

M.A. (ECONOMICS) Part – I

SEMESTER - II

Sr. No.	Name of The Course	Course Code	Course Outcomes (After completing this course, the students will be able to)
1	MICROECONOMICS – II Course Objectives: The objective of this course is to acquaint students with different approaches to analyzing strategic behavior of individuals under asymmetric and incomplete information. Case studies and applications would be used to expound strategic behavior.	ECOME201	<ol style="list-style-type: none">1. Create an understanding of strategic behavior under oligopoly2. Provide students with the necessary theoretical and conceptual underpinnings to real world concepts and issues using illustrations and case studies.
2	MACROECONOMICS – II	ECOME202	<ol style="list-style-type: none">1. To acquaint students with latest developments in macroeconomics





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	<p>Course Objectives:</p> <p>This paper provides deep understanding on macroeconomic concepts. The paper highlights pricing mechanism under imperfect market structures, rigidities and real business cycle theory. Considering the latest developments in the literature of macroeconomics, Keynesian Macroeconomics is introduced so that students can understand the rules, discretion and inconsistencies in policy decisions as well as traditional and non-conventional policy making.</p>		<ol style="list-style-type: none">2. To enhance the understanding of students regarding the practical approach of policy making.3. To establish link between macroeconomic theories and international open Economy
3	<p>AGRICULTURAL DEVELOPMENT AND POLICY</p>	<p>ECOADP203</p>	<ol style="list-style-type: none">1. Aims to improve awareness on agricultural development.2. Promotes students awareness on





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	<p>Course Objectives:</p> <p>This course aims to enhance the students understanding of agricultural development. Starting from basic questions like what factors lead to agricultural development or why does the share of agriculture in GDP go down once economies start developing, the course tries to enhance the students' awareness on contemporary debates in the economic parlance, and leads them to analysis of current governmental policies and strategies for surviving in the globalizing world.</p>		<p>contemporary debates in the area of agricultural products and market.</p>
4	<p>INDUSTRIAL RELATIONS IN INDIA</p> <p>Course Objectives:</p> <p>This course aims to provide a basic conceptual</p>	<p>ECOTUIR204</p>	<p>1. Upon completion of this course, students will be able to identify the impact of industrial relation in different sectors of the Indian Economy.</p>





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<p>understanding of the industrial relations as well as the political economy of trade unions in India. Empirical relevance of theories with suitable examples from a practical industrial relations viewpoint will strengthen a student's understanding of the topic along with their limitations.</p>		<p>2. Enable to understand the political economy of trade unions.</p>
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**B3. Course Outcomes of all courses offered by the Department Name of the course :
M.A. (ECONOMICS) Part – II**

SEMESTER - III

Sr. No.	Name of The Course	Course Code	Course Outcomes (After completing this course, the students will be able to)
1	<p>INDUSTRIAL ECONOMICS</p> <p>Course Objectives: This paper will make aware learners about the factors helping industry, other areas support it, market structure, also to focus on financial</p>	ECOIE302	<p>1. Enable to empower students about the historical background of industrial development and financial institutions.</p> <p>2. It provides understanding on market structure and best theories to fix the location of industries.</p>





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	institutions, policies and theories of location. It also focuses on aspects related to industrial growth.		
2	PUBLIC FINANCE AND PUBLIC CHOICE Course Objectives: The objective of this paper is to provide advanced theoretical knowledge of theory of Public Finance and public choice. In addition, the learners would find it interesting to analyze Indian government budgets and Indian fiscal federalism.	ECOPFPC303	<ol style="list-style-type: none">1. Provides in-depth knowledge on range of issues related to public finance and public choice. This enables the students to analyzed the budgets of government of India
3	INTERNATIONAL TRADE: THEORY AND POLICY Course Objectives: This paper aims at providing a theoretical exposition of bases, effect and restrictions on free flow of International Trade		<ol style="list-style-type: none">1. Enables to understand the flow of international trade2. Awareness on varied trade policies





