**V.V.SANGHA’S, BALLARI.**

**VEERASHAIVA COLLEGE, BALLARI**–583 104.

**(Affiliated to Vijayanagara Sri Krishnadevaraya University, Ballari.)**

**Bachelor of Arts (B.A.)**

Course Module

First Basic Language : English

Second Basic Languages : Kannada/Hindi/Additional English/Telugu

Compulsory Papers:-

1. Indian Constitution (I Semester)
2. Fundamental of Computer Applications (III & IV Semester)
3. Environmental Studies (IV Semester)
4. OPEN Elective Papers

Totally, there are 21 open elective papers. Of which the student shall study any three papers in II, III & V semesters according to their choices. Flexibility is provided to the students in choosing OEP.

Optional Subjects:

The student shall opt any one of the subject combinations given below.

Each combination consists of three optional subjects with the same weightage

Subject Combinations

Kannada History Sociology

English History Sociology

History Political Sc. Sociology

History Economics Political Science

Economics History English

**Programme Outcome**

The students pursuing their degree in humanities and social sciences have wide opportunities to do higher studies such as B.Ed., Post Graduate studies in different subjects. After the completion of PG, they can do research in their respective specialized areas. A student who has undergone research training has increasing demand in city planning, administration, communication, social work, social welfare, social and economic planning, advertising, rural reconstruction, mass media etc. Arts graduates can appear for any competitive examination held by UPSC, KPSC, KEA, BRBC etc. They are also eligible to pursue other courses like Bachelor of Law, MBA, PGDCA etc. The programme meets man power requirements in specific fields. It helps to acquire life skills, employability skills, soft skills. The programme provides information on latest changes and developments in social, political, economic aspects of society. It makes a learner to know about expected roles responsibilities and commitments. Most of the administrators in top level are arts graduates. This clearly indicates that the course has tremendous potentialities for future career.

* The Students can acquire knowledge with facts and figures in subjects like History, Sociology, Political Science, Economics and Languages.
* The students can understand the basic concepts, fundamental principles & various theories in social science subjects.
* The students can realize the significance of literature in terms of aesthetic, mental, moral and intellectual development.
* They can develop analytical ability to analyze and combat social problems.
* They learn about how to bring harmony in society.
* They develop positive attitude towards life.
* They can learn the skills of reading, listening, speaking etc., which help in expressing ideas & opinions effectively.
* Helps to develop a sense of social service.
* Helps to become responsible citizens.
* Assist to develop creative ability and critical thinking.
* Helps to inculcate and respect human values.
* Helps to develop awareness about rights and duties.

**Specific Programme Outcome**

At the end of the course, the students will be able to acquire sufficient knowledge, variety of skills, art of applying knowledge and experiences to solve problems, ability to get jobs, capacity to discharge social responsibilities and become self reliant. By virtue of the knowledge, skills and experiences gained in six semesters, the student can work in various capacities efficiently both in Government and Private organizations with attractive emulations. Above all, the student will develop a multi-faceted personality and learn to sustain himself on his own by respecting the norms and ideals of society.

DEPARTMENT OF KANNADA

COURSE OUTCOME

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| Course | Outcomes |
| B.A- I Basic –KannadaModern Kannada Literature. | In this paper the students are oriented with ancient kannada literature, pages of modern kannada literature like Pre renaissance, renaissance, progressive Dalit and Revolutionary. Students are introduced with the selected works of poets who appear in this literature. They also learn the features of modern kannada literature such as poetry, story, novels, play etc. The impact of modern kannada literature is another part of this paper with which the students acquaint themselves during the period of course. A brief introduction of some representative trend setting poets like Govinda Pai, Kuvempu, Bendre is made to the students.  |
| B.Com / BBA - I Basic –KannadaA)Kannada Story poems B). selected scientific essays | A.)This paper provides the learners an art of converting stories into a heart winning emotional predominant poems. The values system and the beauty of the nature are introduced.B.) This paper makes the students capable of developing scientific outlook along with the opposite literary consciousness . |
| B.Sc / BCA – Ia)Collection of small stories b) An anthology of modern poetry. | a.)This paper aimed at making the students to learn the art of writing short stories and the nature of social metrics b.) This paper provides the knowledge of different aspects and trends of modern literary texts.  |
| B.A- II Basic –KannadaThe Anthology of Mid Kannada Literary Texts | This paper is meant for giving an awareness to the students about how the poetry has made its journey specially in middle age and upto the present through studying the representative literary texts of various poets and forms. |
| B.Com / BBA - II Basic –Kannadaa)A Bunch of selected short stories.b). Kannada Business Communication | a)This paper supposed to develop the creative talents of students in writing short stories as a basic of developing and appreciating literary art.b) This paper aims at equipping the students with the employment skills through learning the art of communication for various occasions and purposes. |

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| B.Sc / BCA – IIa) Kannada Language communication b)Collection of vachanas and keerthanas. | a). The paper is intended for developing the basic language skills like Grammar, Letter Writing , art of speaking communication, facing interviews and so on.b).The students are introduced to appreciate and understand the philosophical truths and art of living by various poets of different times.  |
| B.A- III Basic –KannadaThe literary forms of modern kannada | The students are acquainted with modern kannada place and novels with representative texts from each to make them aware of the social problems  |
| B.Com / BBA - III Basic –KannadaForms of Modern Kannada: Drama and Novel | a) Modern Kannada Drama Tollugatti by T.P.Kailasam- It makes the students to know that humanity is better than education. T.P.Kailasam shows in this work that if an educated man does not have humanity he is like an illiterate one. By studying this books the students know the importance of humanity.b) Subbanna – A novel by Masti – This novel is based on the life activities of subbanna. The novel not like other novels. The subject of this novel is distinctive. |
| B.Sc / BCA – IIIBasic –KannadaThe literary forms of modern kannada | The students are acquainted with modern kannada place and novels with representative texts from each to make them aware of the social problems. |
| B.A- IV Basic –KannadaAncient and Mid Kannada Literature | This paper is intended to provide knowledge about the old kannada literary text like the famous Rannana Gaduyuddha and also the un-shined poets and writers of the middle age. |
| B.Com / BBA - IV Mid kannada literature | a)Collection of Harichandra Poetry – Edited by TS Venkannaiah and AR Krishna Sastry- In this paper the learners learn about the story of Harichandra. The story of Harichandra tells about the importance of truths.b) Vachanas of sarvagnya - edited by Dr L Basavaraj – This paper aimed at introducing of the life sketch of sarvagnya. The students learn about the vachanas of sarvagnya. |
| B.Sc / BCA – IVBasic –KannadaMid kannada literature | a)Collection of Harichandra Poetry – Edited by TS Venkannaiah and AR Krishna Sastry- In this paper the learners learn about the story of Harichandra. The story of Harichandra tells about the importance of truths.b) Vachanas of sarvagnya - edited by Dr L Basavaraj – This paper aimed at introducing of the life sketch of sarvagnya. The students learn about the vachanas of sarvagnya. |

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| B.A- I Opt –KannadaChomanadudi. | The purpose of the novel chomandudi is making the students understand the contemporary burning social issues and the victims of these issues who raise the sympathy of the people. The students are made aware of vicious social network and how it functions.  |
| B.A- II Opt –Kannadaa) The literary history of middle age.b) The collection of mid kannada literary texts | a).This paper is intended to provide and awareness of the different literary trends during the middle ages through the literary forms of Vachanas and Keerthanas (Devotional Songs).b). The representative and influential literary texts of the middle age are introduced to the students to learn different literary and social aspects that moved the sense and sensibility of the literary artists during the middle age. |
| B.A- III Opt –Kannadaa) Ancient Kannada literature.b) The anthology of ancient kannada literary texts | a).This paper develops in the learner an appreciative talent of comparing and contrasting the modern literary forms with the main focus on ancient literary texts. It mainly focuses on the development of different literary forms in the beginning of the journey of kannada literature b). It gives an exclusive knowledge regarding the ancient kannada texts with the different literary texts and social elements and aspects.  |
| B.A- IV Opt –Kannadaa).Literary criticismb)Western literary criticism | a). This paper enables the students the multi prospective literary texts and the ability of judging those texts in a proper prospective.b). The students mainly learn about the concept of western literary thought. It introduces the literary thoughts of Plato, Aristotle, Wood wirth, Colridge, Edward Millo. |
| B.A- V –Paper-5.1Opt –KannadaLanguage and Grammar | This paper is provides an Idea of the origin and development of kannada language and the nature of old kannada grammar. |
| B.A- V –Paper-5.2Opt –KannadaClassical literature | The classical literary texts of old and modern poets provide the distinctly different kinds of poetry and literature |
| B.A- VI –Paper-6.1Opt –KannadaKannada prosody | The paper aims at giving the technical knowledge of creating poetry in a systematic way through various metres and forms of poetry like verse and stanza. |
| B.A- VI –Paper-6.2Opt –KannadaFolk literature | The students are introduced to various kinds of literary sources in rural areas like inscriptions, collecting old texts, folk literature and the journals related to folk studies. |

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| B.A/BCOM/B.Sc/BBA/BCA/ III SemOEP :- A Glands of Kannada Short Story Tradition. | The students get the journal awareness and taste of kannada literature by studying the literary texts of different ages and forms in order to get the conscious of social realities.  |
| B.A/BCOM/B.Sc/BBA/BCA/ IV SemOEP :- The Tradition of Kannada literary texts (Ancient and Middle Age) | The students will get knowledge regarding the different representative literary texts of the poets of ancient and middle ages which provide the social and other patterns of life existing during those days. |
| B.A/BCOM/B.Sc/BBA/BCA/ V SemOEP :- Modern kannada literary tradition  | A glimpse of modern kannada literature with its various forms through representative texts of each form is given to students. |

