#### **DEPARTMENT OF KANNADA**

#### Modern Kannada poetry, Kannada short stories and travelogue

More sensitized perception of the world and self, enhances language skill.

Drama thalikattokkuline(Kailasam) Novel- Jugari Cross(Thejasvi) Napakachithra shale(DVG)

 Sensitization towards imbibing concern for the people around, to develop critical thinking.

Medivalkannada literature, Malenadinachithragalu(Kuvempu) and language component

• Students are made aware of the harsh social realities born out of the hierarchical Indian social system. These creative works are known for their very high aesthetic appeal.

Old kannada literature, anthagoly of vaicharikalekhangalu and language component.

To help the students to grow in human values and understand the rich tradition of kannada literature.

## **DEPARTMENT OF ENGLISH**

Department of English

Title of the Paper: "New Literatures in English"

Semester: VI sem

Programme: III B A, Optional English

No of hours: 6 hours

Programme outcome: This Elective paper introduces students to literature that has emerged from the postcolonial Australia, Canada, Africa, the Caribbean Islands and Singapore. The mix truly reflects the myriad

situations in both individual and political spheres. The poems, the play and novel often speak about the trauma

during the transition from one point of natural/cultural/political history to another. The students studying this

paper develop skills to annotate unforgettable lines from the poems and write cogently about the thought-

provoking Multi-layered problems that surface in the text.

Department of English..

Title of the Paper: Untouchable and Language Component.

Semester: III.

Programme: B.A/B.Sc/B.C.A.

Number of hours: 4hours.

Programme outcome:

This paper for undergraduate offered in B.A, B.Sc, B.C.A. In this semester students learn an

unbridged Indian novel "Untouchable" written in English in taught in the class. The novel form

contains a long narrative and reveals the working of a plot. The novel brings to the struggles and

successes of people, their flaws and their resourcefulness. The novelist Mulk Raj Anand describe a

day in the life of a sweeper. It is encloses working class people. Students are established their

enhancing knowledge through this paper. The language component teaches words to describe people

and their actions places and situations, trains students to find appropriate words and to write

meaningful sentences and paragraphs. Through language component students enhance the level of

understanding and the ability for expression.

Thus, these are the programme outcome for undergraduate programme in B.A/B.Sc/B.C.A.

Title of the paper: Victorian fiction Programme: II B.A (optional English)

Semester: IV sem No of hours: 6 hours

Programme outcome:- The students move on to significant age and study a new form of literature; the

Victorian age and the novel form. The three novels in this semester define the mores of the time. The first

novel is "Silas Marner" by George Eliot. In the early 19th century, a person's village or town was all important

providing the sole source of material and emotional support. "Hard Times" by Charles Dickens, suggests that

England's over zealous adoption of industrialization threatens to turn human beings into machines. The next

novel, "The Return of the Native" by Thomas Hardy, shows human actions being controlled by an impersonal

force, perhaps called destiny and fate, which is independent of both humanity and it's gods. The novelists

engage the question of morality,

Title of the Paper: Intellection - II

Semester: II

Programme: B.Com / B.B.A.

Number of hours: 3 hours + 1 hour Tutorial

Programme outcome:

This paper for undergraduate programs offered in Commerce and Business Administration. The students

who are now familiar with the two important forms of literature - poetry and prose - explore more in these

forms, which come with a slightly higher level of difficulty in this paper. The literary pieces here, in poetry

section, the poem "Ulysses" deals, the feeling about the need to go forward in life. The poem, "If" provide,

a rule book to perfect the art of living and be human. The poem "Questions from a Worker Who Reads"

reveals, boundless compassion for the working class. The poem "You Start Dying Slowly" reveals, us to be

grateful for what we have and also to maintain loving relationships with family and friends. In prose section,

"A Deed of Bravery", the story tells about the bravery of the unsung heroes ."Light is Like Water", this story

which depicts the 'real' and the 'fantastic' like normal occurrence in a straight forward manner. "A Lesson

My Father Taught Me", this story deals as a guiding principle in life. The five units of language component

addresses the importance of achieving clarity in speaking and writing.

Thus, these are the programme outcomes for undergraduate programs in Commerce and Business

Administration.

Title of the Paper: Intellection - I

Semester: I

Programme: B.Com / B.B.A.

Number of hours: 3 hours + 1 hour Tutorial

Programme out come:

This paper for undergraduate programs offered in Commerce and Business Administration. The paper

introduces some of the most delightful and instructive poems and prose pieces in English to the students

beginning their undergraduate course. The literary pieces here, in poetry section, the poem "Polonius Advice

to His Son", deals a Father's advice to a Son who is leaving for higher studies. The poem "Death, Be Not

Proud, familiarise the world of Death which is dreaded by humanity as the end of life. The poem "Barter"

gives us a sense that life is like a colourful market that offers many things. The poem "Partition", deals with

the border conflict between India and Pakistan. The poem "Ajamil and the Tigers", clearly shows how the

rulers sacrifices their people to maintain sovereignty. In prose section, the story "The Fir Tree" suggests that

everything will eventually slide by; that "all stories must come to an end at last". The story "The Romance of

a Busy Broker", reveals the busy financial world of stock market which compels a person to have complete

involvement in work that subsequently makes him to have no time for the fulfillment of his personal

needs. The story "Water - The Elixir of Life", brings out how water is indispensable to plant and human life.

The five units of language component that follow every lesson strengthen the student's English vocabulary

and understanding of English sentence structure.

Thus, these are the programme outcomes for undergraduate programs in Commerce and Business

Administration.

Title of the paper: Business Correspondence, Refund and Language Component.

Semester: IV.

Programme: B.com/B. B. A.

Numbers of hours: 3 hours+1 hour tutorial

Programme outcome: Customized for the students of these streams, the Paper explains the nature of business

Correspondence and teaches writing various kinds of business letters. The one act play conveys effectiveness

of the dialogue. The play Refund is full of humour which deals with an extraordinary ludicrous situation.

The language component here emphasizes on the transactional aspect of English language, in its

spoken as well as written form. The semester examination tests the student's business letter-writing ability,

grasp of the play and language skills.

Title of the Paper: Julius Caesar and Language Component

Semester: IV

Programme: B.Sc/B.A/B.C.A.

Programme Outcome:

This paper for undergraduate offered in IV semester B.A/ B.Sc/B.C.A.In this final paper of their language English, the students are introduced to a full length play "Julius Caesar" by William Shakespeare. The play unlocks the complex emotions, breathtaking actions and intriguing situations. The students experience the effect of dailogue, the brilliance of imagery and the magnificene of poetry. Students enhance their knowledge through the learning of literary terms which Shakespeare used in this play. Dramatic monologue, soliloguy, chorus, etc..are the important literary devices would helps students to increase their literary knowledge.

The Language component here emphasizes on the transactional aspect of English language, in its spoken as well as written form, comprehension questions, annotations and essay type questions in the examinations test the level of understanding and the ability for expression.

#### **DEPARTMENT OF PHYSICS**

| Programme        | 1.Develop, implement the plan of action to acquire new knowledge for          |  |
|------------------|---|--|
| Outcome          | specific scientific goals in pursuit of new intellectual interests            |  |
|                  | 2.Students should be able to critically assess current state of knowledge and |  |
|                  | expertise.  |  |
| Programme        | 1.Students are expected to acquire core knowledge in physics with special     |  |
| Specific Outcome | focus on mechanics, quantum mechanics, electromagnetic theory,                |  |
|                  | electronics, optics, special theory of relativity and Modern Physics          |  |
|                  | 2. Learn how to design and conduct experiments demonstrating their            |  |
|                  | understanding of the scientific methods and processes.                        |  |
|                  | 3. Realization of the impact of physics and science on society.               |  |
| Course Outcomes  |   |  |
| Courses          | Outcomes  |  |

| Mechanics,             | 1.To understand the motion of point mass, Conservation laws, gravitation,           |  |
|------------------------|---|--|
| ŕ                      | _   |  |
| •                      | rotational motion   |  |
| Matter and Sound       |   |  |
|                        | 3.Students should be able to solve complex and diverse problems in                  |  |
|                        | classical mechanics, properties of matter and sound.                                |  |
| Heat and               | 1.To understand the basic principle of the Laws of Thermodynamics, Role of          |  |
| Thermo Dynamics        | Thermodynamic Cycles.   |  |
|                        | 2.Explain the concepts of entropy, enthalpy, reversibility and irreversibility      |  |
|                        | 3.Apply the first and second laws of thermodynamics to various gas processes        |  |
|                        | and cycles, Maxwell's thermodynamic relations                                       |  |
| Optics                 | 1.To understand the basic concepts of wave optics, physical optics and              |  |
|                        | geometrical physics   |  |
|                        | 2.Learn to conduct the experiments demonstrating the understanding of               |  |
|                        | wave optics.  |  |
| Atomic Physics         | Study of Modern Physics in the fields of: interaction of matter, effect of electric |  |
| and Spectroscopy       | field and magnetic field, to learn the behavior of atoms/molecules in variou        |  |
|                        | energy states.  |  |
| Electronics            | 1.To acquire knowledge and apply it to various electronic instruments               |  |
|                        | 2.To motivate the students to apply the principles of electronics in their          |  |
|                        | day-to-day life.  |  |
|                        | 3.To learn the logic gates and to understand the action and application of          |  |
|                        | counters  |  |
| <b>Electricity</b> and | 1.To know the concepts of Electricity ,Gauss law, Faraday's Law,                    |  |
| Electromagnetism       | Inductance, Alternating Current Circuits, Direct Current Circuits, Network          |  |
|                        | Theorem   |  |
|                        | 2.To understand Electromagnetic theory and problem solving skills                   |  |
| Quantum                | 1.Develop the concepts of modern physics: basic knowledge of special                |  |
| Mechanics and          | theory of relativity and general theory of relativity, elementary quantum           |  |
| Relativity             | mechanics, nuclear physics, and particle physics                                    |  |
|                        | 2. Understand the relationship between observation and theory and their use         |  |
|                        | in building the basic concepts of modern physics.                                   |  |
|                        | 3. Understand how major concepts developed and changed over time.                   |  |
|                        | 4. Capable of analyzing and solving problems using oral and written                 |  |
|                        | reasoning skills based on the concepts of modern physics.                           |  |
|                        |   |  |

Solid state physics

1. Understand basic concepts and mathematical methods of solid state physics.

2. Obtaining the variables derived by problem solving method.

#### **DEPARTMENT OF CHEMISTRY**

Title of the paper: Chemistry - I

Bsc/semester : IBsc (Isem)

No of hours :

| Theory | practical |
|--------|-----------|
| 04     | 04        |

## **Course outcome:**

The objective of this course is to learn about inorganic chemistry, physical chemistry, general chemistry & practical chemistry.