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	with empirical evidence. It also updates learner's knowledge about regional trading arrangement and multilateralism in the context of WTO.		
4	INDIAN ECONOMY Course Objectives: The paper aims at building strong fundamentals to varied challenges confronting the Indian economy with special reference to it's developmental challenges. Wherever possible an effort is made to incorporate the discussion on relevant case studies in different sectors of the economy.	ECOIE306	<ol style="list-style-type: none">1. Students get familiarized with the sectoral issues to be tackled with the Indian perspective.2. Generate awareness on the solutions to deal with the development challenges of the Indian economy in the 21st century globalized world.
5	ECONOMICS OF DEVELOPMENT Course Objectives: The objective of this paper	ECOED307	<ol style="list-style-type: none">1. To familiarize students with the developmental aspects of nations2. To acquaint with different theories on growth and





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<p>is to integrate the developmental perspectives and theories to enable the students to understand the complexity of developing economies and the related economic challenges. The students get to critically reflect on the major economic ideas in development parlance.</p>		<p>development</p>
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**B3. Course Outcomes of all courses offered by the Department Name of the course :
M.A. (ECONOMICS) Part – II**

SEMESTER - IV

Sr. No.	Name of The Course	Course Code	Course Outcomes (After completing this course, the students will be able to)
1	<p>MONEY AND BANKING</p> <p>Course Objectives: The objectives of the paper are to provide an understanding on operation of monetary forces, evolution of money, developments of central bank and commercial banks, development</p>	ECOMB404	<p>1. The learners will get an information and understanding about banking system, theories of banks and non-banks, developments of central bank and commercial banks, development banking, reforms in banking sector and Basel norms.</p> <p>2. The learners will learn in detail about the operating of monetary</p>





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	<p>banking and banking sector reforms. The course objectives of the paper include; to make the learners understand the working of monetary forces, to orient the learners about Money and Banking, to help the learners in realizing operating of monetary forces through multitude of channels - Market, Non-market, Institutional etc. To make understand the students about an evolution of money, developments of commercial banks, central banks, theory relating to banking and banking practices in India and other countries.</p>		<p>forces through multitude of channels- market, non-market, institutional etc.</p> <p>3. The learners will be able to understand an evolution of money, developments of commercial banks, central banks, theory relating to banking and banking practices in India and other countries.</p>
2	<p>ENVIRONMENTAL ECONOMICS</p> <p>Course Objectives:</p> <p>This paper introduces students to the key</p>	<p>ECOEEA407</p>	<p>4. Students will be able to understand the conceptual framework of environmental economics</p> <p>5. It equips students to solve issues</p>





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<p>fundamentals in environmental economics. It also equips students with tools and methodologies that are applied to analyse environmental problems and policies. Further, the paper enhances their understanding of environmental issues, perceived within the context of natural eco system.</p>		<p>related to the environmental field</p> <p>6. It empower students to handle Environmental sustainability projects</p>
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DEPARTMENT OF INFORMATION TECHNOLOGY – MSC (IT)

Program outcome and Program specific outcomes offered by the Department of INFORMATION TECHNOLOGY - MSC

NAME OF THE DEPARTMENT: Information Technology (MSC)

Name of the Programme	Programme Outcome [PG]	Program Specific Outcome [PG]
	Students will be able to	Students will be able to have
M.Sc (Information Technology)	PO1: Demonstrate comprehensive knowledge and understanding of core concepts and theories in computing, data science, cloud computing, soft computing techniques, big data analytics, modern networking, microservices architecture, image processing, technical writing, entrepreneurship development, applied artificial intelligence, machine learning, robotics process automation, blockchain, natural language processing, deep learning, and human-computer interaction.	PSO1: Ability to apply the knowledge of Information Technology with recent trends aligned with research and industry.
	PO2: Apply technical skills and methodologies learned in research, data science, cloud computing, soft computing techniques, big data analytics, modern networking, microservices architecture, image processing, and various areas of artificial intelligence to solve real-	PSO2: Ability to apply IT in the field of Computational Research, Soft Computing, Big Data Analytics, Data Science, Image Processing, Artificial Intelligence, Networking and Cloud Computing.