DEPARTMENT OF ENGLISH

COURSE OUTCOME

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| Course | Outcomes |
| B.A- I Basic –English- Eng 101A | Students will be aware of the different kinds of language expression and communication capabilities will improve. The important functional aspects of Grammar will be learnt. |
| B.Sc/B.C.A- IBasic –English- Eng 101C | The student will be able to know the different kinds of expressions like Prose, Poetry and Essay. He will master some functional grammar aspects. |
| B.Com/B.B.A IBasic –English- Eng 101B | It enables the learner to recognize the importance of embedded human values and objective values in language and life. Some functional aspects of language communication and grammar will be learnt. |
| B.A/ BSW – IIBasic –English- Eng 101A | Awareness of employability skills like self introduction, presentation and creativity provided. |
| B.Sc/B.C.A- IIBasic –English- Eng 101C | Knowledge of language from intellectual, moral and social point of view is given. Creativity skills are developed through poetry and short fiction. |
| B.Com/B.B.A IIBasic –English- Eng 101B | Skill of identifying the value and knowledge based language is mastered by the learners. Different aspects of creativity learnt through poetry. |
| B.A/ BSW – IIIBasic –English- Eng 301A | Communication and conversation skills are attained. Writing resume, Writing proposals, Covering letters are learnt. The other skills like group discussions, informal discussion, Debates, facing interview, making speeches, comparing events and writing agenda, notes and minutes of a meeting are mastered. Communication skills are strengthened through a drama.  |
| B.Com/B.B.A IIIBasic –English- Eng 302A | Communication skills like telephone talk face to face informal conversation, one– to-one written communication, writing e-mail, proposals of job application, Group discussions, debates speeches and so on are mastered. Linguistic and thematic value based Shakespearean play is used to enhance their confidence and competence in communication. |
| B.Sc/B.C.A- IIIBasic –English- Eng 303A | Different kinds of communication skills just like BA and B.Com students with a different Shakespearean play are improved in students. |
| B.A/ BSW – IVBasic –English- Eng 401A | Students will master the presentation skills like synchronized body language, using right media, style of presentation and overall impression.They also develop personal conduct and appearance through etiquette and manners, table manners and dress code. They learn about gender bias in communication. To observe all these R.K.Narayana’s novel is used.  |
| B.Com/B.B.A IVBasic –English- Eng 402A | Students will learn the presentation skills, personal conducts and appearance like B.A students, with a different novel i.e. Jane Austen’s Emma. |
| B.Sc/B.C.A- IVBasic –English- Eng 403A | These students also master the same skills of presentation and personal conduct like B.A and B.Com students with a different novel by Ernest Hemmingway. |
| B.A / B.Sc/ BCA/B.Com I Sem. Addl.English Code Eng 201 | The skills like ‘How to read a Book’ developing a right perspective. Keeping up God- Consciousness in day-to-day activities and creative skills are introduced to students. Grammar points related to these skills are also introduced. |
| B.A / B.Sc/ BCA/B.Com II Sem. Addl.English  Code 202 | Through short stories, essays and poetry imaginary, observatory and creative talents are introduced to students. Grammar aspects related to above skills are introduced. |
| B.A / B.Sc/ BCA/B.Com III Sem. Addl.English  Code 203 | Conversational and communication skills are developed through small plays. In addition to these, Basic Research skills are introduced to students. |
| B.A / B.Sc/ BCA/B.Com IV Sem. Addl.English  Code 204 | Students learn through a novel, the importance of social relations, moral and social values and importance of individuality and personality. In addition, additional research skills. Like Data Collection, analysis and organizing data to prepare a research paper are taught. |
| B.A – I SemesterOpt. English Code 200 | Students learn background study of literature and representative texts of different literary forms like drama, Poetry and essay are introduced in a chronological order. |
| B.A – II SemesterOpt. English Code 201 | Students learn the texts and background related to the puritan and the Restoration period. |
| B.A – III SemesterOpt. English Code 202 | Students gain knowledge regarding the texts of representative literary artists and background of the period of Neo classicism and Romanticism. |
| B.A – IV SemesterOpt. English Code 203 | Students will get knowledge regarding the representative literary artists of Poetry, Prose and novel of Victorian Age. |
| B.A –V SemesterOpt. English Paper-V | Students will gain knowledge about the literary texts of the representative literary artists of 20thcentaury. British Literature. |
| B.A –V SemesterOpt. English Paper-VI | Students will obtain knowledge regarding Indian writings in English and English Translations with representative writer’s works of art pertaining to the age. |
| B.A –VI SemesterOpt. English Paper-VII | Students will get knowledge about origin and Development of English Language and Literary theories. |
| B.A –VI SemesterOpt. English Paper-VIII | Students will attain Knowledge regarding World Literature with representative texts and background knowledge of the texts created. |

DEPARTMENT OF HISTORY

COURSE OUTCOME

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| Course | Outcomes |
| BAHIS 101Ancient Indian History (From Indus Valley to Kushana’s | The paper enables students understand ancient Indian history i.e. from Indus valley to Kushanas. Students learn about the achievements of the emperors in this period. |
| BAHIS 201Ancient Indian History (From Gupta’s to 1206 A.D.) | The paper imparts the knowledge about Indian History with regard to Guptas till 1206 A.D. It deals with kings and rulers, their achievements, battles and contributions till 1206 A.D. |
| BAHIS OE 202History of Karnataka (Early to 1565 A.D.) | It enables students know the history of Karnataka. It gives information about the various kingdoms, king, rulers, their respective colonies or areas, wars, contribution to politics, architecture, art and literature till the period of 1565 A.D |
| BAHIS 301Medieval Indian History (1206 A.D. to 1526 A.D.) | The paper explains about medieval era in Indian History i.e. from 1206 A.D to 1526 A.D. It imparts the knowledge about the emperors, battles fought, achievements, their regions, contribution to different fields etc. |
| BAHIS OE 302World History Heritage Sites of India  | The open elective paper aims at providing the information about various historical heritage sites of India.  |
| BAHIS 301Medieval Indian History | It open Medieval Indian History |
| BAHIS OE 402Heritage Tourism of India | The open Elective paper gives knowledge about Heritage tourism of India. |
| BAHIS 501Modern Indian History (From 1707 A.D. to 1856 A.D. ) | The open elective paper provides knowledge about modern History i.e. from a period of 1707 A.D. to 1856 A.D. It gives information about various kingdoms, emperors their regions of this era. |
| BAHIS 502History of Karnataka UP TO 1336 A.D. | It imparts knowledge about the History of Karnataka up to 1336 A.D. It throws light on the kings, empires, battles, achievements and contribution to various fields etc. |

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| BAHIS OE 503Historical Heritage of Karnataka | The open Elective paper gives knowledge about Historical Heritage of Karnataka |
| BAHIS 601Modern Indian History (From 1857 A.D. TO 1950 A.D.) | The paper deals about modern Indian History from the period of 1857 A.D. TO 1950 A.D. All the historical changes, impacts during this time are learnt. |
| BAHIS 602History of Hyderabad Karnataka (Post-Vijayanagara to 1956 A.D.)  | It gives information about the history of Hyderabad Karnataka from Post-Vijayanagara to 1956 A.D. The various changes brought about by various kings in their rules are discussed. |
| BAHIS 603Project Work\* | The students are given an opportunity to do a Project Work on the research conducted by them with their respective topics. By this students are able to understand their applicative skill of the knowledge gained.  |

DEPARTMENT OF ECONOMICS

COURSE OUTCOME

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| Course | Outcomes |
| BA ECS-101Micro Economics-I | This paper enables the students to understand the micro foundations of the economy. The students also acquire knowledge about the economic aspects affecting the behaviour of individuals, firms and markets. |
| BA ECS-201Micro Economics-II | In this paper the students learn about cost, revenue, market conditions, graphical presentation and theories of price, welfare and risk. |
| BA ECO-202Fundamentals of Economics | The students learn about the basics of economics apart from understanding and analyzing the real economic situation. |
| BA ECS-301Macro Economics | This paper enables the students to understand and comprehend different macro- economic issues and polices. It also provides an opportunity to learn basic concepts of monetary economics. |
| BA ECO-302Basics of Indian Economy | At the end of this course, the students acquire knowledge about Indian economy, human and natural resources, there importance economic development. They also become familiar with Indian Agriculture, marketing system and economic reformation initiated in India in 1991. |
| BA ECS-401International Economics | This paper enables the learners to understand theoretical models that are imperative to explain the economic behaviour of man. The students also learn the determination of equilibrium income, output and employment  |
| BA ECO-402Financial Markets | This paper introduces fundamentals of Indian Financial System. The learner will understand the various faces of banking development in India. |
| BA ECH-501Indian Economy | The students learn about different dimensions of Indian economy and resources available in India. |
| BA ECS-502Basic Statistics for Economics | This paper familiarises students with basic statistical skills and applications of statistical techniques to economic problems. |
| BA ECO-503Basics of Karnataka Economy | This course provides knowledge about the state of regional economy. It enables the students to learn about the regional economic diversity and structure. |
| BA ECH-601Public Finance | This paper introduces the concepts in public finance and the learner will also Understand budgetary issues.  |
| BA ECS-602Development Economics | The students acquaint with the fundamentals of development concepts. They will become familiar with basic issues related to theories of development. |
| PW -607Project Work | This course enables the students to acquaint with research skills and learn out to prepare research report. |

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| B.A/ BSW – IVBasic –English- Eng 401A | Students will master the presentation skills like synchronized body language, using right media, style of presentation and overall impression.They also develop personal conduct and appearance through etiquette and manners, table manners and dress code. They learn about gender bias in communication. To observe all these R.K.Narayana’s novel is used.  |
| B.Com/B.B.A IVBasic –English- Eng 402A | Students will learn the presentation skills, personal conducts and appearance like B.A students, with a different novel i.e. Jane Austen’s Emma. |
| B.Sc/B.C.A- IVBasic –English- Eng 403A | These students also master the same skills of presentation and personal conduct like B.A and B.Com students with a different novel by Ernest Hemmingway. |
| B.A / B.Sc/ BCA/B.Com I Sem. Addl.English Code Eng 201 | The skills like ‘How to read a Book’ developing a right perspective. Keeping up God- Consciousness in day-to-day activities and creative skills are introduced to students. Grammar points related to these skills are also introduced. |
| B.A / B.Sc/ BCA/B.Com II Sem. Addl.English  Code 202 | Through short stories, essays and poetry imaginary, observatory and creative talents are introduced to students. Grammar aspects related to above skills are introduced. |
| B.A / B.Sc/ BCA/B.Com III Sem. Addl.English  Code 203 | Conversational and communication skills are developed through small plays. In addition to these, Basic Research skills are introduced to students. |
| B.A / B.Sc/ BCA/B.Com IV Sem. Addl.English  Code 204 | Students learn through a novel, the importance of social relations, moral and social values and importance of individuality and personality. In addition, additional research skills. Like Data Collection, analysis and organizing data to prepare a research paper are taught. |
| B.A – I SemesterOpt. English Code 200 | Students learn background study of literature and representative texts of different literary forms like drama, Poetry and essay are introduced in a chronological order. |
| B.A – II SemesterOpt. English Code 201 | Students learn the texts and background related to the puritan and the Restoration period. |
| B.A – III SemesterOpt. English Code 202 | Students gain knowledge regarding the texts of representative literary artists and background of the period of Neo classicism and Romanticism. |
| B.A – IV SemesterOpt. English Code 203 | Students will get knowledge regarding the representative literary artists of Poetry, Prose and novel of Victorian Age. |
| B.A –V SemesterOpt. English Paper-V | Students will gain knowledge about the literary texts of the representative literary artists of 20thcentaury. British Literature. |
| B.A –V SemesterOpt. English Paper-VI | Students will obtain knowledge regarding Indian writings in English and English Translations with representative writer’s works of art pertaining to the age. |
| B.A –VI SemesterOpt. English Paper-VII | Students will get knowledge about origin and Development of English Language and Literary theories. |
| B.A –VI SemesterOpt. English Paper-VIII | Students will attain Knowledge regarding World Literature with representative texts and background knowledge of the texts created. |

DEPARTMENT OF POLITICAL SCIENCE

COURSE OUTCOME

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| Course | Outcomes |
| BAPSS -101Fundamentals of Political Science | This course enables the students to understand the basic concepts and fundamentals of Political Science. It also makes them to analyse different concepts of state and sovereignty.  |
| BAPSH -102Indian Constitution | This course acquaints students with the constitution design of state structures and institutions and there actual working overtime. It traces the embodiment of some of these conflicts in constitutional provisions, and the students learn how these have played role in political practice. The students also learn about fundamental duties and rights.  |
| BA PSS-201Political Theory | This course introduces Political Theory as a distinctive area of enquiry that is integral to the study of Politics. It highlights contemporary normative debts and places them in a historical perspective. |
| BA PSO-202Human Rights | This course introduces students to the key debts on the meaning and nature of human rights. It address political, economic, social, cultural dimensions of human rights. The course also seeks impart an understanding of the key contemporary human rights issue pertaining to poverty, development and human security. |
| BA PSS- 301Indian Political Process | This paper enables the students to understand actual politics in India which diverges quite significantly from legal rules. The students understand political process with different modes of analysis. It helps to know about the working of modern institutions, premised on the existence of an individuated society. |
| BA PSO- 302Local Government in India. | This course introduces the students to the structure and functions of local self government in India it makes them aware of the various types of local institutions there functions, composition and importance. It enables the students to identify the role of local government, local leadership in rural development and various reforms made in the current contest.  |

