

I Semester

Differential Calculus and Linear Algebra			
Course Code	21BS11	CIE Marks	50
Teaching Hours/Week (L:T:P: S)	3:2:0:0	SEE Marks	50
Total Hours of Pedagogy	50	Total Marks	100
Credits	04	Exam Hours	3 hours
Course Learning Objectives <ul style="list-style-type: none"> • Calculate the limit, examine the continuity, and understand the geometrical interpretation of differentiability. • Understand the consequences of various mean value theorems. • Draw the curves in Cartesian and polar coordinate systems. • Understand conceptual variations while advancing from one variable to several variables in calculus. • Recognize consistent and inconsistent systems of linear equations by the row echelon form of the augmented matrix using rank. • Find eigenvalues and corresponding eigenvectors for a square matrix. 			
Prerequisites: The students are aware of the basic knowledge of Trigonometry, Differentiation for understanding differential calculus. Matrices, Determinants and system of simultaneous linear equations are required to learn Linear Algebra.			
Pedagogy (General Instructions): These are sample Strategies, which teachers can use to accelerate the attainment of the various course outcomes. <ol style="list-style-type: none"> 1. In addition to the traditional lecture method, different types of innovative teaching methods may be adopted so that the delivered lessons shall develop student's theoretical and applied mathematical skills. 2. State the need for Mathematics with Engineering Studies and Provide real-life examples. 3. Support and guide the students for self-study. 4. You will also be responsible for assigning homework, grading assignments and quizzes, and documenting students' progress. 5. Encourage the students for group learning to improve their creative and analytical skills. 6. Show short related video lectures in the following ways: <ul style="list-style-type: none"> • As an introduction to new topics (pre-lecture activity). • As a revision of topics (post-lecture activity). • As additional examples (post-lecture activity). • As an additional material of challenging topics (pre-and post-lecture activity). • As a model solution of some exercises (post-lecture activity). 			

Module-1: Differential Calculus 1	
<p>Recapitulation of Limit and Continuity, Differentiability of functions (Self Learning). Successive differentiation: n^{th} derivatives of the functions: e^{ax}, $(ax + b)^n$, $\log(ax+b)$, $\sin(ax + b)$, $\cos(ax+b)$, $e^{ax}\sin(bx + c)$, $e^{ax}\cos(bx + c)$ – Problems. Leibnitz theorem (with proof) and its applications. Mean value theorems: Rolle's Theorem (statement only), Lagrange's mean value theorem, Cauchy's mean value theorem, Taylor's theorem. Taylor's and Maclaurin's series for functions of one variable. Problems. Indeterminate forms – L-Hospital's rule, Evaluation of indeterminate forms. (RBT Levels: L1 and L2)</p>	
Pedagogy	Chalk and talk method/PowerPoint Presentation
Module-2: Differential Calculus 2	
<p>Polar Coordinates - angle between the radius vector and the tangent, angle of intersection of curves(polar form), length of the perpendicular from pole on the tangent, pedal equations. Derivative of an arc in Cartesian, Polar and Parametric forms. Curvature of plane curves- Formula for the radius of curvature in Cartesian, parametric, polar, and in pedal forms, Centre of Curvature, Evolutes. Self-Study: Involutes (RBT Levels: L1 and L2)</p>	
Pedagogy	Chalk and talk method/PowerPoint Presentation
Module-3: Partial Differentiation	
<p>Partial Differentiation: Functions of two or more variables –Explicit and implicit functions, Partial derivatives – First and higher-order derivatives. Homogeneous functions – Euler's theorem, Total derivatives and differentiation, Differentiation of implicit functions and composite functions, Jacobian, Problems. Taylor's series and Maclaurin's series for functions of two variables, maxima-minima of the function of two variables. Self-Study: Errors and approximations. (RBT Levels: L1 and L2)</p>	
Pedagogy	Chalk and talk method/PowerPoint Presentation
Module-4: Linear Algebra 1	
<p>Self-Study: Related definitions & operations on matrices. Matrices Elementary row and column transformations (operations), equivalent matrices. Row-reduced echelon form, Normal form of a matrix, Rank of a matrix, Problems. Homogeneous and Non – Homogeneous system of linear equations and Consistency. Solutions of system of linear equations. Gauss elimination method, Gauss Jordan method, LU decomposition method – Crout's method. Self-Study: Cholesky's method (RBT Levels: L1 &L2)</p>	
Pedagogy	Chalk and talk method/PowerPoint Presentation
Module-5: Linear Algebra 2	
<p>Eigenvalues and Eigenvectors of a square matrix of order 2 and 3. Standard properties, Matrix polynomial, Cayley-Hamilton theorem (with proof). Finding A^{-1}, A^{-2}, A^2, A^3, A^4 and Problems. Linear transformations. Diagonalization of a square matrix. Quadratic forms- reduction to canonical form. Self-Study: Nature of quadratic form.</p>	

(RBT Levels: L1 & L2)	
Pedagogy	Chalk and talk method/PowerPoint Presentation
Course outcome (Course Skill Set) After successfully completing the course, the student will have a good understanding of the following topics and their applications: <ul style="list-style-type: none"> • Apply the knowledge of n^{th} derivatives, Mean value theorems and power series expansions. • Apply the knowledge of differentiation to the problems related to polar curves and applications to determine the curvature. • Learn the notion of partial differentiation to understand the nature of multivariate functions and to solve the problems related to composite functions and Jacobian. • Make use of matrix theory for testing the consistency of the system using rank and solving the system of linear equations. • Compute the eigenvalues and eigenvectors required for the matrix diagonalization process. 	
Assessment Details (both CIE and SEE) (Methods of CIE need to define topic wise i.e.- MCQ, Quizzes, Open book test or Seminar) The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The student has to obtain a minimum of 40% marks individually both in CIE and SEE to pass. Theory Semester End Exam (SEE) is conducted for 100 marks (3 Hours duration) and then it is reduced to 50. Based on this grading will be awarded. Continuous Internal Evaluation: <ol style="list-style-type: none"> 1. Methods suggested: Test, Open Book test, Written Quiz, Seminar, Assignment, Report writing etc. 2. The class teacher has to decide the topic for the closed book test, open-book test, Written Quiz and Seminar. In the beginning, only the teacher has to announce the methods of CIE for the subject. 3. 10 marks weightage has to be given for Self-Study component (Via assignment / seminar / test). Semester End Examination: Theory SEE will be conducted by University as per the scheduled timetable, with common question papers for the subject <ol style="list-style-type: none"> 1. The question paper will have ten questions. Each question is set for 20 marks. 2. There will be 2 questions from each module. Each of the two questions under a module (with a maximum of 3 sub-questions), should have a mix of topics under that module. 3. The students have to answer 5 full questions, selecting one full question from each module 	
Books recommended: <ol style="list-style-type: none"> 1. G.B. Thomas and R.L. Finney, Calculus, Pearson edition, 2007. 2. H. Anton, I. Birens and S. Davis, Calculus, John Wiley and Sons, Inc., 2002. 3. Serge Lang – First Course in Calculus 4. Lipman Bers – Calculus, Volumes 1 and 2 5. N. Piskunov – Differential and Integral Calculus 6. A. R. Vasista, Differential Calculus, Krishna Series, 2003 7. B. S. Vatssa, Theory of Matrices, 2nd ed., New Delhi: New Age International Publishers., 2007. 8. S. Narayan and P.K. Mittal, Textbook of Matrices, 10th ed. New Delhi: S Chand and Co. Ltd, 2004. 	

9. A R Vashista, Matrices, Krishna Prakashana Mandir, 2003.
Web links and Video Lectures (e-Resources):
<ul style="list-style-type: none"> • http://.ac.in/courses.php?disciplineID=111 • http://www.class-central.com/subject/math(MOOCs) • http://academicearth.org/ • VTU EDUSAT PROGRAMME-20
Activity-Based Learning (Suggested Activities in Class)/ Practical Based learning
<ul style="list-style-type: none"> • Quiz • Group assignment and • Seminars

I Semester

Mechanics and Properties of Matter			
Course Code	21BS12	CIE Marks	50
Teaching Hours/Week (L:T:P: S)	2:2:0:0	SEE Marks	50
Total Hours of Pedagogy	40	Total Marks	100
Credits	03	Exam Hours	03
Course objectives: After going through the course, the student will be able <ul style="list-style-type: none">To understand the perception of linear momentum, angular momentum, a moment of Inertia, simple harmonic motion, Gravitational laws and elasticity.Apply the concept of momentum in rocket propulsion, the moment of inertia in daily life, resonance phenomena for tuning system, Newton's law of gravitation to find the force between two objects, elasticity to find the strength of materials.Analyse the properties of matter for different applications in physical sciences.Evaluation of numerical problems.			
Pedagogy (General Instructions) These are sample Strategies, which teachers can use to accelerate the attainment of the various course outcomes. <ol style="list-style-type: none">In addition to traditional lecture methods alternative effective teaching methods could be adopted to attain the outcomes.Use Powerpoint/Videos/Animations to explain various concepts.Encourage group discussion in the classes.Ask some creative and higher-order thinking questions in classes which helps critical thinking.Show the different ways to solve the same problem this helps the students to come with their own creativity.To improve the understanding level of every student, confer how every concept can be applied to the real world.			
Module-1			
<u>Linear Momentum & Angular Momentum:</u>			08 Hours
Definition of Linear Momentum, Law of conservation of linear momentum for a system of particles, Centre of mass of a system of particles, Position coordinates of the Centre of Mass, Motion of centre of mass, collision between two particles which stick together (inelastic collision) and do not stick together (elastic collision) in laboratory frame of reference (One Dimensional), Conservation of linear momentum in case of variable mass: examples i) Single stage rocket (expression for velocity neglecting the weight) ii) Double stage rocket, , Numerical problems. Definition of angular momentum and its relation to angular velocity, Definition of Torque and its relation to angular velocity, Relation between angular momentum and Torque, Law of conservation of angular momentum, Work done by a Torque, Central force, Kepler's second law of Planetary motion (derivation), Numerical problems.			
Pedagogy	Chalk and talk, Power point presentation, Videos Self study Component: Kepler's second law of Planetary motion		
Module-2			
<u>Moment of Inertia:</u>			08 Hours
Moment of inertia and its physical significance. Rotational motion, Kinetic Energy of a rotating body, radius of gyration, Perpendicular and Parallel axis theorems (derivations), M.I of rectangular lamina, Annular ring and circular disc, (derivations), Hollow and Solid Cylinders (mention of expressions), M. I. of Flywheel (derivation), Numerical problems.			
Pedagogy	Chalk and talk, Power point presentation, Videos Practical Topics: 1. M.I of fly wheel Self study Component: M. I. of different shapes		

Module-3	
<u>Simple Harmonic Motion:</u>	08 Hours
<p>Basics of SHM, Differential equation of linear SHM, Total energy of a particle executing SHM (Derivation), Expressions for the period of oscillation of flat spiral spring (Derivation) Composition of two linear SHM of equal periods acting at right angles to each other, Lissajous figures.</p> <p>Theory of Free vibration, damped vibration and forced vibration. Resonance, sharpness of resonance, Helmholtz resonator (qualitative), Numerical problems.</p>	
Pedagogy	Chalk and talk, Power point presentation, Videos Practical Topics: <ol style="list-style-type: none"> 1. Period of oscillations of a spring 2. Lissajous figures using CRO 3. Helmholtz resonator Self study Component: Helmholtz resonator
Module-4	
<u>Gravitation:</u>	08 Hours
<p>Newton's Law of Gravitation, Determination of Gravitational constant by Cavendish's Method, Density and mass of the Earth, Gravitational potential, potential energy , Potential at a point outside and inside a spherical shell.</p> <p>Theory of Compound Pendulum, Interchangeability of Centres of suspension and oscillation, Four points collinear with the C.G. about which the time period is same, conditions for Maximum and Minimum time periods, Bar Pendulum, Experimental determination of "g" using Bar Pendulum, Numerical problems.</p>	
Pedagogy	Chalk and talk, Power point presentation, Videos Practical Topics: <ol style="list-style-type: none"> 1. Bar pendulum 2. Compound Pendulum Self study Component: Escape velocity and rocket propulsion
Module-5	
<u>Elasticity:</u>	08 Hours
<p>Basics of elasticity, different elastic moduli, Poisson's ratio, Expression for Young's modulus (Y) , Bulk modulus (K) and Rigidity modulus (n) in terms of α and β. Relation between Y, n and K, Limits of Poisson's ratio.</p> <p>Bending of beams- Neutral surface and neutral plane, Derivation of expression for bending moment. Bending moment of a beam with circular and rectangular cross section. Single cantilever, derivation of expression for young's modulus Torsion of cylinder- Expression for couple per unit twist of a solid cylinder (Derivation), Torsional pendulum-Expression for period of oscillation(qualitative), Numerical problems.</p>	
Pedagogy	Chalk and talk, Power point presentation, Videos Practical Topics: <ol style="list-style-type: none"> 1. Young's Modulus 2. Rigidity of modulus Self-study Component: Basics of elasticity
Course outcome (Course Skill Set) At the end of the course the student will be able to : <ol style="list-style-type: none"> 1. Explain conservation laws of linear and angular momentum and its applications 2. Able to compute M.I of various physical dimensions. 3. Examine the phenomena of Simple harmonic motion and distinction between free, damped and forced vibrations and the concept of resonance and quality factor with reference to damped harmonic oscillator. 4. Apply the Newton's law of gravitation to describe the phenomena of revolution of heavenly bodies. 5. Explore the concept of elasticity to design safe and stable man made structures. 	

