



## THASSIM BEEVI ABDUL KADAR COLLEGE FOR WOMEN

A Minority Institution Sponsored by Seethakathi Trust, Chennai.  
Recognized by DBT under Star College Scheme, Ministry of Science and Technology, Govt of India.  
An Autonomous Institution Affiliated to Alagappa University, Karaikudi.  
Accredited by NAAC with "A" Grade [CGPA:3.16] & ISO 9001:2015 Certified Institution.  
Recognized by UGC under 2(f) & 12 (B).  
Kilakarai – 623517, Ramanathapuram District

### POs and COs (Academic Year 2023-24)

#### Programme Educational Objectives (PEO):

**PEO 1:** To create and strengthen women leaders through disciplinary knowledge, skills and ethical sensitivity

**PEO 2:** To transform students as successful entrepreneurs to face the modern challenges

**PEO 3:** To nurture the students to invent, innovate and create solutions for current moral, ecological and economic issues

#### Programme outcomes (PO):

In completion of all under graduate and post graduate degree programs the students will be in enabling with

**PO 1: Disciplinary Knowledge:** Acquiring knowledge of different dimensions in the related area of study and identifying the assumptions that frame thinking and actions

**PO 2: Effective Communication:** Ability to share thoughts, idea and applied skills of communications in its various perspectives through LSRW

**PO 3: Research Skill and Critical Thinking:** Ability to plan execute and report the results of an experiment and to draw conclusions from evidences and the capability to apply analytical thought by following scientific approach to knowledge development

**PO 4: Moral Ethical Awareness /Reasoning:** Ability to enhance moral ethical values in connecting one's life about ethical issues from multiple perspectives, and use ethical practices in all works and appreciating environmental and sustainability issues; and adopting unbiased and truthful actions in all expects of work

**PO 5: Information Digital Literacy:** Capability to use ICT in case of need and the ability to access, evaluate and use the relevant information

**PO 6: Problem Solving:** Ability to apply their competence to solve non-familiar everyday problems in real life situations

**PO 7: Self Directed and Lifelong Learning:** Acquire the ability to engage independent and lifelong learning through self-paced and self-director learning to meet out the change in life



## THASSIM BEEVI ABDUL KADAR COLLEGE FOR WOMEN

A Minority Institution Sponsored by Seethakathi Trust, Chennai.  
 Recognized by DBT under Star College Scheme, Ministry of Science and Technology, Govt of India.  
 An Autonomous Institution Affiliated to Alagappa University, Karaikudi.  
 Accredited by NAAC with "A" Grade [CGPA:3.16] & ISO 9001:2015 Certified Institution.  
 Recognized by UGC under 2(f) & 12 (B).  
 Kilakarai – 623517, Ramanathapuram District

### ACADEMIC YEAR 2023-2024

#### General Interest Courses

S.No	Course Code	Course Name	Course Outcomes
1.	IBES2	Environmental Studies	<p><b>CO1:</b> Understand the key concepts about the renewable and non-renewable resources of environment</p> <p><b>CO2:</b> Appreciate the concept structure and ecological pyramids of ecosystem</p> <p><b>CO3:</b> Reflect critically about the different Protection act of biodiversity and its conservation</p> <p><b>CO4:</b> Create awareness about the environmental pollutions and its management</p> <p><b>CO5:</b> Understand the natural resource exhaustion, related health issues in human</p>
2.	IBHR3	Human Rights	<p><b>CO1:</b> Help to get basic knowledge relating the meaning and concept of human rights</p> <p><b>CO2:</b> Know that protective laws are made for the betterment of weaker section of society</p> <p><b>CO3:</b> Have knowledge on National and State Human Rights Commission</p> <p><b>CO4:</b> Will know the rights of women children dalits etc</p>
3.	IBLVE4	Life Skills and Value Education	<p><b>CO1:</b> Understand the concept of major religions in India</p> <p><b>CO2:</b> The values and ethics to tackle the fundamental question of human life</p> <p><b>CO3:</b> Understand the intention and help one's own self</p> <p><b>CO4:</b> Know what is morally right</p> <p><b>CO5:</b> Right way to treat fellow human</p>
4.	HBWS5	Women studies	<p><b>CO1:</b> Promote and disseminate knowledge about women's role in society and economic trends which affect women's lives and status</p> <p><b>CO2:</b> Assimilate analytical understanding of the significance of gender (relations) and foster study of conduits and configurations of power causes context and consequences of women's subordination</p>