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| BA PSS- 401Modern Governments | The students understand the various organs of government - machinery and representation. This paper exposes students to some constitutions of the world. They study different constitutions in light of the political process to gave understanding of the dynamics of actual politics and policy making in various countries. |
| BA PSO-402Indian Administration | This paper enables the learners to acquaint with administrative structure at the centre as well as state. It helps to learn most important institutions like national development council and planning commission. The students also learn about the significance of civil services. |
| BA PSH – 501Western Political Thinkers | This paper enables the students to acquaint with Greek antiquity and familiarises with the manner in which the political question were first posed. It lays basic foundation for students in evolution and development of political thought. |
| BA PSS-502Public Administration | The course seeks to provided an introduction to enter face between public policy in India. The students learn about issues of democracy, social welfare and financial accountability from a new western prospective. |
| BAPSO-503Governance: Issues and challenges. | This paper makes the learner to understand concepts and different dimensions of governance highlighting major debts in the contemporary times. It enables the students to know the importance of governance in the context of a globalizing world environment, administration and development. |
| BAPSH- 601Indian Political Thinkers | The students get a wide scope to understand individual political thinkers and themes that define the modernity of Indian political thought. They will also learn general themes that have been produced by thinkers from varied social and temporal contexts. |
| BAPSS- 602International Relations. | In this paper, the students study some important theoretical approaches to understand international relations which have become crucial in the current context. It discusses the evolution of Indian foreign policy since independence and its possible feature trajectory.  |
| PW-607Project Work | This enables the students to excel themselves in research field. They acquire empirical knowledge by engaging in field visit, data collection, data analysis and report writing. This helps them to develop problems solving skills, analytical skills etc. |

DEPARTMENT OF SOCIOLOGY

COURSE OUTCOME

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| Course | Outcomes |
| B.A.-I Semester BASOS-101 Fundamentals of Sociology | This paper helps the students to become familiar with the micro Foundations of the society. The student learns about various concepts and processes. The former one enables to know the structure of society and the later one introduces the standards of behavior and also ways of attaining goals. |
| B.A.-II Semester BASOS-201- Social Institution & change | To provide conceptual & theoretical understanding of social change and Development as it has emerged in sociological literature. To address theIndian experience of change and development in particular. |
| B.A.-II Semester OEP-202-Basic Principles of Sociology  | This paper enables the students to acquaint with Sociology as a Social Science and the distinctiveness of its approach among the Social science. By virtue of understanding the subject, the students view people behavior from a sociological prospective and discover their own sociological imagination and apply it to variety of social problems and situations.  |
| B.A.-III Semester OEP-301-Study of Indian Social Thought  | On successful completion of this subject the students read and analyze Classical roots of social thought. It also enables them to read and understand contemporary sociological theories from critical approach |
| B.A.-III Semester OEP-302-OEP- Indian Society | This paper enables the students to gain a better understanding of their own situation and region. It aims at sensitizing the diversity as well as interconnectedness of theoretical perspectives on Indian society, thereby adding depth as well as insight to their understanding of the subject. |

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| B.A.-III Semester BASOS-401-Study of Western thought | This paper aims to understanding comprehensive macro sociological theories. It examines the relationship between sociological theory and empirical research and other forms of analysis in sociology. After the completion of the course the students become self sufficient in in making use of theories for data collection. |
| B.A.-IV Semester BASOS402-OEP- Women Studies | It enables the students to understand Women’s studies as an Academic field of study and research. It also helps to understand the social, economic, political, intellectual and contributions of women in the past and present. |
| B.A.-V Semester BASOS501-Study of Indian Society | This enables the students to acquaint themselves with various dimensions of Indian society. It enhances the knowledge of students about different institutions of Indian society.  |
| B.A.-V Semester BASOS502-Social Movements in India | On successful completion of this course the students will be able to Understand a range of theories and perspectives for analyzing protests and social movements. They learn to evaluate critically the theories and perspectives by investigating historical and contemporary examples of of protests and social movements. |
| B.A.-V Semester BASOOE503-Rural Development in India | This course aims to provide sociological understanding of rural social structure, change and development in India. It also imparts sociological skills essentials to reconstruct rural institution and rural development.  |
| B.A.-VI Semester BASOH601-Research Methodology | On the completion of the course, the student will understand some basic concepts of research and its methodologies. It also enables to select anddefine appropriate research problems and parameters.  |
| B.A.-VI Semester BASOS602-Social Problems in India | This paper aims to provide theoretical knowledge about various social Problems with reference to Indian Society. The students learn to understand the problems and measures to combat the social issues. |
| B.A.-VI Semester BASOS607-Project Work | The students will be provided an opportunity to apply theories to to comprehend key social issues. It sharpens domain of knowledge and provide empirical experience. |

**Bachelor of commerce (B.com)**

Course module

First basic language : English

Second basic language : Kannada/Hindi/Additional English/Telugu

Compulsory papers:

1. 1st semester : IC,FA-1,BE,PPBM-1
2. 2nd semester : EVS,FA-2,ME,PPBM-2,OE
3. 3rd semester : CF,CA-1,MM,QT-1,OE
4. 4th semester : CA,CA-2,CLSP,QT-2,OE
5. 5th semester : PPA,BL,FM,CA-1,BE,IT-1,OE
6. 6th semester : CA,FS,MA,CA-2,HRM,IT-2
7. OPEN ELECTIVE PAPERS

Totally, there are 21 open elective papers. Of which the student shall study any three papers in II, III, IV & V semesters according to their choices. Flexibility is provided to the students in choosing OEP.

Combinations

1. Tax procedures and practice
2. Computers
3. General

**Programme outcome**

Bachelor of Commerce is very vast and wide in handling many papers. The word Commerce itself a Gigantic word to imagine because number of subjects are tagged and linked to one another. The students who are pursuing their course have so many options in their career after completing this course. Nowadays this program is in more demand due to ample of opportunities in future life and in building career.

* The students who have completed B.Com can move further in doing professional course like Chartered Accountants. A lot of demand for this course specially B.Com students
* Further B.Com graduates can do M com and MBA along with this they can become master in social work.
* Student of this course can apply for various competitive exams like banking and other KPSC exams also to get settled in their career.
* These graduates have the opportunities in working at various local, National and international companies.
* B.Com students are gifted in grabbing the opportunity to get specialised in tax courses on the competitions.
* Additional to this B.Com graduates are also welcome to do law course LLB for extra additional qualification for practice in law.
* Teaching field also welcomes them soon after the completing PG course to serve as guest faculty.
* Finally this course feels the graduate with Full fledged knowledge in the field of Commerce which are helpful for them in future which builds a beautiful career.

**Specific program outcome**

The graduate coming out of their course will be loaded with knowledge in various fields of Commerce and practical experiences in solving the business problems.

These students will definitely become part in building Indian economy and in making India as a developed country this program has the power of connecting or beginning out the students to extent

DEPARTMENT OF COMMERCE ( B.Com)

COURSE OUTCOME

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| --- | --- |
| Course | Outcomes |
| FINANCIAL ACCOUNTING –I | To enable the students to recollect the basics of accounting and prepare them to understand advanced treatments in preparation of final accounts. To enable the students to convert the single-entry system into the double-entry system and make them to understand the accounting of consignment and branch accounts. |
| PRINCIPLES AND PRACTICES OF BUSINESS MANAGEMENT-I | To understand the basics of management and its evolution to manage the business entities effectively by getting the insights into the managerial functions. |
| FINANCIAL ACCOUNTING-II | To make the students to understand various issues of partnership firms and accounting aspects of different forms of business. |
| PRINCIPLES AND PRACTICES OF BUSINESS MANAGEMENT-II | To enable the students to understand managerial functions and their significance to steer the business entity on a right track. |
| CORPORATE ACCOUNTING-I | To workout accounting issues from the inception to the liquidation of companies. |
| MARKETING MANAGEMENT | To study and critically analyse the basic concepts of marketing and to impart the knowledge on recent issues in marketing. |
| QUANTITATIVE TECHNIQUES-I | o equip the students with necessary statistical tools to analyse the business performance to take appropriate decisions |
| CORPORATE ACCOUNTING –II | To acquaint the students with accounting issues on bank accounts, insolvency accounts, insurance claims, self-balancing ledgers, and valuation of goodwill. |
| COMPANY LAW AND SECRETARIAL PRACTICE | To orient the students towards strategic position and role of the company secretary and motivate them to find their career spot in that lucrative area |
| QUANTITATIVE TECHNIQUES –II | To equip the students with statistical tools to analyse the data inputs to come out with scientific inference and to forecast the trends. |
| PRINCIPLES AND PRACTICES OF AUDITING | To enable the students to appraise the whole process of auditing |
| BUSINESS LAWS | To equip the students with comprehensive provisions on contracts, to throw light on Sale of Goods Act and Intellectual Property Rights. |
| FINANCIAL MANAGEMENT | To provide a conceptual understanding on financial management and enable the students to take important financial decisions by applying appropriate techniques and approaches |
| COST ACCOUNTING –I | To make the students have a comprehensive understanding of cost concepts and enable the students to examine different techniques and approaches for cost control. |
| INCOME TAX-I | To provide the students an insight into basic concepts of income tax and enable the students to compute income from employment, house property and business &profession by considering income tax provisions. |
| CONTEMPORARY AUDITING | To orient the students with the knowledge of audit of company and other entities, preparation of audit report and observe the professional ethics to be followed while auditing the accounts in the light of contemporary issues |
| FINANCIAL SERVICES | To equip the students with the knowledge of various financial services which support the economic activities and to enable them to find a place in financial services sector for their career growth. |
| MANAGEMENT ACCOUNTING | To enable the students to analyse financial statements of business enterprises to take prudent managerial decisions. |
| COST ACCOUNTING-II | To equip the students with various methods and techniques of costing to take cost-effective business decisions. |
| HUMAN RESOURCE MANAGEMENT | To orient the students with various issues of management of human resources to improve the productivity of business entities. |
| INCOME TAX –II | To provide the students an understanding on the Income Tax provisions on capital gains, income from other sources and whole gamut of other provisions with respect to computation of total income of individuals, HUF and firms. |

**Bachelor of Business Administration (BBA)**

Course module

First basic language : English

Second basic language : Kannada/Hindi/Additional English/Telugu

Compulsory papers:

1. 1st semester : PPM,QT,AFM,IC
2. 2nd semester : EVS,ME,BRM,OB
3. 3rd semester : CF,MM,FM,HRM
4. 4th semester : CA,EDP,FMI,BPSA
5. 5th semester : BL,MA,CM,SPL
6. 6th semester : IBM,PMA,TM,SPL
7. OPEN ELECTIVE PAPERS.

Totally, there are 21 open elective papers. Of which the student shall study any three papers in II,III, & V semesters according to their choices. Flexibility is provided to the students in choosing OEP.

**Programme outcome**

BBA course is a branch of Commerce, Bachelor of Business Administration this course is related to management there are ample opportunities to the students who are pursuing their degree in this course, now a days this course have wide network and related to all other departments

After completion of this course the students will gain the abilities in.

* Pursuing master degree in MBA.
* Applying knowledge of Management theories and practices to solve business problems.
* Faster analytical and critical thinking.
* Ability to develop ethical and value based leadership.
* Applying e business solutions in current environment led by technology .
* Ability to understand analyse and communicate regional, National, Global economic legal and ethical aspects of business.
* Finally this course inherited the qualities of leading them self and others in the achievement of organisational goals contributions effectively to a team environment.
* Student can go for higher studies in B. Ed, Company Secretary Course and Management.
* Teaching field also welcomes them soon after the completing PG course to serve as guest faculty.

**Specific program outcome**

Finally the students will be back by sufficient knowledge variety of skills in taking business problems ability to get jobs capacity to handle social responsibilities and become self independent.

