



(AUTONOMOUS)

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#### **Department of English**

| Subject         | Year | Semester | Course | Title of the course           | Course outcomes   |
|-----------------|------|----------|--------|-------------------------------|---|
| General English | I    | I        | I      | A Course In                   | The Expected learning outcomes of the general English           |
|                 |      |          |        | <b>Communication And Soft</b> | the students are expected course is that                        |
|                 |      |          |        | Skills                        | todemonstratethe following:                                     |
|                 |      |          |        |                               | <b>CO 1:</b> Use grammar effectively in writing and             |
|                 |      |          |        |                               | speaking.   |
|                 |      |          |        |                               | <b>CO 2:</b> Demonstrate the use of good vocabulary             |
|                 |      |          |        |                               | <b>CO 3:</b> Demonstrate an understating of writing skills      |
|                 |      |          |        |                               | <b>CO 4:</b> Acquire ability to use Soft Skills in professional |
|                 |      |          |        |                               | and daily life.   |
|                 |      |          |        |                               | <b>CO 5:</b> Confidently use the tools of communication         |
|                 |      |          |        |                               | skills  |
|                 | I    | II       | II     | A Course In Reading And       | CO 1: Use reading skills effectively                            |
|                 |      |          |        | Writing Skills                | CO 2: Comprehend different texts                                |
|                 |      |          |        |                               | CO 3: Interpret different types of texts                        |
|                 |      |          |        |                               | CO 4: Analyse what is being read                                |
|                 |      |          |        |                               | CO 5: Build up a repository of active vocabulary                |
|                 |      |          |        |                               | CO 6: Use good writing strategies                               |
|                 |      |          |        |                               | CO 7: Write well for any purpose                                |
|                 |      |          |        |                               | <b>CO 8:</b> Improve writing skills independently for future    |
|                 |      |          |        |                               | needs   |

## Department of Telugu అభ్యసనఫలితాలు-2020-2021

| Subject   | Yea | Semeste | Cours | Title of the     | Course outcomes   |
|-----------|-----|---------|-------|------------------|---|
|           | r   | r       | e     | course           |   |
| జనరల్తెలు | I   | I       | I     | ఆధునికసాహి       | CO 1:ఆంగ్లభాష ప్రభావం వల్ల వచ్చిన పరిణామాల ఫలితంగా ఏర్పడిన ఆధునిక తెలుగు సాహిత్య స్వరూప                 |
| గు        |     |         |       | త్యం             | స్వభావాలను తెలుసుకుంటారు.   |
|           |     |         |       | υ                | CO 2:ఆధునిక సాహితీ ప్రక్రియలను అవగాహన చేసుకోవడం ద్వారా సమాజంపై సాహిత్య ప్రభావాన్ని                      |
|           |     |         |       |                  | తెలుసుకోగలరు.   |
|           |     |         |       |                  | CO 3:సామాజిక మార్పులు సాహిత్యంలో ఎలా ప్రతిబింబించింది గ్రహిస్తారు.                                      |
|           |     |         |       |                  | ${ m CO~4:~}$ స్త్రీపురుషులసమానులేఅన్న ఆధునికభావాలనుతెలిపేస్త్రీవాదదృక్పదాన్ని గూర్చిఅవగాహనఏొందుతారు .  |
|           |     |         |       |                  | CO 5:మూలభాషనుంచిలక్ష్కభాషలోకిభాపాంతరీకరణంచేయగలిగేనేర్పునుగూర్చిఅవగాహనహిందుతారు .                        |
|           |     | II      | II    | ప్రాచీనకవిత్వం   | ${ m CO}$ $1:$ ప్రాచీనతెలుగుసాహిత్యంయొక్కప్రాచీనతను, విశిష్టతనుగుర్తిస్తారు. నన్నయ,                     |
|           |     |         |       |                  | తిక్కనకాలంనాటిభాపాసంస్కృతులను, ఇతిహాసకాలంనాటివిషయాలపట్లపరిజ్ఞానాన్ని సంపాదించగలరు.                      |
|           |     |         |       |                  | CO 2:పోతనభక్తితత్వాన్ని , భాగవతవిశిష్టతనుతెలుసుకోగలరు.  |
|           |     |         |       |                  | CO 3:ప్రబంధకవులరచనావిశిష్టతనుధూర్జటిశైవభక్తినితెలుసుకోగలరు.   |
|           |     |         |       |                  | CO 4:ప్రబంధకవులరచనావిశిష్టతనుధూర్జటిశైవభక్తినితెలుసుకోగలరు .  |
|           |     |         |       |                  | CO 5: .ప్రాచీనకావ్యభాషలోనివ్యాకరణాంశాలనుఅధ్యయనంచేయడంద్వారాభాపాసామర్ధ్యాన్ని పెంపొందించుకోగలరు.          |
|           |     | III     | Paper | తెలుగుభాష,       | ${ m CO~1}$ : తెలుగుజాతి $-$ భాషప్రాచీనతసాహితీవైశిష్ఠ్యాన్ని తెలుసుకోగలరు.                              |
|           |     |         | III   | వ్యక్తిత్వవికాసం | $CO\ 2$ : వ్యక్తి– వ్యక్తిత్వం–వ్యక్తిత్వవికాసంలో ఆశావాదం, శ్రమ, సమయపాలనప్రాముఖ్యంగురించితెలుసుకుంటారు. |
|           |     |         |       |                  | ${ m CO~3:}$ స్త్రీపురుషులసమానులేఅన్న ఆధునికభావాలనుతెలిపేస్త్రీవాదదృక్పదాన్ని గూర్చిఅవగాహనపొందుతారు     |
|           |     |         |       |                  | ${ m CO}\ 4$ : స్త్రీపురుషులుధరించేఆభరణాలలో ఈవీడియోఉన్న టువంటిఆరోగ్యసూత్రాలను                           |

|  | శాస్త్రీయద్శక్పథాలనుగూర్చిఅవగాహనపొందుతారు.<br>CO5:<br>పత్రికారచనపరిణామవికాసాలువిలేకరిగారాణించాలంటేపెంపొందించుకోవాల్సినటువంటిసైపుణ్యాలుగూర్చితెలుసుకుంట |
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# **Department of Mathematics Course Outcomes-2020-21**

| Subject     | Year | Semester | Course    | Title of the Course | Course Outcomes   |
|-------------|------|----------|-----------|---------------------|---|
| Mathematics | I    | Ι        | Paper-1   | Differential        | CO 1: Know first order first degree linear differential equations.    |
|             |      |          |           | Equations           | CO 2: Know the methods of finding solution of a differential equation |
|             |      |          |           |                     | of first order but not of first degree.                               |
|             |      |          |           |                     | CO 3: Understand the higher-order linear differential equations for   |
|             |      |          |           |                     | both homogeneous and non-homogeneous, with constant coefficients.     |
|             |      |          |           |                     | CO 4: Understand and apply the appropriate methods for solving        |
|             |      |          |           |                     | higher order differential equations.                                  |
|             |      |          |           |                     | CO 5: Know the methods of Cauchy's Euler and Lagrange's               |
|             |      |          |           |                     | Differential Equations.   |
|             |      | II       | Paper-II  | Analytical Solid    | 1 7 1   |
|             |      |          |           | Geometry            | CO 2: Know the lines and their properties.                            |
|             |      |          |           |                     | CO 3: Understand the Spheres and their properties.                    |
|             |      |          |           |                     | CO 4: Know the Orthogonal spheres and coaxial system of spheres.the   |
|             |      |          |           |                     | Spheres.  |
|             |      |          |           |                     | CO 5: Know the Concept of Cones, Enveloping cones and Right           |
|             |      |          |           |                     | circular cones.   |
|             | II   | III      | Paper-III | Abstract Algebra    | CO 1: Acquire the basic knowledge and structure of groups.            |
|             |      |          |           |                     | CO 2: Get the significance of the notation of a subgroup and cosets.  |
|             |      |          |           |                     | CO 3: Understand the concept of normal subgroups and properties of    |
|             |      |          |           |                     | normal subgroups.   |
|             |      |          |           |                     | CO 4: Study the homomorphisms and isomorphisms with                   |
|             |      |          |           |                     | applications.   |
|             |      |          |           |                     | CO 5: Understand the properties of permutation and cyclic groups.     |
|             |      | IV       | Paper-IV  | Real Analysis       | CO 1: Get clear idea about the limit of a sequence and Convergent     |
|             |      |          |           |                     | sequence – The Cauchy's criterion.                                    |
|             |      |          |           |                     | CO 2: Obtain the skills of analysing the concepts and applying        |
|             |      |          |           |                     | appropriate methods for testing convergence of series.                |

|     |    |                  |  | CO 3: Know about the Real valued Functions, Limits of functions, bounded ness of a function, Continuous functions.  CO 4: Understand the derivability of a function at a point and on an interval, Derivability and continuity of a function and Meanvalue Theorems.  CO 5: Know about the Riemann integral functions, Properties of integrable functions, Fundamental theorem of integral calculus.  |
|-----|----|------------------|--|---|
| III | V  | Paper-V          | Ring Theory &LinearAlgebra                             | CO 1: Acquire the basic knowledge of rings, fields and integral domains, subrings and ideals. CO 2: Get the knowledge of Homomorphism of Rings. CO3: Understand the concepts of Vector spaces, Subspaces. CO4:Understand the concepts of Basis, Dimension and their properties. CO:5 Understand the concept of Linear transformation and its properties.  |
|     |    | Paper-VI         | Multiple Integrals & Vector Calculus                   | CO1. Learn Multiple Integrals as a natural extension of definite Integral to a function of two variables in the case of double integral/three variables in the case of triple integral.  CO2. Learn applications in terms of finding Surface area by Double Integral and volume by Triple integral.  CO3. Determine the Gradient, Divergence and Curl of a vector and Vector identities.  CO4. Evaluate Line, Surface and Volume Integrals.  CO5. Understand the Relation between Surface and Volume integrals, Relation between the Line integral and Volume integral, Relation between Line and Surface integral. |
|     | VI | PAPER-<br>VII(A) | Numerical Analysis<br>and Computer<br>Programming in C | CO 1: Difference between the Forward, Backward operators and the relation between them. CO 2: Know about the Newton-Gregory and Backward interpolation. CO 3: Know the central difference operators and relation between them.  |

|                           |  | CO4: Know the Algorithms ,Flowcharts,Structure of C Programme, Operators. CO5: Know the Looping statements, Functions.   |
|---------------------------|--|--|
| Paper-<br>VII(B)          | Discrete<br>Mathematics  | CO 1: Know the sets, operations of sets ,Relations and Fundamentals of Logic. CO 2: Know about the Methods of Implication CO 3: Know the Generating functions of sequences CO4: Know the Recurrence Relations CO5: Solutions of the Recurrence relations by various methods  |
| Paper-<br>V(IIIA1)        | Advanced<br>Numerical Analysis<br>and Computer<br>Programming in C | CO 1: Understand the process of Numerical Integration.   |
| Paper-<br>VIII(B1)        | Graph Theory & Boolean Algebra                                     | CO1:Know the relations and Digraphs. CO2: Understand the Isomorphism and properties of trees. CO3: Know the Spanning trees, Directed trees, Binary Trees. CO4: Understand the Multi graphs, Hamiltonian Graphs and Chromatic Numbers. Co5: Understand the Boolean Functions, Switchining Mechanisms, Minimizations of Boolean Functions.   |
| Paper-<br>VIII(A2&B<br>2) | Special Functions  | CO 1: Get the knowledge of Hermite equation, generating functions, orthogonal properties of Hermite Polynomials and recurrence relations.  CO2:Acquire the knowledge of Laguerre polynomial, generating functions, orthogonal properties, Recurrence relations.  CO3:Acquire the knowledge of Legendre equation, generating functions, orthogonal properties of Legendre Polynomials.  CO4:Understand the generating function, Recurrence relations, |

|  |           |               | orthogonal properties of Bessel's Equation. CO5:Understand the Beta and Gamma functions, their properties and relation between these two functions |
|--|-----------|---------------|--|
|  | Paper-    | Matrix Theory | CO1: Know the rank of a Matrix   |
|  | VIII(A3&B |               | CO2:Understand the Linear Equations.   |
|  | 3)        |               | CO3: Acquire the Eigen values and Eigen vectors.   |
|  |           |               | CO4:Understand the Cayley Hamilton theorem.  |
|  |           |               | CO5: Understand the Orthogonal Vectors.  |

## **Department of Statistics**

| Subject    | Year | Semester | Course | Title of the<br>Course                                | Course outcome  |
|------------|------|----------|--------|---|---|
| Statistics | I    | I        | I      | Descriptive statistics and probability                | CO:1 Students will Analyze statistical data using measures of central tendency, dispersion and location. CO2:Calculate probabilities, and derive the marginal and conditional distributions of bi variate random variables. CO3: Analyze Statistical data using MS-Excel.                               |
|            |      | II       | П      | Mathematical Expectations & Probability Distributions | CO1:Students will Use discrete and continuous probability distributions, including requirements, mean and variance, and making decisions.  CO2:Also derive formulae by using Mathematical expectations.   |
|            | II   | III      | III    | Statistical Methods &Theory of Estimation             | CO1:Students will Gain Knowledge on important of Statistical concepts in Statistical Methods such as Correlation, Regression, Curve fitting &Methods in Estimation.  CO2: Demonstrate understanding of the theory of maximum likelihood estimation.  CO3: Also Analyze Statistical data using MS-Excel. |
|            |      | IV       | IV     | Testing of Hypothesis                                 | Hypothesis in large and small samples ,they also learn the calculation of those methods such and differences between means, standard deviations and correlations.  Co2:Also learn the construction of Non-Parametric tests  |
|            |      |          | V      | Sampling and ANOVA                                    | CO1: Students can understand the fundamental concepts of Sampling and Experimental Design such as ANOVA,  |

| III | V  | VI      | Operations<br>Research                 | CRD,RBD. ANCOVA. CO2: Students will Gain Knowledge on Sampling techniques such as Simple random sampling, systematic random and stratified random sampling.  CO1: students can Gain the knowledge on optimization techniques. CO2:Also know the construction of those techniques such as Graphical, Simplex, Big-M, Two-Phase and Dual simplex methods.   |
|-----|----|---------|--|---|
|     |    |         |  | CO3: Students can solve the problems in Transportation and sequencing.  |
|     | VI | VII     | Applied Statistics using R-Programming | CO1: students can Demonstrate and understanding the concept of time series and its applications in different areas.  CO2: Acquire knowledge on vital statistics, Index numbers and calculate an indices from given data. Explain how supply and demand relationships between the price of a product and the quantity of the same product.  CO3: Analyze statistical data using MS-Excel R-Programming |
|     |    | VIII A1 | Quality and<br>Reliability             | CO1:Understand the concepts of quality control, chance and assignable causes of variation, control charts for variables and attributes, producer's and consumer's risk -Acceptance samplingplans.  CO2: Understand the setting of mean chart limits, range chart limits using mean and range charts.  CO3: Analyze statistical data using MS-Excel.   |
|     |    | VIII A2 | Designs of Experiments                 | CO1:Students will be able to know the concepts of ANCOVA. CO2: BIBD, PBIBD and factorial Designs such as 2 <sup>2</sup> ·2 <sup>3</sup> ·3 <sup>2</sup> ,3 <sup>3</sup> .   |