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	world problems and challenges.	
	PO3: Analyze complex computing problems, evaluate alternative solutions, and apply critical thinking to make informed decisions in areas such as image processing, big data analytics, machine learning, and robotics process automation.	PSO3: Ability to provide socially acceptable technical solutions in the domains of Information Security, Machine Learning, Internet of Things and Embedded System, Infrastructure Services as specializations.
	PO4: Evaluate the effectiveness and efficiency of IT solutions, considering factors such as scalability, reliability, security, and ethical implications.	PSO4: Ability to apply the knowledge of Intellectual Property Rights, Cyber Laws and Cyber Forensics and various standards in interest of National Security and Integrity along with IT Industry.
	PO5: Communicate technical concepts, project findings, and solutions effectively to diverse audiences, using appropriate communication channels and formats.	PSO5: Ability to write effective project reports, research publications and content development and to work in multidisciplinary environment in the context of changing technologies.
	PO6: Collaborate effectively in multidisciplinary teams to develop and implement IT solutions, demonstrating interpersonal skills and leadership qualities.	
	PO7: Engage in continuous learning and professional development to stay updated with emerging technologies	





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	and industry trends in information technology and related fields.	
	PO8: Demonstrate awareness of ethical, legal, and societal issues related to information technology and apply ethical principles in professional practice.	

**B1. Course Outcomes of all courses offered by the Department Name of the course :
M.S.C (INFORMATION TECHNOLOGY) Part – I**

SEMESTER - I

Sr. No.	Name of the Course	Course Code	Course Outcomes (After completing this course, the students will be able to)
1	<p>Research in Computing (Theory and Practical)</p> <p>Objectives:</p> <p>1. To be able to conduct business research with an understanding of all the latest theories.</p> <p>2. To develop the ability to explore research techniques used for solving</p> <p>3. any real world or innovate problem.</p>	<p>PSIT101</p> <p>PSIT1P1</p>	<p>1. Solve real world problems with scientific approach.</p> <p>2. Develop analytical skills by applying scientific methods.</p> <p>3. Recognize, understand and apply the language, theory and models of the field of business analytics</p> <p>4. Foster an ability to critically analyze, synthesize and solve complex unstructured business problems</p> <p>5. Understand and critically apply the concepts and methods of business analytics</p> <p>6. Identify, model and solve decision problems in different</p>





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			<p>settings interpret results/solutions and identify appropriate courses of action for a given managerial situation whether a problem or an opportunity</p> <p>7. Create viable solutions to decision making problems</p>
2	<p>Data Science (Theory and Practical)</p> <p>Objectives:</p> <ol style="list-style-type: none">1. Develop in depth understanding of the key technologies in data science2. and business analytics: data mining, machine learning, visualization techniques, predictive modeling, and statistics.3. Practice problem analysis and decision-making.4. Gain practical, hands-on experience with statistics programming	<p>PSIT102</p> <p>PSIT1P2</p>	<ol style="list-style-type: none">1. Apply quantitative modeling and data analysis techniques to the solution of real-world business problems, communicate findings, and effectively present results using data visualization techniques.2. Recognize and analyze ethical issues in business related to intellectual property, data security, integrity, and privacy.3. Apply ethical practices in everyday business activities and make well-reasoned ethical business and data management decisions.4. Demonstrate knowledge of statistical data analysis





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	languages and big data tools through coursework and applied research experiences.		techniques utilized in business decision making. 5. Apply principles of Data Science to the analysis of business problems. 6. Use data mining software to solve real-world problems 7. Employ cutting edge tools and technologies to analyze Big Data. 8. Apply algorithms to build machine intelligence. 9. Demonstrate use of team work, leadership skills, decision making and organization theory.
3	Cloud Computing Objectives: 1. To learn how to use Cloud Services. 2. To implement Virtualization.	PSIT103 PSIT1P3	1. Analyze the Cloud computing setup with its vulnerabilities and applications using different architectures. 2. Design different workflows according to requirements and apply map reduce programming





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	<ol style="list-style-type: none">To implement Task Scheduling algorithms.Apply Map-Reduce concept to applications.To build Private Cloud.Broadly educate to know the impact of engineering on legal and societal issues involved.		<p>model.</p> <ol style="list-style-type: none">Apply and design suitable Virtualization concept, Cloud Resource Management and design scheduling algorithms.Create combinatorial auctions for cloud resources and design scheduling algorithms for computing clouds.Assess cloud Storage systems and Cloud security, the risks involved, its impact and develop cloud application.Broadly educate to know the impact of engineering on legal and societal issues involved in addressing the security issues of cloud computing.
4	<p>Soft Computing Techniques (Theory and Practical)</p> <p>Objectives:</p> <ol style="list-style-type: none">Soft computing	<p>PSIT104</p> <p>PSIT1P4</p>	<ol style="list-style-type: none">Identify and describe soft computing techniques and their roles in building intelligent machinesRecognize the feasibility of