While pursuing this course the students must undergo 6 semesters in each semester they are multiple by different skills knowledge and thoughts in order to lead a successful career life

DEPARTMENT OF COMMERCE ( B.B.A)

COURSE OUTCOME

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| Course | Outcomes |
| Paper 1.4 - principles and practices of management | To acquaint the students with the functions of management |
| Paper 1.5 accounting for managers | To develop an insight for students with respect to accounting postulates, principles and utilization of financial and accounting information for planning, decision-making and control. |
| Paper 1.6 quantitative techniques for managers | To enable the students use simple statistical tools and analyses to solve business related problems |
| Paper 2.5 business research methods | To familiarize the students with the nature and methods of research and its applications |
| Paper 2.6 organization behaviour | To orient the students to organizational behaviour and to appraise its relationship with managerial functions, organisational change and development |
| Paper 3.4 marketing management | To familiarize the students with the marketing concepts and develop their analytical skills, as well as conceptual abilities. |
| Paper 3.5 financial management | To familiarize the students with the financial environment of business, especially the financial markets |
| Paper 3.6 human resource management | To provide students with an understanding of the human resources management frame-work. |
| Paper 4.4 entrepreneurship developments | To familiarize the students to Understand the concept of Entrepreneurship skill and development. |
| Paper 4.5 financial markets and institutions | To equip students with the overview of financial system in general and financial markets and institutions in particular |
| Paper 4.6 businesses policy & strategic analysis | To enable the students to develop a holistic perspective of enterprise critical from the point of the view of the top executives |
| Paper 5.1 business laws | To create Legal Awareness in students for decision making |
| Paper 5.2 management accounting  | This course equips the students with accounting techniques to be used for taking managerial decisions |
| Paper 5.3 cost management | This paper enables the students to develop cost management skills. |

V.V. Sangha’s

VEERASHAIVA COLEGE, BALLARI

 **(Affiliated to Vijayanagara Sri Krishnadevaraya University, Ballari)**

**Bachelor of Science (B.Sc.)**

**Course Module**

First Basic Language : English

Second Basic Language : Kannada/Hindi/Additional English/Telugu

**Compulsory Papers:-**

1. Indian Constitution (I Semester)
2. Environmental Studies (II Semester)
3. Fundamentals of Computer Applications (III & IV Semester)
4. OPEN Elective Papers

Totally there are 21 Open Elective Papers. Of which the student shall study a three papers in II III IV & Environmental Studies Semesters according to their Choices. Flexibility is provided to the students in choosing Open Elective Papers.

**Optional Subjects:**

The students shall opt any one of the subject combination given below. Each combination consists of three optional subjects with the same weight-age.

**Subject Combinations:**

 Physics Chemistry Mathematics

 Physics Mathematics Computer Science

 Physics Mathematics Statistics

 Chemistry Botany Zoology

 Chemistry Botany Bio-Technology

 Chemistry Zoology Bio-Technology

 Computer Science Mathematics Statistics

**Programme Outcome**

The Students pursuing their Bachelor Degree in Science have wide opportunities to do higher studies such as B.Ed., Post Graduate Studies in different subjects. After Masters Degree they can pursue their Ph.D [Research] in any one of the above listed subjects. Later they can become scientists by continuing their research in Universities and R & D wings of related industries and organizations like DRDO, ISRO, BARC, IISc, NCBS, ICAR, TIFR, etc. Life Science students also find opportunities in Food Industries as quality control officers, Technicians, Experts etc. One more potential area which provides excellent job opportunities with handsome salary is R & D wing and marketing field of Pharmaceutical Industry. Bio-Tech industries also provide some opportunities on par with Pharmaceutical industries.

In addition to all these opportunities in the field of science, they can also appear for UPSC, KPSC, KEA, BSRB, SSC, RRB and other Competitive Examinations.

**Specific Programme Outcome**

At the end of the course, the programme enables the students to acquire sufficient theoretical knowledge, instrumental skills and practical experience in using devices, instruments, and machineries and to work in research laboratories. This programme help the student get jobs in both Government and Private organizations and industries. This programme also helps the students to realize and take up the responsibility to take innovative steps to meet the energy needs of the eco-friendly society.

DEPARTMENT OF PHYSICS

COURSE OUTCOMES

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| Course | Outcomes |
| B.Sc. – I SemesterPHY 101: Mechanics & Properties of Matter | Fundamentals of mechanics of rigid and elastic bodies are studied. An understanding of space and time is correlated in different frames of reference. A detailed study of properties of regular bodies enables the students to apply in related industries. |
| B.Sc.- II SemesterPHY 201: Heat, Thermodynamics, Waves & Oscillations | The principles of Calorimetry, Waves and oscillations, the development of Thermodynamics, challenges of Low Temperature Physics and Cryogenics, Ultrasonics, the Magical Beats, acoustics of buildings and Microphones are thoroughly studied. |
| PHY OET 201: Mechanics and Properties of matter | Fundamentals of Newtonian mechanics is introduced, which gives an understanding of basics of physics. |
| B.Sc. – III SemesterPHY 301: Electricity, Vector Analysis & Electromagnetic theory | A detailed study of current electricity, electronics and basic network theorems helps the students to understand higher electronics. The fundamentals of vector analysis enables the student to express the advanced theoretical and experimental facts and inventions, The understanding of the universe and its origin, applications of electromagnetic waves is studies using Universal Maxwell’s equation. |
| PHY OET 301:Thermodynamics, waves and oscillations | Heat and thermodynamics, Radiation, Low temperature, Waves and Oscillations are introduced. |
| B.Sc. IV SemesterPHY 401: Physical Optics, Fibre Optics and Relativity. | The advanced Optical phenomenon and their uses are studied together with experiments to verify the phenomenon. The principles and vast usage of Optical Fibres in modern telecommunication system and medicine are the highlights of the study. The relativistic ideas of fundamental units are studied. |
| PHY OET 401:Electronics and Theory of Relativity | Basic ideas of electrical components, wave optics, Optical fibers, Display devices and Special theory of Relativity are introduced. |
| B.Sc. V SemesterPHY 501: Paper 5.1Atomic Physics, Molecular Physics and Lasers. | A detailed progressive study to understand the Structure of Atom, Models of Atom, Atomic Spectra and Molecular Spectra and their vast applications in material science are highlighted. Raman effect which revolutionized the application in industry and medicine, lasers in medicinal physics are introduced and studied. |

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| PHY OEP 501:Atomic, Energy and Astrophysics | Ideal of atomic models, laser and Raman Effect, Super conductivity, energy physics and Astrophysics are introduced. |
| PHY 502: Paper 5.2Statistical Mechanics, Quantum Mechanics and Electronics – I | The basic principles of Statistical Mechanics, Quantum Mechanics and Electronics in research oriented applications are studied. Devices like Semiconductor diodes, Bipolar Junction Transistor, FET, MOSFET, Oscillators, Multi vibrators, Flip flop circuits are included in the study. |
| B.Sc. VI SemesterPHY 601: Paper 6.1Nuclear Physics, Solid State Physics, Astrophysics and Biophysics | A detailed study of Nucleus, its properties and Nuclear Spectroscopy with its applications towards nuclear medicine, energy physics is studied. Non conventional energy sources like solar, wind, tidal, bio energies are typically studied and challenges the students to design alternate eco-friendly energy sources. The fundamentals of Astrophysics like stars, temperatures of stars, HR diagrams are introduced. The cell and its structure and physical phenomenon in the anatomy of humans are studied in Biophysics |
| PHY 602: Paper 6.2Materials Science & Electronics - II | The latest forth coming and challenging branch in Physics i.e., Material Science, Nanoscience, applications of Nanomaterials are introduced and their applications are highlighted. Digital electronics, modulation and demodulation in Telecommunication and physics of TV and antenna are studies in detail.Different projects to design alternate energy sources, electronics devices to help in creating clean and green society are given to stake holders. |
| Project Work | There is a project for B.Sc. VIth semester for 100 marks (70 for External and 30 for internal) of any one of the optional subjects of their choice. |

DEPARTMENT OF CHEMISTRY

COURSE OUTCOMES

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| Course | Outcomes |
| B.Sc – I SemCHT-101 | **INORGANIC CHEMISTRY:** Students will learn about, Chemical bonding, Quantum mechanics, Periodic properties. **ORGANIC CHEMISTRY:** Gain the knowledge about the basic reaction and their mechanism along with hybridization of orbitals.**PHYSICAL CHEMISTRY:** learned basics in physical properties of gas, liquids and amorphous solids. |
| B.Sc – II SemCHT-201 | **INORGANIC CHEMISTRY:** In this semester, they will learn about,Valence bond theory, Some compounds of p-block elements.**ORGANIC CHEMISTRY:** Alkanes and cycloalkanes, Alkenes, Dienes and Alkynes, Nomenclature of benzene derivatives.**PHYSICAL CHEMISTRY:** The rate, order and molecularity of reaction and half life period. Second order reaction with examples. |
| B.Sc – III SemCHT-301 | **INORGANIC CHEMISTRY:** Introduction and definition, position in the periodic table, Lanthanides, Actinides.**ORGANIC CHEMISTRY:** Organic halogen compounds, Carboxylic acids and acid derivatives. **PHYSICAL CHEMISTRY:** Quantum mechanics, Thermodynamics, Limitations of first law of thermodynamics.  |
| B.Sc – IV SemCHT-401 | **INORGANIC CHEMISTRY:** Introduction, nomenclature of coordination compounds. Werner’s theory of complexes, experimental evidences in support of Werner’s theory.**ORGANIC CHEMISTRY:** Ethers: Definition, nomenclature, methods of preparation, Preparation of aldehydes and ketones by alcohols. **PHYSICAL CHEMISTRY:** Different types of solutions with examples, Statement and meaning of terms, Concept of vapor pressure.  |
| B.Sc – V SemCHT-501 | **INORGANIC CHEMISTRY:** Origin magnetic behavior, Magnetic properties of complexes, Electronic spectra of transition metal complexes.**ORGANIC CHEMISTRY:** Introduction and types of spectroscopic methods, advantages of spectroscopic methods, general principles of spectroscopy, basic components of spectrophotometer.**PHYSICAL CHEMISTRY:** Photochemical and thermochemical reactions, Dipolemoment, polarization, induced polarization, orientation polarization. |
| B.Sc – V SemCHT-502 | **INORGANIC CHEMISTRY:** Errors & evaluations, Solvent properties, classification of solvents, general properties, Nuclear chemistry.**ORGANIC CHEMISTRY:** Organic synthesis via Enolates, Introductio and classification, mechanism of osazone formation and Oils & fats.**PHYSICAL CHEMISTRY:** Electro chemistry, Revision of conduction in metals and electrolyte solutions, specific conductance, Ployner chemistry.  |
| B.Sc – VI SemCHT-601 | **INORGANIC CHEMISTRY:** Introduction about industrial chemistry, Environmetal chemistry and inorganic polymers. **ORGANIC CHEMISTRY:** Study of natural products-Alkaloids & Terpenes, Enzymes: Classification, characteristic properties of enzymes, Peptides and proteins. **PHYSICAL CHEMISTRY:** Spectroscopy,Electromagnetic radiations, regions of the spectrum, basic features of different spectrometers. Statement of Born-oppenheimer approximation, degree of freedom. |
| B.Sc – VI SemCHT-602 | **INORGANIC CHEMISTRY:** Oregano metallic chemistry, materials chemistry and Bioorganic chemistry.**ORGANIC CHEMISTRY:** Introduction about heterocyclic chemistry, food chemistry and medicinal chemistry.**PHYSICAL CHEMISTRY:** Electrolytic and Galvanic cells, Application of E.M.F measurements, Primary cell (dry cell), secondary cell (Ni-Cd cell), Fuel cells. Construction and working of hydrogen-oxygen fuel cell and its importance. |