#### Department of Physics & Electronics Course outcomes- 2020-21

| Subject | Year | Semester | Course | Title of the course                | Course outcomes   |
|---------|------|----------|--------|------------------------------------|---|
| Physics | I    | I        | I      | Mechanics and Waves & Oscillations | At the end of the course students will be able to: CO 1:Specialize and update knowledge within one of the main specializations of the mechanics. CO 2: Comprehend complicated practical problems in Mechanics, specify the problem mathematically and identify suitable analytical and/or numerical solution methods, and prospective experimental methods. CO3:Understand the different concepts of vectors and their integrations. CO 4:Understand Collisions in one and two dimensions & relation between scattering cross section and impact parameter. CO 5: Understand the concepts of rigid body and Solve differential equations in concepts of fundamentals of vibrations. |
|         |      | II       | II     | WAVE OPTICS                        | At the end of the course students will be able to: CO 1:understands behavior of light in different mediums and analyses the behavior of light in mirrors and lenses CO2:Interpret reflection and refraction of light to determine light propagation in different media CO 3: Use mathematical analysis to calculate image properties formed by a mirror, a lens and their combinations CO 4: Interpret constructive and destructive interference to visualise interference/diffraction patterns. CO 5:Use mathematical analysis to find bright and dark fringes in an interference/diffraction pattern and use mathematical analysis to find a wavelength diffracted by a grating.  |

## **Department of Physics & Electronics**

### **Electronics Course outcomes- 2020-21**

| Subject     | Year | Semester | Course    | Title of the course | Course outcomes  |
|-------------|------|----------|-----------|---------------------|--|
| Electronics | I    | I        | Paper I   | Circuit Analysis    | At the end of the course, the student will be able to: CO 1: To understand basic electrical properties CO 2: To analyze electrical circuits CO 3: To find circuit response using Laplace transforms CO 4: To understand signal superposition and Fourier transform   |
|             |      | II       | Paper II  | Electronic devices  | At the end of the course, the student will be able to: CO 1: To understand operation of semiconductor devices. CO 2: To understand DC analysis and AC models of semiconductor devices. CO 3: To apply concepts for the design of Regulators and Amplifiers CO 4: To verify the theoretical concepts through laboratory and simulation experiments CO 5: To design and analyze of electronic circuits |
|             | II   | III      | Paper III | Digital Electronics | At the end of the course students will be able to: CO 1: Have a thorough understanding of the fundamental concepts and techniques used in digital electronics. CO 2: To understand and examine the structure of various number systems and its application in  |

|     |    |          |                                   | digital design. CO 3: To understand, analyze and design various combinational and sequential circuits. CO 4: To identify basic requirements for a design application and propose a cost effective solution CO 5: To identify and prevent various hazards and timing problems in a digital design and to develop skill to build, and troubleshoot digital circuits  |
|-----|----|----------|-----------------------------------|--|
|     | IV | Paper IV | Analog& Digital IC applications   | At the end of the course students will be able to CO 1: To develop the ability to understand, analyze and design digital &analog electronic circuits using discrete components. CO 2: Observe the amplitude and frequency responses of common amplification circuits. CO 3: Design, construct, and take measurement of various analog circuits to compare experimental results in the laboratory with theoretical analysis.                              |
| III | V  | Paper V  | Basic Communication<br>Techniques | At the end of the course students will be able to CO 1: Understand and apply the knowledge of statistical theory of communication and explain the conventional digital communication system.  CO 2:Apply the knowledge of signals and system and evaluate the performance of digital communication system in the presence of noise.  CO 3: Apply the knowledge of digital electronics and describe the error control codes like block code, cyclic code. |

|          |                     | CO 4: Analyze the digital communication system with spread spectrum modulation. CO 5: Design as well as conduct experiments, analyze and interpret the results to provide valid conclusions for digital modulators and demodulator using hardware components and communication systems.  |
|----------|---------------------|--|
| Paper VI | 8085 Microprocessor | At the end of the course students will be able to CO 1: Demonstrate computer architecture concepts related to design of modern processors, CO 2: Create the memory interfacing techniques and I/O interfacing techniques with 8085. CO 3: Analyze the performance of commercially available computers. CO 4: To develop logic for assembly language programming. |

| VI | Paper VII     | 8051 Microcontroller          | At the end of the course students will be able to CO 1: Gain comprehensive knowledge about architecture and addressing modes of 8051 CO 2: Write assembly language program in 8051 for various embedded system applications CO 3:Implement the middle level programming and interfacing concepts in 8051 CO 4:Use external interfaces in various embedded system projects CO 5: Design and implement programs on 8051, ARM, PIC and describe the architecture and instruction set of ARM microcontroller   |
|----|---------------|-------------------------------|--|
|    | Paper VIII A1 | Electronic<br>Instrumentation | At the end of the course students will be able to CO 1:Recognize the evolution and history of units and standards in Measurements. CO 2: Identify the various parameters that are measurable in electronic instrumentation. CO 3: Employ appropriate instruments to measure given sets of parameters. CO 4: Practice the construction of testing and measuring set up for electronic systems CO 5: To have a deep understanding about instrumentation concepts which can be applied to Control systems and to relate the usage of various instrumentation standards. |

|  | Paper VIII A2 | Radar    | Systems | & | At the end of the course students will be able to      |
|--|---------------|----------|---------|---|--|
|  |               | Antennas | -       |   | CO 1: Know the fundamentals of Antennas &              |
|  |               |          |         |   | concept of radio wave propagation.                     |
|  |               |          |         |   | and Illustrate the different types of arrays and their |
|  |               |          |         |   | radiation patterns.                                    |
|  |               |          |         |   | CO 2: Analyze a complete radio system, from the        |
|  |               |          |         |   | Transmitter to the Receiver end with reference to      |
|  |               |          |         |   | antenna and Quantify the fields radiated by various    |
|  |               |          |         |   | types of antennas                                      |
|  |               |          |         |   | CO 3: Analyze antenna measurements to assess           |
|  |               |          |         |   | antenna's performance                                  |
|  |               |          |         |   | CO 4. Demonstrate an understanding of the              |
|  |               |          |         |   | importance of Matched Filter Receivers in Radars.      |
|  |               |          |         |   | CO 5. Familiarize with the different types of Radar    |
|  |               |          |         |   | Displays and their application in real time scenario   |
|  | Paper VIII A3 |          |         |   | Electronics Project                                    |
|  |               |          |         |   |  |

## **Department of Chemistry Course outcomes- 2020-21**

| Subject   | Year | Semester | Course | Title of the course               | Course outcomes   |
|-----------|------|----------|--------|-----------------------------------|---|
| Chemistry | I    | I        | I      | Inorganic & Physical<br>Chemistry | At the end of the course, the student will be able to; CO 1. Understand the basic concepts of p-block elements CO 2. Explain the difference between solid, liquid and gases in terms of intermolecular interactions CO 3. Apply the concepts of gas equations, pH and electrolytes while studying other chemistry course  |
|           |      | II       | II     | Organic & General<br>Chemistry    | At the end of the course, the student will be able to; CO 1: Understand and explain the differential behaviour of organic compounds based on fundamental concepts learnt. CO 2. Formulate the mechanism of organic reactions by recalling and correlating the fundamental properties of the reactants involved. CO 3:Learn and identify many organic reaction mechanisms including Free Radical Substitution, Electrophilic Addition and Electrophilic Aromatic Substitution. CO 4: Correlate and describe the stereo chemical properties of organic compounds and reactions. |

## **Department of Botany**

| Subject | Year | Semester | Course | Title of the course                           | Course outcomes   |
|---------|------|----------|--------|---|---|
| Botany  | I    | I        | I      | Fundamentals of Microbes                      | On successful completion of the course, the students will be  |
|         |      |          |        | and Non-vascular Plants                       | able to:  |
|         |      |          |        |   | CO1: Explain origin of life on the earth.                     |
|         |      |          |        |   | CO2: Illustrate diversity among the viruses and prokaryotic   |
|         |      |          |        |   | organisms and can categorizethem.                             |
|         |      |          |        |   | CO3: Classify fungi, lichens, algaeand bryophytes based on    |
|         |      |          |        |   | theirstructure, reproduction andlife cycles.                  |
|         |      |          |        |   | CO4: Analyze and ascertain the plant disease symptoms due     |
|         |      |          |        |   | to viruses, bacteria and fungi.                               |
|         |      |          |        |   | CO5: Recall and explain theevolutionary trends among          |
|         |      |          |        |   | amphibians of plant kingdom fortheir shift to land habitat.   |
|         |      |          |        |   | CO6: Evaluate the ecological and economic value of            |
|         |      |          |        |   | microbes, thallophytes and bryophytes.                        |
|         |      |          |        |   | CO7: Demonstrate the techniques of use of lab equipment,      |
|         |      |          |        |   | preparing slides and identify the material and draw           |
|         |      |          |        |   | diagrams exactly as it appears.                               |
|         |      | II       | II     | Basics of Vascular plants and Phyto-geography | On successful completion of this course, the students will be |

| CO1: Classify and compare Pteridophytes and Gymnosperms based on their morphology, anatomy, reproduction and life cycles. |
|---|
| CO2: Justify evolutionary trends in tracheophytes to adapt for land habitat.  |
| CO3: Explain the process of fossilization and compare the characteristics of extinct and extant plants.                   |
| CO4: Critically understand various taxonomical aids for identification of Angiosperms.                                    |
| Analyze the morphology of the most common Angiosperm plants of their localities and recognize their families.             |
| CO6: Evaluate the ecological, ethnic and economic value of different tracheophytes and summarize their goods and          |
| services for human welfare.  CO7: Locate different phytogeographical regions of the                                       |
| world and India and can analyze their floristic wealth.   |

## **Department of Zoology**

| Subject | Year | Semester | Course | Title of the course | Course outcomes   |
|---------|------|----------|--------|---------------------|---|
| Zoology | I    | I        | I      | Animal Diversity -  | At the end of the course, the student will be able to:    |
|         |      |          |        | Nonchordates        | CO1 Describe general taxonomic rules on animal            |
|         |      |          |        |                     | classification  |
|         |      |          |        |                     | CO2 Classify Protozoa to Coelenterata with taxonomic keys |
|         |      |          |        |                     | CO3 Classify Phylum Platy hemninthes to Annelida phylum   |
|         |      |          |        |                     | using examples from parasitic adaptation and vermin       |
|         |      |          |        |                     | composting  |
|         |      |          |        |                     | CO4 Describe Phylum Arthropoda to Mollusca using          |
|         |      |          |        |                     | examples and importance of insects and Molluscans         |
|         |      |          |        |                     | CO5 Describe Echinodermata to Hemi chordata with suitable |
|         |      |          |        |                     | examples and larval stages in relation to the phylogeny.  |
|         |      | II       | II     | Animal Diversity -  | At the end of the course, the student will be able to;    |
|         |      |          |        | chordates           | CO1 Describe general taxonomic rules on animal            |
|         |      |          |        |                     | classification of chordates                               |
|         |      |          |        |                     | CO2 Classify Protochordata to Mammalia with taxonomic     |
|         |      |          |        |                     | keys  |
|         |      |          |        |                     | CO3 Understand Mammals with specific structural           |
|         |      |          |        |                     | adaptaions  |

|  |   | CO4 Understand the significance of dentition and           |
|--|---|--|
|  |   | evolutionary significance                                  |
|  |   | CO5 Understand the origin and evolutionary relationship of |
|  |   | different phyla from Prochordata to mammalia.              |
|  | · | <u>.                                      </u>             |
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## **Department of Nutrition and Dietetics**

| Subject   | Year | Semseter | Course    | Title of the course      | Course outcomes  |
|-----------|------|----------|-----------|--------------------------|--|
| Nutrition | I    | I        | Paper I   | Principles of            | At the end of the course,the student will be able to;      |
|           |      |          |           | Nutrition                | CO 1: Learns basic concepts of nutrition                   |
|           |      |          |           |                          | CO 2: Identifies various vitamins and minerals             |
|           |      |          |           |                          | CO 3: Knows energy value of foods and energy requirements  |
|           |      |          |           |                          | CO 4: Understands water balance                            |
|           |      |          |           |                          | CO 5: Relates nutrients inter-relationship                 |
|           |      | II       | Paper II  | Food Science and         | At the end of the course,the student will be able to;      |
|           |      |          |           | Chemistry                | CO 1: Understands cereals, millets and sugars              |
|           |      |          |           |                          | CO 2: Learns about pulses, legumes, nuts and oil seeds     |
|           |      |          |           |                          | CO 3: Relates nutritional aspects of vegetables and fruits |
|           |      |          |           |                          | CO 4: Knows various meat and milk products                 |
|           |      |          |           |                          | CO 5: Identifies spices and condiments                     |
|           | II   | III      | Paper III | <b>General Nutrition</b> | At the end of the course,the student will be able to;      |
|           |      |          |           |                          | CO 1: Learns energy metabolism and meal planning           |
|           |      |          |           |                          | CO 2: Knows adulthood, pregnancy and lactation nutritional |
|           |      |          |           |                          | requirements   |
|           |      |          |           |                          | CO 3: Understands nutritional problems of infancy and      |
|           |      |          |           |                          | preschool children   |

|     |    |          |                     | CO 4: Relates the problems of school going children and  |
|-----|----|----------|---------------------|--|
|     |    |          |                     | adolescents  |
|     |    |          |                     | CO 5: Identifies changes in old age.                     |
|     | IV | Paper IV | Diet Therapy        | At the end of the course,the student will be able to;    |
|     |    |          |                     | CO 1: Knows the roles of dietitian and understands       |
|     |    |          |                     | therapeutic diets.                                       |
|     |    |          |                     | CO 2: Relates nutrition in metabolic disorders and CVDs  |
|     |    |          |                     | CO 3: Relates nutrition in GID and liver disorders       |
|     |    |          |                     | CO 4: Understands nutrition in renal disorders           |
|     |    |          |                     | CO 5: Identifies stress conditions and relates nutrition |
| III | V  | Paper V  | Food processing and | At the end of the course,the student will be able to;    |
|     |    |          | preservation        | CO 1: Understands basic concepts of food processing and  |
|     |    |          |                     | preservation   |
|     |    |          |                     | CO 2: Learns processing of pulses                        |
|     |    |          |                     | CO 3: Knows various foods from meat, fish, fruits and    |
|     |    |          |                     | vegetables   |
|     |    |          |                     | CO 4: Relates fermented foods and its nutrition          |
|     |    |          |                     | CO 5: Identifies RTE, RTU foods                          |
|     |    |          | Food analysis and   | At the end of the course, the student will be able to;   |
|     |    |          | Instrumentation(add | CO 1: Learns basic concepts of food chemistry            |
|     |    |          | on course)          | CO 2: Learns general principles of sampling techniques   |
|     |    |          |                     | CO 3: Understands carbohydrates                          |