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	<p>concepts like fuzzy logic, neural networks and genetic algorithm, where Artificial Intelligence is mother branch of all.</p> <p>2. All these techniques will be more effective to solve the problem efficiently.</p>		<p>applying a soft computing methodology for a particular problem</p> <p>3. Apply fuzzy logic and reasoning to handle uncertainty and solve engineering problems</p> <p>4. Apply genetic algorithms to combinatorial optimization problems</p> <p>5. Apply neural networks for classification and regression problems</p> <p>6. Effectively use existing software tools to solve real problems using a soft computing approach</p> <p>7. Evaluate and compare solutions by various soft computing approaches for a given problem.</p>
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**B1. Course Outcomes of all courses offered by the Department Name of the course :
M.S.C (INFORMATION TECHNOLOGY) Part – I**

SEMESTER - II

Sr. No.	Name of the Course	Course Code	Course Outcomes (After completing this course, the students will be able to)
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1	<p>Big Data Analytics (Theory and Practical)</p> <p>Objectives:</p> <ol style="list-style-type: none">1. To provide an overview of an exciting growing field of big data analytics.2. To introduce the tools required to manage and analyze big data like Hadoop, NoSql MapReduce.3. To teach the fundamental techniques and principles in achieving big data analytics with scalability and streaming capability.4. To enable students to have skills that will help them to solve complex real-world problems in for	<p>PSIT201 PSIT2P1</p>	<ol style="list-style-type: none">1. Understand the key issues in big data management and its associated applications in intelligent business and scientific computing.2. Acquire fundamental enabling techniques and scalable algorithms like Hadoop, Map Reduce and NO SQL in big data analytics.3. Interpret business models and scientific computing paradigms, and apply software tools for big data analytics.4. Achieve adequate perspectives of big data analytics in various applications like recommender systems, social media applications etc.
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	decision support.		
2	Modern Networking (Theory and Practical) Objectives: 1. To understand the state-of-the-art in network protocols, architectures and applications. 2. Analyze existing network protocols and networks. 3. Develop new protocols in networking 4. To understand how networking research is done 5. To investigate novel ideas in the area of Networking via term-long research projects.	PSIT202 PSIT2P2	 1. Demonstrate in-depth knowledge in the area of Computer Networking. 2. To demonstrate scholarship of knowledge through performing in a group to identify, formulate and solve a problem related to Computer Networks 3. Prepare a technical document for the identified Networking System Conducting experiments to analyze the identified research work in building Computer Networks
3	Microservice Architecture (Theory and Practical)	PSIT203 PSIT2P3	1. Develop web applications using Model View Control





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	<p>Objectives:</p> <ol style="list-style-type: none">1. Gain a thorough understanding of the philosophy and architecture of Web applications using ASP.NET Core MVC2. Gain a practical understanding of .NET Core3. Acquire a working knowledge of Web application development using ASP.NET Core MVC 6 and Visual Studio4. Persist data with XML Serialization and ADO.NET with SQL Server5. Create HTTP services using ASP.NET Core Web API		<ol style="list-style-type: none">2. Create MVC Models and write code that implements business logic within Model methods, properties, and events3. Create Views in an MVC application that display and edit data and interact with Models and Controllers4. Boost your hire ability through innovative and independent learning5. Gaining a thorough understanding of the philosophy and architecture of .NET Core6. Understanding packages, metapackages and frameworks7. Acquiring a working knowledge of the .NET programming model8. Implementing multi-threading effectively in .NET applications
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	6. Deploy ASP.NET Core MVC applications to the Windows Azure cloud		
4	Image Processing (Theory and Practical) Objectives: 1. Review the fundamental concepts of a digital image processing system. 2. Analyze images in the frequency domain using various transforms. 3. Evaluate the techniques for image enhancement and image restoration. 4. Categorize various compression techniques. 5. Interpret Image compression standards. 6. Interpret image	PSIT204 PSIT2P4	1. Understand the relevant aspects of digital image representation and their practical implications 2. Have the ability to design pointwise intensity transformations to meet stated specifications 3. Understand 2-D convolution, the 2-D DFT, and have the ability to design systems using these concepts 4. Have a command of basic image restoration techniques 5. Understand the role of alternative color spaces, and the design requirements leading to choices of color space 6. Appreciate the utility of wavelet