DEPARTMENT OF MATHEMATICS

COURSE OUTCOMES

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| Course | Outcomes |
| B.Sc. – I SemesterAlgebra – 1.1Mathematical logic, Theory of equations, MatricesCalculus – 1.2  | Enables the students to students to learn about mathematical logic in the study of theoretical computer science, polynomials, and algebraic equations, applications of matrices and determinants to solve equations.Enables the students to learn about successive differentiation in the field of engineering, partial derivatives, total derivative in the field of geometry, applied mathematics |
| B.Sc.- II SemesterAlgebra – 2.1Abstract Algebra, Sequences and series of real numbersAdvanced Calculus – 2.2Differentiability, Integral calculus, line and multiple integrals and gamma and beta functions  | Enables the students to learn about the properties implied by the definitions of groups and rings, use the definitions of convergence as they apply to sequences, series and functions.Enables the students to compute limits, derivatives of algebraic, trigonometric, inverse trigonometric, exponential and logarithmic functions. |
| B.Sc.-III SemesterAlgebra – 3.1Linear algebra, Rings, Integral domains and fieldsDifferential Equations - 3.2Differential equation and Total Differential Equation | Enables the students to solve systems of linear equations, recognize the concepts of the terms span, linear independence, basis, and dimension and apply these concepts to various vector spaces and subspaces.It enables the students to solve differential equations of first order using graphical, numerical and analytical methods and solve and apply linear differential equations of second order. |
| B.Sc.-IV SemesterReal and Complex Analysis – 4.1Complex Analysis and Real AnalysisSpecial functions and PDE – I – 4.2Special Functions and Partial Differential Equations - I | Enables the students to apply the mean value theorems and the fundamental theorem of calculus to problems in the context of real analysis. To represent complex numbers algebraically and geometrically and to apply the concept of C-R equations.It enables the students to recognize the major classifications of PDEs and to be competent in solving linear PDEs using classical solution methods. |

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| B.Sc.- V Semester Integral transformsApplied Mathematics – 5.2 | Enables the students to recognize the different methods of finding Laplace transforms and Fourier transforms of different functions. They apply the knowledge of L.T, F.T in finding the solutions of differential equations, initial value problems and boundary value problems.It enables the students to learn about scalar and cross product of vectors in 2 and 3 dimensions represented as differential forms or tensors, the vector-valued functions of a real variable and their curves and intrinsic geometry. |
| B.Sc.-V SemesterOptional – IGraph Theory - I | Enables the students to model and solve real-world problems using graphs and trees, both quantitatively and qualitatively. |
| B.Sc.- VI SemesterTrigonometry, Topology and Fuzzy Sets – 6.1Numerical Analysis – 6.2 | Enables the students to define and illustrate the concept of topological spaces and continuous functions and to define connectedness and compactness and to illustrate the concepts of separation axioms.It enables the students to derive numerical methods of approximating the solution of problems of continuous mathematics. |
| B.Sc. VI SemesterOptional – IIGraph Theory - II | Enables the students to model and solve real-world problems using graphs and trees, both quantitatively and qualitatively. |
| Project Work |  There is a project for B.Sc. VIth semester for 100 marks (70 for External and 30 for internal) of any one of the optional subjects of their choice. |

DEPARTMENT OF BOTANY

COURSE OUTCOMES

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| Course | Outcomes |
| B.Sc- I Semester –Botany- Code 201Viruses, Bacteria, Cyan bacteria, Algae , Fungi and Lichens | Paper I Diversity in Vascular Plants1. Understand the diversity among Algae.
2. Understand the Biodiversity of Fungi
3. Know the Economic Importance of Algae and Fungi
 |
| B.Sc- II Semester –Botany- Bryophytes, Pteridophytes, Paleobotany and Gymnosperms. | Paper-II 1. Understand the morphological diversity of Bryophytes
2. Understand the economic importance of bryophytes
3. Understand the morphological diversity of Bryophytes, Ptevidophytes and Gymnosperms
 |
| B.Sc- III Semester –Botany- Histology, Anatomy , Embryology and Polynology | Paper-III1. Know various Tissue systems
2. Perform the techniques in Anatomy
3. Understand the scope and importance of Plant Anatomy
 |
| B.Sc- IV Semester –Botany- Plant Ecology and Environmental Biology | Paper- IV1. Know the scope and Importance of the discipline
2. Understand plant communities and Geological aelaptations in plants
3. Learn about consecution of biodiversity, Non- Conventional energy and pollution.
 |
| B.Sc- V Semester –Botany- Plant Morphology, Taxonomy and Economic Botany | Paper-V1. Understand the role of plants in Human Welfare.
2. Gain knowledge about various plants of economic use
3. Know importance of plants and plant products.
4. Understand the chemical contents of the plant products.
5. Know about the utility of plant resources.
 |
| B.Sc- VI Semester –Botany- Cell Biology and Cytogenetic | Paper- VI1. Gain knowledge about cell science
2. Understand cell wall plasma membrane, cell organelles and cell division.
3. Understand the process of synthesis of proteins and role of genetic code in polypeptide formation
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| B.Sc- VII Semester –Botany- Plant Breeding , Biotechnology and Plant Tissue culture | Paper- VII1. Understand the science of plant beading
2. To study the techniques of production of new supervisor crop verities
3. Understand the concept, principles and types of sterilization methods.
 |
| B.Sc- VIII Semester –BotanyPlant Physiology | Paper- VIII1. Know importance and scope of plant physiology2. Understand the process of photosynthesis in higher plants with particular emphasis on light and dark reactions Cz and Ca path ways.Learn about the movement of sap and absorption of water in plant body. |

DEPARTMENT OF ZOOLOGY

COURSE OUTCOMES

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| --- | --- |
| Course | Outcomes |
| B.Sc – I Sem Z-1 Biology of Non-Chordata | Students will learn about primitive creatures and other advanced invertebrate animals living in the nature along with their general characters, nomenclature, identification, significances and association with human beings. |
| B.Sc – II Sem Z-2Biology of Chordata & Comparative AnatomyIII Sem OEC- Taxonomy & Sericulture | In this course students will learn about the characters of higher animals including human beings and their interactions with others. In comparative anatomy they compare the different systems in different animals and it helps them to understand the evolutionary significances, similarities, dissimilarities and advancement of organisms from lower level to higher level. In this open elective course students will learn about biosystematics and also about different taxonomic categories that helps them to identify the organisms easily. In sericulture they will understand about the rearing of silk moth and also about culturing of mulberry trees, which enables them to get self employed and to earn good money.  |
| B.Sc – III Sem Z-3Economic Zoology & HistologyOEC – Medical Zoology & Parasitology | In economic zoology subject all units are directly related to economical aspects of the human welfare and make the students to develop their own farms like Dairy, Poultry, Sericulture, Apiculture & Aquaculture. Apart from that histology portion teaches the structure and nature of tissues of organisms including human beings which helps in studying pathological aspects of human diseases and are eligible to work in clinical laboratories.In Medical Zoology paper students will try to learn about the various diseases and their causative organisms, symptoms of the diseases and their preventive measures. By acquiring basic knowledge about these diseases they will be in a position to be aware of them. So it helps in the maintenance of the healthy society. Parasitology paper reveals about the effects of pathogens and their vectors which affects both plants and animals. |

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| B.Sc – IV Sem Z-4 Physiology & Bio-ChemistryOEC – Dairy Farming | These two parts of the paper are highly essential to understand the body systems, their mechanisms and metabolic activities of the human body. Bio-Chemistry part deals with the chemical composition of cells, tissues, organs and systems, interaction of chemical substances, importance of these as nutrients in providing energy, build up of body mass, strength etc. The knowledge acquired in these units help the students to get ability to work in medical field, pharmaceutical field, clinical laboratory field as scientists, experts and many more. Dairy farming is the most common occupation of villagers in India. By studying cattle rearing based on the scientific methods and marketing of milk and its byproducts, one can lead his life comfortably even by providing job opportunities to others. This is the most reliable and affordable self employment. |
| B.Sc – V Sem Z-5.1Cell Biology & Developmental Biology  | This paper makes the students to enrich the knowledge in Life Sciences especially about the fundamental, functional & structural unit of life i.e., cell. The second part of this paper Developmental biology gives thorough information about the development and continuation of organisms including human beings. |
| B.Sc –V Sem Z-5.2Environmental Biology & Wildlife ZoologyOEC – Poultry & Apiculture | This paper enables the students to understand our habitats, ecosystems, natural resources, pollutions, anthropogenic pressure on nature, ecological imbalances, causes and solutions of all these and life of wild animals, threats to wild animals, conservation, climate changes, green house effect etc. The knowledge of all these aspect in present days is highly essential for conservation of nature & wild animals and sustainable development.Poultry is the rearing of fouls and Apiculture is rearing of honeybees are the most suitable self employment job opportunities for rural students. By studying and applying scientific knowledge in these fields students can earn attractive amount and also solve unemployment upto some extent by providing jobs to others. All these OEC papers prescribed in the zoology subject are providing abundant knowledge to develop self employment and job opportunities, ultimately for the welfare of human beings. |

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| B.Sc – VI Sem Z-6.1Genetics & BiotechnologyB.Sc – VI Sem Z-6.2 Ethology & Evolution | Modern and advanced knowledge of the biology will be obtained by studying this paper. Students will get the information about the genes, gene structure, inheritance, gene regulation in protein synthesis, abnormalities of genes and genetic disorders etc. Genetics is emerged as most potential subject in biology by dealing with genes and their inheritance.Biotechnology is a multidisciplinary subject which employsmodern technology in dealing of genes & their manipulations in various fields. As a result of which most essential products like human insulin, Bt cotton, Golden rice, hormone production, synthesis of desired proteins & enzymes and other products for the welfare of human beings at lower cost.Ethology is recently bifurcated branch of the biology which deals with behavior of organisms. By learning the ethology students will come to know the life activities, nature, mental status etc which help the animals in better survival, identification of its own species and mates, escaping from predators , finding preys etc. To understand the successful survival, adaptation and continuation of living beings, on this planet earth from generation to generation can be possible by studying this paper. Evolution paper makes the students to enrich their knowledge in origin of life on the planet earth and evolutionary history of life from single cell to present day advanced plants & animals with the help of their fossil remains.By the end of this course student will gain utmost knowledge about the living organisms and ability to lead life on his own by developing skills in various fields of life. |