The students are able to get knowledge about structure of atoms, electronic configuration of elements. classification of elements in periodic table & periodic properties .Basic concepts in organic chemistry, types of organic reactions. preparation ,properties & uses of Alkanes, Alkenes, alkynes & Dienes.Types of indicators ,liquid mixture, Fractional distillation, distribution law, Purification of compounds ,stoichiometry , importance of organic compounds in food, fuels, textiles, dyes,drugs etc. preparation of standard solution, standardisation of solution & estimation. (Acid-Base titration, redox titration)

Title of the paper: Chemistry – II

Bsc/semester : I Bsc ( II sem )

No of hours :

| Theory | practical |
|--------|-----------|
| 04     | 04        |

#### Course outcome:

The objective of this course is to learn about inorganic chemistry, physical chemistry, general chemistry & practical chemistry.

The students are able to get knowledge about, ionic bonding, covalent bonding, and molecular Orbital approach. Cycloalkanes , nomenclature of benzene derivatives. Aromatic electrophilic substituation ,hydrogenation of aromatic compounds. chemical kinetics, ionic equilibrium. Prepartion and synthetic application of organic reagents , polymers , organic reagents in inorganic analysis , manufacture of soap and detergents. Qualitative analysis of organic compounds. Preparation of certain organic compounds.

Title of the paper: Chemistry - III

Bsc/semester : II Bsc ( III sem )

No of hours :

| Theory | practical |
|--------|-----------|
| 04     | 04        |

Course outcome:

The objective of this course is to learn about inorganic chemistry, physical chemistry, general chemistry & practical chemistry.

The students are able to get knowledge about, chemistry of transition elements& inner transition elements their electronic configuration, magnetic properties, spectral properties, oxidation states organometallic compounds.-preperation & properties. Alcohols ,phenols, ethers, carbonyl compounds-classification ,synthesis second Law of thermodynamics, free energy ,crystallography,liquidcrystalsLaws,definitions,classifications,applications.

Chromatography-TLC, Column Chromatography, Gas Chromatography, HPLC-experimental details ,instrumentation& applications .Energy sources-Working of cells.Nanotechnology-properties ,types& applications. Amino acids synthesis classification , properties. (Qualitative analysis ,Inorganic preperations.)

Title of the paper: Chemistry - IV

Bsc/semester : II Bsc ( IV sem )

No of hours :

| Theory | practical |
|--------|-----------|
| 04     | 04        |

## \_Course outcome:

The objective of this course is to learn about inorganic chemistry, physical chemistry, general chemistry & practical chemistry.

The students are able to get knowledge about, Co-Ordination compounds, VBT CFT, Ligand field theory Isomerism in co-ordination complexes-classification, Nomenclature ,Stability of complexes. Stereochemistry-definitions & synthesis. geometrical isomerism- cis & trans designation ,mechanism. Carbohydrates- structural elucidation ,reactions. Elements of quantum mechanics . electrochemistry, transport number applications of conductance measurement definitions,Laws,conductometrititrations.HSAB,garvimetry,Dyes,physical properties & chemical constitution, surface tension ,parachor.

(Physical experiments-Determination of density, viscosity, surface tension,

Rate constant transition temperature, percentage composition thermometric titration.

Title of the paper: Chemistry (SEC)

Bsc/semester : III BSc ( V sem )

No of hours :

Theory

02

#### Course outcome:

The objective of this course is to learn analytical chemistry. Skill Enhancement Course is a course for V semester which may be chosen from a pool of the courses.

The students are able to get knowledge about interdisciplinary nature of analytical chemistry, sampling, accuracy, precision, errors and significant figures. Composition of soil, analysis of ph soil. Analysis of ph, alkalinity, acidity and DO of water, water sampling methods and water purification methods, nutritional value of foods, food processing, food preservation and adulteration, paper chromatography, TLC, column and ion exchange chromatography.

Title of the paper: Chemistry (SEC)

Bsc/semester : III BSc ( VI sem )

No of hours :

| Theory |  |
|--------|--|
| 02     |  |

#### Course outcome:

The objective of this course is to learn polymer chemistry. Skill Enhancement Course is a course for V semester which may be chosen from a pool of the courses.

The students are able to get knowledge about preparation, structure, properties and application of polymers. Mechanism and kinetics of polymerization, polymerization techniques, crystallization and crystallinity of polymers, crystalline melting point and degree of crystallinity, polymer solution, solubility parameters, thermodynamics of polymer solutions, lower and upper critical solution temperature.

#### **DEPARTMENT OF MATHEMATICS**

- To find the nth derivatives of functions
- Apply the Leibnitz's theorem for finding nth derivative of product of two functions.
- Apply the chain rule for functions of several variables.
- Apply Taylor's and Maclaurin's series for finding series expansions of functions and approximating values.
- Understand the concept of indeterminate forms, their occurrence in problems and their evaluation
- Describe the concepts and applications of derivatives and higher order derivatives
- Understand the ideas of derivatives and higher order derivatives
- Develop skill in finding the partial derivatives of functions of several variables and various rules associated.

#### **INTEGRAL CALCULUS:**

- Definite Integrals, properties and Reduction formula.
- Acquire the basic ideas of double and triple integral.
- Apply the techniques of double and triple integral to various problems of finding length of plane curves, surface areas and volumes of surfaces of revolution

- Change variables in multiple integrals.
- Improper Integrals- Gamma and beta functions and results, connection between Beta andGamma function, Applications of evaluation of integrals, Duplication formula.

#### **DIFFERENTIAL EQUATIONS.**

- Different methods to solve first order, first degree linear differential equations.
- Determine solutions to second and higher order linear differential equations(homogeneous and non homogeneous) with constant coefficients.
- Acquire the idea for solving the first and higher order partial differential equations.

## ALGEBRA.

- To understand the concept of theory of equations and methods to solve equations of different degree-Cardon's method, Descarte's method.
- Learn more about matrices and matrix methods to solve system of equations by verifying consistency of equations.
- Acquire the basic knowledge of Number Theory and standard theorems.

## **GROUP THEORY-**

- Acquire the basic knowledge and the structure of Group, Subgroup and Cyclic Groups.
- Explain the significance of the notion of a normal subgroup, and of a simple group.
- Analyze and demonstrate examples and theorems on subgroups, normal subgroups andquotient groups.
- Use Lagrange's Theorem to analyze the cyclic subgroups of a group.
- Acquire the notion of permutations and operations on them.
- Prove Cayley's theorem and understand its applications.
- Develop an idea about Isomorphism, homomorphism and automorphism.

#### RINGS AND FIELDS-

- Describe the characteristics of a ring ,subring, integral domain, field, quotientring, ideals, units and associates. b) polynomial ring and Homomorphism.
- vector spaces- Definition and examples. Theorems on linear combination, linear span, linear dependence, independence, Basis and Dimension of vectors. Homomorphism andIsomorphism of vector space and direct sums.
- **linear transformations** Definitions, linear maps as matrices, rank and nullity theorem, Eigen values and Eigen vectors of a linear transformation.

## **REAL ANALYSIS:**

- Real Sequences- Definition, bounded, unbounded, Infimum, supremum and limit of sequences. Standard theorems on limits. Convergent, divergent and oscillatory sequences, monotonic sequence, Cauchy's general principle of convergence,
- Infinite Series- Definition, Convergence, divergence and oscillation of series. Geometric series, p series, Tests of convergence of series, Alternating series.

## **COMPLEX ANALYSIS:**

- Function of a complex variable- Equation of a circle and straight line in complex form, limit, continuity and differentiability, Analytic functions, Cauchy- Riemann Equations in Cartesian and polar forms, Harmonic functions, theorems on Analytic functions, Constructions of Analytic Functions- Milne Thomson method and using the concept of Harmonic functions.
- Complex Integration- The complex line integral, Cauchy's Integral theorem, Integral
  Formulae for the function and the derivatives. Applications to the Evaluations of simple
  line Integrals, Cauchy's Inequality, Liouville's theorem, Fundamental theorem of
  algebra.

# **APPLIED MATHEMATICS:**

• Laplace Transforms- Definition and basic properties, Laplace Transforms of standard functions, Derivative of functions, Integral of functions,  $\alpha$ - functions. Inverse Laplace

Transforms-properties and theorems, convolution theorem, solution of differential

Equations with constant coefficients by laplace transforms.

• Fourier Series- periodic functions, even and odd function, Euler formula, fourier series

and half range series.

**NUMERICAL ANALYSIS-**

Numerical solution of Algebraic and transcendential Equations.

• Numerical solutions of first order linear differential Equations.

• Finite differences.

Numerical integration.

**RIEMANN INTEGRATION:** 

• Upper and lower sums, criterion for Integrability, Integrability of continous and

monotonic functions, Fundamental theorem of calculus, Change of variables, Integration

by parts, first and second Mean value theorems of Integral calculus.

**VECTOR CALCULUS-**

• Vector field and Scalar field. Gradient of a Scalar field, Divergence and curl of a Vector

field, standard Derivations, Vector Integration using Green's theorem.

DEPARTMENT OF ZOOLOGY

**Department of Zoology** 

Title of the paper: Animal diversity-II

**B.Sc / Semester** : I B.Sc ( II sem)

No of hours : theory -04 hrs; practical – 04Hrs

**Course outcome:** 

The objective of this course outcome is to learn about features of Chordata and its representatives.

The students are able to get knowledge about general characters of Chordata and its classification.

Classification of chordata includes 4 sub phylum and its examples.sub phylum vertebrata includes 5 classes

and its classification with example. Important characters of mammalin orders and dental formula of each

order and comparative anatomy of vertebrates (heart, brain, kidney, aortic arch).

Title of the paper: Animal physiology and Developmental biology

**B.Sc / Semester** : II B.Sc ( III sem)

No of hours

: theory -04 hrs; practical – 04Hrs

**Course outcome:** 

The objective of this course outcome is to learn about Physiology and developmental biology.

The students are able to get knowledge about physiology of animals with suitable examples

such as Homeostasis, thermoregulation and osmoregulation. Importance and physiological process of

digestion, respiration, circulation, excretion and neuro and muscle physiology. Process of gamete formation

and development of frog, chick and human.

Title of the paper: Biochemistry and Applied Zoology

**B.Sc / Semester** 

: III B.Sc (V sem)

No of hours

: theory -04 hrs; practical – 04Hrs

**Course outcome:** 

The objective of this course outcome is to learn about structure of Macromolecules and application

of zoology in various fields.

The students are able to get knowledge about structure, classification and importance of

carbohydrates, proteins, lipids, enzymes and nucleic acids. Purpose of sericulture, vermiculture and fisheries.

Life cycle of pest and vectors and their diseases to humans, preventive measures. Conservation of wild life

and hotspots of biodiversity. Biostatistics with suitable examples.

**Title of the paper: Apiculture (SEC)** 

B.Sc / Semester

: III B.Sc (V sem)

No of hours

: theory -02 hrs

**Course outcome:** 

The objective of this course outcome is to learn about bee keeping & its by products, Entrepreneurship.

The students are able to get knowledge about history of bee keeping, classification and biology of honey bees. Social organization and foraging plants of honey bees. Rearing of bees and their diseases and enemies. Product of apiculture industry and its uses. Bee keeping industry with recent, modern methods, cross pollination in bee hives.