Assessment Details (both CIE and SEE)

(methods of CIE need to be define topic wise i.e.- MCQ, Quizzes, Open book test, Seminar or micro project)

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The student has to obtain minimum of 40% marks individually both in CIE and SEE to pass. Theory Semester End Exam (SEE) is conducted for 100 marks (3 Hours duration). Based on this grading will be awarded.

Continuous Internal Evaluation:

1. Methods suggested: Test, Open Book test, Written Quiz, Seminar, report writing etc.
2. The class teacher has to decide the topic for closed book test, open book test, Written Quiz and Seminar. In the beginning only teacher has to announce the methods of CIE for the subject.

Semester End Examination:

Theory SEE will be conducted by University as per scheduled time table, with common question papers for subject

1. The question paper will have ten questions. Each question is set for 20 marks.
2. There will be 2 questions from each module. Each of the two questions under a module (with a maximum of 3 sub questions), should have a mix of topics under that module.
3. The students have to answer 5 full questions, selecting one full question from each module

Suggested Learning Resources:**Books**

1. Mechanics (XX-Edition) – D.S.Mathur- S. Chand & Company Ltd., New-Delhi, 2007.
2. Mechanics (VI-Edition) - J.C. Upadhyay –Ramprasad & Sons, Agra, 2005.
3. Mechanics & Electrodynamics (XVII-Edition, Course- 1 & 2) – Brijlal, Subramanyam & Jivan Seshan, S. Chand & Company Ltd., New-Delhi, 2008.
4. Properties of Matter (XIII-Edition) – Brijlal & Subramanyam, Eurasia Publishing House Pvt. Ltd., New-Delhi, 2001.
5. Elements of Properties of Matter (XXVIII-Edition), D.S.Mathur - S. Chand & Company Ltd., New-Delhi, 2005.
6. Physics, Vol. No.I (V-Edition) – Resnick, Halliday & Krane – John Wiley & Sons Inc., New-York, Singapore, 2005.
7. Berkely Physics, Vol. No.I – ABC Publications, Bangalore & New-Delhi.
8. University Physics (XI-Edition)- Young & Freedman – Pearson Education, 2004.

Web links and Video Lectures (e-Resources):

- <https://www.motionmountain.net/online.html>
- <http://www.csun.edu/science/physics/index.html>
- <https://nptel.ac.in/courses/122/106/122106027/>
- <https://www.youtube.com/watch?v=pyX8kQ-lzHI&list=PL6i60qoDQhQGaGbbg-4aSwXJvxOqO6o5e>
- <http://www2.phy.ilstu.edu/ptefiles/311content/resources/resources.html>

Activity Based Learning (Suggested Activities in Class)/ Practical Based learning

<https://www.vlab.co.in/broad-area-physical-sciences>

- <https://vlab.amrita.edu/index.php?sub=1&brch=74>
- <https://vlab.amrita.edu/index.php?sub=1&brch=280>
- <https://www.elmer.unibas.ch/pendulum/index.html>

I Semester

1 st Semester				CHEMISTRY.1			
Course Code		21BS13		CIE Marks		50	
Teaching Hours/Week (L:T:P: S)		2:2:0		SEE Marks		50	
Total Hours of Pedagogy		40		Total Marks		100	
Credits		03		Exam Hours		03	
CLO 1	Impart the basic knowledge of Inorganic chemistry to solve the conceptual questions using the knowledge gained by studying the model of the atom, electronic configuration, shapes of s, p, and d orbitals, and periodic properties like atomic radii, ionic radii, ionization energy, and electron affinity of elements.						
CLO 2	Explain the different nature and behavior of organic compounds based on fundamental concepts learned. And formulate the mechanism of organic reactions homolytic and heterolytic bond breaking by recalling and correlating the fundamental properties of the reagents involved.						
CLO 3	Understand the concept of the kinetics of chemical reaction and function of different indicators in titration.						
CLO 4	Creatively redesign traditional experiments with a green focus (using the various principles of green chemistry)						
CLO 5	Handle analytical data and estimation by volumetric analysis & gravimetry.						
Pedagogy (General Instructions) These are sample Strategies, which teachers can use to accelerate the attainment of the various course outcomes. These are sample Strategies; which teachers can use to accelerate the attainment of the various course outcomes. 1. Lecturer method (L) does not mean only the traditional lecture method, but a different type of teaching methods may be adopted to develop the outcomes. 2. Show Video/animation films to convince abstract concepts. 4. Encourage collaborative (Group Learning) Learning in the class 5. Ask at least three HOTS (Higher-order Thinking) questions in the class, which promotes critical thinking 6. Adopt Problem Based Learning (PBL), which fosters students' Analytical skills, develop thinking skills such as the ability to evaluate, generalize, and analyze information rather than simply recall it. 7. Topics will be introduced in multiple representations. 8. Show the different ways to solve the same problem and encourage the students to come up with their own creative ways to solve them. 9. Discuss how every concept can be applied to the real world - and when that's possible, it helps improve the students' understanding.							
Module-1 Inorganic Chemistry 08 Hours							
1. Atomic Structure: Review of Bohr's theory and its limitations, dual behavior of matter and radiation, Idea of de Broglie matter waves, Heisenberg uncertainty principle, atomic orbitals, quantum numbers, radial and angular wave functions and probability distribution curves, shapes of s, p, d orbitals. Aufbau and Pauli exclusion principles, Hund's multiplicity rule.							
2. Periodic Properties and Periodicity: Classification of elements into s, p, d, and f-blocks, cause of periodicity. Atomic and ionic radii, ionization energy, electron affinity and electronegativity – definition, methods of determination or evaluation, trends in periodic table (in s & p block elements).							
Pedagogy	Chalk and talk/power point presentation: quantum numbers, radial and angular wave functions and probability distribution curves, shapes of s, p, d orbitals. Aufbau and Pauli exclusion principles, Hund's multiplicity rule. Atomic and ionic radii, ionization energy, electron affinity and electronegativity – definition, methods of determination or						

	<p>evaluation, trends in periodic table (in s & p block elements).</p> <p>Videos/Learning material: Classification of elements into s, p, d, and f-blocks</p> <p>Self-study: Bohr's theory and its limitations, dual behavior of matter and radiation, Idea of de Broglie matter waves, Heisenberg uncertainty principle, atomic orbitals.</p>
<p align="center">Module-2 Organic Chemistry 08 Hours</p>	
<p>1. Mechanism of Organic Reactions</p> <p>Curved arrow notation, drawing electron movements with arrows, half-headed and double-headed arrows, homolytic and heterolytic bond breaking. Types of reagents–electrophiles and nucleophiles. Reactive intermediates-carbocations, carbanions, free radicals, carbenes (formation, structure & stability).</p> <p>2. Alkanes: Preparation by Corey-House reaction, conversion of alkanes to aromatic compounds via alkenes and alkynes- aromatization and pyrolysis.</p> <p>Alkenes: Preparation of alkenes by Wittig's reaction, Hoffmann's elimination, Stereoselectivity. Mechanism of electrophilic addition, oxymercuration, reduction, hydroboration – oxidation and epoxidation. Mechanism of oxidation with KMnO_4 and OsO_4, ozonolysis. Industrial applications of ethene and propene.</p> <p>Alkynes: Methods of preparation – Dehydrohalogenation, vicinal and gem dihalides, reactions of alkynes – Electrophilic additions with HCN, CH_3COOH and H_2O polymerization.</p>	
Pedagogy	<p>Chalk and talk/power point presentation: Mechanism of Organic Reactions, Alkanes, alkenes and alkynes.</p> <p>Videos/Learning material: Mechanism of Organic Reactions</p> <p>Self-study: Types of reagents–electrophiles and nucleophiles. Reactive intermediates-carbocations, carbanions, free radicals, carbenes (formation, structure & stability).</p>
<p align="center">Module-3 Physical Chemistry 08 Hours</p>	
<p>1. Chemical Kinetics</p> <p>Rate of reaction, rate equation, factors influencing the rate of a reaction – concentration, temperature, pressure, solvent, light, catalyst. Order of a reaction, integrated rate expression for zero order, first order, second and third order reaction. Half-life period of a reaction. Methods of determination of order of reaction, effect of temperature on the rate of reaction – Arrhenius equation. Theories of reaction rate – Simple collision theory for unimolecular and bimolecular collision. Transition state theory of Bimolecular reactions.</p> <p>2. Indicators: Definition, types (acid-base, redox, adsorption indicators), examples for each type. Theory of indicators – Oswald's theory and Quinonoid theory – indicator constant – action of phenolphthalein and methyl orange in acid-base solutions – pH titration curves for strong acid vs strong base, weak acid vs strong base, weak base vs strong acid, choice of indicators in these types of titrations. Calculation of pH in mixture of acid and base.</p>	
Pedagogy	<p>Chalk and talk/power point presentation: Chemical Kinetics, Indicators.</p> <p>Videos/Learning material: Methods of determination of order of reaction, effect of temperature on the rate of reaction – Arrhenius equation.</p> <p>Self-study: Definition, types (acid-base, redox, adsorption indicators), examples for each type.</p>
<p align="center">Module-4 Green Chemistry 08 Hours</p>	

<p>1. Green Chemistry: Introduction- Definition of green Chemistry, need of green chemistry, basic principles of green chemistry. Green synthesis- Evaluation of the type of the reaction i) Rearrangements (100% atom economic), ii) Addition reaction (100% atom economic). Organic reactions by Sonication method: apparatus required examples of some chemical reactions (Heck, Hunsdiecker and Wittig reactions).</p> <p>2.Green catalysis: Heterogeneous catalysis, use of zeolites, silica, alumina, supported catalysis-biocatalysis: Enzymes, microbes Phase transfer catalysis (micellar/surfactant)</p>	
Pedagogy	<p>Chalk and talk/power point presentation: Green Chemistry, Green Catalysis.</p> <p>Videos/Learning material: Green synthesis- Evaluation of the type of the reaction i) Rearrangements (100% atom economic), ii) Addition reaction (100% atom economic). Organic reactions by Sonication method.</p> <p>Self-study: bio catalysis: Enzymes, microbes Phase transfer catalysis (micellar/surfactant)</p>
Module 5: Analytical Chemistry 08 Hours	
<p>1. Data handling: Accuracy and precision, types of error, statistical data treatment, significant figures and propagation of errors, use of spreadsheet and data treatment software, control chart, confidence limit, test of significance, outliers, calibration methods, linear and non-linear data fitting.</p> <p>2. Gravimetric analysis: Properties of precipitates. Nucleation and crystal growth, factors influencing completion of precipitation. Co-precipitation and post- precipitation, purification and washing of precipitates. Precipitation from homogeneous solution, a few common gravimetric determinations.</p> <p>3. Volumetric analysis: Acid base titration, complexometric titration, redox titration, precipitation titration.</p>	
Pedagogy	<p>Chalk and talk/power point presentation: Data Handling, Gravimetric analysis. Volumetric analysis.</p> <p>Videos/Learning material: use of spreadsheet and data treatment software, control chart, confidence limit, test of significance, outliers, calibration methods, linear and non-linear data fitting. Co-precipitation and post- precipitation, purification and washing of precipitates.</p> <p>Self-study: Precipitation from homogeneous solution, a few common gravimetric determination.</p>
Course outcome (Course Skill Set)	
At the end of the course the student will be able to:	
CO 1	Discuss the structure of an atom and periodicity in properties with reference to the <i>s</i> and <i>p</i> block of elements.
CO 2	Explain the fundamentals of organic chemistry and identify many organic reaction mechanisms
CO 3	Interpret the knowledge of kinetics to study rate law and rate of reaction, theories of reaction rates and study about different types of indicators.
CO 4	Enumerate the importance of Green chemistry and new insights of Green catalysis.
CO 5	Illustrate the fundamental principles of analytical chemistry and concepts of chemical analysis.

Assessment Details (both CIE and SEE)

(methods of CIE need to be define topic wise i.e.- MCQ, Quizzes, Open book test, Seminar or micro project)

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The student has to obtain minimum of 40% marks individually both in CIE and SEE to pass. Theory Semester End Exam (SEE) is conducted for 100 marks (3 Hours duration). Based on this grading will be awarded.

Continuous Internal Evaluation:

1. Methods suggested: Test, Open Book test, Written Quiz, Seminar, report writing etc.
2. The class teacher has to decide the topic for closed book test, open book test, Written Quiz and Seminar. In the beginning only teacher has to announce the methods of CIE for the subject.

Semester End Examination:

Theory SEE will be conducted by University as per scheduled time table, with common question papers for subject

1. The question paper will have ten questions. Each question is set for 20 marks.
2. There will be 2 questions from each module. Each of the two questions under a module (with a maximum of 3 sub questions), should have a mix of topics under that module.