|    |           |                  | CO 4: Understands total protein                               |
|----|-----------|------------------|---|
|    |           |                  | CO 5: Relates the principles and applications of              |
|    |           |                  | instrumentation in food analysis                              |
|    | Paper VI  | Food Service     | At the end of the course,the student will be able to;         |
|    |           | Management       | CO 1: Knows the basic concepts of food service management     |
|    |           |                  | in various organizations.                                     |
|    |           |                  | CO 2: Understands types and techniques of food services       |
|    |           |                  | CO 3: Learns the equipment and their purchase used in food    |
|    |           |                  | service system  |
|    |           |                  | CO 4: Relates principles and tools in managing the food       |
|    |           |                  | service system  |
|    |           |                  | CO 5: Manages spaces in kitchen and storage units             |
|    | Common    |                  |   |
|    | Project   |                  |   |
| VI | Paper VII | Food Quality and | At the end of the course,the student will be able to;         |
|    |           | Safety           | CO 1: Learns basic concept of food quality control and safety |
|    |           |                  | CO 2: Understands quality assurance and specifications        |
|    |           |                  | CO 3: Identifies types of food additives                      |
|    |           |                  | CO 4: Relates food laws in food quality and safety            |
|    |           |                  | CO 5: Learns food packaging materials and their properties    |
|    | Paper     | Nutritional      | At the end of the course, the student will be able to;        |
|    | VIII A1   | Biochemistry     | CO 1: Learns metabolism of carbohydrates                      |

|         |                   | CO 2: Learns metabolism of fats and fatty acids               |
|---------|-------------------|---|
|         |                   | CO 3: Learns metabolism of proteins and amino acids           |
|         |                   | CO 4: Learns metabolism of nucleic acids                      |
|         |                   | CO 5: Understands enzymes and their mechanism of actions      |
| Paper   | Food Microbiology | At the end of the course,the student will be able to;         |
| VIII A2 |                   | CO 1: Learns about common microbes present in foods           |
|         |                   | CO 2: Understands water and food borne diseases               |
|         |                   | CO 3: Identifies common microbes in food spoilage             |
|         |                   | CO 4: Relates food preservation techniques in food spoilage   |
|         |                   | CO 5: Understands food adulteration                           |
| Paper   | Community         | At the end of the course,the student will be able to;         |
| VIII A3 | Nutrition         | CO 1: Learns the methods of nutritional assessment            |
|         |                   | CO 2: Understands basics of nutrition education               |
|         |                   | <b>CO 3:</b> Knows about intervention programme in nutrition  |
|         |                   | CO 4: Relates the role of agencies in combating malnutrition  |
|         |                   | CO 5: Relates effects of food fads and fallacies on nutrition |
| Paper   | Research          | At the end of the course,the student will be able to;         |
| VIII B1 | Methodology       | CO 1: Learns objectives and motivation in research            |
|         |                   | CO 2: Understands research problem                            |
|         |                   | CO 3: Learns different experimental designs in research       |
|         |                   | CO 4: Relates data processing and statistical analysis to     |
|         |                   | research methodology  |

|         |                             | CO 5: Learns how to write report of research                  |
|---------|-----------------------------|---|
| Paper   | <b>Nutrition in Fitness</b> | At the end of the course,the student will be able to;         |
| VIII B2 |                             | CO 1: Learns basic concepts of fitness and training           |
|         |                             | CO 2: Understands diets and exercises in fitness              |
|         |                             | CO 3: Relates the effect of exercises on body metabolism      |
|         |                             | CO 4: Learns water and electrolyte balance in the body        |
|         |                             | CO 5: Formulates dietary guidelines for health and fitness    |
| Paper   | Community                   | At the end of the course,the student will be able to;         |
| VIII B3 | Nutrition                   | CO 1: Learns the methods of nutritional assessment            |
|         |                             | CO 2: Understands basics of nutrition education               |
|         |                             | <b>CO 3:</b> Knows about intervention programme in nutrition  |
|         |                             | CO 4: Relates the role of agencies in combating malnutrition  |
|         |                             | CO 5: Relates effects of food fads and fallacies on nutrition |

## **Department of Bio-Chemistry**

| Subject   | Year | Semester | Course   | Title of the course   | Course outcomes  |
|-----------|------|----------|----------|-----------------------|--|
| Bio-      | I    | I        | Paper I  | Biomolecules          | At the end of the course, the student will be able to:   |
| Chemitsry |      |          |          |                       | CO 1: This course enable the students to get knowledge   |
|           |      |          |          |                       | and understanding of the molecular machinery of living   |
|           |      |          |          |                       | cells;   |
|           |      |          |          |                       | CO2. Acquire knowledge and understanding of the          |
|           |      |          |          |                       | principles that govern the structures of macromolecules  |
|           |      |          |          |                       | and their participation in molecular recognition;        |
|           |      |          |          |                       | CO3:This course will enable the student to understand    |
|           |      |          |          |                       | the importance of biomolecules in living organisms and   |
|           |      |          |          |                       | effects of their alterations in diseases occurring in    |
|           |      |          |          |                       | plants, animals and humans.                              |
|           |      |          |          |                       | CO 4:The practical will give the expertise to the        |
|           |      |          |          |                       | student for analysis of any biological or non-biological |
|           |      |          |          |                       | sample for identification of its chemical composition.   |
|           |      |          |          |                       | CO5: Students will understand the methods of             |
|           |      |          |          |                       | determination of amino acid and nucleotide sequence      |
|           |      |          |          |                       | of proteins and DNA respectively.                        |
|           |      | II       | Paper II | Analytical techniques | At the end of the course, the student will be able to;   |

| CO1. The student will learn the various analytical         |
|--|
| techniques and their applications in separation and        |
| isolation of cells and tissues for studying their          |
| functional abnormalities                                   |
| CO2. The practicals will provide the expertise to the      |
| student for quantification of electrolytes and other       |
| metal ions, hormones and identification of bacteria.       |
| CO3. The expertise gained by the student in this course    |
| can be useful in food industries, pharma industries        |
| clinical and microbiological labs.                         |
| CO4:Students will be exposed to various                    |
| chromatographic techniques and their applications in       |
| isolation of different biological molecules.               |
| CO5: In addition to understanding the applications of      |
| centrifugation and chromatography in biologica             |
| investigations, they will gain insight into purification o |
| proteins by affinity chromatography using epitope tags     |
| such as histidine tag, GST tag, Flag tag etc.              |
|  |

## **Department of Microbiology**

| Subject      | Year | Semester | Course | Title of the course                                     | Course outcomes  |
|--------------|------|----------|--------|---|--|
| Microbiology | I    | I        | I      | Introductiontomicrobiology<br>andmicrobial<br>Diversity | At the end of the course, the student will be able to:  CO 1: Understand terminologyrelatingtothemicrobiology and gain knowledge about development of branch microbiology and its place in living world.  CO 2:Students will know the structure of and properties of prokaryotic microorganisms  CO 3: Students will know the structure of and properties of eukaryotic microorganisms  CO 4: Gain knowledge on cultivation of bacteria on media  CO5: Demonstrate appropriate br3laboratory skill and techniques related to isolation, staining,identificationandcontrolofmicroorganisms. |
|              |      | II       | II     | Enzymology and<br>Microbial metabolism                  | At the end of the course, the student will be able to;  CO 1: To understand the basics of Enzymes and their classification and functions. Biomolecular synthesis and control will help in further study.  CO 2: Explain the basic nutritional types of microorganisms.  CO 3: Provide practical knowledge knowledge on growth and measurement of growth.  CO 4: Understand the concept of metabolism in bacteria.  |

#### Department of Home Science Course outcomes- 2020-21

| Subject         | Year | Semester | Course  | Title of the course      | Course outcomes   |
|-----------------|------|----------|---------|--------------------------|---|
| Home<br>Science | I    | I        | HSC 101 | Basic Nutrition          | At the end of the course students will be able to CO1: Understanding the concepts of nutrition and food and its relation to health. CO2: Acquiring knowledge about macro and micro nutrients and their functions. CO3: Knowing the consequences of deficiency of taking nutrients. CO4: Understanding importance of non-nutrients in human nutrition  |
|                 |      |          | HSC 102 | Fundamentals of Textiles | At the end of the course students will be able to CO1: The importance of the textiles in human life and also the textile terminology and types of fibres. CO2: Identification of different fibres like plant fibres, animal fibres based on properties. CO3: Gains knowledge on manufacturing of different textile fibers. CO4: Understands the method of Spinning and process of yarn construction. CO5: Judge the differences between simple and novelty yarns. |
|                 |      |          | HSC 103 | General Psychology       | At the end of the course students will be able to CO1: Develop a working knowledge of Psychological contents, areas and applications of psychology. CO2: Develop a base in cognitive psychology with the help of relevant examples of everyday life. CO3: Comprehend and analyse situations in real life appropriately and enable others to exercise in the same way. CO4: Appreciate and apply various theories of learning in the practical world.              |

| II | HSC 201  | <b>Introduction to Food</b> | At the end of the course students will be able to              |
|----|----------|-----------------------------|--|
|    |          | Science                     | CO1: Planning and calculating nutritive values for the foods   |
|    |          |                             | and recipes.   |
|    |          |                             | CO2: Identification of signs and symptoms of different         |
|    |          |                             | nutrient disorders.  |
|    |          |                             | CO3: Practical knowledge on availability of seasonal and       |
|    |          |                             | other foods by doing market survey.                            |
|    |          |                             | CO4: Listing out the common foods and their names in           |
|    |          |                             | scientific and local languages.                                |
|    | HSC 202  | Principles of Garment       | At the end of the course students will be able to              |
|    |          | construction                | CO1: Remember and explain in a systematic way the              |
|    |          |                             | importance of the textiles in human life and also the          |
|    |          |                             | textile terminology and types of fibres.                       |
|    |          |                             | CO2: Understands identification of different fibres like plant |
|    |          |                             | fibres, animal fibres based on properties.                     |
|    |          |                             | CO3: Gains knowledge on manufacturing of different textile     |
|    |          |                             | fibers.  |
|    |          |                             | CO4: Understands the method of Spinning and process of         |
|    |          |                             | yarn construction.   |
|    |          |                             | CO5: Identification of different textile fibres using          |
|    | TIGG 202 | II • 6 D 44                 | microscopic, burning tests.                                    |
|    | HSC 203  | Housing for Better          | At the end of the course students will be able to              |
|    |          | Living                      | CO1:Understand importance and functions of a house             |
|    |          |                             | CO2: Gain knowledge on house plans for different income        |
|    |          |                             | groups CO2-Understand Duilding Materials and Einighes          |
|    |          |                             | CO3:UnderstandBuilding Materials and Finishes.                 |
|    |          |                             |  |

## **Department of Computer Science (B.ScComp.Sc)**

| Subject          | Year | Semester | Course    | Title of the course                       | Course outcomes  |
|------------------|------|----------|-----------|---|--|
| Computer science | I    | I        | Paper I   | Computer Fundamentals<br>&Photoshop       | At the end of the course, the student will be able to:<br>CO1: To explore basic knowledge on computers and<br>Photoshop's beauty from the practical to thepainterly<br>artistic and to understand how Photoshop will help you<br>create your own successfulimages.   |
|                  |      | II       | Paper II  | Programming In C                          | At the end of the course, the student will be able to; CO 1:The students can be able to develop programs using the basic elements like controlstatements, Arrays and Strings. CO 2:The students can solve the memory access problems by using pointers CO 3:The students will become familiar with the fundamentals and acquire programming skillsin the Java language.  |
|                  | II   | III      | Paper III | Object Oriented<br>Programming Using Java | At the end of the course students will be able to: CO 1:The student can be able to develop java programs using oop concepts such as inheritanceand polymorphism. CO 2:The student can develop efficient Java applets and applications using OOP concept CO 3:The students will become familiar with the fundamentals and acquire programming skillsin the Java language. |
|                  |      | IV       | Paper IV  | Data Structures                           | At the end of the course students will be able to CO 1: The student should be able to choose an appropriate data structure for a particular problem.  CO 2: The students can sort the data using different sorting techniques.   |
|                  | III  | V        | Paper V   | Database Management                       | At the end of the course students will be able to  |

|  |    |                  | System               | CO1: The student should be able to Master working successfully on the design and development of adatabase application system.   |
|--|----|------------------|----------------------|---|
|  |    | Paper VI         | Software Engineering | At the end of the course students will be able to CO 1: The student should be able to develop and document a minor project by using theprinciples of Object Oriented Software Engineering.  |
|  |    | Paper VII        | Operating Systems    | The students should be able to Simulate an Operating System by including features like CO 1: Process Management CO 2: Memory Management CO 3: I/O interface Management CO 4: File System Management.  |
|  | VI | Paper VIII<br>A1 | Distributed Systems  | At the end of the course students will be able to CO 1: Understand the design principles in distributed systems and the architectures for distributed systems CO 2: Apply various distributed algorithms related to clock synchronization, concurrency control, deadlock detection, load balancing, voting etc. CO 3: Analyze fault tolerance and recovery in distributed systems and algorithms for the same CO 4:Implement different distributed algorithms over current distributed platforms  |
|  |    | Paper VIII<br>A2 | Cloud Computing      | At the end of the course students will be able to CO 1: Explain the core concepts of the cloud computing paradigm: how and why this paradigm shift came about, the characteristics, advantages and challenges brought about by the various models and services in cloud computing CO 2:Apply the fundamental concepts in datacenters to understand the tradeoffs in power, efficiency and cost CO 3: Identify resource management fundamentals, i.e. resource abstraction, sharing and sandboxing and outline their role in managing infrastructure in cloud computing. |

| Paper<br>VIII A3 | Project | At the end of the course students will be able to: CO 1: Develop ability to analyze a problem, identify and define the computing requirements, which may be appropriate to its solution. CO2: To prepare students to undertake careers involving problem solving using computer science and technologies CO 3: Develop ability to pursue advanced studies and research in computer science CO 4: To produce entrepreneurs who can innovate and |
|------------------|---------|--|
|                  |         | develop software product.  |

## **Department of Computer Science (B.Com Cs)**

| Subject             | Year | Semester | Course    | Title of the course          | Course outcomes  |
|---------------------|------|----------|-----------|------------------------------|--|
| Computer<br>Science | I    | I        | Paper I   | Information Technology       | At the end of the course students will be able to:  CO 1:Describe the fundamental hardware components that make up a computer's hardware and the role of   |
|                     |      |          |           |                              | each of these components. CO 2:Understand the difference between an operating system and an application program, and what each is used for in a computer.  |
|                     |      |          |           |                              | CO 3:Use technology ethically, safely, securely, and legally. CO 4:Use systems development, word-processing, spreadsheet, and presentation software to solve   |
|                     |      |          |           |                              | basic information systems problems.  |
|                     |      | II       | Paper II  | E-Commerce And Web Designing | At the end of the course students will be able to: CO 1:Understand the foundations and importance of E- commerce. CO 2:Define Internet trading relationships including Business to Consumer, Business- to-Business, Intra- organizational. CO 3:Describe the infrastructure for E-commerce. CO 4:Understand the principles of creating an effective web page, including an in-depth consideration of information architecture. |
|                     | II   | III      | Paper III | PROGRAMMING with C           | At the end of the course students will be able to: CO 1:Understanding a functional hierarchical code organization. CO 2:Understanding a concept of object thinking within the framework of functional model.   |

|     |    |          |  | CO 3:Write program on a computer, edit, compile, debug, correct, recompile and run it.  |
|-----|----|----------|--|---|
|     |    | Paper IV | DATABASE MANAGEMENT<br>SYSTEM                      | At the end of the course students will be able to: CO 1: The role of a database management system in an organization. CO 2:Understand basic database concepts, including the structure and operation of the relational data model. CO 3:Understand and successfully apply logical database design principles, including E-Understand R diagrams and database normalization. CO 4:Understand Functional Dependency and Functional Decomposition. |
| III | V  | Paper V  | Sales Force Customer<br>Relationship<br>Management | At the end of the course students will be able to: CO 1: The Salesforce platform dominates the world market, with over 150,000companies powering their business growth with Salesforce. CO 2:From small businesses to tech giants like Google and Facebook, firms are using their suite of services and products to solve business problems.  |
|     |    | Paper VI | DIGITAL MARKETING                                  | At the end of the course students will be able to:  CO 1:Build a strong foundation in accounting, management and business subjects.  CO 2:Seek variety of career options in accounting, management and business related fields.  CO 3:Equip with skills and knowledge to excel in their future careers.  CO 4:Develop critical thinking skills in students.   |
|     | VI |          | PROJECT  | At the end of the course students will be able to:  CO 1:To make the students efficient in office   |

| automation with computers and computer software         |
|---|
| applications.   |
| CO 2: To facilitate the students to join professiona    |
| courses.  |
| CO 3:To develop subject skill within various discipline |
| of commerce, business, accounting, economics            |
| finance, auditing and marketing with soft skills i      |
| Tally.  |
| CO 4:Helps to acquire entrepreneurship.                 |