#### **DEPARTMENT OF BOTANY**

# COURSE LEARNING OUTCOMES OF THE BOTANY SUBJECTS OF EACH SEMESTER OF CBCS SYLLABUS

## **I SEMSTER**

# DSCB 1.1- DIVERSITY OF MICROBES, ALGAE, FUNGI, PLANT PATHOLOGY AND BRYOPHYTES

- ➤ The fundamental concepts related to microbes, Algae, Fungi, lichens and Bryophytes and concept of microbial nutrition.
- > Discovery and general structure and classification of viruses based on their characteristics and structures.
- ➤ Identify true fungi and develop critical understanding of the common plant diseases according to the geographical locations and their remediation.
- > Demonstrate the principles and application of plant pathology in the control of plant disease.
- ➤ Increase the awareness and appreciation of human friendly viruses, bacteria, algae, fungi and bryophytes and their economic importance.
- Demonstrate skills in laboratory, field and work related to mycology and plant pathology.
- ➤ Metagenomics is proving to be a powerful tool, considerably enhancing the present understanding of the extent and role of microbial diversity in their natural habitats, and in many ecologically important environments, with far greater implications on human health and disease
- > The overall aims with the course are to provide a deeper knowledge of the genetic and functional diversity of microorganisms in different ecosystems, and a basic understanding of the methods that are used in the area.
- Analysing microorganisms up close, microbiologists play a crucial role in combating disease, creating chemical products for agriculture, and even helping to keep the planet healthy

#### II SEMESTER

# DSCB 1.2- PTERIDOPHYTA, GYMNOSPERMS, PLANT MORPHOLOGY AND PLANT TAXONOMY

On completion of this course, the students will be able to learn,

- ➤ Gain adequate knowledge about the occurrence, distribution, structure and life history of pteridophytes and gymnosperms
- > Pteridophytes and Gymnosperms Understanding of plant evolution and their transition to land habitat
- Develop critical understanding anatomy Pteridophytes and Gymnosperms
- > Study and impart knowledge of Understanding of plant evolution and their transition to land habitat and seed habit
- ➤ Demonstrate proficiency in the experimental techniques and methods of appropriate analysis of Pteridophytes, and Gymnosperms
- ➤ Understand the habit of the angiosperm plant body and gain the knowledge of the vegetative characteristics and reproductive characteristics of the angiosperm plant.
- ➤ Understand the various adaptations of organs in the angiosperm plants.
- ➤ Understand the comparative account among the families of angiosperms.
- ➤ Understand the distinguishing features of angiosperm families.
- ➤ Know the role of cytology and Phytochemistry in Taxonomy.
- > Study of Plant families with respect to Systematic position, Morphological characters, floral formula and floral diagram.
- Preparation of artificial key

## **III SEMESTER**

## DSCB 1.3- PLANT ECOLOGY, PLANT ANATOMY AND PLANT PHYSIOLOGY

- > Develop an understanding of concepts and fundamentals of plant anatomy and examine the internal anatomy of plant systems and organs
- > Develop critical understanding on the evolution of concept of organization of shoot and root apex.
- Analyze the composition of different parts of plants and their relationships and to evaluate the adaptive and protective systems of plants
- > Understand core concepts of biotic and abiotic and India evaluate energy sources of ecological system
- > Understand plant communities and ecological adaptations in plants
- Analysis the phytogeographical division of India and vegetation types of Karnataka

- ➤ Knowledge about the various physiological process in higher plants such as photosynthesis with particular emphasis on light and dark reactions, C3 and C4 pathways, respiration on aerobic and anaerobic respiration, movement of sap and absorption of water in plant body and plant movements.
- ➤ Know the nitrogen metabolism and its importance.
- ➤ Conduct experiments using skills appropriate to subdivisions

#### **IV SEMESTER**

# DSCB 1.4- CELL AND MOLECULAR BIOLOGY, GENETICS, REPRODUCTIVE BIOLOGY AND PLANT BREEDING.

- > Understand the "Science of Heredity". Realize the role of genes in evolution of species.
- Conceptual understanding of laws of inheritance, genetic basis of loci and alleles and their linkage.
- ➤ Comprehend the effect of chromosomal abnormalities in numerical as well as structural changes leading to genetic disorders.
- Develop critical understanding of chemical basis of genes and their interactions at population and evolutionary levels.
- ➤ Know the molecular biology in relation to genetic material, its inheritance, modification, replication and repair
- Examine the structure, function and replication of DNA
- Understand the science of plant breeding.
- > To study the techniques of production of new superior crop verities

## **V SEMESTER**

#### DSEB 1.1-TAXONOMY OF FLOWERING PLANTS

- Classify Plant systematics and recognize the importance of herbarium and Virtual herbarium
- > Evaluate the Important herbaria and botanical gardens
- ➤ Interpret the rules of ICN in botanical nomenclature
- Assess terms and concepts related to Phylogenetic Systematics.
- > Generalize the characters of the families according to Bentham & Hooker's system of classification
- > Understand the comparative account among the families of angiosperms.
- Understand various angiosperm families emphasizing their morphology, distinctive features and biology.
- ➤ Understand various rules, principles and recommendations of plant nomenclature
- > Know modern trends in taxonomy.

➤ Understand major evolutionary trends in various parts of angiosperm plants.

## **V SEMESTER**

#### SECB 1.1-MEDICINAL PLANTS AND ORNAMENTAL PLANTS

- > Conceptualize ethno botany as an interdisciplinary science
- Restate the established methodology of ethno botany studies
- > Categories various indigenous ethnic groups and their environmental practices.
- ➤ Understand the legalities associated with ethno botany.
- Recognize the basic medicinal plants available
- > Apply techniques of conservation and propagation of medicinal plants.
- > Setup process of harvesting, drying and storage of medicinal herbs
- Propose new strategies to enhance growth of medicinal herbs considering the practical issues pertinent to India

# **VI SEMESTER**

#### DSEB 1.4-ECONOMIC BOTANY AND MEDICINAL PLANTS

- ➤ Understand core concepts of Economic Botany and relate with environment, populations, communities, and ecosystems.
- ➤ Develop critical understanding on the evolution of concept of organization of apex new crops/varieties, importance of germplasm diversity, issues related to access and ownership
- > Develop a basic knowledge of taxonomic diversity and important families of useful plants
- ➤ Understand the utilization of plant and wealth domestication, evaluation, bio prospection.
- Understand ecological distribution, diversity, origin, distribution and cultivation of various crop plants and cash plants.
- > Increase the awareness and appreciation of plants & plant products encountered in everyday life
- Appreciate the diversity of plants and the plant products in human use.
- ➤ To acquire the knowledge of Processing, therapeutic uses of various medicinal plants.

#### **VI SEMESTER**

#### **SECB 1.4-FLORICULTURE**

- > Develop conceptual understanding of gardening from historical perspective
- Analyze various nursery management practices with routine garden operations.
- > Distinguish among the various Ornamental Plants and their cultivation

- > Evaluate garden designs of different countries
- Appraise the landscaping of public and commercial places for floriculture.
- > Diagnoses the various diseases and uses of pests for ornamental plants
- ➤ Understand the concept of Plant Propagation/multiplication techniques, growth, practical problems and plant care.
- > Classify the cultivars according to scientific names.
- > Plan the development of orchards and its management
- ➤ Analyse the process of Vegetative propagation
- Appreciate the diversity of plants and selection of gardening
- Examine the cultivation of different vegetables and growth of plants in nursery and gardening

#### **DEPARTMENT OF HISTORY**

# **HISTORY OF INDIA UPTO 1206AD**

- this paper is designed to help the students to understand political history of Ancient

  India
- Cultural development of Ancient period.
- To analyze the administration of great rulers.

#### HISTORY OF INDIA 1206 TO 1761AD

- To understand the political history of Medieval India.
- To analyze the administrative pattern of the Medieval rulers
- To compare the society and economy of Medieval period with Present day.

#### HISTORY OF MODERN INDIA 1757 TO 1858 AD

- The political changes of the period and expansion of British Empire in India.
- Structure of the colonial government, economic policies and its impact, administrative changes.
- Social reforms and rebellion.

# **INDIAN NATIONAL MOVEMENT (1885 TO 1947AD)**

Rise and growth of national consciousness.

- The contributions of freedom fighters and their techniques.
- Achievement of freedom, growth of communalism and partition of country.

#### PRINCIPLES OF TOURISM

- The role of Literary and epigraphical sources for the understanding of south Indian History.
- The significant ontributions of Satavahanas, Chalukyas, Pallavas, Hoysala, Rastrakuta rulers and their administrative reforms.
- The nature of state society and economy and contributions of socio-religious reformers.

# STATE AND SOCIETY IN SOUTH INDIA(1336 TO 1800 AD)

- Role of sources for understanding state and society of south India.
- Significant contributions of rulers of vijaynagara and Bahamani Dynasties.
- Nature of society, state, administration and economy.
- Religious and cultural developments.

## COLONIALISM AND NATIONALISM IN ASIA(1800 TO 1950AD)

- Development that took place in China.
- Rise of Modern Japan and Japan between two world wars.
- Developments in Turkey and Iran.
- The nature of Arab nationalism and creation of Israel.

#### TOURISM DEVELOPMENT AND ORGANIZATION

- Developments that took place in Mysore state after restoration.
- Significant contributions of wodeyar rulers and prominent Dewans.
- Administrative reforms of commissioners.

• Political Socio-Cultural Movements in Modern Mysore(Karnataka)State

**HISTORY OF MODERN EUROPE(1789 TO 1945AD)** 

• Nature, scope, course and results of French revolution and post revolution developments.

Nationalism and Socialism in Europe.

• Unification movements in Italy and Germany and role of Bismarck

Causes and effects of World wars, Russian Revolutions and functions of UNO

INDIA AND CONTEMPORARY WORLD(1950 TO 1995 AD)

• Establishment of Indian republic, problems and developments of free India.

• India's relation with International organizations and contemporary world.

Modern developments in Asia and struggle against apartheid and Nationalist struggle

inAfrice and Latin America.

**DEPARTMENT OF ECONOMICS** 

Paper - 1

**Indian Economy** 

1<sup>st</sup> Semester B.A

The major purpose of the course is to enable the student to have an analytical Understanding of various

issues of the Indian economy. It enables the student to understand the Structure and development of the

economy. Agricultural sector in India and agricultural prices in India, industrial sector in India. Trade balance

of payment and trade policy. Financial system in India. Growth of service sector in India and critically analyse

the approaches, forces and issues Of the Indian Economy and critically appraise current economic problems

in India.

Paper – 2

**Micro Economics** 

2<sup>nd</sup> semester - B.A

The course analyses the economic behaviour of individuals, firms and markets. It is mainly concerned with the objective of equipping the students in a rigorous and comprehensive manner with the various aspects of consumer behaviour and demand analysis, production theory and behaviour of costs, theory of rent and interest. The theory of traditional markets like perfect competition market, Monopoly market, oligopoly market, imperfect or monopolistic market. Duopoly market, and equilibrium of firm in modern profit and non-profit maximizing framework.

## Paper – 3

#### **Macro Economics**

#### III - Semester B.A

Macroeconomics or aggregate economics analyses and establishes the functional Relationship between the large aggregates. The aggregate analysis has assumed such a great Significance in recent times that a prior understanding of macroeconomic theoretical structure is Considered essential for the proper comprehension of the different issues and policies. Macroeconomics is not only a scientific method of analysis but also a body of empirical economic Knowledge. The Course equips the students to understand systematic facts and latest theoretical Developments for empirical analysis.