DEPARTMENT OF BIO.TECHNOLOGY

COURSE OUTCOMES

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| Course | Outcomes |
| **I Semester****BT: 1.1****Cell biology & Genetics** | * This course will focus on different attributes of living cells ultra structure and function, how cells interact along with the cell adhesion and cellular signaling.
* Specific knowledge will be imparted about role of cell division and its regulation on diseases like cancer.
* After completing the course on genetics complete knowledge as how genes are transmitted in plants and animals from one generation to another will be imparted. Along with this, the course will highlight the role of genetics / mutations in animal and plant breeding.
 |
| **II Semester****BT: 2.1****Biochemistry & biophysics** | * Students will be imparted complete knowledge about structure and function of different biomolecules (proteins, lipids, nucleic acids, and carbohydrates) found in living cells.
* Also the course will provide the knowledge how biomolecules are synthesized and metabolized inside living cells.
* Students will also get knowledge about acids, bases& buffer as well the biophysical techniques like Centrifugation, Chromatography and Electrophoresis.
 |
| **III Semester****BT: 3.1****Molecular Biology** | * Course on molecular Biology will enhance the knowledge base about structural organization, structure, synthesis and replication of nucleic acids, its types and fine structure of gene.
* The course also aims at understanding the structure and types of IS elements.
* It will also provide the knowledge of gene function like DNA replication, Transcription, Translation and to gene regulation mechanisms
 |
| **IV Semester****BT: 4.1****Microbiology** | * Course will provide sound knowledge about different types of microscopes structure and functions
* This course will aid students to acquire skills and competency in microbiological laboratory practices applicable to microbiological research or clinical methods, including accurately reporting observations and analysis.
* Students will gain awareness about the pathogenic microbes and their diseases, symptoms and control measures.
* Course will provide practical knowledge about different types of bacteria, virus and fungi found in environment and the
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| **V Semester****BT: 5.1****Immunology** | * The course will provide technical knowledge as to how different diseases are caused and various responses mediated by living cells to combat pathogen attack.
* The course will provide sound knowledge of how immune system deals with various pathogens, different processes and cell types involved in prevention of disease.
* Along with this the students will become aware about concept, synthesis and action mechanism of vaccines.
 |
| **V Semester****BT: 5.2****Recombinant DNA Technology** | * Learning outcomes of this course are providing fundamental knowledge about basic tools of recombinant DNA technology.
* An understanding on application of genetic engineering techniques in basic and applied experimental biology and proficiency in designing and conducting experiments involving genetic manipulation.
* The course will provide techniques involved in production of transgenic plants and animals and their pros and cons and also DNA Sequencing mechanisms.
 |
| **VI Semester****BT: 6.1****Agriculture & Environmental Biotechnology** | * The student will acquire knowledge about the range of approaches to manipulate and improve plants. Students will demonstrate the ability to develop, interpret, and critically evaluate modern approaches to scientific investigation in field of agriculture.
* Course will have a specific focus on bioremediation and treatment of polluted effluent.
* Learning outcome of Environment Biotechnology is to describe existing and emerging technologies that are important in the area of environment and the principles and techniques which underline the application of biosciences, address environmental issues including pollution, mineral resource, renewable energy and water recycling.
* The course will also provide information as how to develop and use biofertilizers in agriculture along with utilization of microbes.
 |
| **VI Semester****BT: 6.2****Plant** **& Animal cell culture** | * Cell and tissue culture remains to be one of the most prominent fields of biotechnology.
* The course will provide complete exposure as how plant and animal cells are isolated, cultured and genetically manipulated in laboratory.
* Also the course will provide information cell suspension cultures can be utilized for molecular farming for commercially synthesizing products such as vaccines, hormones, proteins, enzymes, etc.
* The course also aims at understanding of Human Genome Project and its implications.
 |

DEPARTMENT OF STATISTICS

COURSE OUTCOMES

|  |  |
| --- | --- |
| Course | Outcomes |
| B.Sc.-I SemesterSTAT 101: PAPER 1Descriptive statistics | To acquaint students with some basic concepts in statistics, totabulate statistical information, use graphical techniques, applystatistics in various field. |
| B.Sc.-II SemesterSTAT 201:PAPER 2Probability theory andcorrelation andregression analysis | To introduce the students the concept of probability, axiomatictheory of probability. Concept of random variable, probabilitydistribution( unvariet and bivariate), to acquire the knowledge of correlation and regression analysis, to distinguish between random and non random experiments |
| B.Sc.-III SemesterSTAT 301:PAPER 3Probabilitydistribution and C-language | To acquaint students with probability distribution, students areaware of well known discrete, continues probability distribution, to apply the C- language program in statistics field. |
| B.SC.-IV SemesterSTAT 401:PAPER 4Statistical inference | Enables the students with various test, this course will to solve the testing problems in real life situations. |
| B.SC.- V SemesterSTAT 501:PAPER 5Small &Large sampletest and SQC | To apply mathematical concepts and principals to performnumerical symbolic computations, write clear and prices proot, to understand the basic concept of quality maintenance. |
| B.Sc.-V SemesterSTAT 502:PAPER 6Design of samplesurvey and design ofexperiments. | This subject provides students with the knowledge to use statistics in experiments, analyze the results from such investigations to obtain conclusions. |
| B.SC.- VI SemesterSTAT 601: PAPER 7Multiple CorrelationRegression and Applied Statistics | Understand the concept of analyze multiple correlation to predict the data, method of solving system; linear equation. |
| B.Sc. VI SemesterSTAT 602: PAPER 8Operations research | To enables the linear programming networks flow problems,understand how to model and solve problems using modelDynamics of programming linear optical conditions. |
| Project Work | There is a project for B.Sc. VIth  semester for 100 marks (70 forExternal and 30 for internal) of any one of the optional subjects of their choice. |

## V.V.Sangha’s

Veerashaiva College, Ballari – 583104.

## (Affiliated to Vijayanagara Sri Krishnadevaraya University, Ballari)

**Bachelor Computer Applications and Bachelor of Computer Science**

**Course Module:**

# About the course: Academic Aims

To give experience of undertaking a significant individual design and development exercise from conception through to design, implementation and delivery.

The students can study different area subjects apart from computer science and applications papers like , Indian constitution ,Environment studies ,sociology , History ,Optional English , Regional languages etc.,

## Learning Outcomes:

What types of computer specialists may be produced?

Developing countries, in common with those where the use of computers has reached a higher level, need people with specific knowledge and skills. It is possible to make a broad distinction between those who provide and maintain computer systems but are not directly concerned with their use, and those who actually use computer systems. In the user group, one can also distinguish between those who specialize in data processing, which may be in a scientific, administrative, industrial or commercial environment, and those working in the area of information systems, again in differing contexts.

With these practical distinctions in mind, a more detailed classification is the following: System programmers, with special knowledge and the ability to develop the software required to make computer systems effective in relation to operating systems, compilers, interpreters,

communications software and networking. Applications programmers, with knowledge of specific fields of application and of data-processing techniques, and the ability to construct substantial programs and packaged software for users.

The successful student will be experienced and empowered in undertaking significant academic work in a self disciplined, organized, and professional manner from conception to documentation.

## Specific Programme Outcome:

The focus of the program is on preparing graduates for software development careers that emphasize mathematical, scientific, and engineering applications.

The program also prepares students for their careers by emphasizing communication,

teamwork, ethics, and by examining the local, global, and societal impacts of innovation and technological advancement. At the time of graduation, all students will:

1. Possess a strong foundation in the software development process;
2. be able to solve problems using a variety of programming languages and have extensive experience with at least one high-level language;
3. Have a background in computer hardware and experience with a variety of operating systems;
4. Possess an extensive background in mathematics and an appreciation of the scientific method;
5. Have an understanding of the theoretical foundations of computing;
6. Have developed effective communication skills and have experience working with teams;
7. Possess an understanding of professional, ethical, legal, security and social issues and

 responsibilities.

DEPARTMENT OF BACHELOR OF COMPUTER APPLICATIONS (BCA)

COURSE OUTCOMES

|  |  |
| --- | --- |
| Course | Outcomes |
| BCA I Sem : Computer applications & Programming | Students learn basic computer applications & programming . which helps to learn basic idea and design their own documents for academic purpose |
| B.Sc (CS) I Sem : Computers Fundamental | Students learn basic computer applications and its usage in different platform. so later they can work for documentation about the academic syllabus. |
| BCA II Sem : DBMS and OOPS | Students going to learn database concepts and OOPs. After competition of this syllabus students can create database for any runtime applications. |
| B.Sc(CS) II Sem : Office Automation | Students can understand the skills of making automation work for different default basic applications. |
| BCA III Sem: Computer Applications, data structure and operating system | Learning about different OS platform and data relationships. Once if they come out from this subject students will gain knowledge of data relationships in memory management. |
| B.Sc(CS) III Sem :OOPs with C++ | OOPS concepts which increases real world entity relationships to build real time applications from users or students. |
| BCA IV Sem : DWDM,VB,E-Commerce | Interface designing numerical methods, runtime business and data storage learning. Basic things for database design interface for runtime applications . students will learn online business mechanisms. |
| B.Sc(CS) IV Sem : Data Structure | Students can gain knowledge of how data related each other for run time applications. One of the critical issues in information technology about data. By reading this subject students can gain knowledge of data relationships in memory management. |
| BCA V Sem : SE,CN,AI,Java,CG | A core subject includes designing, creating attractive interfaces. Students will come up with programming skill to design runtime applications. |
| B.Sc(CS) V Sem : DBMS, VB | Database linking and interface designing . this subject gives clear understanding on designing of general purpose software creations. |
| BCA VI Sem :IP,SP,MM,C #,,Unix, WT | Web applications and deploying mechanism. Final stage of students can come out with standard software design mechanisms . Students can design core code for specific purpose software. |
| B.Sc(CS) VI Sem: CG JAVA | Methods of creating graphics and OOPS concepts by learning this subjects students can gain interface designing and runtime software creation which helps in any user service oriented sectors. |

V.V. Sangha’s

VEERASHAIVA COLEGE, BALLARI

 **(Affiliated to Vijayanagara Sri Krishnadevaraya University, Ballari)**

**Master of Science (M.Sc.)**

**Courses Offered:**

The students shall opt any one of the subject given below. Each Subject has 4 Theory Papers and 2 Practical for each semester

**Subjects:**

1. **M.Sc. in Physics [Solid State Physics as Specialization]**
2. M.Sc. in Chemistry [General Chemistry as Specialization]
3. M.Sc. in Zoology [ ]

 **Programme Outcome**

The Students pursuing their Master’s Degree in Science have wide opportunities to do higher studies such as M.Phil., PhD [Research] in any one of the above listed subjects. Later they can become scientists by continuing their research in Universities and R & D wings of related industries and organizations like DRDO, ISRO, BARC, IISc, NCBS, ICAR, TIFR, etc. Life Science students also find opportunities in Food Industries as quality control officers, Technicians, Experts etc. One more potential area which provides excellent job opportunities with handsome salary is R & D wing and marketing field of Pharmaceutical Industry. Bio-Tech industries also provide some opportunities on par with Pharmaceutical industries.

In addition to all these opportunities in the field of science, they can also appear for UPSC, KPSC, KEA, BSRB, SSC, RRB and other Competitive Examinations.

**Specific Programme Outcome**

At the end of the course, the programme enables the students to acquire sufficient theoretical knowledge, instrumental skills and practical experience in using devices, instruments, and machineries and to work in research laboratories. This programme helps the student to get jobs in both Government and Private organizations and industries. This programme also helps the students to realize and take up the responsibility to take innovative steps to meet the energy needs of the eco-friendly society. Soon after the completion of M.Sc. in physics, they can strive to get entry in to organizations like DRDO, ISRO, BARC, IISc, NCBS, ICAR, TIFR by taking entrance exams conducted by respective organizations.