Suggested Learning Resources:**Books**

1. James E. Huheey, Ellen Keiter & Richard Keiter: Inorganic Chemistry: Principles of Structure and Reactivity, Pearson Publication.
2. G.L. Miessler & Donald A. Tarr: Inorganic Chemistry, Pearson Publication.
3. J.D. Lee: A New Concise Inorganic Chemistry, E.L.B.S.
4. F.A. Cotton & G. Wilkinson: Basic Inorganic Chemistry, John Wiley & Sons.
5. I.L. Finar: Organic Chemistry (Vol. I & II), E.L.B.S.
6. R.T. Morrison & R.N. Boyd: Organic Chemistry, Prentice Hall.
7. Peter Sykes: A Guide Book to Mechanism in Organic Chemistry, Orient Longman.
8. Peter Atkins, Peter William Atkins, Julio de Paul: Atkins' Physical Chemistry, OUP Oxford.
9. Pathania & Sharma. Physical Chemistry, Vishal Publications Jalandhar & Delhi.
10. Lancaster, M.(2016),Green Chemistry An Introductory Text.2nd Edition, RSC Publishing.
11. Anastas, P.T.; Warner, J.C .(1998), Green Chemistry, Theory and Practice, Oxford University Press
12. Skoog, D.A.; West, D.M. & Holler, F.J. Fundamentals of Analytical Chemistry 6th Ed., Saunders College Publishing, Fort Worth (1992).
13. Dean, J. A. Analytical Chemistry Notebook, McGraw Hill.

Web links and Video Lectures (e-Resources):

1. <https://www.youtube.com/watch?v=CCsNJFsYSGs>
2. <https://www.youtube.com/watch?v=Efh5GkVbhEc>
3. <https://www.youtube.com/watch?v=NhdtqnEfa9w>
4. <https://www.youtube.com/watch?v=9opyTo7ZIJY>

Activity Based Learning (Suggested Activities in Class)/ Practical Based learning

- <https://www.vlab.co.in/broad-area-chemical-sciences>
- <https://demonstrations.wolfram.com/topics.php>
- <https://interestingengineering.com/science>

PROBLEM-SOLVING THROUGH PROGRAMMING			
Course Code	21BS14	CIE Marks	50
Teaching Hours/Week (L:T:P: S)	3:0:0:0	SEE Marks	50
Total Hours of Pedagogy	40	Total Marks	100
Credits	03	Exam Hours	03
Course Objectives: <ol style="list-style-type: none">1. Elucidate the basic architecture and functionalities of a Computer2. Apply programming constructs of C language to solve the real-world problems3. Explore user-defined data structures like arrays, structures and pointers in implementing solutions to problems4. Design and Develop Solutions to problems using modular programming constructs such as functions and procedures			
Teaching-Learning Process (General Instructions) <p>These are sample Strategies, which teachers can use to accelerate the attainment of the various course outcomes.</p> <ol style="list-style-type: none">1. Lecturer method (L) need not be only a traditional lecture method, but alternative effective teaching methods could be adopted to attain the outcomes.2. Use of Video/Animation to explain the functioning of various concepts.3. Encourage collaborative (Group Learning) Learning in the class.4. Ask at least three HOT (Higher-order Thinking) questions in the class, which promotes critical thinking.5. Adopt Problem Based Learning (PBL), which fosters students' Analytical skills, develop design thinking skills such as the ability to design, evaluate, generalize, and analyze information rather than simply recall it.6. Introduce Topics in manifold representations.7. Show the different ways to solve the same problem and encourage the students to come up with their own creative ways to solve them.8. Discuss how every concept can be applied to the real world - and when that's possible, it helps improve the students' understanding.			
Module-1		0 8 Hours	
Introduction to Computer Hardware and Software: Computer generations, computer types, bits, bytes and words, CPU, Primary memory, Secondary memory, ports and connections, input devices, output devices, Computers in a network, Network hardware, Software basics, software types.			
Overview of C: Basic structure of C program, executing a C program. Constant, variable and data types, Operators and expressions			
Teaching-Learning Process:		Chalk &board, Active Learning	
Module-2		08Hours	
Managing Input and output operations. Conditional Branching and Loops. Example programs, finding roots of a quadratic equation, computation of binomial coefficients, plotting of Pascal's triangle.			
Teaching-Learning Process:		Chalk & board, Active Learning, Problem based learning	
Module-3			
Arrays: Arrays (1-D, 2-D), Character arrays and Strings, Basic Algorithms: Searching and Sorting Algorithms (Linear search, Binary search, Bubble sort and Selection sort).			
Teaching-Learning Process:		Chalk & board, MOOC, Active Learning	

Module-4	
User Defined Functions and Recursion. Example programs: Finding Factorial of a positive integer, GCD of two numbers and Fibonacci sequence.	
Teaching-Learning Process:	Chalk& board, Problem based learning
Module-5	
Structures, Unions and Pointers, Pre-processor Directives and Example Programs like Addition of two complex numbers using structures , compute the sum, mean and standard deviation of all elements stored in an array of N real numbers using pointers.	
Teaching-Learning Process:	Chalk & board, MOOC
Course Outcomes (Course Skill Set) At the end of the course the student will be able to: <ol style="list-style-type: none"> 1. Elucidate the basic architecture and functionalities of a computer and also recognize the hardware parts. 2. Apply programming constructs of C language to solve the real world problem 3. Explore user-defined data structures like arrays in implementing solutions to problems like searching and sorting 4. Explore user-defined data structures like structures, unions and pointers in implementing solutions 5. Design and Develop Solutions to problems using modular programming constructs using functions 	
Assessment Details (both CIE and SEE) The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The student has to obtain a minimum of 40% marks individually both in CIE and SEE to pass. Theory Semester End Exam (SEE) is conducted for 100 marks (3 hours duration). Based on this grading will be awarded. Continuous Internal Evaluation: 1.Methods recommended: Three tests (60%) Written Quiz (20%) and module assignments (20%) 2. The teacher has to decide the topics for open book tests ,seminars and for quiz, and announce in the class, Semester End Examination: Theory SEE Will be conducted by the University as per the schedule time table; <ol style="list-style-type: none"> 1. The question paper will have 10 questions each question is set for 20 marks. 2. There will be 2 questions from each module. Each of the 2 questions in a module will have a maximum of three sub divisions. 3. The students have to answer 5 full questions ,selecting one full question from each module. 	
Suggested Learning Resources:	
Books <ol style="list-style-type: none"> 1. E. Balaguruswamy, Programming in ANSI C, 7th Edition, Tata McGraw-Hill 2. Brian W. Kernighan and Dennis M. Ritchie, The 'C' Programming Language, Prentice Hall of India. 	
Reference:	

1. Reema Thereja , Programming in C , Cengage publication,
Web links and Video Lectures (e-Resources): <ol style="list-style-type: none">1. elearning.vtu.ac.in/e- content/courses/video/BS/15PCD23.html2. https://nptel.ac.in/courses/106/105/106105171/ MOOC courses can be adopted for more clarity in understanding the topics and verities of problem solving methods.
Activity Based Learning (Suggested Activities in Class)/ Practical Based learning <ol style="list-style-type: none">1. Real world problem solving using group discussion. E.g., Electricity bill generation. etc.,2. Demonstration of solution to a problem through programming.3. Demonstration of simple project and motivating the students to develop similar type of projects.

I-Semester

MECHANICS LABORATORY			
Course Code	21BSL15	CIE Marks	50
Teaching Hours/Week (L:T:P: S)	1:0:2:0	SEE Marks	50
Credits	02	Exam Hours	3 Hours
Course objectives: <ul style="list-style-type: none">To realize experimentally the mechanical properties of materialsTo understand the laws of Oscillations			
List of Experiments: <div>Any Eight experiments to be performed</div>			
Sl.NO	Experiments		
1	Bar Pendulum L vs. T and L^2 Vs. LT^2 graphs.		
2	M.I. of the Fly-Wheel		
3	Verification of Parallel axes theorem of Moment of Inertia using Bar Pendulum.		
4	Verification of Perpendicular axes theorem of Moment of Inertia using Torsional Pendulum.		
5	Bifilar Suspension.		
6	Young's Modulus of the material of a wire using Searls' Apparatus.		
7	Y- by Uniform bending- Load depression Graph.		
8	Y-Single Cantilever		
9	Determination of rigidity modulus		
10	Time period of a spring		
	Demonstration Experiments (For CIE)		
11	Lissajous Figures		
12	Y by stretching		
13	Poisons ratio of rubber tube		
Course outcomes (Course Skill Set): At the end of the course the student will be able to: <ul style="list-style-type: none">1. Able to calculate M.I of various physical dimensions.2. Gain the knowledge of SHM3. Recognize and to measure the Young's Modulus and Modulus of rigidity elastic properties of materials			
Assessment Details (both CIE and SEE) Continuous Internal Evaluation (CIE): The CIE marks awarded in case of Practical shall be based on the weekly evaluation of laboratory journals/ reports after the conduction of every experiment and one practical test.			

Semester End Evaluation (SEE): The practical examinations to be conducted as per the time table of university in a batch wise with strength of students not more than 10-15 per batch.

1. All laboratory experiments are to be included for practical examination.
2. Breakup of marks and the instructions printed on the cover page of answer script to be strictly adhered by the examiners.
3. Students can pick one experiment from the questions lot prepared by the examiners.
4. Change of experiment is allowed only once and 15% Marks allotted to the procedure part to be made zero.

Suggested Learning Resources:

<https://vlab.amrita.edu/index.php?sub=1&brch=74&sim=571&cnt=1>

<https://vlab.amrita.edu/?sub=1&brch=280&sim=194&cnt=1>

<https://vlab.amrita.edu/index.php?sub=1&brch=280&sim=1518&cnt=1>

<https://vlab.amrita.edu/index.php?sub=1&brch=280&sim=210&cnt=2>

<https://vlab.amrita.edu/?sub=1&brch=280&sim=1509&cnt=1>

<https://vlab.amrita.edu/index.php?sub=1&brch=280&sim=550&cnt=1>

<https://www.merlot.org/merlot/viewMaterial.htm?id=74465>

https://iwant2study.org/lookangejss/math/ejss_model_Lissajous/Lissajous_Simulation.xhtml

<https://vlab.amrita.edu/index.php?sub=1&brch=280&sim=1518&cnt=1>

Chemistry Lab.1			
Course Code	21BSL16	CIE Marks	50
Teaching Hours/Week (L:T:P: S)	1:0:2:0	SEE Marks	50
Credits	02	Exam Hours	03
Course objectives:			
CLO1 Quantitative analysis of materials by Volumetric, Gravimetry, and chemical method.			
CLO2 Instrumental methods & Kinetics for developing experimental skills in building technical competence			
SL.N O	Experiments		
1	Preparation of standard oxalic acid solution and standardization of potassium permanganate solution. Estimation of ferrous ammonium sulfate present in the solution.		
2	Preparation of zinc sulphate solution and standardization of EDTA. Estimation of total hardness of water.		
3	Determination of percentage of copper in brass by Iodometric method		
4	Preparation of std. potassium dichromate solution and estimation percentage of ferrous ammonium sulphate present in the solution using potassium ferricyanide as an external indicator.		
5	Determination of Chemical oxygen demand of industrial waste water.		
6	Gravimetric estimation of barium as barium sulphate.		
	Section B: Physical Chemistry Experiments		
7	Study of kinetics of reaction between $K_2S_2O_8$ and KI, 2nd order, determination of rate constant		
8	Conductometric titration of strong acid x strong base and weak acid x strong base.		
9	Colourimetric estimation of Cu^{2+} ion using NH_4OH as complexing agent.		
10	Potentiometric titration of ferrous ammonium sulphate against potassium dichromate.		
11	Determination of the density using specific gravity bottle and viscosity of a liquid using Ostwald's viscometer.		
12	Determination of the density using specific gravity bottle and surface tension of a liquid using stalagmometer.		
Course outcomes (Course Skill Set):			
At the end of the course the student will be able to:			
C01 Determine the total hardness, ferrous ammonium sulphate and chemical oxygen demand in the given solution by volumetric analysis method.			
C02 Determine the percentage of copper and Iron in the given analyte solution by titration method.			
C03 Estimate the percentage of barium by gravimetric analysis.			

- C04** Estimate the amount of substance present in the given solution using colourimeter, potentiometer and conductivity meter.
- C05** Determine the Surface tension and coefficient of viscosity of the given organic liquid.
- C06** Demonstrate of kinetic study and determination of rate constant.

Assessment Details (both CIE and SEE)

Continuous Internal Evaluation (CIE): The CIE marks awarded in case of Practical shall be based on the weekly evaluation of laboratory journals/ reports after the conduction of every

Semester End Evaluation (SEE): The practical examinations to be conducted as per the time table of university in a batch wise with strength of students not more than 10-15 per batch.

1. All laboratory experiments are to be included for practical examination.
2. Breakup of marks and the instructions printed on the cover page of answer script to be strictly adhered by the examiners.
3. Students can pick one experiment from the questions lot prepared by the examiners.
4. Change of experiment is allowed only once and 15% Marks allotted to the procedure part to be made zero.

Suggested Learning Resources:

Text Books:

- 1 Vogel's A.I. A textbook of quantitative analysis, 35th edition, 2012.
- 2 Willard, Merit, Dean and Settle, A textbook of Instrumental analysis, 6th edition 2012.