#### Paper - 4

#### **Mathematics and statistics for Economics**

#### 4th Semester B.A.

Economics is incomplete without knowledge of Mathematics and statistics. Since mathematics Gives flesh and blood to the subject of Economics. Mathematics for Economics deals with various Applications of mathematical tools and techniques in defining and developing economic Relationships. So this course, accordingly, is designed to include various mathematical methods to Analyse and understand economic theories.

Economics has become more and more analytic over the years, requiring sufficient Knowledge of quantitative methods. To meet this requirement, a course in Statistics for Economics Is absolutely essential. This course will help the student in data collection, presentation, analyses And drawing inferences about various statistical hypotheses. Further, it helps to develop the Analytical skills in the student.

## Paper - Money, Banking and Public Finance

## 5<sup>th</sup> semester B.A

Money plays an important role in macroeconomic situation. A clear understanding of the operations of money interactions between monetary aggregate and real aggregates. Monetary policy interventions and their interactions with the rest of the economy is essential to to release how monetary forces operate through a magnitude of channels. The course deals with the evaluation of money, development of commercial banks, Central Bank, theory relating to to banking and banking practices in major development countries.

Public Finance aims at giving the students an analytical Understanding of the growth, pattern and terms in public expenditure, and revenue, and the role of The government in the budgetary process.

#### Paper – History of Economic Thought

#### 5<sup>th</sup> Semester B.A

The major purpose of the course in to enable student to have an analytical understanding of various issues of the history of economic thought. It enables the student to understanding the nature and origin of economic thought and critical analysis the approaches forces and ideas of the economic thought and critically appraise current economic ideas are thoughts in the world. It enables the student to review the various thoughts and ideas for growth of economic thought.

#### Paper - Indian economic development

# 5<sup>th</sup> semester B.A - Generic elective paper

The major purpose of the course is to enable the student to have an analytical Understanding of various issues of the Indian economy. It enables the student to understand the Structure and development of the economy. Agricultural sector in India and agricultural prices in India, industrial sector in India. Trade balance

of payment and trade policy. Financial system in India. Growth of service sector in India and critically analyse the approaches, forces and issues Of the Indian Economy and critically appraise current economic problems in India.

# Paper - Economics of development and planning

# 6<sup>th</sup> semester. B. A.

Economic development is a universal importance and its study is gaining lot of prominence in present pay world. Economic development is the interest of both rich and poor countries. For development Nations the study is crucial for overcoming the problem of secular stagnation whereas for the developing countries the study is essential to break the vicious circle of poverty. While a few success stories can be counted. Mini have grappled with the choice, problems like over tea and in security, unemployment, Poor health, environmental pollution excreta.

The objective of this course is to to give an exposure to the student recording the the origin of planning and policies by discussing the various aspects of development under the five year plans.

#### Paper – Indian Economic Thought

# 6<sup>th</sup> semester - B.A

The Indian economic thought course is to enable the student to have an analytical understanding of different thoughts Indian economic thinkers. It enables the student to understand the structure and growth of Indian economic thoughts and critically analyse the approaches, ideas of Indian economic thought and critically appraise ancient and current economic ideas in India. It enables the student to review the various stages for growth of Indian thoughts and comparison with western countries of the world.

#### Paper – Karnataka Economic Development

## 6th semester B.A. - Generic Elective

Karnataka Economic Development paper provides an analysis of trends and patterns of economic development and social change in Karnataka during the planning era. The population growth and its features, sectoral growth trends and issues are dealt with. The students will learn the different aspects of

State Economy viz., agriculture development, industrial development, and state finances and regional Imbalances. The human development and regional development implications are derived from the Overall study of the growth process of Karnataka State. A thorough knowledge of the performance Of Karnataka Economy helps students to face State level competitive examinations.

#### DEPARTMENT OF POLITICAL SCIENCE

#### **COURSE OUTCOME**

## **INTRODUCTION TO POLITICAL SCIENCE:**

• Students will understand the basics of the subject, learn evolution of political science

## **INDIAN GOVERNMENT AND POLITICS**

 Opportunity to know about constitution, Government organs, fundamental rights andduties

#### **MAJOR POLITICAL IDEALOGIES**

Students can understand ideologies of Sociolism, Nationalism and Democracy

## **INTRODUCTION TO INTERNATIONAL RELATIONS:**

- Opportunity to study other nation's politics and government.
- Students will be able to Know Changing role of Modern state.

#### POLITICAL THOUGHT, POLITIAL SOCIOLOGY, PUBLIC ADMINISTRATION:

 Studetns can study about political thinkers, Society and state concept to betterunderstand the role of administration

## INDIAN GOVERNMENT AND POLITICS, PUBLIC POLICY, INTERNATIONAL

## **RELATIONS**

- Great opportunity to understand Indian Government, Constitution, Decision Making.
- Student will be able to understand diplomacy, war and international relations.

#### DEPARTMENT OF SOCIOLOGY

# **INTRODUCTION TO SOCIOLOGY**

- Students will develop a basic understanding of sociology
- Definesociology
- IllustratethesociologicalperspectivesofEmpiricist,humanistandEmpiricist,humanist
- Applythesociologicalimaginationtoher/his ownlife
- Studentswillacquiredetailedknowledgeofimportantsocialinstitutions,policiesandculturalfr a meworks.
- Students will learnhowtheforegoingsocialstructurescanbothcontributetoandameliorateobservedsociali ne qualities.
- Studentswillcompareandanalyzesociallifeacrosscultures.

## **FOUNDATIONS OF SOCIOLOGY**

- Studentswilldemonstrateanunderstandingofthestagesofhumandevelopment,thesocializ ationprocess,anddeviationfrom thenormsofsociety.
- Toanalyzethenatureofdeviance,itsimpactonsociety,andevaluatemethodsofsocialcontrols oc ietiesimplement

## STUDY OF INDIAN SOCIETY

- Indiaaspluralisticsociety.
- Marriageanditstrendsinmarriage—itsfutureprospects
- ChangingIndiansocialstructure

## PIONEERS OF SOCIOLOGY

- AnalyzethehistoricaltheoriesofComte,Durkheim,Marx,Weber,&Spencer.
- Intellectualcontextandenlightenment
- TheFrenchandIndustrialRevolution

## **CONTEMPORARY SOCIAL PROBLEMS**

- Howsocialproblemsaredefined and how they differ from personalissues.
- Natureandcausesofsocialproblems.
- Identifyproblemsandframeresearchquestionsrelatingtohumansandtheirexperience.
- Thetheoreticalandpolicyimplicationsofsocialproblems
- CreateawarenessaboutthesocialproblemsinIndiaandhowitcanbetackled
   edthroughpracticalsuggestions.

# **RURAL SOCIETY AND RECONSTRUCTION**

- Understandtheoriginanddevelopmentofruralsociology
- Toanalyzethesignificanceofvillagestudies
- Criticallyanalyzeagrarianmovements
- Ruralsocietyintransition—itschangesanddevelopments

#### SOCIAL STRATIFICATION AND MOBILITY

- Historical development of social stratification
- Formsofsocialstratification
- Socialmobility

## **SOCIOLOGY OF GENDER**

- Studentisabletounderstandhowgendershapesourculturalexperiences.
- Gendershapes threats, media, and genderine quality.

• Genderinequalityismanifestedinsocialinstitutions, from worktoeducation to the family

# **POPULATION STUDIES**

- Demographicconcepts, theories and principles.
- Contemporarypopulationissuesusingsociologicaltheoryandmethods.
- Thepopulationasconstraintsandresourcesofdevelopments
- Theoriesofpopulation

## **RESEARCH METHODOLOGY**

- Tocriticallyassesspublishedresearchandhowtopublisharticles
- Itwilldeveloptheoreticallyinformedhypotheses.
- Articulatethebasictenetsofthequantitative&qualitativemethodsusedinsociology.

# INDUSTRIAL SOCIOLOGY

- The course aimstoprovide you with an understanding of the ways in which the Process of industrialization has shaped societies.
- Theareasthatarecoveredinthisregardincludetechnologyanditsinfluenceontheworkplace,a
   nd theinfluencegenderandclassinthestudyofwork.
- Tounderstandingofsomeofthesalientfactorsthatinfluencejobsatisfaction.
- Itwillalsoreviewthenatureofrelationsamongworkers, and between workers and management.

## **URBAN SOCIOLOGY**

- Sociological Perspectives on Urban Life
- Seekstostudythestructures, processes, changes and problems of urbanareas
- GrowthofUrbanizationinIndia.

#### ENTREPRENEURSHIP DEVELOPMENT

- Familiarize the students with the latest programs of the government authorities in promoting small and medium industries.
- Impart knowledge regarding how to start new ventures.
- Equip the students to have a practical insight for becoming an entrepreneur.

#### FINANCIAL MANAGEMENT

- Familiarise the students with the conceptual framework of financial management.
- Enable the students to understand the practical application of financial management. Provide conceptual and analytical insights to make financial decisions skilfully.
- Provide the students with a clear-cut idea about the functioning of Indian Capital Market.
- Provide an in-depth knowledge on Capital Market

#### MANAGEMENT OF BANKING AND INSURANCE SERVICES.

- Provide basic knowledge of the theory and practices of banking.
- Familiarize the students with the changing scenario of Indian Banking.
- Expose the students to the changing scenario of Indian banking.

#### CORPORATE ACCOUNTING

- Enable the students to develop awareness about corporate accounting inconformity with the provisions of Companies Act, IAS and IFRS.
- Enable the students to prepare and interpret financial statements of joint stock companies in different situations.
- Expose the students to the accounting practices prevailing in the corporate.
- Exposure to the issue of shares and debentures of the company
- Attainment of knowledge about accounting procedure of company final account. Understanding the accounting procedure amalgamation and absorption of company
- Ability to get the knowledge about valuation of shares.
- Understanding the accounts procedure of liquidation of Ltd. Company.

#### **BUSINESS STATISTICS**

- Enable the students to gain understanding of statistical techniques as are applicable to business.
- Enable the students to apply statistical techniques for quantification of data in business.

- Develop for applying appropriate statistical tools and techniques indifferent business situations.
- Making familiar with statistical tools which are relatively used in business.
- Imparting the ability to collect present, analyze and interpret data.

#### **BUSINESS TAXATION**

- Familiarize the students about the fundamental concepts of Income Tax
- Enable the students to acquire the skills required to compute Gross Total Income with more emphasis on income from salary and income from house property.
- Impart the basic knowledge and understanding of the concepts and practices of Income Tax Law in India.
- Understanding basic concepts in Indian Tax Act.
- Obtaining the knowledge about tax free incomes.
- Acquiring the knowledge about general deductions from income.
- Exposure to income tax planning
- Knowing the procedure of calculation of income tax
- Understanding the procedure of e-filling of return and e-payment of tax.
- Getting known with application of principles and provisions of direct tax laws in computation of taxable income under various heads of income.