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	segmentation and representation techniques.		decompositions and their role in image processing systems 7. Have an understanding of the underlying mechanisms of image compression, and the ability to design systems using standard algorithms to meet design specifications
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**B1. Course Outcomes of all courses offered by the Department Name of the course :
M.S.C (INFORMATION TECHNOLOGY) Part – II**

SEMESTER - III

Sr. No.	Name of the Course	Course Code	Course Outcomes (After completing this course, the students will be able to)
1	Technical Writing and Entrepreneurship Development & Project Documentation and Viva (Theory and Practical) Objectives: 1. This course aims to provide conceptual understanding of developing strong 2. foundation in general	PSIT301 PSIT3P1	1. CO1: Develop technical documents that meet the requirements with standard guidelines. Understanding the essentials and hands-on learning about effective Website Development 2. CO2: Write Better Quality Content Which Ranks faster at Search Engines. Build effective social media Pages





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	<p>writing, including research proposal and reports</p> <p>3. It covers the technological developing skills for writing Article, Blog, E-Book, Commercial web Page design, Business Listing Press Release, E-Listing and Product Description</p> <p>4. This course aims to provide conceptual understanding of innovation and entrepreneurship development</p>		<p>3. CO3: Evaluate the essentials parameters of effective Social Media Pages</p> <p>4. CO4: Understand importance of innovation and entrepreneurship</p> <p>5. CO5: Analyze research and development projects</p>
2	<p>Applied Artificial Intelligence (Theory and Practical)</p> <p>Course Objectives:</p> <p>1. To explore the applied</p>	<p>PSIT302a</p> <p>PSIT3P2a</p>	<p>After completion of course the learner will:</p> <p>1. CO1: be able to understand the fundamentals concepts of expert system and its applications.</p>





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	<p>branches of artificial intelligence</p> <p>2. To enable the learner to understand applications of artificial intelligence</p> <p>3. To enable the student to solve the problem aligned with derived branches of artificial intelligence</p>		<p>2. CO2: be able to use probability and concept of fuzzy sets for solving AI based problems.</p> <p>3. CO3: be able to understand the applications of Machine Learning. The learner can also apply fuzzy system for solving problems.</p> <p>4. CO4: learner will be able to apply to understand the applications of genetic algorithms in different problems related to artificial intelligence.</p> <p>5. CO5: A learner can use knowledge representation techniques in natural language processing.</p>
3	<p>Machine Learning (Theory and Practical)</p> <p>Objectives:</p> <p>1. Understanding Human learning aspects</p>	<p>PSIT303a</p> <p>PSIT3P3a</p>	<p>After completion of the course, a student should be able to:</p> <p>1. CO1: Understand the key issues in Machine Learning and its associated applications in intelligent business and scientific</p>





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	<p>2. Understanding primitives in learning process by computer</p> <p>3. Understanding nature of problems solved with Machine Learning</p>		<p>computing.</p> <p>2. CO2: Acquire the knowledge about classification and regression techniques where a learner will be able to explore his skill to generate data base knowledge using the prescribed techniques</p> <p>3. CO3: Understand and implement the techniques for extracting the knowledge using machine learning methods</p> <p>4. CO4: Achieve adequate perspectives of big data analytics in various applications like recommender systems, social media applications etc.</p> <p>5. CO5: Understand the statistical approach related to machine learning. He will also Apply the algorithms to a real-world problem, optimize the models learned and report on the expected accuracy that can be</p>
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			achieved by applying the models
4	<p>Robotic Process Automation (Theory and Practical)</p> <p>Objectives:</p> <ol style="list-style-type: none">1. To make the students aware about the automation today in the industry2. To make the students aware about the tools used for automation3. To help the students automate a complete process	<p>PSIT304a</p> <p>PSIT3P4a</p>	<p>After completing the course, a learner will be able to:</p> <ol style="list-style-type: none">1. CO1: Understand the mechanism of business process and can provide the solution in an optimize way2. CO2: Understand the features use for interacting with database plugins3. CO3: Use the plug-ins and other controls used for process automation4. CO4: Use and handle the different events, debugging and managing the errors5. CO5: Test and deploy the automated process