DEPARTMENT OF POST GRADUATE STUDIES IN PHYSICS

|  |  |
| --- | --- |
| Course | Outcomes |
| **M.Sc. – I Semester**PH HCT110: Mathematical Physics IPH HCT120: Quantum Mechanics 1PH HCT130: Atomic, Molecular and Optical PhysicsPH HCT140: ElectronicsPH HCP 150: Electronics LabPH HCP 160: General and Computational Lab | An understanding and solving of differential equation is exercised thoroughly with various methods, like special functions, Fourier Series, integral transform, matrices, tensors which enables the students to solve any analytical treatment, also the students learn HTML learning of Fortran Language. And a detailed study of Fundamentals of Quantum Mechanics and Electronics, Atomic, Molecular and Optical Physics  |
| **M.Sc. – II Semester**PH HCT 210: Mathematical Physics IIPH HCT 220: Quantum Mechanics IIPH SCT 230: Elements of Solid State PhysicsPH SCT 240: Nuclear PhysicsPH OET 251: General PhysicsPH HCP 260: Practical IIIPH HCP 270: Practical IV  | Advanced Mathematical Physics, Quantum Mechanics are explored together with Elements of Solid State Physics, Nuclear Physics. This study enables the students to develop skills for fabrication of electronic devices and to know nuclear instruments. The student is given an opportunity to apt General Physics as Open Elective Subject in which optics, electricity and magnetism, atomic and nuclear physics are studied. |
| **M.Sc. – III Semester**PH HCT 310: Classical MechanicsPH HCT 320: Electrodynamics and Plasma PhysicsPH SCT 330: Solid State Physics IPH SCT 340: Solid State Physics IIPH OET 351: Energy SciencePH HCP 350: Practical V-Solid State Physics IPH HCP 360: Practical VI-Solid State Physics II  | The student specializes in Solid State Physics, essentials of advanced electronics and its devices. Also, a detailed study of Classical Mechanics, Electrodynamics is reviewed to understand space and energy. An introduction to plasma Physics and its production is given.The student is given an opportunity to apt Energy Science in which non-conventional sources of energy, Bio-fuel, Hydrogen as fuel and to develop skills to manufacture energy in large scale. |
| **M.Sc. – IV Semester**PH HCT 410: Statistical MechanicsPH HCT 420: Analytical Techniques and InstrumentationPH SCT 430: Solid State Physics IIIPH SCT 440: Solid State Physics IVPH PROJECT: 200 Marks  | The specialized study in Solid State Physics is enhanced together with a detailed studies in Statistical Mechanics is done. The student is made to develop analytical techniques to design devices and instruments.Student is made to work on unique project to enhance the practical knowledge of the relevant topics. |

DEPARTMENT OF POST GRADUATE STUDIES IN CHEMSITRY

**COURSE OUTCOMES**

**SEMESTER 1**

**CHI HCT: 1.1 -Concepts and Models of Inorganic Chemistry**

**Outcomes:**

* To know the structure and bonding in molecules / ions and predict the structure of molecules / ions.
* To learn the periodic properties of the different groups of compounds focusing on production methods and application of selected elements and compounds.
* To know the different definitions of acids / bases and predict the reactions between acids and bases.
* To learn the selected crystal structures and to explain what kind of parameters that affects the crystal structure of a compound.
* To be able to describe the stability of metal complexes by the use of formation constants and to calculate thermodynamic parameters from them.
* To be able to name coordination compounds and to be able to draw the structure based on it's name.

**CHO HCT: 1.2- Theoretical Organic Chemistry**

* To understand the basic concepts and mechanism in organic chemistry.
* To know stereochemistry and various possible conformations of organic compounds and how it affects the reaction outcome.
* To learn the stereochemistry substitution and aromaticity.
* To identify the stereochemical notation.
* To be able to recognize the types of isomers in geometric isomers.
* To get an idea about the various kinetic and thermodynamic factors which control the organic reactions.
* To familiarize the various types of aromatic substitution reaction and their Mechanism.

**CHP HCT: 1.3- Chemical Thermodynamics and Chemical Kinetics**

* To know the basic concepts in classical thermodynamics and to learn the thermodynamic aspects of various processes and reactions
* To understand the different aspects of statistical thermodynamics and its applications.
* To understand the Maxwell’s relationships, spontaneity, equlibria-Temperature, pressure dependence of thermodynamic quantities
* To study the concept of thermodynamic probability
* To learn the Maxwell – Boltzmann, Fermi – Dirac and Bohr’s Einstein statistics Comparison and applicationsTo know about the Partition functions
* To know the detail study of Simultaneous reaction

**CSA SCT: 1.4- Analytical Chemistry – I**

* To know the Limitations of analytical methods, classifications of errors, accuracy, precision, minimization of errors, significant figures and computations, mean and standard deviation.
* To understand the practical and theoretical application of Titrimetic and Gravimetric analysis.
* To know the Principle, distribution law, choice of solvents for extraction, synergic extraction, techniques-batch, continuous and multiple extractions and applications.

**SEMESTER 2**

**CHI HCT: 2.1- Coordination Chemistry.**

* To know the structure and bonding of important coordination compounds
* To understand the magnetic properties of complexes and to know how magnetic moments can be employed for the interpretation of their structure
* To get an overview about the stereochemistry of coordination compounds

**CHO HCT: 2.2- Heterocyclic Chemistry, Natural Products Reagents in Organic Synthesis.**

* To understand the IUPAC nomenclature of heterocyclic ring systems (3-7 memberd rings and simple fused systems)
* To know the methods of synthesis, electorphilic and nucleophilic substitutions reactions of pyrrole, furon, thiophene, pyridine ring systems. Compression of basecity of pyridine, piperidine and pyrrole.
* To get an overview chemistry of Natural Products Alkaloids Terpenoids and steroids.
* Carbohydrates, Proteins and Nucleic acids.
* To understand the reagents in organic synthesis, applications of reagents in organic synthesis and functional group transformation

**CHP HCT: 2.3- Electro-, Quantum- and Photochemistry.**

* To understand the basic and application of Electrochemistry.
* To know the methods and applications Debye-Huckel theory of strong electrolytes, Debye Huckel – Onsager equation.
* To understand the basic Introduction, reversible and irreversible electrodes. Polarization, Ohmic overvoltage, concentration overvoltage, activation overvoltage.
* To known the basic and application of Quantum Mechanics in chemistry.
* To get brief about, Wave function, particle duality of material particles, de Broglie equation, Heisenberg uncertainty principle. Concept of operators (operator – operand), algebra of operators.

**CSA-SCT 2.4- Analytical Chemistry-II.**

* To understand the basic Introduction about Group Theory and Symmetry,
* To known about Symmetry elements & Symmetry operations, groups and their applications.
* To get brief about, Electromagnetic radiation and its applications.
* To known about spectroscopy and basics, application of UV-Visible Spectroscopy.
* To known basic about, Flame Photometry and Atomic Absorption Spectrometry, atomic Emission Spectrometry and Inductively Coupled Plasma, nephelometry and Turbidometry.

**SEMESTER 3**

**CHS HCT: 3.1- Spectroscopy – I**

* To get brief about, the rotation of molecules.
* To known basic and application about, Vibrating diatomic molecule.
* To known basic and application about, Raman Spectroscopy.
* To get brief about, Infra Red Spectroscopy, Introduction – Molecular vibrations – Mode of Vibrations, calculation of vibrational frequencies, instrumentation-– FT – IR Spectrometer.
* To known basic and application about, HNMR Spectroscopy, Introduction – Nuclear spin and magnetic moment, origin of NMR spectra
* To understand the basic and application of X-Ray Diffraction, X-Ray diffraction, Bragg's laws, Miller indices laws.

**CHI HCT: 3.2 NUCLEAR CHEMISTRY AND MATERIALS SCIENCE**

* To known basic and application about, nuclear chemistry
* To get brief about, Induced radioactivity, nuclear fission, fusion.
* To understand and basic and application about, materials science, Atomic packing in crystals.
* To known about, Electronic Properties and Band Theory applications.

**CHP HCT: 3.3 Advanced Physical Chemistry**

* To known about, Statistical Thermodynamics, Concepts of distribution, thermodynamic probability and most probable distribution.
* Brief resume of concepts of laws of thermodynamics.
* To known about, Application of variation theorem Quantum Mechanics.
* To understand and basic and application about, Solid State Chemistry, Bonding and conductivity, mechanism.

**CSE SCT: 3.5 ENVIRONMENTAL AND BIOCHEMICAL ANALYSIS**

* To known about, Application of Environmental Segments, Air Pollution and Soil Pollution
* To understand and basic and Classification of pollutants and their characteristics, sources, prevention and control.
* To known about, Hydrologic cycle, sources, criteria and standards of water quality.
* To understand and basic and application about of Physical and chemical properties of soils.

**OET SCT: 3.1-Analytical and Organic Chemistry**

* To understand Principles of Chromatography.
* To known about, Introduction, classification of organic compounds, Gas Liquid Chromatography.
* To known about, Principles, apparatus, preparations of plates HPLC Principles.
* To known about, Principles, apparatus, preparations of Thin Layer Chromatography.
* To get the Introduction, classification of organic compounds.

**SEMESTER 4**

**CHO HCT – 4.1- ADVANCED ORGANIC CHEMISTRY**

* To be able to known the Introduction, classification, sterols, hormones, androgens, oestrogens.
* To be able to understand the Synthesis and therapeutic applications of non-steroidal hormones.
* To become familiar with Classification, terminology and principle of stereoselectivity, Strategy of stereoselective synthesis.
* To be able to describe the Catalytic hydrogenation, alkylation, stereoselective formation of double bond.
* To known the Interaction of electromagnetic radiation with matter, types of excitations, Jablonski diagram, fate of excited molecule, quantum yield, transfer of excited energy.
* To be able to understand the, Photochemistry and Rearrangement in Heterocycles.

**CHI HCT: 4.2 ADVANCED INORGANIC CHEMISTRY**

* To known the interaction of metal Ions in Biological Systems.
* To be able to describe the metal deficiency chelation therapy and metal complexes as drugs.
* To known about the Chlorophyll and its role in photosynthesis, transport and storage of dioxygen.
* To be able to understand the, Fundamental reactions, Organometallic Reaction mechanisms and catalysis.
* To learn the Inorganic pigments, molecular materials and fullerides.

**CHS HCT: 4.3 SPECTROSCOPY AND CHROMATOGRAPHY**

* To known about the principle, apparatus-columns, sample application, mobile phase, stationary phase, detectors, applications
* To known the Introduction and Basic theory about Mass Spectroscopy, types of ions – molecular ion, fragment ion, meta stable ion, base peak, factors affecting fragmentation, intensity of M+ peaks.
* To be able to describe the Principles of Fluorescence, Phosphorescence, and Chemiluminescence.

**CSP SCT: 4.4 POLYMER SCIENCE AND TECHNOLOGY**

* To known about the, Basic Concepts of polymers and Classification of polymers.
* To become familiar with Polymerization conditions and polymer reactions. Polymerization in homogenous and heterogeneous systems, Polymerization Techniques.
* To learn the, analysis and testing of polymers-chemical analysis of polymers,
* To known about the, Polymer structure and physical properties-crystalline melting poit Tm-melting points of homogenous series.
* To known about the, Chemical and physical properties of commercial polymers.
* To be able to understand the, Biomedical polymers: contact lens, dental polymers, artificial heart, kidney skin and blood cells.

**CHI HCP-4.7 PROJECT WORK/THESIS/DISSERTATION**

* Project work / Thesis / Dissertation shall be carried out under the supervisionof a qualified teacher in the concerned Department.
* A student may however, in certain cases, be permitted to work for the projectin an Industrial/Research Organization, on the recommendation of the Head of the Department. In such cases, the project work shall be jointly supervised by a faculty of the Department and an Engineer / Scientist from the organization and the student shall be instructed to meet the faculty periodically and to attend the review committee meetings for evaluating the progress.
* The Project Report/Thesis / Dissertation report / Drawings preparedaccording to approved guidelines and duly signed by the supervisor(s) and the Head of the Department shall be submitted to the concerned department.
* The deadline for submission of final Project Report / Thesis / Dissertation iswithin 30 calendar days from the last working day of the semester in which Project / Thesis / Dissertation is done.
* If a student fails to submit the Project Report / Thesis / Dissertation on orbefore the specified deadline he / she is deemed to have not completed the Project Work / Thesis / dissertation and shall re-register the same in a subsequent semester.
* A student who has acquired the minimum number of total credits prescribedin the Curriculum for the award of Masters Degree will not be permitted to enroll for more courses to improve his/her cumulative grade point average (CGPA).