#### **AUDITING**

- Understand the principles, techniques and practice of auditing
- Familiarise the students with the principles and procedure of auditing.
- Enable the students to understand the duties and responsibilities of auditors.
- Getting knowledge of vouching of cash and credit transactions.
- Knowing the appointment procedure of Auditor.
- Acquiring the skills of Audit program of co-operative societies and banks.
- Knowledge about writing of audit reports.

#### COST ACCOUNTING AND MANAGEMENT ACCOUNTING

- Familiarize the students with cost concepts.
- To make the students learn cost accounting as a separate system of accounting

- Impart knowledge of cost accounting system and acquaint the students with the measures of cost control.
- Develop professional competence and skill in applying accounting information for decision making.
- Equip the students to interpret financial statements with specific tools of management accounting.
- Enable the students to have a thorough knowledge on the management accounting techniques in business decision making.

#### PRINCIPLES OF MARKETING

- Enhancing the skill of marketing among students.
- Providing the different techniques of marketing for increase of Sales.
- Creating the sense how to behave in the market while buying or selling of product.
- Understanding how to Undertake crucial task such as competition analysis, production etc.
- Providing information about buying pattern and different attitudes of consumers.
- Providing information about buying pattern and different attitudes of consumers.

#### **COST ACCOUNTING**

- Creating logical thinking power.
- Creating ability to take decision at different level of production activity like make or buy, project launching etc.
- Developing knowledge among students about cost ascertainment and fixation of selling price and cost control.
- Knowledge about presentation of cost accounting information for the purpose of decision making.
- Determination of profitable or unprofitable activity in business by using different cost accounting tools.
- Developing knowledge about preparation of tenders, quotations, etc.
- Helping in determining the product total cost and fixation of selling price.
- Creating skills about handling of various financial records, documentation, collection and classification of different costs.
- Enhancing the knowledge of business project analysis and cost planning and procedure.
- Getting known with how to publish information about production to management, consumer, Government, Employee at different levels for decision making purpose.

#### **BUSINESS MANAGEMENT**

• Supporting to Achieve Group Goals.

- Knowledge about motivating employees by providing financial and nonfinancial incentives.
- Evaluating the economic growth and development of an organization.
- Understanding the relation between individuals, groups, departments and between levels of management.
- Comprehending the human resource productivity.

#### **E-COMMERCE**

- Knowledge of technologies supporting E-commerce, including web services and electronic payment system.
- Recognition of fundamental principles of E-business and Knowledge about Electronic Data Interchange.
- Analysis of and real business cases regarding their E-Business strategies and transformation processes and choices.

#### MARKETING MANAGEMENT

- Marketing management helps the students to analysis product design, promotion, selling and distribution
- The students will focus more on the concepts and field work such as promotion, advertisement, research and sells.
- Marketing is the subject which gives us the detail information about customer, sellers manufactures etc.

#### **BUSINESS LAW**

- It helps to understand resolve the legal formalities require business.
- It helps to resolve the legal issues occur in business.
- It helps to do business legally and not getting study by practicing and unethical things.

#### **BACHOLORE OF BUSINESS ADMINISTRATION (BBA)**

## **COURSE OUTCOME**

## **FINANCIAL ACCOUNTING**

• To enable the students to understand the concepts and conventions of accounting and also accounting standards.

- Preparing financial statement in accordance with appropriate standards, Journal entries, ledger accounts cash book maintenance.
- To enable the students to understand partnership account like admission, retirement, death and dissolution of partnership.
- To understand the concept of branch accounting and its system, Hire purchase and Instalment system.
- To enable the students to understand consignment, Bills of exchange, depreciation.
- To understand issue and redemption of shares and debentures, their types.
- Know the steps to liquidate the company, prepare liquidator's final statement of accounts.
- To have knowledge of right share, bonus share, stock option, E trading, BSE, NSE and SEBI.

# **INDIAN BUSINESS ENVIRONMENT**

- Understanding business environment at national and international level.
- Knowledge about various forms of organisation.
- Study about Business Process Management.
- Measuring implementation and impact of Liberalization, Privatization and Globalization on Indian Economy,
- Justifying performance, role, function, merits and demerits of Foreign Capital, Multinational Corporations and International corporation (IMF, IBRD, WTO and SAARC).

## **ENVIRONMENTAL STUDIES**

- Understanding environmental concerns by the students at the under graduate level.
- Understanding the relationship of man with environment and help them change his attitude for more positive, proactive, eco- friendly and sustainable life styles.
- Getting information about climate change, Global warming, Acid rain, Greenhouse effect, Ozone and layer depletion.
- Cultivating attitudes of safeguard the environment built particularly with field experience.
- Realization of impact of human actions on the immediate environment and linkage with the larger issue.
- Getting information about Environment Protection Acts.

## PRINCIPLES OF MANAGEMENT

- Supporting to Achieve Group Goals.
- Knowledge about motivating employees by providing financial and non-financial incentives.

- Evaluating the economic growth and development of an organisation.
- Understanding the relation between individuals, groups, departments and between levels of management.
- Comprehending the human resources productivity.

## **GLOBAL BUSINESS ENVIRONMENT**

- To familiarize with global business environment.
- To make them understand about different trade policy on export and import.
- To develop knowledge about International Business.
- To create an awareness about various international trade, institutions (IMF, IBRD, IFC and IDA etc,.)
- To develop knowledge about different marketing strategies.

#### MANAGEMENT OF SERVICE AND MANAGEMENT INFORMATION SYSTEM

- To acquire the knowledge of various service sectors, banking and insurance hotel management, hospital and educational service etc,. and managing the service sectors.
- To acquire the knowledge of event management like corporate event, private event, small event, grand event, musical events, sports events, fashion shows, trade fairs and exhibitions.
- To acquire the knowledge and structure of Management Information System.
- Information of various levels of management, value of information in decision making.

# **QUANTITATIVE TECHNIQUES**

- To learn about laws of indices, laws of logarithms, and its applications.
- To know arithmetic and geometric progression business applications.
- To learn about ratio proportions and percentages.
- To learn about Matrices and determinants operations and properties.

#### **FUNCTIONAL MANAGEMENT**

- To know the role of management in modern organisation.
- To understand role of HR managers, Training and Development, placement, methods of wage payment.
- To understand role of Financial Manager- profit maximisation, wealth maximisation, financial decisions and working capital management.
- To understand production management- plant location, layout, production planning and control.

## **COST ACCONTING**

- To understand the concepts of cost accounting and to expertise in presenting cost centre and profit centre and preparing cost sheet.
- To have the knowledge on material cost and its methodologies, classification of overheads.
- To have the knowledge of computing wages under different methods.
- To understand the allocation, apportionment, re- apportionment and absorption of overheads.

#### MANAGEMENT ACCOUNTING

- Apply management accounting concepts and tools for the decisions making faced by a management.
- Apply management accounting concepts and tools to take financial decisions and cost ascertainment.
- Apply the techniques of management accounting for cost minimization and profit maximization.
- Knowledge about Ratio Analysis, various budgets, standard costing etc,..

#### **BANKING IN INDIA**

- After the successful completion of the course the students will be able to know the functions of banks.
- The students will be aware of credit control measures of central banking, various banks etc,.
- Gain knowledge about duties and responsibilities of collecting and paying bankers.

#### **COMMERCIAL LAW**

- It helps to understand the legal formalities require in business.
- It helps to resolve the legal issues occur in business.
- It helps to do business legally.
- To know the different types of contract, methods of contracts.

#### **COMPANY LAW**

- To know different types of company, legal obligations etc,.
- To enable students to know how forms a company.
- To have knowledge about Articles and Memorandum of Association.
- To have a knowledge of issue of shares and debentures.

# **ENTREPRENEURSHIP DEVELOPMENT**

• Entrepreneurship Development involves a wide range of training and experience and designed to prepare students for starting and managing their own business.

- This is the subject which teach the students how to start their own business what quality should entrepreneur have what are the government schemes provided by small industries.
- It helps to get detail knowledge about the business plans and other things.

## **MARKETING MANAGEMENT**

- Marketing management helps the students to analyse product design, promotion, selling and distribution.
- The students will focus more on the concepts and field work such as promotion, advertising, research and sells.
- Marketing is the subjects which give us the detail information about customer, sellers and manufacturers.

#### **FINANCIAL MANAGEMENT**

- This course enables the students which the knowledge about the Capital budgeting, Working capital, Cash management and better Financial management techniques.
- Financial decisions, Capital structure decisions and Dividend policy.
- Apply the fundamental concepts and tools of finance.
- Apply financial management concepts and tools to decision faced by a manager.
- Apply financial management concepts and tools to the financial decisions and dividend decisions faced by the firm.
- Evaluate the corporate governance structure of firms and examine the interactions between firm management and financial markets and stakeholders.
- Appraise the risk profile of the firm.

# **BUSINESS STATISTICS**

- Acquaintance with some basic concepts in statistics. Making familiar with some elementary statistical
  methods of analysis of data viz. Measures of Central Tendency, Dispersion, Skewness and to interpret
  them.
- Analysis of data pertaining to attributes and to interpret the results.
- Acquainting with some basic concepts of probability. Ability to distinguish between random and non-random experiment. Ability to find the probabilities of various events.
- Ability to understand the concepts of conditional probability and independence of events. Ability to distinguish between univariate and bivariate probability distribution.

Ability to understand the concept of correlation and computation of correlation coefficient.
 Interpreting the value of correlation coefficient and its use in regression analysis.

## **INCOME TAX**

- To make the students know basic concepts of Income Tax.
- To gain knowledge about various Heads of Income.
- Understand the various deductions given under various Heads of Income.
- To know the deduction available under section 80C of Income Tax Act.

## **BUSINESS DECISION THEORIES**

- Understanding the basic concepts of demand and supply and their determinants.
- Analyse how elasticity affects revenue, BEP and Demand analyse.
- Understanding the concepts of National Income and the methods of calculating National Income.
- To know the price and output decisions of all forms market structure and Application of price discrimination.
- Analysing cost function and difference between short run long run cost functions.

## FINANCIAL SERVICES

- Students learn about various financial services provided by NBFC's and Merchant Bankers.
- Create awareness about the roles and functions of stock exchange and E- trading.
- To understand the rights and obligations of depositories, participants, issues and beneficial owners.
- Understand the consumer finance practices followed in India by banks and other financial institutions.

## **HUMAN RESOURCE MANAGEMENT**

- HRM helps to understand the man power status or condition in the organization.
- HRM helps to understand human resource policies in the organization.
- HRM is the lifeblood of every originations flow by utilizing the human resources.
- HRM tell us how to deal with HR in decent manner.

## **INTERNATIONAL BUSINESS**

- International business helps to understand the EXIM procedure.
- International business helps to understand the EXIM documentation.
- International business helps to know the contribution done towards country's development.

International business helps to understand the domestic and foreign market conditions.

### DEPARTMENT OF COMPUTER SCIENCE

Title of the paper: Object Oriented Programming using Java and Cloud Computing and Big

**Data Analytics** 

Semester: III Sem, V Sem

**Programme: BCA** 

**Number of hours: 4 hours + 3 Hours Practical** 

**COURSE OUTCOME: JAVA** 

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

programes.