# **Department of Computer Science (BBA)**

### Course outcomes- 2020-21

| Subject          | Year | Semester | Course   | Title of the course              | Course outcomes   |  |
|------------------|------|----------|----------|----------------------------------|---|--|
| Computer science | I    | I        | Paper I  | It for managers                  | At the end of the course, the student will be able to: CO1:Students are capable of doing documentation with MS Office word. CO 2:The students can perform analysis and calculations exactly with pictorial representation using MS Excel. CO 3:The students feel comfortable in designing slides creatively and present a power point presentation of particular topic using MS PowerPoint.   |  |
|                  |      | II       | Paper II | Business analysis using Ms-Excel | At the end of the course, the student will be able to; CO 1:Microsoft Excel tool which helps the user to perform complex and large calculations,data processing on the huge amount of data, performing data analysis, betterrepresentation of data, etc. CO 2:Advanced Excel functions allow business organizations to increase their productivity and performance by easily sorting and filtering relevant information and using it forbetter decision making. |  |
|                  | II   | II       | III      | Paper III                        | Fundamentals of Web<br>Technologies   | At the end of the course students will be able to: CO 1:Students are able to develop an ability to design and implement static and dynamicwebsite CO 2:The student should able to Master working successfully on the design and development of different web applications. |
|                  |      | IV       | Paper IV | Advanced web technologies        | At the end of the course students will be able to CO 1: The student should able to Master working   |  |

|     |    |          |  | successfully on the design of Web applications with visual elements. And also student get an idea on PHP which is used as server side scripting language.  CO 2: Learn web-based application is any application that uses a website as the interface or front-end.  CO 3:Users can easily access the application from any computer connected to the Internet using a standard browser.  |
|-----|----|----------|--|---|
| III | V  | Paper V  | Photoshop and Internet<br>Applications | At the end of the course students will be able to CO1:To explore basic knowledge on computers and Photoshop's beauty from thepractical to the painterly artistic and to understand how Photoshop will help you create your own successful images  CO 2: They can grow individually by having their own business by creating flex withPhotoshop.  CO 3: Photoshop remains as a mail stone for the further steps in to animations.  CO 4: Learn web Applications deliver many business benefits compared to office basedsolutions.  CO5: Students are able to learn Communication with anyone in the world. |
|     | VI | Paper VI | Computerized accounting through Tally  | At the end of the course students will be able to CO 1: Tally provides simple-to-use accounting features that enables to record businesstransactions easily and quickly.  CO 2: One can record transactions necessary for your business by creating and maintainingmasters, vouchers, and generating reports.  CO 3: It also allows you to perform and manage all of the major accounting operations in your business.  |

# **Department of Computer Science- Web Technology and Multimedia**

### Course outcomes- 2020-21

| Subject   | Year | Semester | Course | Title of the course                               | Course outcomes   |
|-----------|------|----------|--------|---|---|
| BVOC(WTM) |      |          |        | C programming Fundamentals of Web Technology      | At the end of the course, the student will be able to: CO 1: Design an algorithmic solution for a given problem. CO 2: Write a maintainable C program for a given algorithm. CO 3: Trace the given C program manually. CO 4: Write C program for simple applications of real life using structures and files. At the end of the course, the student will be able to: CO 1: Basic HTML tags. CO 2: They can able to develop a web application using java script. CO 3: Students will gain the skills and project-based experience needed for creating web application. |
|           | I    | I        |        | Fundamentals of Multimedia and<br>Basic Photoshop | At the end of the course, the student will be able to: CO 1: The major functions of Photoshop CS4. CO 2: Work and manipulate images, CO 3: Resize and Crop images. CO 4: Work with basic selections. CO 5: Create, edit, delete and manage Layers. Paint, Retouch photoS, Correct Color.  |
|           |      |          |        | Ms office - I                                     | At the end of the course, the student will be able to; CO 1: Create documents using MS Word CO 2: Develop Style sheets and Lookup tables. CO 3: Create slides and animation effect for presentation   |

| Subject | Year | Semester | Course | Title of the course           | Course outcomes   |
|---------|------|----------|--------|-------------------------------|---|
|         |      | II       |        | Digital Painting in photoshop | At the end of the course, the student will be able to; CO 1: Using drawing tablet effectively CO 2: Demonstrate how to utilize the tools within Photoshop CO 3: Identify the steps required to create a concept project CO 4: Apply an understanding of Composition, Perspective, and the Anatomy of Light CO 5: Define the characteristics of Perspective CO 6: Apply artistic direction from their instructor and peers to their own work CO 7: Objectively articulate design decisions to peers and instructor during critique CO 8: Create concept pieces that show ease and familiarity with the use of the software and hardware. CO 9: Select supporting examples of work as inspiration to design work. CO 10: Critically analyze their own creative work and the work of others. |
|         |      |          |        | PhpProgramming -I             | At the end of the course, the student will be able to;<br>CO 1: Understand what is PHP Programming<br>CO 2: The Syntax and rules for writing basic CO 3:<br>PHP Programming<br>CO 4: Arrays and Objects in PHP  |
|         |      |          |        | Css And Javascript            | At the end of the course, the student will be able to;<br>CO 1: Know different Style sheets<br>CO 2: How to apply styles to the web pages without<br>disturbing its content<br>CO 3: Use of Dynamic HTML in detail  |
|         |      |          |        | Ms office - II                | At the end of the course, the student will be able to;  |

| Subject | Year | Semester | Course | Title of the course | Course outcomes   |
|---------|------|----------|--------|---------------------|---|
|         |      |          |        |                     | CO 1: Create slides and animation effect for presentation CO 2: Create database and storing data in database CO 3: Select different tables basing on the query  |
|         | II   | III      |        | Python              | CO 4: Create outlook and basic usage of MS Outlook At the end of the course students will be able to: CO 1: Python is a versatile language that can be used for a wide range of applications, including web development, data analysis, artificial intelligence, machine learning, scientific computing, automation, and more. Learning Python opens up opportunities in various fields. CO 2: Python is known for its simple and easy-to-read syntax, making it a great language for beginners to start with. Its readability and simplicity make it easier to learn compared to other programming languages. CO 3: Python can be used to build web applications using frameworks like Django and Flask. Learning Python can help you enter the field of web development and create dynamic websites and web applications. |
|         |      |          |        | BG Art concepts     | At the end of the course students will be able to: CO 1: Create Old Concrete, Flooring, and Carpeting. CO 4: Create Sand Texturing, Brick Texturing, Floor Texturing CO 5: Create Different types of Wall Textures in New Interior Models   |
|         |      |          |        | 3Ds max modelling   | At the end of the course students will be able to:  CO 1: Creating 3D Models like Interiors & Exteriors CO 2: car models, Indoor and Outdoor Locations CO 3: Creating props' and different Objects which we   |

| Subject | Year | Semester | Course | Title of the course             | Course outcomes  |
|---------|------|----------|--------|---------------------------------|--|
|         |      |          |        |                                 | are using in daily life.                               |
|         |      |          |        | 3Ds max texturing and lightings | At the end of the course students will be able to:     |
|         |      |          |        |                                 | CO 1: Using the material editor & the material         |
|         |      |          |        |                                 | CO 2: explorer, creating & applying standard           |
|         |      |          |        |                                 | materials, adding material details with maps           |
|         |      |          |        |                                 | CO 3: creating compound materials and material         |
|         |      |          |        |                                 | modifiers, unwrapping UVs & mapping texture.           |
|         |      |          |        | Phpprogramming II               | At the end of the course students will be able to:     |
|         |      |          |        |                                 | CO 1: String functions                                 |
|         |      |          |        |                                 | CO 2: Printf, scanf functions                          |
|         |      |          |        |                                 | CO 3: Different date and time functions                |
|         |      |          |        |                                 | CO 4; Trimming functions                               |
|         |      |          |        |                                 | CO 5: How to connect our PHP Programming to the        |
|         |      |          |        |                                 | database   |
|         |      |          |        | Webphotoshop                    | At the end of the course students will be able to:     |
|         |      |          |        |                                 | CO 1: Creating different Website Layout Designing,     |
|         |      |          |        |                                 | Social Website Layout Design                           |
|         |      |          |        |                                 | CO 2: Official Website Layout Design, creating         |
|         |      |          |        |                                 | buttons, menus, shadings image framing.                |
|         |      |          |        | Mini Project                    | At the end of the course students will be able to      |
|         |      |          |        | J                               | CO 1: Students will go to the companies for doing      |
|         |      |          |        |                                 | their Internships. With this they will learn the real  |
|         |      |          |        |                                 | application of their work (softwares) and they will do |
|         |      |          |        |                                 | one real project.                                      |
|         |      |          |        |                                 | CO 2: They will learn how an industry crack a project. |
|         |      |          |        |                                 | They will also learn new Plug Ins which the industries |
|         |      |          |        |                                 | are using.   |
|         |      |          |        |                                 |  |
|         |      |          |        | Maya Modelling                  | At the end of the course students will be able to      |
|         |      |          |        |                                 | CO 1: Character modeling design, visual art            |
|         |      |          |        |                                 | principles, tools and extension through the pipeline.  |

| Subject | Year | Semester | Course | Title of the course         | Course outcomes  |
|---------|------|----------|--------|-----------------------------|--|
|         |      | IV       |        |                             | CO 2: The project starts with verbal representations by completing characterization profile followed by 2D drawings of the character design.  CO 3: Students will apply the professional practices taught in class to digitally sculpt their own characters in 3D using MAYA. Each student is responsible for their own model while working within a group of 3-4 peers.  CO 4: Together each member will design and create a character that fits one unified art direction as agreed on by its members (the group).   |
|         |      |          |        | Maya Texturing and lighting | At the end of the course students will be able to CO 1: Exploring Types of Materials ,Understanding Materials Attributes CO 2: Using the Hyper shade Window Texturing, Types of Textures, UV Texturing Mapping, Shading and Texturing, Material Assigning, Exploring the Types of Lighting CO 3: Creating Lighting Effects, Understanding Shadows, Understanding Mental Ray, Exploring Mental Ray Attributes CO 4: Exploring Types of Cameras, Working with Cameras, Understanding Cameras Attribute, Mental Ray Rendering, Rendering a Scene CO 5: Working with Rendering Layers, Exploring Render Nodes. |
|         |      |          |        | SQL server                  | At the end of the course students will be able to CO 1: What is database CO 2: Use of database   |

| Subject | Year | Semester     | Course | Title of the course      | Course outcomes  |
|---------|------|--------------|--------|--------------------------|--|
|         |      |              |        |                          | CO 3: Creation of database                               |
|         |      |              |        |                          | CO 4: Knowledge on Queries                               |
|         |      |              |        |                          | CO 5: Query solving                                      |
| 1       |      |              |        |                          | CO 6: Transaction Recovery                               |
| 1       |      |              |        |                          |  |
| 1       |      |              |        | Adobe Flash              | At the end of the course students will be able to        |
| 1       |      |              |        |                          | CO 1: Simple animation                                   |
| 1       |      |              |        |                          | CO 2: Application of Adobe Flash                         |
| 1       |      |              |        |                          | CO 3: Usage of Flash                                     |
| 1       |      |              |        |                          | CO 4: Combining Flash animations into single project     |
| 1       |      |              |        |                          | CO 5: Adding sound to their animation                    |
| 1       |      |              |        |                          |  |
| 1       |      |              |        | Photography              | At the end of the course students will be able to        |
| 1       |      |              |        |                          | CO 1:What is Photography                                 |
| 1       |      |              |        |                          | CO 2: Carrier opportunities                              |
| 1       |      | <b>T</b> 7   |        |                          | CO 3: Camera Features                                    |
| 1       |      | $\mathbf{V}$ |        |                          | CO 4: DSLR camera  |
| 1       |      |              |        |                          | CO 5: Identifying the object focal length                |
| 1       |      |              |        |                          | CO 6: Techniques in Photography                          |
| 1       |      |              |        | T 1                      |  |
| 1       |      |              |        | Lab training project     | At the end of the course students will be able to        |
| 1       |      |              |        |                          | CO 1: This helps students in applying the knowledge      |
| 1       |      |              |        |                          | which they have learned in a project.                    |
|         |      |              |        |                          | CO 2: So they will know the combing of works into a      |
|         |      |              |        |                          | project. CO 3: They will model the project by using clay |
|         |      |              |        |                          | techniques.  |
|         |      |              |        |                          | techniques.  |
|         |      |              |        | Programming through java | At the end of the course students will be able to        |
|         |      |              |        | 0                        | CO 1: What is Java Programming                           |
|         |      |              |        |                          | CO 2: Why it is used                                     |
|         |      |              |        |                          | CO 3: Programming techniques in Java                     |

| Subject | Year | Semester | Course | Title of the course | Course outcomes   |
|---------|------|----------|--------|---------------------|---|
|         |      |          |        |                     | CO 4: Security in Java by Access Specifiers. CO 5: Exception Handling CO 6: Dividing the program into simpler parts Thread Concept  |
|         |      |          |        | Z brush modelling   | At the end of the course students will be able to CO 1: Z Brush is the 3D industry's standard digital sculpting application. Use customizable brushes to shape, texture, and paint virtual clay, while getting instant feedback. Work with the same tools used by film studios, game developers and artists the world over.  CO 2: Dynamesh is Z Brush's digital clay. It rebuilds the topology of your model as you sculpt, creating a smooth, even surface for you to add fine details. Z Brush bridges the gap between 2D and 3D.  CO 3: In this students will create different models using clay tools etc. |
|         | III  |          |        | Z brush Texturing   | At the end of the course students will be able to CO 1: In Z Brush Texturing we give texturing to a model done in Z Brush and give detailing to the objects using alpha and stroke CO 2: We can give colors CO 3: By using dynamesh students learn to create how to soften the object CO 4: By using different brushes according to the model students will learn to give the texture detail in more realistic way.  CO 5: They also learn how to import the model done in maya into the Z Brush to give particular detailing and textures to the model.  |
|         |      |          |        | Film Making         | At the end of the course students will be able to   |

| Subject | Year | Semester | Course | Title of the course         | Course outcomes                                       |
|---------|------|----------|--------|-----------------------------|---|
|         |      |          |        |                             | CO 1: The techniques in Film Making,                  |
|         |      |          |        |                             | CO 2: How to select a story                           |
|         |      |          |        |                             | CO 3: How to write the story script                   |
|         |      |          |        |                             | CO 4: How to do shooting                              |
|         |      |          |        |                             | CO 5: How to act in a film                            |
|         |      |          |        | Java servlets               | At the end of the course students will be able to     |
|         |      |          |        |                             | CO 1: What is Servlets                                |
|         |      |          |        |                             | CO 2: Usage of Servlets                               |
|         |      |          |        |                             | CO 3: Combining Java Program to a database with       |
|         |      |          |        |                             | servlets.   |
|         |      |          |        |                             | CO 4: Creating forms in java and storing the data in  |
|         |      |          |        |                             | database.   |
|         |      | VI       |        | After effects video editing | At the end of the course students will be able to     |
|         |      |          |        |                             | CO 1: The basics of creating projects, compositions,  |
|         |      |          |        |                             | and layers,Importing footage, including video, audio, |
|         |      |          |        |                             | and still images                                      |
|         |      |          |        |                             | CO 2: Creating special effects using the Effects      |
|         |      |          |        |                             | menu, Creating animation for shapes, objects, and     |
|         |      |          |        |                             | layers  |
|         |      |          |        |                             | CO 3: Adding and animating text ,Drawing shapes       |
|         |      |          |        |                             | ,Animating shapes,Creating and using masks and track  |
|         |      |          |        |                             | mattes  |
|         |      |          |        | After effects audio editing | At the end of the course students will be able to     |
|         |      |          |        |                             | CO 1: Working in 3D Using the puppet tools to create  |
|         |      |          |        |                             | animated characters and effects                       |
|         |      |          |        |                             | CO 2: Extracting and removing objects from layers,    |
|         |      |          |        |                             | Exporting to video                                    |