Reference books:

1. G.H Jeffery, J Bassett, J Mendham and R.C. Denney Vogel's A.I. A textbook of quantitative analysis, Dorling Kindersley (India) Pvt., Ltd. 35th edition, 2012
2. Halpern, A. M. & McBane, G. C. *Experimental Physical Chemistry 3rd Ed.*; W.H. Freeman & Co.: New York (2003) Gurudeep Raj. *Advanced Practical Inorganic*

COMPUTER PROGRAMMING LABORATORY			
Course Code	21BSL17	CIE Marks	50
Teaching Hours/Week (L: T:P: S)	1:0:2:0	SEE Marks	50
Total Hours of Pedagogy	--	Total Marks	100
Credits	02	Exam Hours	03
Course Objectives:			
1. Explain problem statements and identify appropriate solutions			
2. Demonstrate the use of IDE, C Compiler, and identify and rectify the syntax and syntactic errors during programming.			
3. Development of algorithms and programs using constructs of C programming language			
4. Reporting the observations			
Sl. No.	Practice Programs		
1	Calculation of Simple Interest,		
2	Check whether the given number is even or odd		
3	Convert string case		
4	Check for the palindrome, prime number, perfect square.		
5	Development of linear search algorithm Etc....		
PART A-List of problems for which students should develop the program and execute in the Laboratory			
1	Simulation of a Simple Calculator.		
2	Compute the roots of a quadratic equation by accepting the coefficients. Print appropriate messages.		
3	An electricity board charges the following rates for the use of electricity: for the first 200 units 80 paise per unit: for the next 100 units 90 paise per unit: beyond 300 units Rs 1 per unit. All users are charged a minimum of Rs. 100 as meter charge. If the total amount is more than Rs 400, then an additional surcharge of 15% of the total amount is charged. Write a program to read the name of the user, the number of units consumed, and print out the charges.		
5	Implement Binary Search on Integers / Names.		
6	Implement Matrix multiplication and validate the rules of multiplication.		
7	Compute sin(x)/cos(x) using Taylor series approximation. Compare your result with the built-in library function. Print both the results with appropriate inferences.		
8	Sort the given set of N numbers using Bubble sort.		
9	Write functions to implement string operations such as compare, concatenate, string length. Convince the parameter passing techniques.		
10	Implement structures to read, write and compute average- marks and the students scoring above and below the average marks for a class of N students.		
11	Develop a program using pointers to compute the sum, mean and standard deviation of all elements stored in an array of N real numbers.		
12	Implement Recursive functions for Binary to Decimal Conversion.		
PART B – Practical Based Learning			
	A problem statement for each batch is to be generated in consultation with the co-examiner and the student should develop an algorithm, program and execute the program for the given problem with appropriate outputs.		

Course Outcome (Course Skill Set)

At the end of the course the student will be able to:

1. Define the problem statement and identify the need for computer programming
2. Make use of C compiler, IDE for programming, identify and correct the syntax and syntactic errors in programming
3. Develop algorithm, flowchart and write programs to solve the given problem
4. Demonstrate use of functions, recursive functions, arrays, strings, structures and pointers in problem solving.
5. Document the inference and observations made from the implementation.

Assessment Details (both CIE and SEE)

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The student has to obtain a minimum of 40% marks individually both in CIE and SEE to pass. Practical Semester End Exam (SEE) is conducted for 100 marks (3 hours duration). Based on this grading will be awarded.

Continuous Internal Evaluation (CIE):

75% CIE marks awarded in case of practical shall be based on the weekly evaluation of laboratory journals/ reports after the conduction of every experiment and 25% marks for one practice test for practical-based learning.

Semester End Evaluation (SEE):

1. The practical examinations are to be conducted as per the timetable of the University in batch-wise with the strength of students not more than 10-15 per batch.
2. All laboratory experiments (Part A) are to be included for practical examination.
3. **Students can pick one experiment from the questions lot of PART A with equal choice to all the students in a batch.**
For PART B examiners should frame a question for each batch, the student should develop an algorithm, program, execute and demonstrate the results with appropriate output for the given problem.
4. **Weightage of marks for PART A is 80% and for PART B is 20%**
5. Change of experiment is allowed only once for part A and 15% Marks allotted to the procedure part to be made zero. However, PART B question is mandatory (change of question is not allowed).
6. Marks distribution: procedure (15%) + execution (70%) + viva voce (15%)
PART A (12+56+12 = 80) AND FOR PART B (3+14+3 = 20)

Suggested Learning Resources:

1. Yashavanth Kanetkar, Let us C, Authentic Guide to C Programming Language, bpb publisher, 17th Edition, 2020.
2. Herbert Schildt, C: The complete reference, Mc Graw Hill, 4th Edition, 2017
3. Programming in C, Reema Theraja

Weblinks and Video Lectures (e-Resources):

1. <http://elearning.vtu.ac.in/econtent/courses/video/BS/14CPL16.html>
2. <https://nptel.ac.in/courses/106/105/106105171/>

Communicative English

I Semester -

Communicative English			
Course Code	21BS18	CIE Marks	50
Teaching Hours/Week (L:T:P: S)	2:0:0 Hours	SEE Marks	50
Total Hours of Pedagogy	02 Hours/Week	Total Marks	100
Credits	02	Exam Hours	02 hours
Course objectives: The course (21EGH18) will enable the students, <ul style="list-style-type: none">• To know about Fundamentals of Communicative English and Communication Skills in general.• To train to identify the nuances of phonetics, intonation and enhance pronunciation skills for better communication skills.• To impart basic English grammar and essentials of important language skills.• To enhance English vocabulary and language proficiency for better communication skills.• To learn about Techniques of Information Transfer through presentation.			
Language Lab : To augment LSRW, grammar, and Vocabulary skills (Listening, Speaking, Reading, Writing and Grammar, Vocabulary) through tests, activities, exercises etc., comprehensive web-based learning and assessment systems can be referred as per the AICTE /VTU guidelines.			
Teaching-Learning Process (General Instructions) These are sample Strategies, which teacher can use to accelerate the attainment of the various course outcomes. <ol style="list-style-type: none">1. Teachers shall adopt suitable pedagogy for effective teaching - learning process. The pedagogy shall involve the combination of different methodologies which suit modern technological tools and software's to meet the present requirements of the Global employment market.<ol style="list-style-type: none">(i) Direct instructional method (Low /Old Technology),(ii) Flipped classrooms (High/advanced Technological tools),(iii) Blended learning (combination of both),(iv) Enquiry and evaluation based learning,(v) Personalized learning,(vi) Problems based learning through discussion,(vii) Following the method of expeditionary learning Tools and techniques,(viii) Use of audio visual methods through language Labs in teaching of LSRW skills.2. Apart from conventional lecture methods, various types of innovative teaching techniques through videos, animation films may be adapted so that the delivered lesson can progress the students In theoretical applied and practical skills in teaching of communicative skills in general.			
Module-1			
Introduction to Communicative English: Introduction, Language as a Tool, Fundamentals of Communicative English, Process of Communication, Barriers to Effective Communicative English, Different styles and levels in Communicative English (Communication Channels). Interpersonal and Intrapersonal Communication Skills, How to improve and Develop Interpersonal and Intrapersonal Communication Skills.			
Teaching-Learning Process	Chalk and talk method, Videos, PowerPoint presentation to teach Communication skills (LSRW Skills), Creating real time stations in classroom discussions, Giving activities and assignments (Connecting Campus & community with companies real time situations).		
Module-2			

Communicative English

Introduction to Phonetics :

Introduction, Phonetic Transcription, English Pronunciation, Pronunciation Guidelines Related to consonants and vowels, Sounds Mispronounced, Silent and Non-silent Letters, Syllables and Structure, Word Accent and Stress Shift, – Rules for Word Accent, Intonation – purposes of intonation, Spelling Rules and Words often Misspelt – Exercises on it. Common Errors in Pronunciation.

Teaching-Learning Process

Chalk and talk method, Videos, PowerPoint presentation and Animation videos to teach phonetics in Practical method, creating real time stations in classroom discussions, Giving activities and assignments (Connecting Campus & community with companies real time situations).

Module-3

Basic English Communicative Grammar and Vocabulary PART - I :

Grammar: Basic English Grammar and Parts of Speech - Nouns, Pronouns, Adjectives, Verbs, Adverbs, Conjunctions, Articles and Preposition. Preposition, kinds of Preposition and Prepositions often Confused. Articles: Use of Articles – Indefinite and Definite Articles, Pronunciation of 'The', words ending 'age', some plural forms. Introduction to Vocabulary, All Types of Vocabulary – Exercises on it.

Teaching-Learning Process

Chalk and talk method, Videos, PowerPoint presentation to teach Grammar, Animation videos on communication and language skills, creating real-time stations in classroom discussions, Giving activities and assignments (Connecting Campus & community with companies real time situations).

Module-4

Basic English Communicative Grammar and Vocabulary PART - II:

Question Tags, Question Tags for Assertive Sentences (Statements) – Some Exceptions in Question Tags and Exercises, One Word Substitutes and Exercises. Strong and Weak forms of words, Words formation - Prefixes and Suffixes (Vocabulary), Contractions and Abbreviations. Word Pairs (Minimal Pairs) – Exercises, Tense and Types of tenses, The Sequence of Tenses (Rules in use of Tenses) and Exercises on it.

Teaching-Learning Process

Chalk and talk method, PowerPoint presentation to teach Grammar and phonetics, Animation videos on communication and language skills, creating real time stations in classroom discussions, Giving activities and assignments (Connecting Campus & community with companies real time situations).

Module-5

Communication Skills for Employment:

Information Transfer: Oral Presentation - Examples and Practice. Extempore / Public Speaking, Difference between Extempore / Public Speaking, Communication Guidelines for Practice. Mother Tongue Influence (MTI) – South Indian Speakers, Various Techniques for Neutralization of Mother Tongue Influence – Exercises. Reading and Listening Comprehensions – Exercises.

Teaching-Learning Process

Chalk and talk method, Videos, PowerPoint presentation to teach Grammar and phonetics, Animation videos on communication and language skills, creating real time stations in classroom discussions, Giving activities and assignments (Connecting Campus & community with companies real time situations).

Course outcome (Course Skill Set)

At the end of the course(21EGH18) the student will be able to :

1. Understand and apply the Fundamentals of Communication Skills in their communication skills.
2. Identify the nuances of phonetics, intonation and enhance pronunciation skills.
3. To impart basic English grammar and essentials of language skills as per present requirement.
4. Understand and use all types of English vocabulary and language proficiency.
5. Adopt the Techniques of Information Transfer through presentation.

Communicative English

Assessment Details (both CIE and SEE)

(methods of CIE need to be defined topic wise i.e.- MCQ, Quizzes, written test, Reports writing, Seminar and activities). Continuous internal evaluation (CIE) needs to be conducted for 50 marks like Engineering courses. The weight age of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The student has to obtain a minimum of 40% of maximum marks in CIE and 35% of maximum marks in SEE to pass. MCQ Pattern (Multiple Choice Questions) Semester End Exam (SEE) is conducted for 50 marks (120 minutes duration). Based on this grading will be awarded.

Continuous Internal Evaluation (CIE) :

Three Unit Tests each of **20 Marks (duration 01 hour)**

1. First test at the end of 5th week of the semester
2. Second test at the end of the 10th week of the semester
3. Third test at the end of the 15th week of the semester

All the tests are preferred similar to SEE pattern; however, teacher may follow test pattern similar to other theory courses of Engineering

Two assignments each of **10 Marks**

4. First assignment at the end of 4th week of the semester
5. Second assignment at the end of 9th week of the semester

Report writing /Group discussion/Seminar any one of three suitably planned to attain the COs and POs for **20 Marks (duration 01 hours)**

6. At the end of the 13th week of the semester

The sum of three tests, two assignments, and quiz/seminar/group discussion will be out of 100 marks and will be **scaled down to 50 marks**

CIE methods /question paper is designed to attain the different levels of Bloom's taxonomy as per the outcome defined for the course.

Semester End Examination (SEE) :

SEE paper will be set for 100 questions of each of 01 marks. The pattern of the question paper is MCQ. The time allotted for SEE is 120 minutes. Marks scored are scaled down to 50 Marks. *(Time duration may be made 90 minutes to train the students for engineering / non-engineering competitive examination)*

1. Communicative English has become a very important component in all engineering and non-engineering competitive examinations. In exams like GRE, TOEFL, IELTS and GATE exam, all state and Central Government recruitment examinations, placement tests and other Examinations, so the pattern of question paper, in general, will be in a multiple-choice question (MCQ) Pattern. So, to meet the relevance of the recruitment requirement of our Engineering students "Communicative English" Semester end examination (SEE) will be conducted in a multiple choice question (MCQ) pattern.
2. MCQ Pattern (Multiple Choice Questions) Semester End Exam (SEE) is conducted for 50 marks (120 minutes duration).