Java is platform-independent. One of the most significant advantages of Java is its ability to move

easily from one computer system to another. The ability to run the same program on many different

systems is crucial to World Wide Web software, and Java succeeds at this by being platform-

independent at both the source and binary levels.

• Read and make elementary modifications to Java programs that solve real-world problems.

• Validate input in a Java program.

Identify and fix defects and common security issues in code.

Document a Java program using Javadoc.

Use a version control system to track source code in a project.

**Title of the paper:** Data base management system

**Semester:** IV

**Programme:** BCA

Number of hours: 4Hrs+3Hrs Practical

# **COURSE OUTCOME**

Will be able to comprehend and evaluate the role of database management systems in information

technology applications within organizations.

Effectively explains the basic concepts of databases and data models.

Explains the features of database management systems, architecture of database systems, and the role

of database users.

Defines the basics of the relational data model.

- Lists the database design process steps.
- Will be able to design and implement properly structured databases that match the standards based under realistic constraints and conditions.
  - Develops an Entity-Relationship model based on user requirements.
  - Converts an Entity-Relationship diagram to Relational Schema.
  - Explains Functional Dependency and Functional Decomposition.
  - Applies various Normalization techniques for database design improvement.
- Will be able to comprehend how to use Structured Query Language (SQL) to define and manipulate database information.
  - Designs SQL queries to create database tables and make structural modifications.
  - Designs SQL queries to add data to the database, edit existing data, and to delete data from the database.
  - Effectively designs basic and advanced SQL queries to retrieve data from the database
  - Declares and enforces integrity constraints on a database.
  - Understands and applies indexing mechanisms in databases.
- Will be able to describe and develop Relational Algebra and Relational Calculus queries.
  - Constructs queries with relational algebra.
  - Explains the basics of query evaluation mechanisms.
- Will be able to explain the principle of transaction management design.
  - Explains the concurrency control and recovery algorithms.
  - Applies transaction processing mechanisms in relational databases.
- Will be able to work in a group on the design, and implementation of a database system project.
  - Experiences how to apply the theoretical information in database management systems area into practice to model and solve an engineering problem.
  - Experiences how to use SQL language for constructing and utilizing a database application.
  - Experiences how to manage data by establishing a database connection over the current programming languages.
  - Experiences on how to implement an application using a database management system

**Title of the paper:** Data structures and file processing

Semester: II

**Programme:** BCA

**Number of hours:** 4Hrs+3Hrs Practical

**COURSE OUTCOME:** 

Develops skills in implementations and applications of data structures.

Describe how arrays, records, linked structures, stacks, queues, trees, and graphs are represented in

memory and used by algorithms.

Describe common applications for arrays, records, linked structures, stacks, queues, trees, and graphs.

Write programs that use arrays, records, linked structures, stacks, queues, trees, and graphs.

Defines the meaning of iterative and recursive algorithms

Demonstrate different methods for traversing trees.

Compare alternative implementations of data structures with respect to performance.

Compare and contrast the benefits of dynamic and static data structures implementations.

Describe the concept of recursion, give examples of its use, describe how it can be implemented using a

stack.

Design and implement an appropriate hashing function for an application.

Discuss the computational efficiency of the principal algorithms for sorting, searching, and hashing.

Implements basic algorithms for sorting and searching.

Applies algorithms and data structures in various real-life software problems.

Title of the paper: Numerical and statistical analysis

**Semester: IV Sem** 

**Programme: BCA** 

**Number of hours: 4 hours + 3 Hours Practical** 

**COURSE OUTCOME:** 

Numerical analysis is concerned with all aspects of the numerical solution of a problem, from the **theoretical development and understanding of numerical methods** to their practical implementation as reliable and efficient computer programs.

The five reasons to study statistics are **to be able to effectively conduct research**, to be able to read and evaluate journal articles, to further develop critical thinking and analytic skills, to act a an informed consumer, and to know when you need to hire outside statistical help.

Based on numerical methods such as finite element method, boundary element method, and meshless method, numerical simulations for various problems in the field so of science, engineering, and society have developed rapidly in the recent decades.

Various numerical methods are presented for solving the problems in different fields, and the corresponding computational efficiency, accuracy, and convergence are studied as well.

With the development of big data, numerical simulation and combined data analysis will play a more important role for studying the problems in science, engineering, and society.

Moreover, the manuscripts on the theories of numerical simulation and data analysis for complicated science, engineering, or social problems.

## Applications::

https://www.quora.com/What-are-the-applications-of-numerical-analysis1. Development of a mathematical model representing all important characteristics of the physical system.

- 2. Solution of governing equations.
- 3. Critical Loads for Buckling a Column.
- 4. Static Analysis of a Scaffolding
- 5. Analysis of Natural Frequencies of a Vibrating Bar.
- 6. Stability of frameworks under external forces (bridges, houses, ...). Mostly numerical linear algebra, sometimes differential equations are solved.
- 7. In hydrodynamics and aerodynamics: construction of cars, planes, boats. Usually PDE with finite element methods.

COURSE OUTCOME: Cloud computing and Big data Analytics (6hrs)

Cloud Computing model enables your business to communicate and share more easily outside of the

traditional methods. It allows better collaboration between employees, enabling multiple users to share

and work on data and files at the same time.

Cloud computing facilitates the access of applications and data from any location worldwide and from

any device with an internet connection. Cost savings; Cloud computing offers businesses with scalable

computing resources hence saving them on the cost of acquiring and maintaining them.

Cloud computing allows people access to the same kinds of applications through the internet.

• Cloud computing is the future of enterprise applications and solutions. With cloud-based services, we

rely on remote servers for our technological infrastructure

Big Data solutions these data silos can be quickly integrated to provide valuable insights such as

detection of **fraud** and abuse patterns, identification of best practices for safer and more efficient care

delivery, and better epidemiology surveillance.

Cloud computing and big data technologies aim to enhance the revenue of the company while reducing

the investment cost. While Cloud manages the local software, Big data helps in business decisions.

Title of the paper: Computer Concepts of C Programming

**Semester: I Sem** 

**Programme: Bsc** 

**Number of hours: 4 hours + 3 Hours Practical** 

**COURSE OUTCOME:** 

• C is highly portable and is used for scripting system applications which form a major part of

Windows, UNIX, and Linux operating system.

C is a general-purpose programming language and can efficiently work on enterprise applications,

games, graphics, and applications requiring calculations, etc.

Able to implement the algorithms and draw flowcharts for solving Mathematical and Engineering

problems.

• Demonstrate an understanding of computer programming language concepts.

To be able to develop C programs on linux platform.

Ability to design and develop Computer programs, analyzes, and interprets the concept of pointers,

declarations, initialization, operations on pointers and their usage.

Able to define data types and use them in simple data processing applications also he/she must be

able to use the concept of array of structures.

Student must be able to define union and enumeration user defined data types.

Write the C code for a given algorithm.

Develop confidence for self education and ability for life-long learning needed for Computer

language.

Title of the paper: Fundamentals of Information Technology

**Semester: II Sem** 

**Programme: BCA** 

**Number of hours: 6 hours** 

**COURSE OUTCOME:** 

Understanding the concept of input and output devices of Computers and how it works and

recognize the basic terminology used in computer programming

Write, compile and debug programs in C language and use different data types for writing the

programs.

Design programs connecting decision structures, loops and functions.

Explain the difference between call by value and call by address.

Understand the dynamic behavior of memory by the use of pointers.

Use different data structures and create / manipulate basic data files and developing applications

for real world problems.

Understanding computer terminology helps with other technology. Having a good understanding

of the terminology and jargon used with computers helps you be more efficient with other

technology.

For example, anyone connected to the Internet has a better understanding of using the Internet

and connecting other devices.

An introduction to the fundamentals of hardware, software and programming.

An understanding of cyber laws and computer security

Title of the paper: DISCRETE TRANSFORMATION

Semester: I Sem

**Programme: BCA** 

Number of hours: 6 hours

**COURSE OUTCOME** 

1. Write an argument using logical notation and determine if the argument is or is not valid.

2. Demonstrate the ability to write and evaluate a proof or outline the basic structure of and give examples

of each proof technique described.

3. Understand the basic principles of sets and operations in sets.

4. Prove basic set equalities.

5. Apply counting principles to determine probabilities.

6. Demonstrate an understanding of relations and functions and be able to determine their properties.

7. Determine when a function is 1-1 and "onto".

8. Demonstrate different traversal methods for trees and graphs.

9. Model problems in Computer Science using graphs and trees.

Title of the paper: SYSTEM SOFTWARE AND OPERATING SYSTEM

Semester: II Sem

**Programme: BCA** 

Number of hours: 4 hours + 3 hours

**COURSE OUTCOME** 

Compare the functionality of different computing hardware structures and Operating Systems

Structures.

Discuss issues of Process Management including process structure, synchronization, scheduling and

communication.

Demonstrate memory management issues including advance techniques of paging, segmentation and

virtual memory.

Explain the operation of various File Management Algorithms.

Discuss the issues related to I/O Sub-systems, Threats and specialized operating systems.

Distinguish between Operating Systems software and Application Systems software.

Describe commonly used operating systems.

Identify the primary functions of an Operating System.

Able to understand the basic components of a computer operating system, and the interactions among

the various components.

The course will cover an introduction on the policies for scheduling, deadlocks, memory management,

synchronization, system calls, and file systems.

Title of the paper: Software Engineering

**Semester: VI Sem** 

**Programme: BCA** 

**Number of hours: 6 hours** 

**COURSE OUTCOME:** 

1. Basic knowledge and understanding of the analysis and design of complex systems.

2. Ability to apply software engineering principles and techniques.

3. Ability to develop, maintain and evaluate large-scale software systems.

4. To produce efficient, reliable, robust and cost-effective software solutions.

5. Ability to perform independent research and analysis.

6. To communicate and coordinate competently by listening, speaking, reading and writing English

for technical and general purposes.

7. Ability to work as an effective member or leader of software engineering teams.

8. To manage time, processes and resources effectively by prioritising competing demands to achieve

personal and team goals Identify and analyzes the common threats in each domain.

9. Ability to understand and meet ethical standards and legal responsibilities.

**Title of the paper: Digital Electronics** 

**Semester: I Sem** 

**Programme: BCA** 

**Number of hours: 4 hours + 3 Hours Practical** 

**COURSE OUTCOME:** 

To understand and examine the structure of various number systems and its application in

digital design.

The ability to understand, analyze and design various combinational and sequential circuits.

Digital electronic circuits are main thing in digital electronics which is usually made from large

assemblies of logic gate.

The system which process discrete values is known as digital system. The significance of digital

electronics is that are inherently more reliable than analog, in terms of information processing.

Counters can be used in many areas of practical applications such as **microcontrollers**, **frequency** 

synthesizers, analog to digital converters, digital clocks and timing circuits and circuits used

in communication systems

Digital electronics are electric circuits that work on only two fixed values: "1" and "0". They use

a series of 1's and 0's to store and communicate information. They can also perform math using

just 1's and 0's. This is called Boolean math or Boolean logic.

To develop skill to build, and troubleshoot digital circuits

Title of the paper: WEB TECHNOLOGY

Semester: VI

**Programme: BCA** 

Number of hours: 4 hours + 3 Hour Practical

**COURSE OUTCOME:** 

> The students are able to get knowledge about the basic web technology concepts that are

required for developing web application. The key technology components are descriptive

languages, server side program elements and client side program elements.