# **B.VOC-Clinical and Aqua Lab Technology**

### **Course outcomes- 2020-21**

| Subject | Year | Semester | Course    | Title of the course           | Course outcomes   |
|---------|------|----------|-----------|-------------------------------|---|
| CALT    | I    | I        | Paper I   | Biology of Fish               | At the end of the course, the student will be able to: CO1 Explain the General characters of Fishes and Classification CO2 Understand the anatomy of bony fish CO3 Understand Fish nutrition CO4 Describe fish scales CO5 Understand general characters of crab, Lobester     |
|         |      | II       | Paper II  | Seed Production<br>Technology | At the end of the course, the student will be able to; CO1 Learn the importance of Fish seed CO2 Understand the fish resources CO3 Describe Fish hatchery CO4 Understand Fish breeding CO5 Explain cryopreservation   |
|         | II   | III      | Paper III | Aquatic Ecology & Toxicology  | At the end of the course students will be able to: CO 1: Understand pond ecosystem CO 2: Explain planktonic organisms CO 3: Estimation of water parameters like DO, Ammonia CO 4: Estimation of Water parameters like Carbonates, bicarbonates CO 5; Understand BOD treatment |
|         |      | IV       | Paper IV  | Aquaculture Management        | At the end of the course students will be able to CO 1: Understand Site eclection criteria CO 2: learn about pond mangement CO 3: Learn crustacean and molluscan Fisheries CO 4: Water quality management CO5: Understand health management                                   |

|          | III | V   | Paper V         | Ornamental Fish Keeping | At the end of the course students will be able to CO 1 Understand potential scope of ornamental industry CO 2 Understand Aquarium fish |
|----------|-----|-----|-----------------|-------------------------|--|
|          |     |     |                 |                         | CO 3 learn food and feeding of fish  |
|          |     |     |                 |                         | CO 4 learn transport of fish   |
|          |     |     |                 |                         | CO 5 maintenance of Aquarium   |
|          |     |     | Paper VI        | Post Harvest Technology | At the end of the course students will be able to  |
|          |     |     | 1               |                         | CO 1: Understand preservation and processing of fish   |
|          |     |     |                 |                         | CO 2: Know the biproducts of fish  |
|          |     |     |                 |                         | CO 3: Understand marketing of fish   |
|          |     |     |                 |                         | CO 4: Learn about Fishery Economics  |
|          |     | X7X | D VIII          | TT A                    | CO 5: Understand Export and quality control  |
|          |     | VI  | Paper VII       | Human Anatomy           | At the end of the course students will be able to CO 1 Knew about anatomical terms of Human body                                       |
|          |     |     |                 |                         | _  |
|          |     |     |                 |                         | CO 2 Understand Digestive, Repiratory systems  |
|          |     |     |                 |                         | CO 3 Understand Excretory and circulatory system   |
|          |     |     |                 |                         | CO 4 Understand Nervous suytem   |
|          |     |     | Danier VIII A 1 | Dharialana              | CO 5 UnderstanfUrinogenitalsysem  At the end of the course students will be able to  |
|          |     |     | Paper VIII A1   | Physiology              | CO 1. Understand Digestive and Respiration   |
|          |     |     |                 |                         | CO 2: Understand Circulatory and Excretion   |
|          |     |     |                 |                         | CO 3: Understand Repruction  |
|          |     |     |                 |                         | CO 4: Learn about Endocrine glands   |
|          |     |     |                 |                         | CO 5: Understand Nervous coordination and muscle   |
|          |     |     |                 |                         | contraction.   |
|          |     |     | Paper IX        | Clinical Laboratory     | At the end of the course students will be able to  |
|          |     |     |                 | Practices               | CO 1: Learn about Laboratory services  |
|          |     |     |                 |                         | CO 2:Learn about   |
|          |     |     |                 |                         | CO 3: Understand infrastructure and sample collection  |
|          |     |     |                 |                         | CO 4: Learn about all equipment in the lab   |
| <u> </u> |     |     |                 |                         | CO 3.  |

| Paper 10 | pathology -I    | At the end of the course students will be able to CO 1: Knew about introduction to animal cell CO 2: Understand reception of specimen, tissue embedding, preparation tissue blocks CO 3: Processing and cleaning of tissue blocks CO 4: Equipment for pathological slides CO 5: Procedures of section cutting and microslide preparation |
|----------|-----------------|--|
| Paper 11 | Microbiology I  | At the end of the course students will be able to CO 1: Know the general bacteriology CO 2: Understand culture media preparation CO 3: Learn systemic bacteriology CO 4: Understand bacterial infections and diagnosis CO 5: Procedures of CNS infections  |
| Paper 12 | Biochemistry I  | At the end of the course students will be able to CO 1: Understand introduction to chemical balance CO 2: Understand concepts of molecular weight CO 3: Principles of photometry and spectrometry CO 4: Learn the chemistry of carbohydrates CO 5: Learn the chemistry of Proteins and fats  |
| Paper 13 | Haematology     | At the end of the course students will be able to CO 1: Know the blood composition CO 2: Estimation of WBC and RBC CO 3: Understand blood transfusion CO 4: problems of blood transfusion like AIDS, CO 5: Understand stains used in Heamatology   |
| Paper 14 | Immunology II   | At the end of the course students will be able to CO 1: Understand Immunity, Types of Immunity CO 2: Learn about anibody and antigens CO 3: Understand Antigen and antibody reaction CO 4: Learn about immune system and immune response CO 5: infection, modes of transmission  |
| Paper 15 | Biochemistry II | At the end of the course students will be able to  |

|          |                 | CO 1: Enzyme definition, classification CO 2: Determination of SGOP, SGPT, CO 3: Chemistry of Proteins CO 4: Chemistry of Lipid, triglycerides CO 5: Inorgonic ions   |
|----------|-----------------|---|
| Paper 16 | Pathology II    | At the end of the course students will be able to CO 1: Knew about types of staining agents CO 2: Demonstration of pigments, CO 3: Demonstration collegen CO 4: Preparation of cell blocks CO 5: Museum techniques                                    |
| Paper 17 | Immunology II   | At the end of the course students will be able to CO 1: Hemorrhagic disorders- Mechanism of coagulation CO 2:,Understand Hyper sensitivity CO 3: Learn Immunodeficiency diseases CO 4: Learn Autoimmunity CO 5: Understand Basics of Tumor Immunology |
| Paper 18 | Microbiology II | At the end of the course students will be able to CO 1: Understand general properties of Virology CO 2: Knew DNA viruses CO 3: Understand fungi and diseases CO 4: learn parasites and their preventice methods CO 5: learn cestoda parasites         |

# Department of social science

### **History Course outcomes- 2020-21**

| Subject | Year | Semester | Course   | Title of the course  | Course outcomes   |
|---------|------|----------|----------|--|---|
| History | I    | I        | Paper I  | Indian history and culture.<br>(from earliest times to 647A.D) | At the end of the course, the student will be able to:    |
|         |      |          |          | ()   | CO1 It creates awareness about one of the Ancient         |
|         |      |          |          |  | civilization of the world.                                |
|         |      |          |          |  | CO2 Compare and contrast stages of progress from          |
|         |      |          |          |  | Vedic culture to Jainism, Buddhism and Mauryans.          |
|         |      |          |          |  | CO3 I can make to identify transition from territorial    |
|         |      |          |          |  | States to emergence of Empires – Gain knowledge           |
|         |      |          |          |  | about South Indian culture.                               |
|         |      |          |          |  | CO4 Impacts knowledge about classical age -               |
|         |      |          |          |  | Development of Science, Technology - New                  |
|         |      |          |          |  | culture through Arabs.                                    |
|         |      |          |          |  | CO5 Facilitate to study administration from basic         |
|         |      |          |          |  | administrative unit and can compare with                  |
|         |      |          |          |  | present day.  |
|         |      | II       | Paper II |  | At the end of the course, the student will be able to;    |
|         |      |          |          | Indian history and culture.<br>(from 647A.D TO 1526A.D)        | CO 1: Students will demonstrate an understanding of       |
|         |      |          |          | (Holl 04/A.D 10 1320A.D)                                       | the major historical events and figures in Indian history |
|         |      |          |          |  | from 647 to 1526, including the political, social, and    |
|         |      |          |          |  | economic changes  |
|         |      |          |          |  | CO 2: Students will analyze the rise and fall of various  |

|    |     |           |   | dynasties and factors contributing to their success or decline.  CO 3: Students will explore the cultural and religious developments of the period, it's impact on society.  CO 4: Students will examine the evolution of Indian art, architecture, and literature during this period.  CO 5: Students will discuss the legacy of this period in shaping the cultural and historical landscape of India, including the influence on modern Indian society and culture.   |
|----|-----|-----------|---|--|
| II | III | Paper III | Indian history and culture. (from 1526A.Dto 1761A.D)    | At the end of the course students will be able to:  Co1: Students will gain a comprehensive understanding of the establishment, expansion, and consolidation of the Mughal Empire in India.  CO2: Students will learn about the administrative and political structures of the Mughal Empire.  Co3: Students will examine the economic policies of the Mughal Empire.  Co4: Students will study the military strategies of the Mughal rulers, significant battles, and conflicts with regional powers and European colonial entities.  Co5: Students will develop critical thinking skills by analyzing primary sources, historical texts. |
|    | IV  | Paper IV  | Indian history and culture.<br>(from 1757A.Dto 1964A.D) | At the end of the course students will be able to  CO 1: Students will be able to describe the key events, policies, and consequences of British colonial rule in India from 1757 to Indian Independence 1947.  CO 2: Students will know the significant figures in the Indian independence struggle. Students will be able to   |

|     |   |          |   | explain the socio-economic changes in Indian society due to colonial policies.  CO 3: Students will analyze historical events and trends using primary and secondary sources, developing critical thinking and interpretive skills.  CO 4: Students will compare and contrast different perspectives on colonialism, nationalism, and the struggle for independence.  CO 5: Students will present well-organized, clear, and coherent written and oral presentations on topics related to Indian history and culture from 1757 to 1964.  |
|-----|---|----------|---|--|
| III | V | Paper V  | History of Modern World.<br>(from 1453 to 1848 A.D)                       | At the end of the course students will be able to  CO1. Comprehensive understanding of British policies. CO2Awareness of key reform movements. CO3. Knowledge of Nationalist movements. CO4. Insight into Gandhian and revolutionary movements. CO5. Understanding of communalism and partition  |
|     |   | Paper VI | History and culture of Andhra<br>Pradesh.(from satavahanas to<br>1857A.D) | At the end of the course students will be able to: 1: Students will recognize the influence of various dynasties, such as the Satavahanas, Ikshvakus, Pallavas, Eastern Chalukyas, Kakatiyas, Vijayanagara, QutbShahis, and the British. CO 2:Develop an appreciation for the rich cultural heritage of Andhra Pradesh, including its art, architecture, literature, and music. CO 3:Analyse the social and economic structures of the time, including caste systems, trade, agriculture, and the impact of colonialism. CO 4:Study the changes in land tenure systems and the emergence of new social cla |

|    |                |   | CO 5:Explore the religious and philosophical movements in the region, including the spread of Buddhism, Jainism, Shaivism, and Vaishnavism. |
|----|----------------|---|---|
| VI | Paper VII      | History of Modern World.<br>(from 1848 to 1945 A.D) | At the end of the course students will be able to   |
|    |                |   | <b>CO1</b> . Comprehensive understanding of British policies.   |
|    |                |   | CO2Awareness of key reform movements.   |
|    |                |   | CO3. Knowledge of Nationalist movements.  |
|    |                |   | CO4. Insight into Gandhian and revolutionary  |
|    |                |   | movements.  |
|    |                |   | <b>CO5.</b> Understanding of communalism and partition  |
|    | Paper VIII A1  | Cultural Tourism in Andhra<br>Pradesh               | At the end of the course students will be able to   |
|    |                |   | CO 1. Students will demonstrate an in-depth   |
|    |                |   | understanding of the cultural heritage, traditions, and   |
|    |                |   | historical significance of Andhra Pradesh.  |
|    |                |   | CO2. Students will develop an appreciation for cultural   |
|    |                |   | diversity and demonstrate cultural sensitivity towards  |
|    |                |   | different communities in Andhra Pradesh.  |
|    |                |   | CO 3.Students will acquire practical skills in planning   |
|    |                |   | and managing cultural tourism activities and events in  |
|    |                |   | Andhra Pradesh.   |
|    |                |   | CO 4. Students will be able to effectively communicate  |
|    |                |   | cultural narratives and interpret the cultural significance of sites and traditions to diverse audiences,                                   |
|    |                |   | including tourists and local communities.   |
|    | Danis VIII A 2 | Daniela Marana ( ' A II                             | At the end of the course start of 2111 111 to   |
|    | Paper VIII A2  | Popular Movements in Andhra Desa.(1848 to 1956 A.D) | At the end of the course students will be able to   |
|    |                | ,             | CO 1: Students will be able to identify and explain the   |
|    |                |   | historical contexts and causes of various popular   |
|    |                |   | movements in Andhra Desa from 1857 to 2014.   |

|               |   | CO 2: Students will gain an in-depth understanding of significant movements, and they will be able to analyze their origins, development, and impact on the region. CO 3: Students will evaluate the social, political, and economic changes brought about by these movements. CO 4: Students will be able to compare and contrast different movements, understanding how they intersected with broader national and global trends. CO 4: Students will conduct research on specific movements or events, utilizing primary and secondary sources. CO 5: Students will connect historical movements to contemporary issues.  |
|---------------|---|--|
| Paper VIII A3 | Contemporary History of Andhra Pradesh.(1956 to 2014) | At the end of the course students will be able to:  CO 1: Students will understand the historical context and the political movements leading to the formation of Andhra Pradesh in 1956 CO 2. Students will be able to dentify and describe the key political leaders and their roles in shaping the state's political landscape. CO 3: Students will understand the rise of regional political parties, including the Telugu Desam Party, and their impact on state politics. CO 4: Students will explore the cultural and literary movements in Andhra Pradesh, including contributions to Telugu literature, cinema, and arts. CO 5: Students will be able to analyse the political, economic, and social implications of the bifurcation for both Andhra Pradesh and Telangana. |