Communicative English

Suggested Learning Resources:

- 1) **Communication Skills** by Sanjay Kumar and Pushp Lata, Oxford University Press - 2019.
- 2) **English for Engineers** by N.P.Sudharshana and C.Savitha, Cambridge University Press – 2018.
- 3) **A Textbook of English Language Communication Skills**, Infinite Learning Solutions–(Revised Edition) 2021.
- 4) **A Course in Technical English–D Praveen Sam, KN Shoba**, Cambridge University Press – 2020.
- 5) **Technical Communication** by Gajendra Singh Chauhan and Et al, Cengage learning India Pvt Limited [Latest Revised Edition] - 2019.
- 6) **English Language Communication Skills – Lab Manual cum Workbook**, Cengage learning India Pvt Limited [Latest Revised Edition] – 2019.
- 7) **Practical English Usage** by Michael Swan, Oxford University Press – 2016.
- 8) **Technical Communication – Principles and Practice**, Third Edition by Meenakshi Raman and Sangeetha Sharma, Oxford University Press 2017.

Activity Based Learning (Suggested Activities in Class)/ Practical Based learning

- ✓ Contents related activities (Activity-based discussions)
- ✓ For active participation of students instruct the students to prepare Flowcharts and Handouts
- ✓ Organising Group wise discussions Connecting to placement activities
- ✓ Quizzes and Discussions
- ✓ Seminars and assignments

ಬಳಕೆ ಕನ್ನಡ - baLake Kannada (Kannada for Usage) ಕನ್ನಡ ಕಲಿಕೆಗಾಗಿ ನಿಗದಿಪಡಿಸಿದ ಪಠ್ಯಪುಸ್ತಕ (Prescribed Textbook to Learn Kannada)			
ವಿಷಯ ಸಂಕೇತ (Course Code)	21KBK19	ನಿರಂತರ ಆಂತರಿಕ ಮೌಲ್ಯಮಾಪನದ ಅಂಕಗಳು	50
ಒಂದು ವಾರಕ್ಕೆ ಬೋಧನಾ ಅವಧಿ (Teaching Hours/Week (L:T:P: S))	L - 3, P-0, S-1 = 03 ಗಂಟೆಗಳು / ವಾರಕ್ಕೆ	ಸೆಮಿಸ್ಟರ್ ಅಂತ್ಯದ ಪರೀಕ್ಷೆಯ ಅಂಕಗಳು	50
ಒಟ್ಟು ಬೋಧನಾ ಅವಧಿ Total Hours of Pedagogy	40 ಗಂಟೆಗಳು	ಒಟ್ಟು ಅಂಕಗಳು	100
ಕ್ರೆಡಿಟ್ಸ್ (Credits)	03	ಪರೀಕ್ಷೆಯ ಅವಧಿ	03
ಬಳಕೆ ಕನ್ನಡ ಪಠ್ಯದ ಕಲಿಕೆಯ ಉದ್ದೇಶಗಳು (Course Learning Objectives): <ul style="list-style-type: none"> To Create the awareness regarding the necessity of learning of local language for comfortable and healthy life with native language people. To enable learners to Listen and understand the Kannada language properly. To speak, read and write Kannada language as per requirement. To train the learners for correct and polite conservation. 			
ಬೋಧನೆ ಮತ್ತು ಕಲಿಕಾ ವ್ಯವಸ್ಥೆ (Teaching-Learning Process - General Instructions) : These are sample Strategies, which teacher can use to accelerate the attainment of the various course outcomes. <ol style="list-style-type: none"> ಬಳಕೆ ಕನ್ನಡ ಈ ಪಠ್ಯಪುಸ್ತಕವನ್ನು ತರಗತಿಯಲ್ಲಿ ಶಿಕ್ಷಕರು ಬೋಧಿಸಲು ಪ್ರಸ್ತುತ ಚಟುವಟಿಕೆಗಳ ಆಧಾರದ ಈ ಪುಸ್ತಕ ಆಧಾರಿತ ಬ್ಲಾಕ್ ಬೋರ್ಡ್ ವಿಧಾನವನ್ನು ಅನುಸರಿಸುವುದು. ಪ್ರಮುಖ ಅಂಶಗಳ ಚಾರ್ಟ್ ಗಳನ್ನು ತಯಾರಿಸಲು ವಿದ್ಯಾರ್ಥಿಗಳನ್ನು ಪ್ರೇರೇಪಿಸುವುದು ಮತ್ತು ತರಗತಿಯಲ್ಲಿ ಅವುಗಳನ್ನು ಚರ್ಚಿಸಲು ಅವಕಾಶ ಮಾಡಿಕೊಡುವುದು. ಪ್ರತಿ ವಿದ್ಯಾರ್ಥಿ ಪುಸ್ತಕವನ್ನು ತರಗತಿಯಲ್ಲಿ ಬಳಸುವಂತೆ ನೋಡಿಕೊಳ್ಳುವುದು ಮತ್ತು ಪ್ರತಿ ಪಾಠ ಮತ್ತು ಪ್ರವಚನಗಳ ಮೂಲ ಅಂಶಗಳಿಗೆ ಸಂಬಂಧಪಟ್ಟಂತೆ ಪೂರಕ ಚಟುವಟಿಕೆಗಳಿಗೆ ಪ್ರೇರೇಪಿಸುವುದು. ಡಿಜಿಟಲ್ ತಂತ್ರಜ್ಞಾನದ ಮುಖಾಂತರ ಇತ್ತೀಚೆಗೆ ಡಿಜಿಟಲೀಕರಣ ಗೊಂಡಿರುವ ಭಾಷೆ ಕಲಿಕೆಯ ವಿಧಾನಗಳನ್ನು ಪಿಪಿಟಿ ಮತ್ತು ದೃಶ್ಯ ಮಾಧ್ಯಮದ ಮುಖಾಂತರ ಚರ್ಚಿಸಲು ಕ್ರಮಕೈಗೊಳ್ಳುವುದು. ಇದರಿಂದ ವಿದ್ಯಾರ್ಥಿಗಳನ್ನು ತರಗತಿಯಲ್ಲಿ ಹೆಚ್ಚು ಏಕಾಗ್ರತೆಯಿಂದ ಪಾಠ ಕೇಳಲು ಮತ್ತು ಅಧ್ಯಯನದಲ್ಲಿ ತೊಡಗಲು ಅನುಕೂಲವಾಗುತ್ತದೆ. ಇತ್ತೀಚಿನ ತಂತ್ರಜ್ಞಾನದ ಅನುಕೂಲಗಳನ್ನು ಬಳಸಿಕೊಳ್ಳುವುದು ಸೂಕ್ತ - ಅಂದರೆ ಭಾಷಾಕಲಿಕೆಯ ಪ್ರಯೋಗಾಲಯದಲ್ಲಿ ಈ ವಿಧಾನಗಳನ್ನು ಅಳವಡಿಸಿಕೊಳ್ಳುವುದರ ಮುಖಾಂತರ ಬಹುಬೇಗ ಕನ್ನಡ ಭಾಷೆಯನ್ನು ಕಲಿಯಲು ಅನುಕೂಲವಾಗುವಂತೆ ಕಾರ್ಯಚಟುವಟಿಕೆಗಳನ್ನು ಮತ್ತು ಕ್ರಿಯಾ ಯೋಜನೆಗಳನ್ನು ರೂಪಿಸುವುದು. ಬಹುಬೇಗ ಕನ್ನಡ ಭಾಷೆಯನ್ನು ಸರಳ ವಿಧಾನಗಳ ಮುಖಾಂತರ ಕಲಿಯಲು ಅನುಕೂಲವಾಗುವಂತಹ ನವೀನ ಮಾದರಿಯ ವಿಧಾನಗಳನ್ನು ಶಿಕ್ಷಕರು ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ ಅನುಕೂಲವಾಗುವ ರೀತಿಯಲ್ಲಿ ಅಳವಡಿಸಿಕೊಳ್ಳಬಹುದು. 			
Module-1			
<ol style="list-style-type: none"> 1. Introduction, Necessity of learning a local language. 2. Methods to learn the Kannada language. 3. Easy learning of a Kannada Language: A few tips. Hints for correct and polite conservation 4. Listening and Speaking Activities 5. Key to Transcription. 			
ಬೋಧನೆ ಮತ್ತು ಕಲಿಕಾ ವಿಧಾನ	ಪುಸ್ತಕ ಆಧಾರಿತ ಬ್ಲಾಕ್ ಬೋರ್ಡ್ ವಿಧಾನ, ಪ್ರಮುಖ ಅಂಶಗಳ ಚಾರ್ಟ್ ಗಳನ್ನು ಬಳಸುವುದು, ಪಿಪಿಟಿ ಮತ್ತು ದೃಶ್ಯ ಮಾಧ್ಯಮದ ವಿಡಿಯೋಗಳನ್ನು ಬಳಸುವುದು, ವಿದ್ಯಾರ್ಥಿಗಳೊಂದಿಗೆ ಚಟುವಟಿಕೆಗಳ ಮುಖಾಂತರ ಚರ್ಚಿಸುವುದು.		

Module-2

1. ವೈಯಕ್ತಿಕ, ಸ್ವಾಮ್ಯಸೂಚಕ/ಸಂಬಂಧಿತ ಸಾರ್ವನಾಮಗಳು ಮತ್ತು ಪ್ರಶ್ನಾರ್ಥಕ ಪದಗಳು - Personal Pronouns, Possessive Forms, Interrogative words
2. ನಾಮಪದಗಳ ಸಂಬಂಧಾರ್ಥಕ ರೂಪಗಳು, ಸಂದೇಹಾಸ್ಪದ ಪ್ರಶ್ನೆಗಳು ಮತ್ತು ಸಂಬಂಧವಾಚಕ ನಾಮಪದಗಳು - Possessive forms of nouns, dubitive question and Relative nouns
3. ಗುಣ, ಪರಿಮಾಣ ಮತ್ತು ವರ್ಣಬಣ್ಣ ವಿಶೇಷಣಗಳು, ಸಂಖ್ಯಾವಾಚಕಗಳು Qualitative, Quantitative and Colour Adjectives, Numerals
4. PĀgĀPĀ gĀĒĀUĀ%ĀĀ ĀĀvĀĀŪ «”sĀQŪ ĀĀevĀĀiĀĀUĀ%ĀĀ – ,ĀĀŪ«Ā «”sĀQŪ ĀĀevĀĀiĀĀ – (D, CzĀĀ, CĀĀĀ, C°è) Predictive Forms, Locative Case
5. ZĀvĀĀyŕ «”sĀQŪ ĀĀevĀĀiĀĀzĀ §ĀPĒ ĀĀvĀĀŪ ,ĀASĀĀĀZĀPAUĀ%ĀĀ - Dative Cases, and Numerals

ಬೋಧನೆ ಮತ್ತು ಕಲಿಕಾ ವಿಧಾನ

ಪುಸ್ತಕ ಆಧಾರಿತ ಬ್ಲಾಕ್ ಬೋರ್ಡ್ ವಿಧಾನ, ಪ್ರಮುಖ ಅಂಶಗಳ ಚಾರ್ಟ್ ಗಳನ್ನು ಬಳಸುವುದು, ಪಿಪಿಟಿ ಮತ್ತು ದೃಶ್ಯ ಮಾಧ್ಯಮದ ವಿಡಿಯೋಗಳನ್ನು ಬಳಸುವುದು, ವಿದ್ಯಾರ್ಥಿಗಳೊಂದಿಗೆ ಚಟುವಟಿಕೆಗಳ ಮುಖಾಂತರ ಚರ್ಚಿಸುವುದು.

Module-3

1. ,ĀASĀĀUĀĀtĀZĀPAUĀ%ĀĀ ĀĀvĀĀŪ §ĀĀĀĀZĀĒĀ ĒĀĀĀgĀĒĀUĀ%ĀĀ - Ordinal numerals and Plural markers
2. ĒĀĒĒĒ / ĩĒĒĒsĀĀĀĀPĀ QĀiĀiĀĀĀZĀUĀ%ĀĀ ĀĀvĀĀŪ Ātŕ UĀĀtĀZĀPAUĀ%ĀĀ Defective / Negative Verbs and Colour Adjectives
3. ಅಪ್ಪಣೆ / ಒಪ್ಪಿಗೆ, ನಿರ್ದೇಶನ, ಪ್ರೋತ್ಸಾಹ ಮತ್ತು ಒತ್ತಾಯ ಆರ್ಥರೂಪ ಪದಗಳು ಮತ್ತು ವಾಕ್ಯಗಳು Permission, Commands, encouraging and Urging words (Imperative words and sentences)
4. ಸಾಮಾನ್ಯ ಸಂಭಾಷಣೆಗಳಲ್ಲಿ ದ್ವಿತೀಯ ವಿಭಕ್ತಿ ಪ್ರತ್ಯಯಗಳು ಮತ್ತು ಸಂಭವನೀಯ ಪ್ರಕಾರಗಳು Accusative Cases and Potential Forms used in General Communication
5. “ಇರು ಮತ್ತು ಇರಲ್ಲ” ಸಹಾಯಕ ಕ್ರಿಯಾಪದಗಳು, ಸಂಭಾವ್ಯಸೂಚಕ ಮತ್ತು ನಿಷೇಧಾರ್ಥಕ ಕ್ರಿಯಾ ಪದಗಳು - Helping Verbs “iru and iralla”, Corresponding Future and Negation Verbs

ಬೋಧನೆ ಮತ್ತು ಕಲಿಕಾ ವಿಧಾನ

ಪುಸ್ತಕ ಆಧಾರಿತ ಬ್ಲಾಕ್ ಬೋರ್ಡ್ ವಿಧಾನ, ಪ್ರಮುಖ ಅಂಶಗಳ ಚಾರ್ಟ್ ಗಳನ್ನು ಬಳಸುವುದು, ಪಿಪಿಟಿ ಮತ್ತು ದೃಶ್ಯ ಮಾಧ್ಯಮದ ವಿಡಿಯೋಗಳನ್ನು ಬಳಸುವುದು, ವಿದ್ಯಾರ್ಥಿಗಳೊಂದಿಗೆ ಚಟುವಟಿಕೆಗಳ ಮುಖಾಂತರ ಚರ್ಚಿಸುವುದು.