> Students are able to develop a dynamic webpage by the use of html (hyper text markup

language).

> Students will be able to write a well formed XHTMl documents.

The students will be able to Analyze a web page and identify its Elements and attributes

like Paragraphs, Links, Headings, Lists, Tables, Images, Forms (Elements)

Attruibutes-href attribute is used to create Link, src and alt attributes are used with Image

elements.

> Create web pages using XHTML and Cascading style sheets(CSS),CSS is used to apply

the different properties like font, color, margins, images, background properties to the related

XHTML documents.

➤ Build dynamic web pages using Javascript(scripting language).

➤ Basics concepts of PHP like PHP with arrays and functions, simple programs of PHP.

Title of the paper :Desktop Publishing

Semester: V

**Programme: BCA** 

Number of hours: 1 hour+ 2 Hour Practical

**COURSE OUTCOME:** 

**DTP:** Desktop publishing

The students able to leran to create a publishing documents like invitations,

cards, visiting cards, before that Completes the necessary preparations for print and broadcast before

starting the process of creating a graphic design.

Defines color model according to the typeof print, the dimensions of the study, visual resolution.

Performs the required corrections on all material used in design to print and broadcast.

Creates effective design based on design principles.

Defines the characteristics of the paper and propagation techniques.

Recognizes all necessary elements for printing Creates her/his designs.

Title of the paper: ANDROID APPLICATION

Semester: VI Sem

**Programme: BCA** 

Number of hours: 1 hours + 2 hours

#### **COURSE OUTCOME**

Android which is exclusively developed for mobile phones, is an efficient operating system or mobile platform empowering billions of devices with high-end functionality.

It allows the user to do everything possible just as on a PC with several games, apps, movies, music, books etc available for download and use.

In the Android Developer Fundamentals course, you learn basic Android programming concepts and build a variety of apps, using the Java programming language.

Start with Hello World and work your way up to apps that schedule jobs, update settings, and use Android Architecture Components

- Basic Android Development tools such as Eclipse, DDMS, Drawables, Listeners, and so on.
- How to use various Layouts and Widgets in Android Applications.
- How to create interactive applications in android with multiple activities including audio, video and notifications.
- How to create applications using SQLite database.
- How to publish your App on Google Play.
- Use development tools, such as those found in the Android Developer's Toolkit to efficiently create, understand, debug and optimize Android applications.
- Understand the key forces and constraints acting on handheld devices and know how to accommodate these when designing and building their own Android applications.
- Know where to find additional sources of information to understand and solve Android-related problems.
- Understand the Android platform's organization, patterns and programming mechanisms and be able to use them effectively to develop their own Android applications.

Title of the paper: Data Communication and Computer Network

**Semester: IV** 

**Programme: BCA** 

**Number of hours : 4 hours + 2 Hours Tutorial** 

**COURSE OUTCOME:** 

This Course has been prepared for the computer science graduates to help them understand the basic

to advanced concepts related to Data Communication and Computer Networking.

> Computer networking courses train students to connect local area networks (LAN), wide area

networks (WAN) and wireless versions of both types. They also learn to connect hardware devices

and set up Internet access. These skills can apply to a variety of careers. Assist others with network

problems.

Data communications and networking is a truly global area of study, both because the technology

enables global communication, and because new technologies and applications often emerge from a

variety of countries and spread rapidly around the world.

> Files can easily be shared between users. Network users can communicate by email and instant

messenger. Security is good - users cannot see other users' files unlike on stand-alone machines. Data

is easy to backup as all the data is stored on the file server.

In this course students will also learn the new technologies like, Ethernet, IEEE 802.3, IEEE 802.5 &

IEEE 802.5 configurations, frame formats.

They aware about the different ISDN channels and congestion control mechanisms, bridging and

routing algorithms, RSA algorithms.

Title of the paper: Operation Research

Semester: IV

**Programme: BCA** 

**Number of hours : 4 hours + 2 Hours Tutorial** 

**COURSE OUTCOME:** 

❖ The term "operational research" was originally used in Britain during World War II to connote

scientific research done to integrate new radar technologies into Royal Air Force tactics.

Operations research is important because it is a helpful tool used to solve complex problems under

uncertainty. Operations research helps in improving the productivity of the organizations.

Operations controls provide significant information to the managers before making an important

decision. It helps in making small decisions for important decisions for an organization.

The basic tools of operations research are probability theory, Monte Carlo methods, s queuing

models, transportation models, network models, game theory, linear and nonlinear programming,

dynamic programming, Markov decision processes, input-output analysis, choice modelling.

The central objective of operations research is optimization, i.e., "to do things best under the given

circumstances." This general concept has great many applications, for instance, in agricultural

planning, biotechnology, data analysis, distribution of goods and resources, emergency and rescue

operations, engineering.

❖ This will help to solve the different transportation problems, method of finding IBFS to the

problems, Travelling salesman problem, and also this will helpful in minimising the cost and

maximising the profit.

Title of the paper: Digital Image Processing

Semester: V Sem

**Programme: BCA** 

**Number of hours: 4 hours + 3 Hours Practical** 

**COURSE OUTCOME:** 

**Digital Image Processing** is software which is used in image processing. For example:

computer graphics, signals, photography, camera mechanism, pixels, etc.

Digital Image Processing provides a platform to perform various operations like image

enhancing, processing of analog and digital signals, image signals, voice signals etc. It provides

images in different formats.

o Image sharpening and restoration: The common applications of Image sharpening and

restoration are zooming, blurring, sharpening, gray scale conversion, edges detecting, Image

recognition, and Image retrieval, etc.

o **Medical field:** The common applications of medical field are Gamma-ray imaging, PET scan,

X-Ray Imaging, Medical CT, UV imaging, etc.

**Remote sensing:** It is the process of scanning the earth by the use of satellite and

acknowledges all activities of space.

Machine/Robot vision: It works on the vision of robots so that they can see things, identify

them, etc.

**IMAGE ENHANCEMENT**— It is amongst the simplest and most appealing in areas of Image

Processing it is also used to extract some hidden details from an image and is subjective.

**IMAGE RESTORATION**— It also deals with appealing of an image but it is objective

(Restoration is based on mathematical or probabilistic model or image degradation).

**IMAGE COMPRESSION**-It involves in developing some functions to perform this operation.

It mainly deals with image size or resolution.

Title of the paper: Python

Semester: VI Sem

**Programme: BCA** 

**Number of hours: 1 hours + 2 Hours Practical** 

**COURSE OUTCOME:** 

Python is an interpreter, interactive, object-oriented programming language.

Python is commonly used for developing websites and software, task automation, data analysis, and data visualization.

Python is **simply structured** easy to learn and fun to use, Python has been adopted by many non-programmers such as accountants and scientists, for a variety of everyday tasks, like organizing finances.

Its syntax, unlike most computer languages, reads like English, so it isn't stressful to pick up. It was named after Monty Python

- Multiple Programming Paradigms.
- Web Testing.
- Data Extraction.
- Artificial Intelligence (AI) and Data Science Researches.
- Web Application and Internet Development.
- Database Easy Access, Interface Customization, and Quick System Integration.
- Cyber security.

#### DEPARTMENT OF HINDI

### **COURSE OUTCOMES**

- Students can work anywhere in India, as they know Hindi Our National Language. In many other countries also, Hindi is used as an Official Language as well as second Language. So they can easily be employed easily in those countries also.
- As they are Practicing Translation from Hindi to English and English to Hindi and some other Languages as well, they can become Translators in many Central Govt Offices.
- They are learning Poetry and Grammar -so they can become creative writers or poets areauthors.
- By Reading and observing Drama's and one act plays they can become good actors. By having good communication skills and command over language one can becomes good speaker.

Having good command over particular language one can present himself in better way. Learning Hindi in non-hindi region definitely one can achieve anything

### DEPARTMENT OF FOLKLORE

- 1. Demonstrate thorough understanding and knowledge of people and their "lores", especially in the respective cultural contexts of the concerned students.
- 2. Develop research related skills while understanding the nuances of field- based research.
- 3. Show an ability to evolve multicultural competence through an investigation of different traditions and texts.
- 4. Reflect critical and reflective thinking through the ability to analyze not only written but oral texts too.
- 5. Illustrate commitments to lifelong learning necessary to understand and imbibe knowledge that is part of one's growing up and which is significantly associated with the aspirations and values

#### DEPARTMENT OF ENVIRONMENTAL STUDIES

### **ENVIRONMENTAL STUDIES**

- Understanding environmental concerns by the students at the undergraduate level.
- Understanding the relationship of man with the environment and help them change his attitude for more positive, proactive, eco-friendly and sustainable life styles.
- Getting information about climate change, Global warming, Acid rain, Greenhouse effect, Ozone, layer depletion.
- Cultivating attitudes to safeguard the environment built particularly with field experience
- Realization of the impact of human actions on the immediate environment and the linkage with the larger issues.
- Getting information about Environment Protection Acts.

### POST-GRADUATE DEPARTMENT OF COMMERCE

#### **ACCOUNTING THEORY**

The course provides the coverage of the meaning of accounting theory, its types, approaches to formulate accounting theory; the IASB's conceptual framework; definition,

recognition, measurement and disclosure of elements of financial statements; accounting regulation and policy in India.

The goal of this course is to provide the knowledge of accounting theory based on conceptual framework of accounting theory and also the critical thinking skills necessary to analyse and interpret accounting related transactions in accordance with accounting theory, and the financial reports generated by the accounting system.

### CORPORATE GOVERNANCE AND BUSINESS ETHICS

The course provides coverage of concept of corporate governance, ethics, Corporate Social Responsibility and corporate governance in India and reforming of BOD and different Committees.

The aim of this course is to enable the student to understand the concept of corporate governance, help students to know about corporate ethics and cultural influences, impart knowledge of corporate social responsibility and accountability and to provide information about the corporate governance reforming committee reports in India.

## FINANCIAL DECISIONS

Financial decision making assumes greater importance in maximising value of an organisation. This course is designed to focus on the analysis of three crucial long term financial decisions like Capital budgeting, Capital Structure and Dividend decisions.

To equip students with necessary skills to evaluate capital projects with a focus on advanced capital budgeting techniques like MIRR (Modified IRR) and selection of projects under conditions of risk and help students analyse the leverage and dividend decisions based on theoretical framework.

#### MARKETING MANAGEMENT

This course provides the coverage of marketing concepts, marketing in 21st Century, marketing environment, and market oriented strategic planning, E- commerce, online marketing.

On completion of this course the students would be able to understand the changing business environment, identify the indicators of management thoughts and practices and understand fundamental premise underlying market driven strategies.

#### BUSINESS POLICY AND ENVIRONMENT

This course provides the coverage of business as a social system, internal and external environment, business ethics, social responsibility and business policy.

The objective of this course is to provide the student the knowledge about human resources, their significance and managing them in organisations.

### STATISTICS FOR BUSINESS DECISIONS

The course comprises of probability theories, sampling techniques, time series analysis and multivariate analysis.