DEPARTMENT OF POST GRADUATE STUDIES IN ZOOOGY

|  |  |  |
| --- | --- | --- |
| Course Code  | Paper  |  |
| ZOT-HCT 1.1 | **Animal systematics**  | * In this paper, students will learn about the principles of taxonomy, Species concepts, Procedure of collections, preservation, enrating, cataloging, and identification, Phylogenetic interrelationship various invertebrates.
* Upon completion of this paper, student will able understand the animals, their inter relationship and integration in their ecosystem. Student also able identify animals, classify them based on their salient features.
 |
| ZOT-HCT 1.2 | **Biology of non-chordates**  | * The main concepts of this paper are types of locomotion and locomotors organs, Food and feeding habits of non-chordates, the animal respiration and excretion, organs system for respiration and excretion and mechanism and nervous system and reproduction systems in some the primitive animals advanced animals.
* Upon completion of this paper, students are able to understand the certain physiological aspects like locomotion, excretion, nervous system and reproduction in non-chordates.
* Students will be able perform hands-on practice on certain physiological features of animals.
 |
| ZOT-HCT- 1.3  | **Cell and molecular biology** | * In this paper, students will learn about the cells and their organelle, Molecular organization and functions aspects of orgnaelles,
* Molecular events during different stages of cell cycle, organic complexes of cells, Semi conservation of double stranded DNA, Genetic transposition. Immunology as a tool in biology and medicine.
* At the end of this paper, students are able identify animal and plant cells and their composition, extraction of DNA, RNA and other aspects of the cells.
* Upon completion of this paper students are able conduct experiments related to cells and their components.
 |
| ZOT-HCT- 1.4  | **Aquatic biology**  | * This paper comprises aquatic biology, physicochemical and biological parameters of freshwater and marine water, tropic condition and aquatic environment, interrelation of abiotic and biotic components of water body, energy flow etc.
* Upon completion, students are able to differentiate all aquatic animals respect to their habitat and feeding system.
* Student are able to estimate some physic- chemical parameters like pH, Turbidity, EC, Chloride, Alkalinity, DO, CO2 Hardness of water
 |
| **ZOT: HCT-2.1** | **Biology of chordates** | * In this paper students will study theOrigin of chordate in the light of recent theories, life cycle of some protochordates and significance. Fishes and diversity, Breeding behaviour and parental care of living Amphibia, Extinct reptiles, Adaptive radiation in living reptiles, Poisonous and non-poisonous snakes in India.
* Further flight adaptations and mechanism, breeding behaviour will be covered. In mammals origin and evolution, Adaptive radiation in Marsupials. Diversity and evolution will be covered.
* In the end the study students will be in a position to understand the animals under chordate, their diversity and distribution, and adaptive radiations. Students will also able to identify the species based on their salient feature
 |
| **ZOT: HCT-2.2-** | **Developmental biology**  | * In this paper students will learn about Developmental Biology, Anatomical, and Experimental approach to Developmental biology, cloning in mammals and the Stem cell research and regenerative medicine.
* They also learn about early development, biochemical and physiological gradients.
* Upon completion of this paper students take up the experimental work on certain lower grade organism with respect to reproduction.
 |
| **ZOT: SCT-2.3**  | **- Wildlife biology and conservation**  | * In this paper, student will learn about the historical accounts on wild life conservation, its importance, natural resources, distribution of animals in several biogeographic regions of India and their biology.
* They also learn about India-Project Tiger, Project Gir Lion, Project hangul, musk deer project, Manipur Deer project, Project Elephant, Crocodile Breeding Project, Great Indian Bustard project. Wildlife legislations and Wildlife Act, 1972.
* Upon completion of this paper students can able to understand the complete fauna and their distribution in different geographical region.
 |
| **ZOT: OET-2.1 -** | **Human physiology** | * In this paper students will learn about functions of different organs system in human, physiology of cardiac muscles, cardiac arrhythmias, ECG myocardial infarction and cardiac arrest, blood circulation, Nutrition and balanced diet and vitamins, transport of gases,
* Micturition and diuretics and Renal failure and dialysis.
* In completion, students can be aware of all the vital organs, their physiological functions, hormonal regulation, and cell integrity.
* Students can able to conduct several experiment related to human physiology.
 |
| **Paper : HCT-3.1-** | **Biology of reproduction 56 hours** | * In this paper students will learn about Sex differentiation and development of gonads, Biogenesis of gonadal hormones.
* Students also learn about Anatomy and physiology of male reproductive system..
* Upon completion of this paper student are able to understand the complete reproductive system including both male and female, students will be able prepare the models and demonstrate them
 |
| **ZOT : HCT-3.2-**  | **Animal physiology**  | * In this paper student will going to learn about theTransport of gases in animals, principle and physics involved in reparation, Body temperature in ‘cold blooded’ animals. Osmotic regulation and enzyme regulation, Muscle and movement, biomechanics, Neuronal circuits, and Genral principles of chemical senses.
* After completion of this paper student will be able explain physiological aspect of animals with demonstration tools and kits.
 |
| **ZOT : SCT-3.1** | **Environmental biology** | * In this paper student will going to learn about Environment, different spheres, Components of ecosystem, Energy flow in ecosystem, Biogeochemical cycles (N,C,P cycles).
* Student will also learn about renewable and non –renewable resources, utilization of land and water, and Environmental pollution, human health and Human rights.
* Upon completion of this paper student will be aware of environmental issues, protection of natural resources and regulation for protection.
 |
| **ZOT: HCT-4.1**  | **Biodiversity** | * In this paper students will study the values of biodiversity, consumptive use and productive use, hot spots of biodiversity and endemism and endemic species.
* Students also study the possible threats to biodiversity like overexploitation, pollution and biodiversity legislation, Role of Biotechnology in assessment of biodiversity and bioresources
* upon completion of this paper student can able understand disseminate the knowledge on biodiversity and its importance to the stakeholders
 |
| **ZOT: HCT-4.2**  | **Animal behaviour**  | * In this paper students will understand the basics of animal behaviour-brief history, Motivation and conflict behaviour, Stimuli and communication, Ecological aspects of behaviour and Courtship and ritual behaviour.
* Upon completion this paper student will have a thorough knowledge on animal behaviour and conflicts.
 |
| **ZOT: HCT-4.3**  | **Project** | * In this paper, studen6t will be taught how to chose the topic for research, searching literature, collection and sample and perseveration, data entry and computation etc.
* Upon leaning a brief on the above aspects, the students can choose the burning issues in zoology, select their research area and collect the literature pertaining to their research.
* Planning will be done to conduct their research either survey or wet lab experiments.
* Students can conduct experiments in order to get their research result and try to analyze their data.
* Student able to start writing theses and finally submit o the University for Evaluation.
 |
| **ZOT: SCT-4.4** | **Endocrinology**  | * In this paper student will learn about the evolution of endocrine function and concept of neuroendocrine system, mechanism of signal transduction, comparative morphology in vertebrates. Glands and their secretion, Hormones of the different origin and their metabolism.
 |

**V.V SANGHA’S , BALLARI.**

**VEERASHAIVA COLLEGE, BALLARI-583104**

**(Affiliated to vijayanagara sri Krishnadevaraya university, Ballari.)**

**Master of commerce (M.com)**

**Course module**

**Compulsory papers:**

1. **1st semester** :Organisation Behaviour, Market Structure & Analysis, Financial Management, Advanced Marketing Management, Accounting Standards & Corporate Reporting and Financial Markets & Institutions.
2. **2nd semester** :Banking System & Evaluation, Contemporary Issues In Accounting, Business Environment & Government Policy, Operations Research For Business Decisions, International Financial Reporting & Standards and Investment Management.
3. **3rd semester** :Business Research Methods, Strategic Management, Accounting For Managerial Decisions, Strategic Human Resources Management, Corporate Tax Planning & Management and Financial Derivatives.
4. **4th semester** :International Business, Business Ethics And Corporate Governance, Strategic Cost Management, Project Report, Corporate Tax Planning & Management-II And International Financial Management.
5. **OPEN ELECTIVE PAPERS**

Totally, there are 21 open elective papers. Of which the student shall study any three papers in II & III semesters according to their choices. Flexibility is provided to the students in choosing OEP.

Specialisations

1. Accounting and tax
2. Finance

**Programme outcome**

Master of Commerce is very vast and wide in handling many papers. The word Commerce itself a Gigantic word to imagine because number of subjects are tagged and linked to one another. The students who are pursuing their course have so many options in their career after completing this course. Now a day this program is in more demand due to ample of opportunities in future life and in building career.

* Impart the students with higher level knowledge and understanding of contemporary trends in commerce and business finance
* Equip the students to evaluate environmental factors that influence business operation with the conceptual requirements and skills on preparation and interpretation of financial statements
* Prepare the students to apply Statistical methods and proficient use of tools for modeling and analysis of business data
* Facilitate the students to apply capital budgeting techniques for investment decisions
* Prepare students to appraise the structure and operations of banking system
* Prepare the students for an in depth analysis of investment, portfolio management, investment banking and liquidation of investments
* Develop competency in the students about the laws and regulations, and roles of commercial, government and central banks in controlling money market and inflation
* Facilitate the students to analyse and frame micro financing schemes for rural banking
* Impart the students the concept of risk mitigation in financial sectors and their role in investment decisions of individuals and business enterprises
* Provide guidance to students to plan and undertake independent research in a chosen discipline
* Train the students on teamwork, lifelong learning and continuous professional development
* The students who have completed M.Com can move further in research work like M.phil & PhD.
* M.Com graduates can start a new venture.
* Student of this course can apply for various competitive exams like Banking and other UPSC, KPSC & SSC exams also to get settled in their career.
* These graduates have the opportunities in working at various local, National and international companies.
* M.Com students are gifted in grabbing the opportunity to get specialised in tax & finance courses on the competitions.
* Additional to this M.Com graduates are also welcome to do Law (LLB), Company Secretary (CS) & Charted Accountant (CA) for extra additional qualification.
* Teaching field also welcomes them soon after qualifying KSET/NET to serve as guest faculty/ Assistant Professor.
* Finally this course feels the graduate with Full fledged knowledge in the field of Commerce which are helpful for them in future which builds a beautiful career.

**Specific program outcome**

The aim of this Programme is to develop Commerce professionals with specialised skills and applied competencies in theoretical and practical knowledge of Accounting & Tax and Finance catering to the contemporary needs of industry and academia by providing student-centric learning ambience backed with critical thinking and problem solving capabilities.

The objective of this Programme is to provide a systematic and rigorous learning and exposure to Accounting & Tax and Finance related disciplines. The main objective of this Programme is to 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 Accounting & Tax Transactions of a business.

DEPARTMENT OF POST GRADUATE STUDIES IN COMMERCE

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| Course | Outcomes |
| M.Com -I semester | To remind the basics in economics, accountancy and familiarise the students with the principles of organisation behaviour, they learn different concepts and practices contributed by various authors. This helps them in studying the behaviour of employees in the organisation. Along with these papers students will gain practical knowledge in accounting concepts or financial markets & institutions which ever they opt as a specialisation. |
| M.Com-II semester | In order to enrich the student knowledge in field of accountancy the students will be learning contemporary issues in accounting and to gain the analytical skills of analyzing practical problems students are going to study operational research along with that IFRS & Invest Management will provide a essential knowledge in the field of corporate sector. |
| M.Com -III semester | This semester paper aims to provide knowledge in the field of research to solve the practical business problems , strategic human resource will provide the managing the human resource in the organisation with a new techniques and students will get knowledge in the field of financial statement analysis through the study of accounting for managerial decisions. |
| M.Com -IV semester | The students will be provided with the subjects relating to International business management helps in knowing India foreign trade and strategic cost management will helps students to gain knowledge in modern concepts in cost management and also the students are exposed to project work with reference to their specialization |