Module-4

1. ಹೋಲಿಕೆ (ತರತಮ), ಸಂಬಂಧ ಸೂಚಕ ಮತ್ತು ವಸ್ತು ಸೂಚಕ ಪ್ರತ್ಯಯಗಳು ಮತ್ತು ನಿಷೇಧಾರ್ಥಕ ಪದಗಳ ಬಳಕೆ- Comparative, Relationship, Identification and Negation Words
2. ಕಾಲ ಮತ್ತು ಸಮಯದ ಹಾಗೂ ಕ್ರಿಯಾಪದಗಳ ವಿವಿಧ ಪ್ರಕಾರಗಳು - Different types of forms of Tense, Time and Verbs
3. ದ್, -ತ್, - ತು, - ಇತು, - ಆಗಿ, - ಅಲ್ಲ, - ಗ್, -ಕ್, ಇದೆ, ಕ್ರಿಯಾ ಪ್ರತ್ಯಯಗಳೊಂದಿಗೆ ಭೂತ, ಭವಿಷ್ಯತ್ ಮತ್ತು ವರ್ತಮಾನ ಕಾಲ ವಾಕ್ಯ ರಚನೆ - Formation of Past, Future and Present Tense Sentences with Verb Forms
4. ಕರ್ನಾಟಕ ರಾಜ್ಯ ಮತ್ತು ರಾಜ್ಯದ ಬಗ್ಗೆ ಕುರಿತಾದ ಇತರೆ ಮಾಹಿತಿಗಳು Karnataka State and General Information about the State

Lesson – 15 ಕನ್ನಡ ಭಾಷೆ ಮತ್ತು ಸಾಹಿತ್ಯ - Kannada Language and Literature

ಬೋಧನೆ ಮತ್ತು ಕಲಿಕಾ ವಿಧಾನ

ಪುಸ್ತಕ ಆಧಾರಿತ ಬ್ಲಾಕ್ ಬೋರ್ಡ್ ವಿಧಾನ, ಪ್ರಮುಖ ಅಂಶಗಳ ಚಾರ್ಟ್ ಗಳನ್ನು ಬಳಸುವುದು, ಪಿಪಿಟಿ ಮತ್ತು ದೃಶ್ಯ ಮಾಧ್ಯಮದ ವಿಡಿಯೋಗಳನ್ನು ಬಳಸುವುದು, ವಿದ್ಯಾರ್ಥಿಗಳೊಂದಿಗೆ ಚಟುವಟಿಕೆಗಳ ಮುಖಾಂತರ ಚರ್ಚಿಸುವುದು.

Module-5

1. ಭಾಷೆ ಕಲಿಯಲು ಏನನ್ನು ಮಾಡಬೇಕು ಮತ್ತು ಮಾಡಬಾರದು Do's and Don'ts in Learning a Language
2. PART - II, Kannada Language Script Part – 1
3. PART – III, Kannada Vocabulary List : ಸಂಭಾಷಣೆಯಲ್ಲಿ ದಿನೋಪಯೋಗಿ ಕನ್ನಡ ಪದಗಳು - Kannada Words in Conversation

<p>ಬೋಧನೆ ಮತ್ತು ಕಲಿಕಾ ವಿಧಾನ</p>	<p>ಪುಸ್ತಕ ಆಧಾರಿತ ಬ್ಲಾಕ್ ಬೋರ್ಡ್ ವಿಧಾನ, ಪ್ರಮುಖ ಅಂಶಗಳ ಚಾರ್ಟ್ ಗಳನ್ನು ಬಳಸುವುದು, ಪಿಪಿಟಿ ಮತ್ತು ದೃಶ್ಯ ಮಾಧ್ಯಮದ ವಿಡಿಯೋಗಳನ್ನು ಬಳಸುವುದು, ವಿದ್ಯಾರ್ಥಿಗಳೊಂದಿಗೆ ಚಟುವಟಿಕೆಗಳ ಮುಖಾಂತರ ಚರ್ಚಿಸುವುದು.</p>
<p>ಬಳಕೆ ಕನ್ನಡ ಪಠ್ಯದ ಕಲಿಕೆಯಿಂದ ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ ಆಗುವ ಅನುಕೂಲಗಳು ಮತ್ತು ಫಲಿತಾಂಶಗಳು: course Outcomes (Course Skill Set): At the end of the Course, The Students will be able</p> <ol style="list-style-type: none"> 1. To understand the necessity of learning of local language for comfortable life. 2. To Listen and understand the Kannada language properly. 3. To speak, read and write Kannada language as per requirement. 4. To communicate (converse) in Kannada language in their daily life with kannada speakers. 5. To speak in polite conversation. 	
<p>Assessment Details (both CIE and SEE) (methods of CIE need to be definetopic wise i.e.- MCQ, Quizzes, Open book test, Seminar or micro project) The weight age of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The student has to obtain a minimum of 40% marks individually both in CIE and 35% marks in SEE to pass. Theory Semester End Exam (SEE) is conducted for 100 marks (03 hours duration). Based on this grading will be awarded.</p> <p>ನಿರಂತರ ಆಂತರಿಕ ಮೌಲ್ಯಮಾಪನದ ಪ್ರಕ್ರಿಯೆ ಈ ಕೆಳಗಿನಂತಿರುತ್ತದೆ-Continuous Internal Evaluation (CIE) :</p> <ol style="list-style-type: none"> 1. ಸೂಚಿಸಿದ ವಿಧಾನಗಳು : ಕಿರುಪರೀಕ್ಷೆ, ಬಹು ಆಯ್ಕೆ ಮಾದರಿಯ ಪ್ರಶ್ನೆಗಳು, ವಿದ್ಯಾರ್ಥಿಗಳ ಭಾಷಾ ಸಂವಹನ ಕೌಶಲ್ಯವನ್ನು ಪ್ರಸ್ತುತಪಡಿಸಲು ಅನುಕೂಲವಾಗುವಂತಹ ಪಠ್ಯಾಧಾರಿತ ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳುವುದು. 2. ಅಸೈನ್ಮೆಂಟ್ ಗಳನ್ನು ನೀಡುವುದು, ಪ್ರಬಂಧ ಸ್ಪರ್ಧೆ/ಚರ್ಚಾ ಸ್ಪರ್ಧೆಗಳು ಮತ್ತು ರಸಪ್ರಶ್ನೆ ಮಾದರಿಯ ಚಟುವಟಿಕೆಗಳನ್ನು ಆಯೋಜಿಸುವುದು. ಈ ರೀತಿಯಲ್ಲಿ ಮೌಲ್ಯಮಾಪನವನ್ನು ಮಾಡಬಹುದಾಗಿರುತ್ತದೆ. 3. ಪ್ರತಿಯೊಂದು ವಿಭಾಗದ ಪಠ್ಯ ಭಾಗ ಮೇಲಿನ ಮೌಲ್ಯಮಾಪನ ಪ್ರಕ್ರಿಯೆಯಲ್ಲಿ ಬರುವಂತೆ ನೋಡಿಕೊಳ್ಳುವುದು. <p>ಸೆಮಿಸ್ಟರ್ ಅಂತ್ಯದ ಪರೀಕ್ಷೆಯು ಈ ಕೆಳಗಿನಂತಿರುತ್ತದೆ - Semester End Exam (SEE):</p> <ol style="list-style-type: none"> 1. ಪ್ರಶ್ನೆಪತ್ರಿಕೆಯಲ್ಲಿ 10 ಪೂರ್ಣಪ್ರಮಾಣದ ಪ್ರಶ್ನೆಗಳು ಇರುತ್ತವೆ. ಪ್ರತಿಪ್ರಶ್ನೆ 20 ಅಂಕಗಳಿಗೆ ಇರುತ್ತದೆ. 2. ಪ್ರತಿಯೊಂದು ವಿಭಾಗದಿಂದ 2 ಪೂರ್ಣ ಪ್ರಶ್ನೆಗಳು ಇರುತ್ತವೆ. 3. ಪ್ರತಿಯೊಂದು ಪೂರ್ಣ ಪ್ರಶ್ನೆಗೆ ಪೂರಕವಾಗಿ ಮತ್ತು ಸಂಬಂಧಿಸಿದಂತೆ ಉಪ ಪ್ರಶ್ನೆಗಳು ಇರುತ್ತವೆ. 4. ವಿದ್ಯಾರ್ಥಿ 10 ಪೂರ್ಣಪ್ರಮಾಣದ ಪ್ರಶ್ನೆಗಳಲ್ಲಿ 05 ಕ್ಕೆ ಉತ್ತರಿಸಬೇಕು. ಉತ್ತರಿಸುವಾಗ ಪ್ರತಿ ವಿಭಾಗದಿಂದ ಒಂದು ಪೂರ್ಣಪ್ರಮಾಣದ ಪ್ರಶ್ನೆಯನ್ನು ಉತ್ತರಿಸಬೇಕು. 	
<p>(Suggested Learning Resource):</p> <p style="text-align: center;"><u>ವಿಶ್ವವಿದ್ಯಾಲಯವು ನಿಗದಿಪಡಿಸಿರುವ ಪಠ್ಯಪುಸ್ತಕ</u></p> <p style="text-align: center;"><u>“ಬಳಕೆ ಕನ್ನಡ”</u></p> <p style="text-align: center;">- ಡಾ. ಎಲ್. ತಿಮ್ಮೇಶ</p> <p style="text-align: center;">ಪ್ರಕಟಣೆ : ಪ್ರಸಾರಾಂಗ, ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ, ಬೆಳಗಾವಿ.</p>	
<p>ಹೆಚ್ಚಿನ ಮಾಹಿತಿ ಮತ್ತು ಪೂರಕ ಓದಿಗಾಗಿ :</p> <ol style="list-style-type: none"> 1. ಕನ್ನಡ ಅಭಿವೃದ್ಧಿ ಪ್ರಾಧಿಕಾರವು ಅನ್ಯಭಾಷಿಕರಿಗೆ, ವಿದೇಶಿಗರಿಗೆ ಮತ್ತು ಹೊರ ರಾಜ್ಯದ ವಿದ್ಯಾರ್ಥಿಗಳು ಮತ್ತು ಹೊರ ದೇಶ/ರಾಜ್ಯ ಗಳಿಂದ ಬಂದು ಕರ್ನಾಟಕದಲ್ಲಿ ಇನ್ನಿತರ ಉದ್ಯೋಗಗಳಲ್ಲಿ ಇರುವವರು ಕನ್ನಡ ಭಾಷೆಯನ್ನು ಕಡಿಮೆ ಸಮಯದಲ್ಲಿ ಕಲಿಯಲು ಅನುಕೂಲವಾಗುವಂತೆ ಸಿದ್ಧಪಡಿಸಿರುವ ಕೈಪಿಡಿಗಳನ್ನು ಕನ್ನಡ ಅಭಿವೃದ್ಧಿ ಪ್ರಾಧಿಕಾರದ ಜಾಲತಾಣ ಮತ್ತು ಸರ್ಕಾರದ ಅಧಿಕೃತ ಜಾಲತಾಣಗಳಲ್ಲಿರುವ ಕೈಪಿಡಿಗಳನ್ನು ಗಮನಿಸುವುದು. 2. ಕನ್ನಡ ಸಾಹಿತ್ಯ ಪರಿಷತ್ತು, ಕನ್ನಡ ಅಭಿವೃದ್ಧಿ ಪ್ರಾಧಿಕಾರ ಮತ್ತು ಕನ್ನಡ ಹಾಗೂ ಸಂಸ್ಕೃತಿ ಇಲಾಖೆಯ ಈಗಾಗಲೇ ಪ್ರಕಟಿಸಿರುವ ಕನ್ನಡ ನಾಡು ನುಡಿ ಮತ್ತು ಸಂಸ್ಕೃತಿಯ ವಿಷಯಗಳಿಗೆ ಸಂಬಂಧಪಟ್ಟ ಪ್ರಕಟಣೆಗಳನ್ನು ಗಮನಿಸುವುದು. 	