The aim of this course is to enable a student to have knowledge about application of probability theory and sampling in different areas of commerce, time series analysis and application of multiple correlation and regression analysis.

## **CAPITAL MARKET INSTRUMENTS**

Capital markets in recent times are flooded with new and innovative instruments enhancing vibrancy and volume of capital markets. Every advanced programme in commerce should consist of a course in analysis and evaluation of various instruments traded in capital markets today.

The course intended to equip students an opportunity to comprehend the role of capital markets, evaluate the various capital markets instruments like Stock, bonds, etc. and to know the basics of new instruments like futures and options.

## **HUMAN RESOURCE MANAGEMENT**

This course provides the coverage of concept of HRM, Human resources planning and procurement, human resource development and compensational and rewards system.

The objective of this course is to provide the student the knowledge about human resources, their significance and managing them in organisations.

#### ORGANISATIONAL BEHAVIOUR

This course provides the coverage of scope of OB, different contributing discipline to OB, foundational of individual behaviour, motivational theories and foundations of group behaviour.

The objective of this course is to provide the student the knowledge about organisations, their constitution and the behaviour of people in organisations.

#### COMPUTER APPLICATIONS IN COMMERCE

This course is designed to provide knowledge and skills in computer applications in commerce. It focuses on computer applications in Accounting, Finance, Taxation, Statistics and Operations Research.

The objective of the course is to enable to students to understand online trading, online banking, and online submission of income tax and indirect tax returns, Tally and XBRL applications in Accounting and the usage of SPSS applications in statistical analysis.

#### STRATEGIC MANAGEMENT

This course provides the coverage of concept of strategic management, vision, mission and purpose of business definition, strategic analysis and choice strategic implementation and evaluation.

Apart from general management, strategic management is acquiring importance in the business due to the increased competition. Students of commerce will have to have the knowledge of Strategic management. With this objective of this course is introduced to the students at postgraduate level.

#### STOCK MARKETS

Stock markets are more popular today as they provide a wonderful opportunity to the general public to invest their savings. This course provides the coverage of fundamentals of stock markets, indices, instruments and trading in stocks and shares including Demat accounts.

The course is designed to meet the expectations of non-commercial graduates and intended to help students to understand the role of stock markets as an avenue for investments, understand the different type's stock market instruments, and provide them necessary knowledge regarding trading in stocks.

#### **BUSINESS RESEARCH METHODS**

This course provides the coverage of business research methods, ethical issues in business research methods, research process, data collection methods, designing of questionnaire, various statistical tools like univariate and bivariate analysis and report writing.

The course is envisaged to provide the student the knowledge and skill related to conduct of research related to business. This basic course familiarizes the student with the technicalities of executing a research assignment, in particular the applied research domain.

## INTERNATIONAL BUSINESS

This course provides the coverage of international marketing, international trade, international global sourcing, international business environment, multinational corporations and India in the global setting.

This specialization course on International Business is designed to equip the student with policy and practice skills related to international business. Upon completing this course, the student will be able to understand the intricacies of running business across the political territories. She/he would also get an insight in to the policy environment in India regarding the international business.

## MANAGEMENT OF NON-PROFIT ORGANISATIONS

This course provides the coverage of non-profit enterprises, accounting and finance in the non-profit organizations, human resource management in non-profit organization and governance and professionalism in NPO.

This is an introductory course designed to give the student basic inputs related to management of non-profit organizations. The place of non-profit sector vis-à-vis State and Business and different functional dimensions of professionally managing the non-profit organizations are introduced to the students.

## PORTFOLIO MANAGEMENT

Portfolio analysis and management is a course in financial management. This includesportfolio investment analysis, risk analysis and optimal combinations of securities which lead to create effective return on investment.

Candidates will be able to apply appropriate portfolio decisions and recommend relevant methods of evaluation techniques taking into account other factors affecting investment decisions.

# BUSINESS TAXATION SPECIALISATION – Paper 1: INDIRECT TAX LAW AND PRACTICE

This paper is to prepare the students to understand the Indian Tax System and its operation in the global economy. The importance of the indirect taxes in the Indian market oriented economy and its role in achieving the objectives of modern welfare governments.

On completion of this course the students would be able to understand the importance of indirect taxes in the Indian developing economy and its contribution for the economic development, understand the implications of indirect taxes on the taxable capacity of the society at large, understand the role of tax consultant in preparing the tax planning, and understand the concept of indirect tax in the changing global economy.

# FINANCIAL ACCOUNTING SPECIALISATION – Paper 1: CONTEMPORARY AREAS OF FINANCIAL ACCOUNTING

This course focuses on contemporary areas of financial accounting which are likely to be of interest to a wide range of stakeholders including investors, employees, society, government agencies and public at large. The course provides the coverage of accounting for the effects of price level changes, interim, segment and tax reporting, hedge accounting, human resource, social and value added accounting.

The aim of this course to provide knowledge and skills to the students on contemporary areas of financial accounting and to bring attitudinal changes to innovations in accounting and to develop professional knowledge and skills in contemporary areas.

# FINANCIAL MANAGEMENT SPECIALISATION – Paper 1: FUTURES, OPTIONS AND SWAPS

The course is designed to provide basic knowledge about risk management and the new instruments of capital market i.e., derivatives used for managing risk. It mainly comprises of a description of the concepts of risk management, forwards/futures, options and swaps along with the trading mechanics and pricing of these instruments.

The course aims to help the students in Basic understanding of risk management, Critical understanding of derivative markets and instruments, understanding the trading mechanics and technology involving derivative contracts and provide the basic valuation models for pricing the derivative assets.

# HUMAN RESOURCE MANAGEMENT SPECIALISATION – Paper 1: STRATEGIC MANAGEMENT OF HUMAN RESOURCES

This course Strategic Management of Human Resources covers concept of HRM, objectives, corporate strategy in HRM practice, Industrial relations perspectives, trends in HRM, Grievance procedure and ethical issues in HRM

The course is envisaged to provide the student the knowledge related to management of human resources in business enterprises. This course familiarizes the student with various facets of human resources and their management.

# MANAGEMENT ACCOUNTING SPECIALISATION – Paper 1: MARGINAL COSTING AND DECISION MAKING

This course provides the coverage of concept of cost behaviour analysis, break even analysis, multi product break even analysis, graphs, marginal costing and managerial decisions and direct costing.

The course in marginal costing and decision making is aimed at equipping the students with the knowledge and skill relating to marginal costing as a tool for evaluating a wide range of managerial decisions involving make-or-buy, pricing, export offers, temporary short-term of operations, discontinuance of a product line, etc,.

#### SOCIAL ENTREPRENEURSHIP

This course provides the foundation of social entrepreneurship as a domain knowledge covering the concept and importance of social entrepreneurship, incorporation and source of funding social enterprises.

The course is structured to make the student familiar with the concept of Social Entrepreneurship and the process of establishing and managing a social enterprise. The emphasis of the course is to make the student understand the possibilities of pursuing an entrepreneurial path and demonstrating the potential for social enterprises in emerging economies. The course content is designed so as to facilitate the students from any discipline understand and appreciate the concepts and technical details.

#### INTERNATIONAL ACCOUNTING

This course is designed to provide a deeper understanding of international accounting issues related to global financial reporting. It focuses on major diversities and challenges of financial reporting in the global arena, harmonization and international financial reporting standards. It also covers accounting for foreign currency transactions and major translation methods. It focuses on main issues in international financial statement analysis.

The aim of this course to provide knowledge and skills to the students on areas of accounting at international level and to bring attitudinal changes to meet challenges and issues of international accounting.

## **OPERATIONS RESEARCH**

The course Operations Research covers linear and integer programming, transportation and assignment problems and their applications in decision making in business.

The objective of the course is to acquaint the students with the use of quantitative models in decision making.

#### FOREIGN EXCHANGE MANAGEMENT

This course focuses on international financial environment, foreign exchange flows, foreign exchange markets and payments.

This specialization course on International Business is designed to equip the student with policy and practice skills related to international business. Upon completing this course, the student will be to understand the intricacies of running business across the political territories. She/he would also get an insight in to the policy environment in India regarding the international business.

## INTERNATIONAL FINANCIAL MANAGEMENT

As there has been a significant increase in multinational corporate activities; multinational finance is an added dimension of every advanced course in the area of finance. Hence this course has been designed to highlight the important finance functions of an MNC operating in India.

To enable students to understand the reasons, problems in internal finance management, foreign currency management, modes of payment, source of finance available etc as far as MNC operations/ firms concerned.

#### **PROJECT WORK:**

The project work brings practical knowledge among the students regarding research, through the collection of primary data and secondary data and analysing them for better decision making. It enhances the knowledge of statistical tools and techniques used in conducting the academic research or business research.

# BUSINESS TAXATION SPECIALISATION – Paper 2: CORPORATE TAX LAW AND PLANNING

This course is focus on different heads of income, taxable in the hands of companies, computation of grass total income, deduction, exemptions, set off and carry forward of loss. Tax planning for reducing the tax burden, allocation of investments, and maximize the company wealth. As a tax consultant of the corporate tax laws of the company to give advice to the drawing officers regarding TDS, advance payment of tax and remittances of tax, for his employees.

This course is intended to enable the students to understand the incidence based and residential status of the companies, understand the deferent types of companies under corporate income tax act, understand the different sources of income for corporate assesses, analyse the basic principal of tax planning to reduce the tax burden of the company and understand the roleof tax consultant relating to TDS, Advance payment of Tax, remittance of corporate income tax, preparation of various Forms.

# FINANCIAL ACCOUNTING SPECIALISATION – Paper 2: INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS)

The International Financial Reporting Standards (IFRS) issued by International Accounting Standards Board (IASB) are gaining recognition as Global Reporting Standards. This course is designed to provide a deeper understanding of International Financial Reporting Standardsissued

by IASB.

The aim of this course is to acquire knowledge, comprehension and capability to apply in the real world scenario of the accounting concepts, principles and interpretations discussed in the required pronouncements of International Financial Reporting Standards issued by the IASB.

# FINANCIAL MANAGEMENT SPECIALISATION – Paper 2: STRATEGIC FINANCIALDECISIONS

Financial decisions need to be aligned with overall corporate strategy. This course is introduced to provide an interface of financial policy and strategic management process mainly focusing on financial restructuring, innovative financing strategies and risk management.

The objective of this course is to acquaint students with the advanced concepts of financial management and the application of the same in developing financial strategies for the organisation.

# HUMAN RESOURCE MANAGEMENT SPECIALISATION – Paper 2:INTERNATIONAL HUMAN RESOURCES MANAGEMENT

This course covers broader framework of international HRM covering the major functions including HR Planning, performance management and issues relating to expatriation.

The course is envisaged to provide the student the knowledge related to management of human resources in business enterprises. This course familiarizes the student with various facets of human resources and their management.

# MANAGEMENT ACCOUNTING SPECIALISATION – Paper 2: COST MANAGEMENT

This course provides the coverage of a broader framework of various tools and strategies used for cost management and control.

The course is aimed at helping the students to understand the scope and need for cost control and management, familiarise themselves with the basic cost control and management tools, understand the importance of statistical tools and operation research in cost control and management.