# Department of social science

### **Political Science Course outcomes- 2020-21**

| Subject | Year | Semester | Course   | Title of the course                 | Course outcomes  |
|---------|------|----------|----------|-------------------------------------|--|
| Subject | I    | I        | Paper I  | Basic concepts of political Science | At the end of the course, the student will be able to:  CO1: Analysing what is Politics and explaining the approaches to the Study of Political Science – Normative, Historical and Empirical Traditions CO 2: Assessing the theories of State (Origin, Nature, Functions): Contract, Idealist, Liberal and Neo-Liberal Theories. CO 3: Explaining the Concept of State Sovereignty:                                   |
|         |      | II       | Paper II | Political Institutions (concepts    | Monistic and Pluralistic Theories, Analysing the changing concept of Nation and Nationality .  CO 4: Classification of Rights of Indian Citizen and Citizenship and Understanding basic concepts of Liberty, Equality, and Justice.  At the end of the course, the student will be able  |
|         |      |          |          | ,Theories and Institutions)         | to; CO 1: Students will get aware of the different political systems that are working throughout the world. CO 2:Students get interest in knowing about the working of constitution and constitution law in various countries. CO 3:They will understand the inter link between the organs of the government. CO 4: They will get knowledge about democracy, and the differences between direct and indirect democracy |

| II | III | Paper III |                          | At the end of the course students will be able to:   |
|----|-----|-----------|--------------------------|--|
|    |     |           | Indian Constitution      |  |
|    |     |           |                          | <b>CO1</b> : Introducing the Indian Constitution with a focus  |
|    |     |           |                          | on the role of the Constituent Assembly and examining  |
|    |     |           |                          | the essence of the the Preamble.   |
|    |     |           |                          | CO 2: Examining the Fundamental Rights and Duties of   |
|    |     |           |                          | Indian citizens with a study of the significance and status of Directive Principles.                     |
|    |     |           |                          | CO3: Assessing the nature of Indian Federalism with  |
|    |     |           |                          | focus on Union-State Relations.  |
|    |     |           |                          | <b>CO 4</b> : Critically analyzing the important institutions of   |
|    |     |           |                          | the Indian Union: the Executive: President; Prime  |
|    |     |           |                          | Minister, Council of Minister s; The legislature:  |
|    |     |           |                          | RajyaSabha, LokSabha, Speaker, The Judiciary:  |
|    |     |           |                          | Supreme Court composition and functions- Judicial  |
|    |     |           |                          | Activism   |
|    |     |           |                          | CO5: Looking at the Constitutional Amendment   |
|    |     |           |                          | Procedure with focus on the main recommendations of<br>the Constitutional Review and Basics Structure of |
|    |     |           |                          | Constitution   |
|    |     |           |                          | Constitution   |
|    |     |           |                          |  |
|    | IV  | Paper IV  | Indian Political process | At the end of the course students will be able to  |
|    |     |           |                          | CO1: Teach and Evolution of Approach to Study the  |
|    |     |           |                          | political process in India they Examine Modernization  |
|    |     |           |                          | and Marxian Approach   |
|    |     |           |                          | CO 2: Evaluating the role of various forces on Indian  |
|    |     |           |                          | politics: Communalism and Secularism and Religion at   |
|    |     |           |                          | peasants <b>CO 3:</b> Critically evaluating the Indian Party system –                                    |
|    |     |           |                          | its development and looking at the ideology of   |
|    | l   | <u> </u>  | 1                        | its development and looking at the ideology of   |

|   |         |   | dominant national parties and Regional Parties. Evaluating the Electoral Process in India and Assess how elections affect the behavior of public officials CO 4: Investigating the Andhra, Telangana agitations and Naxalists movement CO 5:Analyzing the new Government programmes working like swatch Bharath, Make in India and Made in India and National Skill development corporation They Provide awareness in this programmes  |
|---|---------|---|--|
| V | Paper V | Indian and Western political<br>Thought | At the end of the course students will be able to  CO 1:- Providing an insight into the dominant features of Ancient Western Political Thought: Ancient Greek political thought with focus on Aristotle and Plato; Roman Political Thought: its contributions with special emphasis on the emergence of Roman law.  CO2:- Examining the features of Ancient I Political Thought. They Evaluating the Manu Varnadharma and Dandaneeti; political thought of Reformation; and Machiavelli.  CO3:- Critically examining Hobbes as the founder of the science of materialist politics; Locke as the founder of Liberalism with focus on his views on natural rights, property and consent; and Rousseau's views on Freedom and Democracy; Bentham's Utilitarianism; and John Stuart Mill's views on liberty and representative government.  CO 4:- Analysing the nationalist thought of Raja Rammohun Roy and Assessing the nationalist thought of . Discussing the roots of communalism- Savarkar and Hindu Nationalism and Jinnah and the two nation |

|    |           |  | theory CO 5: - Discussing the nationalism of Gandhi, M. N. Roy, Narendra Deva and . Analysing the Gandhian.  |
|----|-----------|--|--|
|    | Paper VI  | Principles Of Public<br>Administration     | At the end of the course students will be able to  |
|    |           |  | CO 1:- Explaining the nature, scope and evolution of Public Administration; Private and Public Administration;   |
|    |           |  | CO 2-: Discussing the ,Classical approach ,Scientific Management approach ,Human Relations approach , Ecological approach and Decision Making approach to  |
|    |           |  | Pub. Adm.  CO 3:- Analysing the Administrative Processes: decision making; communication and control;  |
|    |           |  | leadership; co-ordination and Line and Staff agencies CO 4:- Examining the Institutions of Personnel Administration in India and Evolution of Motivational Theories  |
| VI | Paper VII | Local Self Government In Andhra<br>Pradesh | At the end of the course students will be able to  |
|    |           |  | CO1: Examining the Institutions of Local Self Government in India, Local self government implies the transference of power to rule to the lowest rungs of political order. It is form of democratic deporturalisation. |
|    |           |  | political order .It is form of democratic decentralisation where the participation of even the grass root level of the society is ensure in the process of Administration  |
|    |           |  | CO2: They understand the knowledge on evolution of local self Government and recommendations of Balwantrai, Ashok Mehta committees and They clear idea on 73rd and 74th constitutional amendments.                     |

| Paper VIII A1 | International Relations | CO3:They analysis the structure and functions of Rural and urban governments and They applying knowledge on role of leadership and Emerging challenges CO 4:They aware the strategies of Rural development and role of people participation in Rural development.  At the end of the course students will be able to CO1:Students get the understanding about the different nations and relations between them. CO2:Knowing about the post – world war scenario, makes them to realize importance of peace and adversities of conflict. CO3:A strong hold on international relations will give them success in competitive exams like UGC-NET, SLET, and Civil Services etc. CO4:Choosing international relations as the career will give them employment in NGOs and other international organizations. CO5: As a broad in its scope, it has a many chance in taking up research and taking up research in international relations will have bright career. |
|---------------|-------------------------|--|
| Paper VIII A2 | India's Foreign Policy  | At the end of the course students will be able to  CO1: Students get interest in knowing the relations of various countries with India, which makes them to follow contemporary events happening in foreign policy.  CO2: Brings them awareness on trends in India's foreign policy since the time of independence to till today.  CO3; It creates interest to know the social culture and political culture of various nations all over CO4; It is helpful while writing competitive exams like UGC NET, SLET and Civil Services.   |

|               |                            | <b>C05:</b> As because of its vast area of study gives more opportunities for students while choosing foreign policy as their area of research.   |
|---------------|----------------------------|---|
| Paper VIII A3 | Contemporary Global Issues | At the end of the course students will be able to:  |
|               |                            | CO1 :students get affinity with international community and show their responsibility towards the problems of the world.  CO2:They try to find various solutions for the post globalization problems.  CO 3: Helpful for students while writing competitive exams like UGC NET, SLET, APPSC, UPSC, RRB, SSC etc.  CO4 :Encourages the students to choose area for research purposes . And Leads them to understand the importance of reading international problems in Political Science. |

### **Department of Social Sciences**

### **Economics Course outcomes- 2020-2021**

| Subject   | Year | Semester | Course   | Title of the course         | Course outcomes  |
|-----------|------|----------|----------|-----------------------------|--|
| Economics | I    | I        | Paper I  | Micro Economics<br>Analysis | At the end of the course students will be able to:   |
|           |      |          |          | ·                           | CO1.Students will be able to learn concepts of demand and elasticity of supply.                    |
|           |      |          |          |                             | CO2.students will be able to known market and kinds of   |
|           |      |          |          |                             | markets  |
|           |      |          |          |                             | CO3. Students will be able to known different markets like   |
|           |      |          |          |                             | perfect competition and imperfect competition. CO4. Students will be able to Understoodconcepts of |
|           |      |          |          |                             | distribution and kinds of distribution.  |
|           |      |          | Paper II | Macro economics             |  |
|           |      | II       |          | Analysis                    | At the end of the course students will be able to;   |
|           |      |          |          |                             | CO1. studentswill be able to learn classical and practical keynsian theories of employment.        |
|           |      |          |          |                             | CO2. studentswill be able to known GNP and percapita income.                                       |
|           |      |          |          |                             | CO3. Students will be able to learn causes of inflation and  |
|           |      |          |          |                             | measures of trade cycle.  CO4. Students will be able to Understood functions of                    |
|           |      |          |          |                             | banking.   |
|           |      |          |          |                             |  |

### **Department of Social sciences**

### **Psychology Course outcomes- 2020-21**

| Subject    | Year | Semester | Course    | Title of the course | Course outcomes   |  |  |  |  |   |   |   |   |         |                    |   |
|------------|------|----------|-----------|---------------------|---|--|--|--|--|---|---|---|---|---------|--------------------|---|
| Psychology | I    |          | _         | _                   |   |  |  |  |  | I | I | Ι | I | Paper I | General psychology | At the end of the course, the student will be able to: CO 1: Understanding and application of psychological principles, theories and methods of different psychological areas (like learning, memory, etc.) to understand the complexity of human behaviour.  CO 2: Knowledge of the fundamental physiological functional mechanism behind the Nervous system in the human body. CO 3: It also correlates to the understanding of historical context of different studies and researches. |
|            |      | II       | Paper II  | General psychology  | At the end of the course, the student will be able to; CO 1: Extensive knowledge about different theories and principles of Cognition and Behaviour concerning the areas of Motivation, Emotion, Intelligence, Thinking, and Personality etc. CO 2: Understand the measures involved in different aspects of human behaviour. CO 3: Develop ability to relate the psychological concepts to everyday life events. |  |  |  |  |   |   |   |   |         |                    |   |
|            | II   | III      | Paper III | Social psychology   | At the end of the course students will be able to: CO 1: Develop insight and the contribution of social psychologists to the understanding of human society. CO 2: Evaluate effective strategies in socialization, group processes (both inter and intra-group) and helping behavior.   |  |  |  |  |   |   |   |   |         |                    |   |

|     |    |          |                   | CO 3: Ability to register the progression of theories in major areas in Social Psychology. CO 4: Interpret attitude formation and various methods to be used to change the attitude.  |
|-----|----|----------|-------------------|---|
|     | IV | Paper IV | Social psychology | At the end of the course students will be able to CO 1: Recognize major theories of social psychology related to cognitive and behavioral phenomenon. CO 2: Describe the scientific methods used to obtain knowledge about social behavior. CO 3: Analyze the complexity of action in social contexts by combining factors related to the person and the situation. CO 4: Describe situational factors that constrain human action. CO 5: Describe social factors that affect personal motivations. CO 6:Analyze contemporary events using social psychological theories or concepts. CO 7: Examine the effects of implicit and explicit prejudice on cognition and behavior. |
| III | V  | Paper V  | Child psychology  | At the end of the course students will be able to CO 1: Review, appraisal and applications of theory of child psychology in various settings. CO 2: Ability to construct and interpret a historical overview of Child psychology. CO 3: This course introduces the students to the biological foundations, various developmental stages and theories from prenatal to childhood stages.   |
|     |    | Paper VI | Psychopathology   | At the end of the course students will be able to CO 1: Identify different types of anxiety and mood disorders, their clinical picture and management. CO 2:Analyze Impact of socio-occupational & personal   |

|    |            |                                 | functioning.   |
|----|------------|---------------------------------|--|
|    |            |                                 | CO 3: Formulate the case with the help of              |
|    |            |                                 | psychological testing.                                 |
|    |            |                                 | CO 4: Plan Therapeutic programs for management         |
|    |            |                                 | based on goals of therapy.                             |
| VI | Paper VII  | Child and adolescent psychology | At the end of the course students will be able to      |
|    |            |                                 | CO 1: State the meaning of psychology;                 |
|    |            |                                 | CO 2: Explain the relevance of the study of psychology |
|    |            |                                 | of childhood and adolescent for a teacher-trainee      |
|    |            |                                 | CO 3: Outline the methods you will select when         |
|    |            |                                 | studying children's different problems                 |
|    |            |                                 | CO 4: Define the following basic concepts in child     |
|    |            |                                 | development: maturation, learning, development,        |
|    |            |                                 | perception, and motivation                             |
|    |            |                                 | CO 5: Outline the biological and environmental bases   |
|    |            |                                 | of human development                                   |
|    |            |                                 | CO 6: Describe the trend of the changes that occur in  |
|    |            |                                 | the following facets of human development              |
|    | Paper VIII | Psychopathology                 | At the end of the course students will be able to      |
|    |            |                                 | CO 1: The students will understand signs and           |
|    |            |                                 | symptoms of psychopathology.                           |
|    |            |                                 | CO 2: They will be able to assess the symptoms,        |
|    |            |                                 | nature, causes and dysfunctions associated with these  |
|    |            |                                 | disorders  |
|    |            |                                 | CO 3: They will be able to understand the intervention |
|    |            |                                 | programs with regard to the goals of therapy.          |
|    |            |                                 | CO 4: Develop an understanding of etiology of various  |
|    |            |                                 | mental health symptoms and illnesses.                  |
|    |            |                                 | CO 5: Develop familiarity with the usual clinical      |
|    |            |                                 | course of each specific mental illness.                |
|    |            |                                 |  |