ಸಾಂಸ್ಕೃತಿಕ ಕನ್ನಡ			
ವಿಷಯ ಸಂಕೇತ (Course Code)	21KSK19	ನಿರಂತರ ಆಂತರಿಕ ಮೌಲ್ಯಮಾಪನದ ಅಂಕಗಳು (CIE)	50
ಒಂದು ವಾರಕ್ಕೆ ಬೋಧನಾ ಅವಧಿ (Teaching Hours/Week (L:T:P: S))	L - 3, P-0, S-1 = 03 ಗಂಟೆಗಳು / ವಾರಕ್ಕೆ	ಸೆಮಿಸ್ಟರ್ ಅಂತ್ಯದ ಪರೀಕ್ಷೆಯ ಅಂಕಗಳು (SEE)	50
ಒಟ್ಟು ಬೋಧನಾ ಅವಧಿ Total Hours of Pedagogy	40 ಗಂಟೆಗಳು	ಒಟ್ಟು ಅಂಕಗಳು	100
ಕ್ರೆಡಿಟ್ಸ್ (Credits)	03	ಪರೀಕ್ಷೆಯ ಅವಧಿ	03

ಸಾಂಸ್ಕೃತಿಕ ಕನ್ನಡ ಪಠ್ಯದ ಕಲಿಕೆಯ ಉದ್ದೇಶಗಳು (Course Objectives):

- ಪದವಿ ವಿದ್ಯಾರ್ಥಿಗಳಾಗಿರುವುದರಿಂದ ಸಾಂಸ್ಕೃತಿಕ ಕನ್ನಡದ ಜೊತೆಗೆ ಕ್ರಿಯಾತ್ಮಕ ಕನ್ನಡವನ್ನು, ಕನ್ನಡ ಸಾಹಿತ್ಯ, ಸಂಸ್ಕೃತಿ ಮತ್ತು ನಾಡು ನುಡಿಯ ಪರಿಚಯ ಮಾಡಿಕೊಡುವುದು.
- ತಾಂತ್ರಿಕ ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ ಆಧುನಿಕ ಕನ್ನಡ ಸಾಹಿತ್ಯ ಚರಿತ್ರೆಯ ಪ್ರಮುಖ ಕಾಲಘಟ್ಟಗಳ ಸಾಹಿತ್ಯದ ಪರಿಚಯವನ್ನು ಮಾಡಿಕೊಡುವುದು.
- ತಾಂತ್ರಿಕ ವ್ಯಕ್ತಿಪರಿಚಯ ಕಥೆ ಮತ್ತು ಪ್ರವಾಸ ಕಥನಗಳನ್ನು ನಾಡು-ನುಡಿಗೆ ಸಂಬಂಧಪಟ್ಟಂತೆ ಪರಿಚಯಿಸುವುದು.
- ಕನ್ನಡದಲ್ಲಿ ತಾಂತ್ರಿಕ ವಿಜ್ಞಾನಗಳ ವಿಷಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದ ಹಲವಾರು ವಿಷಯಗಳನ್ನು ಪರಿಚಯ ಮಾಡಿಕೊಡುವುದು.
- ಕನ್ನಡ ಭಾಷಾಭ್ಯಾಸ, ಸಾಮಾನ್ಯ ಕನ್ನಡ ಹಾಗೂ ಆಡಳಿತ ಕನ್ನಡದ ಪದಗಳ ಪರಿಚಯ ಮಾಡಿಕೊಡುವುದು.

ಬೋಧನೆ ಮತ್ತು ಕಲಿಕಾ ವ್ಯವಸ್ಥೆ (Teaching-Learning Process - General Instructions) :

These are sample Strategies, which teacher can use to accelerate the attainment of the various course outcomes.

- ಸಾಂಸ್ಕೃತಿಕ ಕನ್ನಡ ಈ ಪಠ್ಯಪುಸ್ತಕವನ್ನು ಬೋಧಿಸಲು ತರಗತಿಯಲ್ಲಿ ಶಿಕ್ಷಕರು ಪ್ರಸ್ತುತ ಪುಸ್ತಕ ಆಧಾರಿತ ಬ್ಲಾಕ್ ಬೋರ್ಡ್ ವಿಧಾನವನ್ನು ಅನುಸರಿಸುವುದು. ಪ್ರಮುಖ ಅಂಶಗಳ ಚಾರ್ಟ್ ಗಳನ್ನು ತಯಾರಿಸಲು ವಿದ್ಯಾರ್ಥಿಗಳನ್ನು ಪ್ರೇರೇಪಿಸುವುದು ಮತ್ತು ತರಗತಿಯಲ್ಲಿ ಅವುಗಳನ್ನು ಚರ್ಚಿಸಲು ಅವಕಾಶ ಮಾಡಿಕೊಡುವುದು.
- ಡಿಜಿಟಲ್ ತಂತ್ರಜ್ಞಾನದ ಮುಖಾಂತರ ಇತ್ತೀಚೆಗೆ ಡಿಜಿಟಲೀಕರಣ ಗೊಂಡಿರುವ ಸಾಹಿತ್ಯ ಮತ್ತು ಸಂಸ್ಕೃತಿ, ನಾಡು-ನುಡಿಯ ಅಂಶಗಳನ್ನು ತರಗತಿಯಲ್ಲಿ ಪಿಪಿಟಿ ಮತ್ತು ದೃಶ್ಯ ಮಾಧ್ಯಮದ ಮುಖಾಂತರ ಚರ್ಚಿಸಲು ಕ್ರಮಕೈಗೊಳ್ಳುವುದು.
- ಇತ್ತೀಚಿನ ತಂತ್ರಜ್ಞಾನದ ಅನುಕೂಲಗಳನ್ನು ಬಳಸಿಕೊಳ್ಳುವುದು - ಅಂದರೆ ಕವಿ-ಕಾವ್ಯ ಪರಿಚಯದಲ್ಲಿ ಕವಿಗಳ ಚಿತ್ರಣ ಮತ್ತು ಲೇಖನಗಳು ಮತ್ತು ಕಥೆ ಕಾವ್ಯಗಳ ಮೂಲ ಅಂಶಗಳಿಗೆ ಸಂಬಂಧಪಟ್ಟ ಧ್ವನಿ ಚಿತ್ರಗಳು, ಸಂಭಾಷಣೆಗಳು, ಈಗಾಗಲೇ ಇತರ ವಿಮರ್ಶಕರು ಬರೆದಿರುವ ವಿಮರ್ಶಾತ್ಮಕ ವಿಷಯಗಳನ್ನು ಟಿಪಿಟಿ, ಡಿಜಿಟಲ್ ಮಾಧ್ಯಮಗಳ ಮುಖಾಂತರ ವಿಶ್ಲೇಷಿಸುವುದು.
- ನವೀನ ಮಾದರಿಯ ಸಾಹಿತ್ಯ ಬೋಧನೆಗೆ ಸಂಬಂಧಪಟ್ಟ ವಿಧಾನಗಳನ್ನು ಶಿಕ್ಷಕರು ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ ಅನುಕೂಲವಾಗುವ ರೀತಿಯಲ್ಲಿ ಅಳವಡಿಸಿಕೊಳ್ಳಬಹುದು.

ಘಟಕ - 1

ಕನ್ನಡ ನಾಡು, ನುಡಿ ಮತ್ತು ಸಂಸ್ಕೃತಿಗೆ ಸಂಬಂಧಿಸಿದ ಲೇಖನಗಳು :

- ಕರ್ನಾಟಕ ಸಂಸ್ಕೃತಿ
 - ಹಂಪ ನಾಗರಾಜಯ್ಯ
- ಕರ್ನಾಟಕದ ಏಕೀಕರಣ : ಒಂದು ಅಪೂರ್ವ ಚರಿತ್ರೆ
 - ಜಿ. ವೆಂಕಟಸುಬ್ಬಯ್ಯ
- ಆಡಳಿತ ಭಾಷೆಯಾಗಿ ಕನ್ನಡ
 - ಡಾ. ಎಲ್. ತಿಮ್ಮೇಶ ಮತ್ತು ಪ್ರೊ. ವಿ. ಕೇಶವಮೂರ್ತಿ

ಬೋಧನೆ ಮತ್ತು ಕಲಿಕಾ ವಿಧಾನ ಪುಸ್ತಕ ಆಧಾರಿತ ಬ್ಲಾಕ್ ಬೋರ್ಡ್ ವಿಧಾನ, ಪ್ರಮುಖ ಅಂಶಗಳ ಚಾರ್ಟ್ ಗಳನ್ನು ಬಳಸುವುದು, ಪಿಪಿಟಿ ಮತ್ತು ದೃಶ್ಯ ಮಾಧ್ಯಮದ ವಿಡಿಯೋಗಳನ್ನು ಬಳಸುವುದು, ವಿದ್ಯಾರ್ಥಿಗಳೊಂದಿಗೆ ಚಟುವಟಿಕೆಗಳ ಮುಖಾಂತರ ಚರ್ಚಿಸುವುದು.

ಘಟಕ - 2	
<p>ಕಾವ್ಯ ಭಾಗ (ಆಧುನಿಕ ಪೂರ್ವ)</p> <ol style="list-style-type: none"> 1. ವಚನಗಳು : ಬಸವಣ್ಣ, ಅಕ್ಕಮಹಾದೇವಿ, ಅಲ್ಲಮಪ್ರಭು, ಆಯ್ದಕ್ಕಿ ಮಾರಯ್ಯ, ಜೇಡರ ದಾಸಿಮಯ್ಯ, ಆಯ್ದಕ್ಕಿ ಲಕ್ಕಮ್ಮ. 2. ಕೀರ್ತನೆಗಳು : ಅದರಿದೇನು ಫಲ ಇದರಿದೇನು ಫಲ - ಪುರಂದರದಾಸ ತಲ್ಲಣಿಸದಿರು ಕಂಡ್ಯ ತಾಳು ಮನವೆ - ಕನಕದಾಸ 3. ತತ್ವಪದಗಳು : ಸಾವಿರ ಕೊಡಗಳ ಸುಟ್ಟು - ಶಿಶುನಾಳ ಪರೀಫ, ಶಿವಯೋಗಿ - ಬಾಲಲೀಲಾ ಮಹಾಂತ ಶಿವಯೋಗಿ 4. ಜನಪದ ಗೀತೆ : ಬೀಸುವ ಪದ, ಬಡವರಡಬೇಡ 	
ಬೋಧನೆ ಮತ್ತು ಕಲಿಕಾ ವಿಧಾನ	ಪುಸ್ತಕ ಆಧಾರಿತ ಬ್ಲಾಕ್ ಬೋರ್ಡ್ ವಿಧಾನ, ಪ್ರಮುಖ ಅಂಶಗಳ ಚಾರ್ಟ್ ಗಳನ್ನು ಬಳಸುವುದು, ಪಿಪಿಟಿ ಮತ್ತು ದೃಶ್ಯ ಮಾಧ್ಯಮದ ವಿಡಿಯೋಗಳನ್ನು ಬಳಸುವುದು, ವಿದ್ಯಾರ್ಥಿಗಳೊಂದಿಗೆ ಚಟುವಟಿಕೆಗಳ ಮುಖಾಂತರ ಚರ್ಚಿಸುವುದು.
ಘಟಕ - 3	
<p>ಕಾವ್ಯ ಭಾಗ (ಆಧುನಿಕ)</p> <ol style="list-style-type: none"> 1. ಮಂಕುತಿಮ್ಮನ ಕಗ್ಗ : ಡಿ.ವಿ.ಜಿ. 2. ಕುರುಡು ಕಾಂಚಾಣಾ : ದ.ರಾ. ಬೇಂದ್ರೆ 3. ಹೊಸಬಾಳಿನ ಗೀತೆ : ಕುವೆಂಪು 4. ಹೆಂಡತಿಯ ಕಾಗದ : ಕೆ.ಎಸ್. ನರಸಿಂಹಸ್ವಾಮಿ 5. ಮಬ್ಬಿನಿಂದ ಮಬ್ಬಿಗೆ : ಜಿ.ಎಸ್. ಶಿವರುದ್ರಪ್ಪ 6. ಆ ಮರ ಈ ಮರ : ಚಂದ್ರಶೇಖರ ಕಂಬಾರ 7. ಚೋಮನ ಮಕ್ಕಳ ಹಾಡು : ಸಿದ್ದಲಿಂಗಯ್ಯ 	
ಬೋಧನೆ ಮತ್ತು ಕಲಿಕಾ ವಿಧಾನ	ಪುಸ್ತಕ ಆಧಾರಿತ ಬ್ಲಾಕ್ ಬೋರ್ಡ್ ವಿಧಾನ, ಪ್ರಮುಖ ಅಂಶಗಳ ಚಾರ್ಟ್ ಗಳನ್ನು ಬಳಸುವುದು, ಪಿಪಿಟಿ ಮತ್ತು ದೃಶ್ಯ ಮಾಧ್ಯಮದ ವಿಡಿಯೋಗಳನ್ನು ಬಳಸುವುದು, ವಿದ್ಯಾರ್ಥಿಗಳೊಂದಿಗೆ ಚಟುವಟಿಕೆಗಳ ಮುಖಾಂತರ ಚರ್ಚಿಸುವುದು.
ಘಟಕ - 4	
<p>ತಾಂತ್ರಿಕ ವ್ಯಕ್ತಿ ಪರಿಚಯ, ಕಥೆ ಮತ್ತು ಪ್ರವಾಸ ಕಥನ</p> <ol style="list-style-type: none"> 1. ಡಾ. ಸರ್ ಎಂ ವಿಶ್ವೇಶ್ವರಯ್ಯ - ವ್ಯಕ್ತಿ ಮತ್ತು ಐತಿಹ್ಯ : ಎ ಎನ್ ಮೂರ್ತಿರಾವ್ 2. ಯುಗಾದಿ : ವಸುಧೇಂದ್ರ 3. ಮೆಗಾನೆ ಎಂಬ ಗಿರಿಜನ ಪರ್ವತ : ಹಿ.ಚಿ. ಬೋರಲಿಂಗಯ್ಯ 	
ಬೋಧನೆ ಮತ್ತು ಕಲಿಕಾ ವಿಧಾನ	ಪುಸ್ತಕ ಆಧಾರಿತ ಬ್ಲಾಕ್ ಬೋರ್ಡ್ ವಿಧಾನ, ಪ್ರಮುಖ ಅಂಶಗಳ ಚಾರ್ಟ್ ಗಳನ್ನು ಬಳಸುವುದು, ಪಿಪಿಟಿ ಮತ್ತು ದೃಶ್ಯ ಮಾಧ್ಯಮದ ವಿಡಿಯೋಗಳನ್ನು ಬಳಸುವುದು, ವಿದ್ಯಾರ್ಥಿಗಳೊಂದಿಗೆ ಚಟುವಟಿಕೆಗಳ ಮುಖಾಂತರ ಚರ್ಚಿಸುವುದು.
ಘಟಕ - 5	
<p>ವಿಜ್ಞಾನ ಮತ್ತು ತಂತ್ರಜ್ಞಾನ</p> <ol style="list-style-type: none"> 1. ಕರಕುಶಲ ಕಲೆಗಳು ಮತ್ತು ಪರಂಪರೆಯ ವಿಜ್ಞಾನ : ಕರೀಗೌಡ ಬೀಚನಹಳ್ಳಿ 2. 'ಕ' ಮತ್ತು 'ಬ' ಬರಹ ತಂತ್ರಾಂಶಗಳು ಮತ್ತು ಕನ್ನಡದ ಟೈಪಿಂಗ್* 3. ಕನ್ನಡ - ಕಂಪ್ಯೂಟರ್ ಶಬ್ದಕೋಶ* 4. ತಾಂತ್ರಿಕ ಪದಕೋಶ : ತಾಂತ್ರಿಕ ಹಾಗೂ ಪಾರಿಭಾಷಿಕ ಕನ್ನಡ ಪದಗಳು* <p>* (ಅಧ್ಯಾಯ 3, 19, 20 ಮತ್ತು 21 ಇವುಗಳು ವಿತಾವಿ ಯದಿಂದ ಪ್ರಕಟಿತ " ಆಡಳಿತ ಕನ್ನಡ " ಪುಸ್ತಕದಿಂದ ಆಯ್ದ ಲೇಖನಗಳು - ಡಾ. ಎಲ್. ತಿಮ್ಮೇಶ ಮತ್ತು ಪ್ರೊ. ವಿ. ಕೇಶವಮೂರ್ತಿ.</p>	
ಬೋಧನೆ ಮತ್ತು ಕಲಿಕಾ ವಿಧಾನ	ಪುಸ್ತಕ ಆಧಾರಿತ ಬ್ಲಾಕ್ ಬೋರ್ಡ್ ವಿಧಾನ, ಪ್ರಮುಖ ಅಂಶಗಳ ಚಾರ್ಟ್ ಗಳನ್ನು ಬಳಸುವುದು, ಪಿಪಿಟಿ ಮತ್ತು ದೃಶ್ಯ ಮಾಧ್ಯಮದ ವಿಡಿಯೋಗಳನ್ನು ಬಳಸುವುದು, ವಿದ್ಯಾರ್ಥಿಗಳೊಂದಿಗೆ ಚಟುವಟಿಕೆಗಳ ಮುಖಾಂತರ ಚರ್ಚಿಸುವುದು.