B1. Course Outcomes of all courses offered by the Department Name of the course :

M.S.C (INFORMATION TECHNOLOGY) Part – II

SEMESTER - IV

Sr. No.	Name of the Course	Course Code	Course Outcomes (After completing this course, the
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			students will be able to)
1	Blockchain (Theory and Practical) Objectives: 1. To provide conceptual understanding of the function of Blockchain as a method of securing distributed ledgers, how consensus on their contents is achieved, and the new applications that they enable 2. To cover the technological underpinnings of blockchain operations as distributed data structures and decision-making systems, their functionality and different architecture types 3. To provide a critical	PSIT401 PSIT4P1	After completion of the course, a student should be able to: 1. CO1: The students would understand the structure of a blockchain and why/when it is better than a simple distributed database 2. CO2: Analyze the incentive structure in a blockchain based system and critically assess its functions, benefits and vulnerabilities 3. CO3: Evaluate the setting where a blockchain based structure may be applied, its potential and its limitations 4. CO4: Understand what constitutes a smart contract, what are its legal implications and what it can and cannot do, now and in the near future 5. CO5: Develop blockchain DApps





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	evaluation of existing —smart contract capabilities and platforms, and examine their future directions, opportunities, risks and challenges		
2	<p>Natural Language Processing (Theory and Practical)</p> <p>Objectives:</p> <ol style="list-style-type: none">1. The prime objective of this course is to introduce the students to the field of Language Computing and its applications ranging from classical era to modern context2. To provide understanding of various NLP tasks and NLP abstractions such as Morphological analysis, POS tagging,	<p>PSIT402a</p> <p>PSIT4P2a</p>	<p>After completion of the course, a student should be able to:</p> <ol style="list-style-type: none">1. CO1: Students will get idea about know-hows, issues and challenge in Natural Language Processing and NLP applications and their relevance in the classical and modern context.2. CO2: Student will get understanding of Computational techniques and approaches for solving NLP problems and develop modules for NLP tasks and tools such as Morph Analyzer, POS tagger, Chunker, Parser, WSD tool etc.3. CO3: Students will also be





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	<p>concept of syntactic parsing, semantic analysis etc.</p> <p>3. To provide knowledge of different approaches/algorithms for carrying out NLP tasks</p> <p>4. To highlight the concepts of Language grammar and grammar representation in Computational Linguistics</p>		<p>introduced to various grammar formalisms, which they can apply in different fields of study.</p> <p>4. CO4: Students can take up project work or work in R&D firms working in NLP and its allied areas.</p> <p>5. CO5: Student will be able to understand applications in different sectors</p>
3	<p>Deep Learning (Theory and Practical)</p> <p>Objectives:</p> <p>1. To present the mathematical, statistical and computational challenges of building neural networks</p>	<p>PSIT403a</p> <p>PSIT4P3a</p>	<p>After completion of the course, a student should be able to:</p> <p>1. CO1: Describes basics of mathematical foundation that will help the learner to understand the concepts of Deep Learning</p> <p>2. CO2: Understand and describe model of deep learning</p> <p>3. CO3: Design and implement</p>





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	<p>2. To study the concepts of deep learning</p> <p>3. To enable the students to know deep learning techniques to support real-time applications</p>		<p>various deep supervised learning architectures for text & image data</p> <p>4. CO4: Design and implement various deep learning models and architectures.</p> <p>5. CO5: Apply various deep learning techniques to design efficient algorithms for real-world applications</p>
4	<p>Human Computer Interaction and Project Implementation and Viva (Theory and Practical)</p> <p>Objectives:</p> <p>1. Understand the important aspects of implementation of human-computer interfaces.</p> <p>2. Identify the various tools and techniques for interface analysis, design, and</p>	<p>PSIT404a</p> <p>PSIT4P4</p>	<p>After completion of the course, a student should be able to:</p> <p>1. CO1: have a clear understanding of HCI principles that influence a system's interface design, before writing any code.</p> <p>2. CO2: understand the evaluation techniques used for any of the proposed system.</p> <p>3. CO3: understand the cognitive models and its design.</p> <p>4. CO4: able to understand how to</p>





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	evaluation. 3. Identify the impact of usable interfaces in the acceptance and performance utilization of information systems		manage the system resources and do the task analysis. 5. CO5: able to design and implement a complete system.
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