# **Department of Social Science**

### **Social Work Course outcomes- 2020-21**

| Subject        | Year | Semester | Course    | Title of the course  | Course outcomes  |
|----------------|------|----------|-----------|--|--|
| Social<br>work | I    | I        | Paper I   | Social work-profession,<br>philosophy and basic social<br>science concepts | At the end of the course, the student will be able to: CO 1: The students will acquire the knowledge on social work methods CO 2:The students will enhance knowledge on social case work CO 3: The students Will get knowledge on social group work CO 4: The students will understand the Basic concepts of community organization.     |
|                |      | II       | Paper II  | Social work-profession,<br>philosophy and basic social<br>science concepts | At the end of the course, the student will be able to;  CO 1: Get knowledge on social reform movements in India.  CO 2: Understand the origin and growth of social work in USA, UK and India. Auquiné knowledge on social work values, ethics, principles and approach.  CO 4: Develop knowledge on social practice in various settings. |
|                | II   | III      | Paper III | Social work methods I  | At the end of the course students will be able to: CO 1: The students will understand the concept of social work. CO 2: The students will acquire the knowledge on social work methods. CO 3: The students enhance knowledge on social case work   |

|     | IV | Paper IV | Social work methods II  | CO 4: The students will get knowledge on social group work.  CO 5: The students will understand the basic concepts of community organisation.  At the end of the course students will be able to CO 1: The students will understand the concept of social work  CO 2: The students will acquire the knowledge on social work methods.  CO 3: The students enhance knowledge on social case work.  CO 4: The students will get knowledge on social group work.  CO 5: The students will understand the basic concepts of community organisation |
|-----|----|----------|-------------------------|--|
| III | V  | Paper V  | Fields of social work I | At the end of the course students will be able to CO 1: To understand the concept of social work CO 2:To acquire the knowledge on social work methods CO 3: To enhance knowledge on integrated approach of social work To get knowledge on foublem solving and termination CO 4:To obtain knowledge on importance and types of fivid work in social work   |

| Paper VI      | Non-governmental organisations              | At the end of the course students will be able to   |
|---------------|---|---|
|               |   | CO 1: Understand the concept of Non-Governmental Organisations. CO 2:Acquire the knowledge on formation of r non-governmental organisation. CO 3: Enhance knowledge on management of non-governmental organisation Understand the financial management of non-governmental organisation. CO 4:Enhance the knowledge on financial management.  |
| Paper VII     | Fields of social work II                    | At the end of the course students will be able to CO 1: To understand the concept of social work. CO 2: To acquire the knowledge on social work methods.  CO 3: To enhance knowledge on integrated approach of social work To get knowledge on problem solving and termination.  CO 4: To obtain knowledge on importance and types of vivid work in social work                                       |
| Paper VIII A1 | Social problems and social welfare in India | CO 1: Students at the successful composition of the course will be able to CO 2: Develop knowledge about and analyze the origin, and cames of social problems Understand the effects of social problems on individuals, groups and society CO 3: acquire knowledge about social reforms, social policy and social legislation and critically understand their role in controlling the social problems |

|               |                                 | CO 4: Aware on the Preventive and remedial services of Govt. and Non- Governmental in dealing with social Problems   |
|---------------|---------------------------------|--|
| Paper VIII A2 | Social work and HIV/AID         | By the end of the paper, students will be able to: CO 1; Understand HIV /AIDs CO 2: Describe Key Epidemiological Trends: Articulate the key epidemiological trends of HIV/AIDS on a global and local scale. CO 3: Identify Social Determinants: Identify and explain how various social determinants impact the spread and treatment of HIV/AIDS. CO 4: Explain the Role of Social Workers: Clearly explain the different roles and responsibilities of social workers in the context of HIV/AIDS. CO 5: Design Intervention Programs: Design a basic intervention program that addresses the needs of individuals living with HIV/AIDS. |
| Paper VIII A3 | Corporate social responsibility | At the end of the course the student will be able to: CO 1: Understand Social responsibility CO 2: Develop a holistic understanding of the concept CSR. CO 3: Gain adequate knowledge on CSR Policy Understand global perspectives on CSR practices. CO 4: Know various CSR practices in India and Andhra Pradesh through case study   |

# **Department of Commerce**

### **Course outcomes- 2019-20**

| Subject  | Year | Semester | Course                     | Title of the course    | Course outcomes  |
|----------|------|----------|----------------------------|------------------------|--|
| COMMERCE | I    | I        | B.Com General and computer | Financial Accounting I | CO1: To understanding of basic commerce concepts and principles of Commerce, including trade, business market structures and the role of Commerce in the economy.  CO2: Apply basic accounting principles and practises, including journal entities, pledges and trial balance.  CO3: Identify the basic principles of marketing, including market research, product development, pricing  strategies, promotional distribution channels.  CO4:. Explain the basic economic principles that affect commerce, including supply and demand, pricing and economic cycles. |
|          |      |          |                            | Business statistics    | CO1: Understanding of statistical concepts: Students will comprehend key statistical terms, formulas, and techniques.  |

| Ţ | <br>                       | 1                     |   |
|---|----------------------------|-----------------------|---|
|   |                            |                       | CO2: Data analysis skills: Students will learn to collect, organize, and analyze data to extract insights.                    |
|   |                            |                       | CO3: Descriptive statistics: Students will understand how to summarize and describe tendency and variability.                 |
|   |                            |                       | CO4: Inferential statistics: Students will learn to make conclusions about populations based on sample data.                  |
|   |                            |                       | CO5: Regression analysis: Students will learn to model relationships between variables.                                       |
|   | B.Com General and computer | Business organization | CO1: Ability to understand the concept of Business Organization along with the basic laws and norms of Business Organization. |
|   |                            |                       | CO2: The ability to understand the terminologies associated with the field of Business Organization                           |

|   |               |                    | along with their relevance and to identify the appropriate types and functioning of Business Organization for solving different problems.  CO3: The application of Business Organization principles to solve business and industry related problems and to understand the concept of Sole Proprietorship, Partnership and Joint Stock Company etc. |
|---|---------------|--------------------|--|
| I | B.Com Finance | Business finance I | CO1. Understanding of financial concepts: Students will comprehend key financial terms, theories, and principles.  CO2. Financial statement analysis: Students will learn to analyze and interpret financial statements (Balance Sheet, Income Statement, Cash Flow Statement).  |

|  |  | II | B.COM<br>(COMP&GEN) | Financial<br>Accounting II | CO3. Time value of money: Students will understand concepts like present value, future value, and net present value.  CO4. Capital budgeting: Students will learn to evaluate investment opportunities using techniques like NPV, IRR, and payback period.  CO5. Cost of capital: Students will understand how to calculate and apply the cost of capital.  CO1: To understanding of basic commerce concepts and principles of Commerce, including trade, business market structures and the role of Commerce in the economy.  CO2:TO know about conzinementdepresiatation, jointventure, and rectification of errors.  CO3: Identify the basic principles of marketing, including market research, product development, pricing strategies, promotional distribution channels.  CO4:Explain the basic economic principles that affect commerce, including supply and demand, |
|--|--|----|---------------------|----------------------------|---|
|--|--|----|---------------------|----------------------------|---|

|  |    |                     |                     | pricing and economic cycles.  CO5: Gain an awareness of the global business environment and its impact on local commerce         |
|--|----|---------------------|---------------------|--|
|  | II | B.COM<br>(COMP&GEN) | Business statics II | CO1. Confidence intervals: Students will learn to estimate population parameters with confidence intervals.                      |
|  |    |                     |                     | CO2. Data visualization: Students will learn to effectively communicate insights using charts, graphs, and other visualizations. |
|  |    |                     |                     | CO3. Business decision-making: Students will apply statistical techniques to real-world business problems.                       |
|  |    |                     |                     | CO4. Critical thinking: Students will develop critical thinking skills to evaluate information and make informed decisions.      |
|  |    |                     |                     | CO5. Communication skills: Students will learn to  |

|  |    |                     |                          | present statistical findings effectively.  |
|--|----|---------------------|--------------------------|--|
|  | II | B.COM<br>(COMP&GEN) | Principles<br>management | of CO1. Understanding of management concepts: Students will comprehend key management terms, theories, and principles. |
|  |    |                     |                          | CO2. Management functions: Students will learn about planning, organizing, leading, and controlling.                   |
|  |    |                     |                          | CO3: Decision-making skills: Students will develop critical thinking and problem-solving skills.                       |
|  |    |                     |                          | CO4:Leadership skills: Students will understand leadership styles, motivations, and effective leadership practices.    |
|  |    |                     |                          | CO5:Organizationalbehavior: Students will learn about individual and group dynamics, culture, and                      |

|  |    |                |         | diversity. CO5.   |
|--|----|----------------|---------|---|
|  | II | Business<br>II | finance | CO1:Capital structure: Students will learn to optimize capital structure and make financing decisions.  |
|  |    |                |         | CO2:Dividend policy: Students will understand the impact of dividend policy on shareholder value.   |
|  |    |                |         | CO3:Risk management: Students will learn to identify and manage financial risks using techniques like hedging and diversification.                        |
|  |    |                |         | CO4:Financial markets and instruments: Students will understand the functioning of financial markets and instruments like stocks, bonds, and derivatives. |
|  |    |                |         | CO5:Financial planning and decision-making:<br>Students will apply financial concepts to real-  |

|  |     |                            |                                   | world business problems.  |
|--|-----|----------------------------|-----------------------------------|---|
|  | III | B.Com general and computer | Banking<br>&financial<br>services | CO1:Discuss the impact of government policy and regulations on the banking industry.  CO2:Evaluate the performance of the banking industry.  CO3:Discuss bank lending policies and procedures.  CO4:To elucidate the broad functions of banks  CO5: To understand the working of the Reserve Bank of India  CO6: To grasp the conduct of monetary policy and its effect on the interest rate, credit availability, prices, and the inflation rate |
|  | III | B.Com general              | Income tax                        | CO1: Understand the basic principles underlying the Income Tax Act Compute the taxable income of an assesse  CO2: know the residential status of assesse and incomes exempted from tax  CO3: To familiar with the computation of income from salary, To familiar with the computation of income from house property, income from salary,  |

|  | III | B.Com Finance  B.Com General and | Financial management I | CO1. Understanding of financial concepts: Students will comprehend key financial terms, theories, and principles.  CO2: Students will learn to analyze and interpret financial statements.  CO3. Investment decisions: Students will understand how to evaluate investment opportunities.  CO4. Capital budgeting: Students will learn to evaluate and select capital projects.  CO5. Cost of capital: Students will understand how to calculate and apply the cost of capital. |
|--|-----|----------------------------------|------------------------|---|
|  | 111 | computer                         | E-commerce             | Students will comprehend key e-commerce terms,  |

|  |     |                            |                      | theories, and principles.  CO2. E-commerce business models: Students will learn about various e-commerce business models (B2B, B2C, C2C, etc.). |
|--|-----|----------------------------|----------------------|---|
|  |     |                            |                      | CO3. Payment and security systems: Students will understand payment processing and security measures.   |
|  |     |                            |                      | CO4. Supply chain and logistics management: Students will learn to manage supply chains and logistics in an e-commerce environment.             |
|  | III | B.Com General and computer | Corporate accounting | CO1. Corporate finance: Students will learn about corporate finance, including capital raising, restructuring, and advisory services.           |
|  |     |                            |                      | CO2. Mergers and acquisitions: Students will understand the process of mergers and acquisitions, including deal structuring and negotiation.    |

|  |    |                                |                         | CO3. IPOs and equity financing: Students will learn about initial public offerings (IPOs) and equity financing options.  CO4. Debt financing and restructuring: Students will understand debt financing options and restructuring strategies. |
|--|----|--------------------------------|-------------------------|---|
|  | IV | B.COM(COMPUTERS<br>& GENERALS) | Business<br>environment | CO1. Understanding of business environment concepts: Students will comprehend key terms, theories, and principles.  |
|  |    |                                |                         | CO2. External environment analysis: Students will learn to analyze the external environment (PESTLE analysis).  |
|  |    |                                |                         | CO3. Internal environment analysis: Students will understand how to analyze the internal environment (SWOT analysis).   |
|  |    |                                |                         | CO4. Industry analysis: Students will learn to  |

|  |    |                            |                                      | analyze industries and competitors.   |
|--|----|----------------------------|--------------------------------------|---|
|  | IV | B.Com General and computer | Merchant banking                     | CO1 -Discuss the impact of government policy and regulations on the banking industry.  CO2 -Evaluate the performance of the banking industry.  CO3 -Discuss bank lending policies and procedures.  CO4 -To elucidate the broad functions of banks  CO5 - To understand the working of the Reserve Bank of India  CO6 - To grasp the conduct of monetary policy and its effect on the interest rate, credit availability, prices, and the inflation rate |
|  | IV | B.Com General and computer | Accounting for service organizations | CO1. Financial statement preparation: Students will learn to prepare financial statements for service organisations.  CO2. Revenue recognition: Students will   |

|  | IV | B.Com General | Fundamentals of<br>GST | understand revenue recognition principles and apply them to service organisations.  CO3. Expense accounting: Students will learn to account for various expenses, including salaries, rent, and utilities.  CO4. Asset accounting: Students will understand how to account for assets, including depreciation and amortization.  CO1. GST registration and compliance: Students will learn about GST registration, returns, and compliance requirements.  CO2. Taxable supplies and exemptions: Students will understand what constitutes a taxable supply and exemptions.  CO3. Input tax credits and refunds: Students will learn about claiming input tax credits and refunds. |
|--|----|---------------|------------------------|---|
|--|----|---------------|------------------------|---|

|  |    |               |                            | CO4. GST calculations and invoicing: Students will understand how to calculate GST and prepare GST-compliant invoices.  CO5. GST classifications and rates: Students will learn about different GST classifications and rates. |
|--|----|---------------|----------------------------|--|
|  | IV | B.Com Finance | Financial<br>management II | CO1. Capital structure: Students will learn to optimize capital structure and make financing decisions.  |
|  |    |               |                            | CO2. Dividend policy: Students will understand the impact of dividend policy on shareholder value.   |
|  |    |               |                            | CO3. Risk management: Students will learn to identify and manage financial risks.  CO4. Financial planning and forecasting: Students will learn to create financial plans and forecasts.                                       |

|  |   |                            |                 | CO5. Financial performance evaluation: Students will understand how to evaluate financial performance.   |
|--|---|----------------------------|-----------------|--|
|  | V | B.Com general and computer | Business Law    | CO1: Understand the legal environment of business and laws of business, Highlight the security aspects in the present cyber-crime scenario.  CO2: Apply basic legal knowledge to business transactions, Understand the various provisions of Company Law.  CO3: Engage critical thinking to predict outcomes |
|  |   |                            |                 | and recommend appropriate action on issues relating to business associations and legal issues and Integrate concept of business law with foreign trade.  |
|  |   |                            |                 | CO4:Equip the students about the legitimate rights and obligations under The Sale of Goods Act. enable with skills to initiate entrepreneurial ventures as LLP.  |
|  | V | B.Com General and computer | Cost accounting | CO1. Cost accounting systems: Students will understand different cost accounting systems, including job costing, process costing, and activity-based costing.  |

|  |   |                            |          | CO2. Cost estimation and prediction: Students will learn to estimate and predict costs using various techniques.                      |
|--|---|----------------------------|----------|---|
|  |   |                            |          | CO3. Cost-volume-profit analysis: Students will understand how to analyze the relationship between costs, volume, and profit.         |
|  |   |                            |          | CO4. Break-even analysis: Students will learn to calculate the break-even point and understand its significance.                      |
|  |   |                            |          | CO5. Standard costing and variance analysis: Students will understand standard costing  |
|  | V | B.Com General and computer | Auditing | CO1: Understanding the meaning and necessity of audit in modern era, Comprehend the role of auditor in avoiding the corporate frauds. |
|  |   |                            |          | CO2: Identify the steps involved in performing audit process, Determine the appropriate audit   |

|  |   |                            |                           | report for a given audit situation.  CO3: Apply auditing practices to different types of business entities and plan an audit by considering concepts of evidence, risk and materiality  |
|--|---|----------------------------|---------------------------|---|
|  | V | B.Com General and computer | Human resource management | CO1. Recruitment and selection: Students will learn about effective recruitment and selection techniques.  CO2. Training and development: Students will understand how to design and implement training programs.  CO3. Performance management: Students will learn to develop and implement performance management systems.  CO4. Compensation and benefits: Students will understand how to design and manage compensation and benefits packages. |
|  | V | B.Com General              | Marketing<br>management   | CO1. Market research and analysis: Students will learn to conduct market research and analyze data to inform marketing decisions.   |