ಸಾಂಸ್ಕೃತಿಕ ಕನ್ನಡ ಪಠ್ಯದ ಕಲಿಕೆಯಿಂದ ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ ಆಗುವ ಅನುಕೂಲಗಳು ಮತ್ತು ಫಲಿತಾಂಶಗಳು: course Outcomes (Course Skill Set) :

1. ವಿದ್ಯಾರ್ಥಿಗಳು ತರಗತಿಯಲ್ಲಿ ಚರ್ಚೆ ಮತ್ತು ಸಂಭಾಷಣೆ ಮುಖಾಂತರ ನಡೆದ ಬೋಧನೆಯ ಫಲಿತಾಂಶವಾಗಿ ಸಾಂಸ್ಕೃತಿಕ ಕನ್ನಡದ ಜೊತೆಗೆ ಕ್ರಿಯಾತ್ಮಕ ಕನ್ನಡವನ್ನು, ಕನ್ನಡ ಸಾಹಿತ್ಯ, ಸಂಸ್ಕೃತಿ ಮತ್ತು ನಾಡು ನುಡಿಯ ಕುರಿತು ಆಳವಾದ ಜ್ಞಾನವನ್ನು ಗಳಿಸಿರುತ್ತಾರೆ.
2. ಕನ್ನಡ ಸಾಹಿತ್ಯದ ಪ್ರಮುಖ ಕಾಲಘಟ್ಟ ಆಧುನಿಕ ಕನ್ನಡ ಸಾಹಿತ್ಯ ಚರಿತ್ರೆಯನ್ನು ವಿದ್ಯಾರ್ಥಿಗಳು ಪ್ರಮುಖ ಕವಿಗಳು ಮತ್ತು ಅವರ ಸಾಹಿತ್ಯದ ನಿರೂಪಣೆಯಿಂದ ಅರ್ಥೈಸಿಕೊಳ್ಳುತ್ತಾರೆ.
3. ತಾಂತ್ರಿಕ ವ್ಯಕ್ತಿಪರಿಚಯ ಕಥೆ ಮತ್ತು ಪ್ರವಾಸ ಕಥನಗಳನ್ನು ನಾಡು-ನುಡಿಗೆ ಸಂಬಂಧಪಟ್ಟಂತೆ ಪರಿಚಯವಾಗುತ್ತದೆ.
4. ಕನ್ನಡದಲ್ಲಿ ತಾಂತ್ರಿಕ ವಿಜ್ಞಾನಗಳ ವಿಷಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದ ಹಲವಾರು ವಿಷಯಗಳ ಪರಿಚಯವಾಗುತ್ತದೆ.
5. ಕನ್ನಡ ಭಾಷಾಭ್ಯಾಸ, ಸಾಮಾನ್ಯ ಕನ್ನಡ ಹಾಗೂ ಆಡಳಿತ ಕನ್ನಡದ ಪದಗಳ ಪರಿಚಯವಾಗುತ್ತದೆ ಇದರಿಂದ ಮುಂದಿನ ಉದ್ಯೋಗದ ಸಂದರ್ಭಗಳಲ್ಲಿ ಭಾಷೆಯ ಬಳಕೆ ಮತ್ತು ಸಂವಹನ ಎರಡರಲ್ಲಿಯೂ ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ ಅನುಕೂಲವಾಗುತ್ತದೆ.

ಮೌಲ್ಯಮಾಪನದ ಮಾಹಿತಿ (Assessment Details- both CIE and SEE)

(methods of CIE need to be definetopic wise i.e.- MCQ, Quizzes, Open book test, Seminar or micro project)

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The student has to obtain a minimum of 40% marks individually both in CIE and 35% marks in SEE to pass. Theory Semester End Exam (SEE) is conducted for 100 marks (03hours duration). Based on this grading will be awarded.

ನಿರಂತರ ಆಂತರಿಕ ಮೌಲ್ಯಮಾಪನದ ಪ್ರಕ್ರಿಯೆ ಈ ಕೆಳಗಿನಂತಿರುತ್ತದೆ-Continuous Internal Evaluation (CIE) :

1. ಸೂಚಿಸಿದ ವಿಧಾನಗಳು : ಕಿರುಪರೀಕ್ಷೆ, ಬಹು ಆಯ್ಕೆ ಮಾದರಿಯ ಪ್ರಶ್ನೆಗಳು, ವಿದ್ಯಾರ್ಥಿಗಳ ಭಾಷಾ ಸಂವಹನ ಕೌಶಲ್ಯವನ್ನು ಪ್ರಸ್ತುತಪಡಿಸಲು ಅನುಕೂಲವಾಗುವಂತಹ ಪಠ್ಯಾಧಾರಿತ ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳುವುದು.
2. ಅಸೈನ್ಮೆಂಟ್ ಗಳನ್ನು ನೀಡುವುದು, ಪ್ರಬಂಧ ಸ್ಪರ್ಧೆ/ಚರ್ಚಾ ಸ್ಪರ್ಧೆಗಳು ಮತ್ತು ರಸಪ್ರಶ್ನೆ ಮಾದರಿಯ ಚಟುವಟಿಕೆಗಳನ್ನು ಆಯೋಜಿಸುವುದು. ಈ ರೀತಿಯಲ್ಲಿ ಮೌಲ್ಯಮಾಪನವನ್ನು ಮಾಡಬಹುದಾಗಿರುತ್ತದೆ.
3. ಪ್ರತಿಯೊಂದು ವಿಭಾಗದ ಪಠ್ಯ ಭಾಗ ಮೇಲಿನ ಮೌಲ್ಯಮಾಪನ ಪ್ರಕ್ರಿಯೆಯಲ್ಲಿ ಬರುವಂತೆ ನೋಡಿಕೊಳ್ಳುವುದು.

ಸೆಮಿಸ್ಟರ್ ಅಂತ್ಯದ ಪರೀಕ್ಷೆಯು ಈ ಕೆಳಗಿನಂತಿರುತ್ತದೆ - Semester End Exam (SEE):

1. ಪ್ರಶ್ನೆಪತ್ರಿಕೆಯಲ್ಲಿ 10 ಪೂರ್ಣಪ್ರಮಾಣದ ಪ್ರಶ್ನೆಗಳು ಇರುತ್ತವೆ. ಪ್ರತಿಪ್ರಶ್ನೆ 20 ಅಂಕಗಳಿಗೆ ಇರುತ್ತವೆ.
2. ಪ್ರತಿಯೊಂದು ವಿಭಾಗದಿಂದ 2 ಪೂರ್ಣ ಪ್ರಶ್ನೆಗಳು ಇರುತ್ತವೆ.
3. ಪ್ರತಿಯೊಂದು ಪೂರ್ಣ ಪ್ರಶ್ನೆಗೆ ಪೂರಕವಾಗಿ ಮತ್ತು ಸಂಬಂಧಿಸಿದಂತೆ ಉಪ ಪ್ರಶ್ನೆಗಳು ಇರುತ್ತವೆ.
4. ವಿದ್ಯಾರ್ಥಿ 10 ಪೂರ್ಣಪ್ರಮಾಣದ ಪ್ರಶ್ನೆಗಳಲ್ಲಿ 05 ಕ್ಕೆ ಉತ್ತರಿಸಬೇಕು. ಉತ್ತರಿಸುವಾಗ ಪ್ರತಿ ವಿಭಾಗದಿಂದ ಒಂದು ಪೂರ್ಣಪ್ರಮಾಣದ ಪ್ರಶ್ನೆಯನ್ನು ಉತ್ತರಿಸಬೇಕು.

(Suggested Learning Resource):

ವಿಶ್ವವಿದ್ಯಾಲಯವು ನಿಗದಿಪಡಿಸಿರುವ ಪಠ್ಯಪುಸ್ತಕ

“ಸಾಂಸ್ಕೃತಿಕ ಕನ್ನಡ”

ಡಾ. ಹಿ. ಚಿ. ಬೋರಲಿಂಗಯ್ಯ ಮತ್ತು ಡಾ. ಎಲ್. ತಿಮ್ಮೇಶ

ಪ್ರಕಟಣೆ : ಪ್ರಸಾರಾಂಗ, ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ, ಬೆಳಗಾವಿ.

ಹೆಚ್ಚಿನ ಮಾಹಿತಿ ಮತ್ತು ಪೂರಕ ಓದಿಗಾಗಿ :

1. ಕನ್ನಡ ಸಾಹಿತ್ಯ ಪರಿಷತ್ತು, ಕನ್ನಡ ಅಭಿವೃದ್ಧಿ ಪ್ರಾಧಿಕಾರ ಮತ್ತು ಕನ್ನಡ ಹಾಗೂ ಸಂಸ್ಕೃತಿ ಇಲಾಖೆಯ ಈಗಾಗಲೇ ಪ್ರಕಟಿಸಿರುವ ಕನ್ನಡ ನಾಡು ನುಡಿ ಮತ್ತು ಸಂಸ್ಕೃತಿಯ ವಿಷಯಗಳಿಗೆ ಸಂಬಂಧಪಟ್ಟ ಪ್ರಕಟಣೆಗಳನ್ನು ಗಮನಿಸುವುದು.
2. ಕರ್ನಾಟಕ ವಿಜ್ಞಾನ ಮತ್ತು ತಂತ್ರಜ್ಞಾನ ಪರಿಷತ್ತು ಪ್ರಕಟಗೊಳಿಸುತ್ತಿರುವ ವಿಜ್ಞಾನ ಸಾಹಿತ್ಯ ಮತ್ತು ತಂತ್ರಜ್ಞಾನದ ಬರಹಗಳನ್ನು ಸಾಂಸ್ಕೃತಿಕ ಕನ್ನಡದ ಪಠ್ಯಗಳಿಗೆ ಪೂರಕವಾಗಿ ಓದುವುದು.