|  |   |               |                        | CO2. Segmentation, targeting, and positioning (STP): Students will understand how to segment markets, target audiences, and position products.  CO3. Marketing mix (4Ps): Students will learn to develop and implement marketing strategies using the 4Ps(product, price, place, promotion).   |
|--|---|---------------|------------------------|--|
|  | V | B.Com General | International business | CO1. International trade and investment: Students will learn about international trade theories, agreements, and practices.  CO2. Global market entry strategies: Students will understand how to enter global markets, including export, import, and foreign direct investment.  CO3. Cross-cultural management: Students will learn to manage across cultures, including communication, negotiation, and leadership.  CO4. Global marketing and branding: Students will understand how to develop global marketing strategies and build global brands.  CO5. International finance and accounting: Students will learn about international financial markets, instruments, and accounting practices. |

|  | V | B.Com General and computer | Fundamentals of international financial management | CO1. Foreign exchange markets and rates: Students will learn about foreign exchange markets, exchange rates, and currency risk management.  CO2. International financial instruments: Students will understand international financial instruments, including bonds, stocks, and derivatives.  CO3. International investment and portfolio management: Students will learn about international investment strategies and portfolio management techniques.  CO4. Multinational corporate finance: Students will understand multinational corporate finance, including capital budgeting, funding, and risk management. |
|--|---|----------------------------|--|---|
|  | V | B.Com Finance              | Security analysis and portfolio management         | CO1. Security analysis techniques: Students will learn to analyze stocks, bonds, and other securities using fundamental and technical analysis.  CO2. Portfolio management theories: Students will understand modern portfolio theory, asset allocation, and diversification.   |

|    |                            |             | CO3. Risk management strategies: Students will learn to manage risk using hedging, diversification, and asset allocation.  CO4. Asset pricing models: Students will understand asset pricing models, including CAPM and APT.  CO5. Portfolio performance evaluation: Students will learn to evaluate portfolio performance using metrics such as return, risk, and Sharpe ratio.                             |
|----|----------------------------|-------------|--|
| VI | B.Com General and computer | Company law | CO1. Knowledge of company formation procedures and documentation (articles of association, memorandum of association)  CO2. Familiarity with company management structures (board of directors, shareholders, officers)  CO3. Understanding of company finance and funding (shares, dividends, capital raising)  CO4. Awareness of legal duties and responsibilities (directors' duties, shareholder rights) |

|  |    |                            |                               | CO5. Knowledge of company insolvency and winding-up procedures   |
|--|----|----------------------------|-------------------------------|--|
|  | VI | B.Com General and computer | Management accounting         | CO1. Knowledge of budgeting and forecasting techniques (operational budgeting, financial budgeting)  CO2. Familiarity with performance measurement and evaluation methods (KPIs, balanced scorecard)  CO3. Ability to analyze and interpret financial statements for internal decision-making  CO4. Understanding of variance analysis and cost control techniques  CO5. Understanding of company finance and funding (shares, dividends, capital raising) |
|  | VI | B.Com General and computer | <b>Business</b> communication | CO1. Ability to craft clear, concise, and persuasive written messages (emails, reports, proposals)  CO2. Effective verbal communication skills (presentations, meetings, negotiations)  CO3. Familiarity with nonverbal communication and interpersonal skills   |

|  |    |                            |                                 | CO4. Knowledge of communication technologies and platforms (video conferencing, instant messaging)  CO5. Understanding of cultural and diversity issues in communication   |
|--|----|----------------------------|---------------------------------|--|
|  | VI | B.Com General              | Office management               | CO1. Ability to plan, organize, and coordinate office operations  CO2. Knowledge of human resources management(recruitment, training, performance evaluation)  CO3. Familiarity with financial management (budgeting, accounting, financial reporting)  CO4. Understanding of records management and filing systems  CO5. Ability to manage office technology and systems (software, hardware, networks) |
|  | VI | B.Com general and computer | Advertising and sales promotion | CO1. Ability to analyze consumer behavior and target markets  CO2. Knowledge of advertising media (print, broadcast, digital, outdoor)   |

|  | VI | B.Com general  B.Com Finance | Brand management           | CO3. Familiarity with creative development (copywriting, art direction, design)  CO4. Understanding of campaign planning and execution  CO5. Ability to measure and evaluate advertising effectiveness  CO1Knowledge of brand research and analysis methods  CO2. Familiarity with brand identity design (logos, typography, color palettes)  CO3.Understanding of brand communication and messaging  CO4. Ability to manage brand consistency across touchpoints  CO5.Knowledge of digital brand management (social media, website, e-commerce) |
|--|----|------------------------------|----------------------------|--|
|  | V1 | D.Com Finance                | Working capital management | CO2. Knowledge of inventory management techniques (EOQ, JIT, ABC analysis)   |

|  |    |               |   | CO3. Familiarity with accounts receivable and payable management  CO4. Understanding of short-term financing options (bank loans, factoring, commercial paper)  CO5. Ability to calculate and manage working capital ratios (current ratio, quick ratio) |
|--|----|---------------|---|--|
|  | VI | B.Com Finance | security analysis and portfolio management-II | ( 1 1 1 1 1 1 1  |
|  |    |               |   | CO4. Familiarity with behavioral finance and investor psychology  CO5. Ability to develop a comprehensive investment policy  |

## **Department of Management Studies**

## Course outcomes- 2020-2021

| Subject | Year | Semester | Course   | Title of the course  | Course outcomes  |
|---------|------|----------|----------|----------------------|--|
| BBA     | I    | I        | Course 1 | Managerial Economics | At the end of the course, the student will be able to: CO1: To state concept of economics and its relevance to business. CO2: Understand concepts of perfect competition and monopoly for fixation of prices. CO2: Understand the international business scenario and concepts of BOP. CO3: Learn to apply the concepts of cost and Break-even analysis and learn various theories on production. CO4: Comprehend the concept of Demand analysis for making important business decisions |
|         |      |          | Course 2 | Management Process:  | At the end of the course, the student will be able to: CO1: To explain the basic concepts, principles and theories of Management CO2: To outline the fundamental activities of Managers CO3: To examine the broad functions of Management CO4: To comprehend the contemporary issues and challenges in the field of Management CO5: To understand various control techniques practiced at organizations  |

|  | Course 3 | Organization Behaviour | At the end of the course, the student will be able to; <b>CO1:</b> Grab the basics of Business concepts and |
|--|----------|------------------------|---|
|  |          |                        | functions, forms of Business Organisation and functions   |
|  |          |                        | of Management.  |
|  |          |                        | CO2:Tounderstand different types of personality and   |
|  |          |                        | learning styles. <b>CO3:</b> Develop an appreciation for the  |
|  |          |                        | interdisciplinary nature of business, recognizing how   |
|  |          |                        | various functions within an organization are  |
|  |          |                        | interconnected and contribute to overall success.   |
|  |          |                        | <b>CO4:</b> To analyse the contemporary trends in business.   |
|  |          |                        | CO5: Foster critical thinking skills by analysing real-   |
|  |          |                        | world business scenarios and applying theoretical   |
|  |          |                        | frameworks to solve problems and make informed  |
|  |          |                        | decisions.  |
|  |          |                        |   |

| II | Course 4 | Accounting for Managers              | At the end of the course, the student will be able to; CO1: Acquire conceptual knowledge of basics of financial accounting.  CO2: Understand the list of accounting standards and their application.  CO3: Demonstrate hands on skills in preparing Financial Statements of a Business enterprise.  |
|----|----------|--------------------------------------|---|
|    | Course 5 | Business Environment.                | At the end of the course, the student will be able to;  CO1: Understand the concepts of Business, Industry and commerce.  CO2: Analyze different forms of organization and its effect on Business Environment.  CO3: Gain knowledge regarding different dimensions of Business Environment and its powerful effect on Business Entity.  CO4: Develop understanding regarding overview of Government Policies in India post liberalization and its impact on Business Empires. |
|    | Course 6 | Quantitative Techniques for Managers | At the end of the course, the student will be able to; CO1: Provide the basic knowledge of quantitative methods and their application to commercial situation and for decision making in business.  |

| I III | Course 7 | Human Resources Management | At the end of the course, the student will be able to; CO1: Acquire knowledge on HRM, its environment, methods of selection, and Interview techniques.  CO2: Impart the skills to manage various functions of Human Resource Management in order to provide the professional approach and outlook. |
|-------|----------|----------------------------|--|
|       | Course 8 | Operations Management      | At the end of the course, the student will be able to; CO1: Understand the concepts, principles, problems, and practices of operations management.  CO2: Identify and articulate how operations management contributes to the achievement of an organization's strategic objectives.               |
|       | Course 9 | Event Management           | At the end of the course students will be able to: Co1: obtain a sense of responsibility for the multi- disciplinary nature of event management  Co2: Gain confidence and enjoyment from involvement in the dynamic industry of event management   |

|     | IV | Course 10 | Financial Management                  | At the end of the course students will be able to: CO1: To gain basic knowledge of objectives of Financial Management and its functions. CO2: To gain familiarization with different financial decisions that impact any organization. CO3: To understand the capital budgeting process and risk analysis in capital budgeting and Understand decisions relating to dividend policies and their valuation CO4: Analyze working capital management to organization. |
|-----|----|-----------|---------------------------------------|--|
|     |    | Course 11 | Marketing Management                  | At the end of the course students will be able to: CO1: To know the basic concepts on Marketing Environment CO2: Develop understanding about marketing management concepts and frameworks. CO3: Analyze an organization's marketing strategies,formulateand assess strategic, operational and tactical marketing decisions. CO4: Enhance business communication skills required to work effectively with a marketing team.   |
|     |    | Course 12 | Fundamentals of Research  Methodology | At the end of the course students will be able to: CO1: Apply the basic understanding of research methodology into the application of modern analytical tools and techniques for the purpose of management decision making. CO2: Identify the overall process of designing a research study from its inception to its report.  |
| III | V  | Course 13 | Business Law                          | At the end of the course students will be able to:  CO1: To equip the student with fundamental concepts, principles relating to Contract Act that applies to   |

|           |            | business situations.  |
|-----------|------------|---|
|           |            | CO2: To provide an overview on Negotiable   |
|           |            | Instruments Act and Partnership Act in India.   |
|           |            | CO3: To understand the regulatory framework of companies with reference to various provisions of Companies Act.   |
|           |            | CO3: To understand the essentials and execution of Sale contracts.  |
|           |            | CO4: To acquire knowledge on Right to Information Act and Consumer Protection Act.  |
| Course 14 | E-Commerce | At the end of the course students will be able to:  |
|           |            | CO1: Understand the concept of electronic commerce, and how electronic commerce is affecting business enterprises, governments, consumers and people in general.  |
|           |            | CO2: Recognize the impact of Information and Communication technologies, in business operations.  |
| Course 15 | Taxation-I | At the end of the course students will be able to: CO1: Understand the tax concepts and calculate Total Income & Tax Liability. CO2: Identify and explain the self-assessment system of tax administration. |

|    | Course 16 | Management Accounting          | At the end of the course students will be able to:<br>CO1: understand concepts of Management Accounting.<br>CO2: Demonstrate Accounting compliance and planning in financial statements.  |
|----|-----------|--------------------------------|---|
|    | Course 17 | Financial Markets and Services | At the end of the course students will be able to: CO1: Gather knowledge of Issues in Primary & Secondary Markets & about the various Financial Services.  CO2: Understand the difference between Traditional & Modern Financial Services.  |
|    | Course 18 | BBA Practical's                | At the end of the course students will be able to: CO1: Gain knowledge of business practices and processes. CO2: Analyze, evaluate and interpret data practically for the situations at the industry, business and individual levels.   |
| VI | Course 19 | Business Strategy              | At the end of the course students will be able to:  CO1: Understand the basics of the how organizations are managed, with a special focus on the role played by a business firm's strategy.  CO2: Assess or predict business performance based on the detailed analysis of a specific problem, case or company. |

| Course 20 | International Business                 | At the end of the course students will be able to:  CO1: Understand International Business in a multicultural world.  CO2: Acquire knowledge about the impact of various economic, legal, cultural, geographical, and political systems on international business.  |
|-----------|--|---|
| Course 21 | Taxation –II                           | At the end of the course students will be able to:  CO1: Understand the tax concepts and calculate Total Income & Tax Liability.  CO2: Identify and explain the self-assessment system of tax administration.   |
| Course 22 | Computerized Accounting through Tally. | At the end of the course students will be able to: CO1: Understand the accounting concept, tools and techniques influencing business organization. CO2: Use accounting and business terminology. CO3: Explain the objective of financial reporting and related key accounting assumptions and principles. |
| Course 23 | Advertising & Media<br>Management      | At the end of the course students will be able to: CO1: gain an understanding of advertising and sales promotion practices. CO2: Prepare promotional and advertising campaigns, for projects, assignments, and tests.   |

|  |  | Course 24 | Logistics & Supply Chain<br>Management.      | At the end of the course students will be able to: CO1: Address LSCM problems in a holistic approach by taking into account general management concepts, human resources, environmental concerns, and quality, technological and economic aspects. CO2: Prepare students for career opportunities in logistics. |
|--|--|-----------|--|---|
|  |  | Course 25 | Self Study. Marketing of Banking<br>Services | At the end of the course students will be able to: CO1: Get an outlook of how banking sector work on day- to-day basis. CO2: Understand the fundamentals of banking as applicable on individuals and organizations within the larger economic system.   |

## Department of Hindi

## **Course outcomes- 2020-21**

| Subject | Year | Semester | Course | Title of the course   | Course outcomes   |
|---------|------|----------|--------|-----------------------|---|
|         | I    | I        | I      | Prose, Short stories, | I Semester के अंत में विद्यार्थी इन विषयों को सीखते है            |
|         |      |          |        | Grammar & Letter      | Co 1: साहित्य के विविध प्रक्रियाओं का परिचय।                      |
|         |      |          |        | Writing               | Co 2: नैतिक मूल्यों पर आधारित कहानियो के द्वारा मूल्यों को बढाना। |
|         |      |          |        |                       | Co3: विविध व्याकारणांशों के द्वारा वाक्य निर्माण का परिचय।        |
|         |      |          |        |                       | Co4: अनुवाद का परिचय।   |
|         |      |          |        |                       | Co 5 : पत्रलेखन की विधि के द्वारा विद्यार्थियों की ज्ञान वुद्धि।  |
|         |      |          |        |                       |   |
|         |      | II       | II     | Prose, Short stories, | II Semester के अंत में विद्यार्थी इन विषयों को सीखते है           |
|         |      |          |        | Grammar & Letter      | Co 1: साहित्य के विविध प्रक्रियाओं के द्धार साहित्य का परिचय।     |
|         |      |          |        | Writing               | Co 2: सामाजिक कहानियों के पढ़ने से सामाजिक स्थितिगतियों का परिवय। |
|         |      |          |        |                       | Co3: वाक्य शुद्धि के द्धारा वाक्यों का शुद्ध रूप जानना।           |
|         |      |          |        |                       | Co4: कार्यालयीन शब्दावली का उपयोग करना।                           |
|         |      |          |        |                       | Co 5 : विविध नौकरियों केलिए अवेदन पत्र लिखना सीखते है।            |
|         |      |          |        |                       |   |