			<p><b>CO3:</b> Know the rights and laws for protection of women</p> <p><b>CO4:</b> Know women's psychological reactions to puberty, marriage, motherhood, abortion, birth control, menopause etc.</p>
5.	HBSED6	Skills for employability development	<p><b>CO1:</b> Able to understand the way of success through bring some attitude changes Among them</p> <p><b>CO2:</b> Know how to build a positive personality</p> <p><b>CO3:</b> Will to prepare resume and obtain interview and group discussion skills</p> <p><b>CO4:</b> Prepare themselves for quantitative analytical aptitude test.</p>



## THASSIM BEEVI ABDUL KADAR COLLEGE FOR WOMEN

A Minority Institution Sponsored by Seethakathi Trust, Chennai.  
Recognized by DBT under Star College Scheme, Ministry of Science and Technology, Govt of India.  
An Autonomous Institution Affiliated to Alagappa University, Karaikudi.  
Accredited by NAAC with "A" Grade [CGPA:3.16] & ISO 9001:2015 Certified Institution.  
Recognized by UGC under 2(f) & 12 (B).  
Kilakarai – 623517, Ramanathapuram District

### DEPARTMENT OF ARABIC & ISLAMIC STUDIES

ACADEMIC YEAR 2023-2024

### COURSE OUTCOMES

#### *Professional Ethics:*

<i>S.No</i>	<i>Course Code</i>	<i>Course Name</i>	<i>Course Outcomes</i>
1	IBARC11	Arabic for Beginners I	CO 1: Identify various types Arabic letters & Arabic vowels CO 2: Classify the vocabularies and pronounce with proper spelling & stress CO 3: Understand the unique patterns of nouns and construct (conjugate) the same CO 4: Elaborate the difference between the phrase constructions of English & Arabic CO 5: Perceive the skills of reading and writing
2	IBARC12	Arabic Grammar I	CO 1: Recall Arabic vocabularies and list out according to its category CO 2: Sort out the syntax and translate Arabic sentences into English CO 3: Analyze sentences grammatically CO 4: Assess the Arabic sentences CO 5: Compile own lexicon and develop LSRW skills
3	IBARC21	Arabic for Beginners I	CO 1: Memorize and list new vocabularies CO 2: Understand the special syntax features of Modern Standard Arabic CO 3: Translate simple sentences from Arabic to English and vice

			<p>versa</p> <p>CO 4: Construct simple sentences by applying grammatical rules</p> <p>CO 5: Perceive the skills of reading and writing</p>
4	IBARC22	Arabic Grammar II	<p>CO 1: Tell new vocabularies and explain the grammar of Arabic language</p> <p>CO 2: Apply the grammatical concepts</p> <p>CO 3: Analyze the phrase construction of English and Arabic</p> <p>CO 4: Visualize the translation of simple sentences from Arabic to English and vice versa</p> <p>CO 5: Assess &amp; understand the grammatical concepts through classroom conversation</p>
5	IBARC31	Applied Arabic Grammar I	<p>CO 1: Recall unique patterns of Arabic verbs and conjugation of the same</p> <p>CO 2: Understand the number system of Arabic language</p> <p>CO 3: Translate and construct simple sentences by applying grammatical rules</p> <p>CO 4: Apply and analyze the grammatical concepts</p> <p>CO 5: Perceive the skills of reading and writing</p>
6	IBARC41	Applied Arabic Grammar II	<p>CO 1: Identify and understand the unique patterns of weak and doubled verbs</p> <p>CO 2: Construct (conjugate) the weak and doubled verbs</p> <p>CO 3: Develop communication skill</p> <p>CO 4: Classify the verbs based on the nature of letters</p> <p>CO 5: Perceive the skills of reading and writing</p>
7	HBARC51 1	Advanced Arabic Grammar	<p>CO 1: Describe parts of speech in Arabic</p> <p>CO 2: Get a wide knowledge on unique types of Arabic nouns</p> <p>CO 3: Develop communication skills through conversation</p> <p>CO 4: Differentiate between the phrase constructions of English &amp; Arabic</p>
8	HBARC52	Modern Arabic Prose I	<p>CO 1: Memorize Modern Standard Arabic Vocabularies and group according to its category</p> <p>CO 2: Understand the syntax and translate Arabic sentences into English</p> <p>CO 3: Analyse sentences grammatically</p>

			CO 4: Compile own lexicon and develop LSRW skills
9	HBARE5 C	Classical Arabic Prose III	CO 1: Learn and memorize the classical vocabulary of Quran CO 2: Infer the meaning of chapters of Quran CO 3: Demonstrate the importance of being fair, equitable and just to all people CO 4: Relate the themes of the Quran chapters CO 5: Evaluate and reframe their life style with the guidance of Quran CO 6: Develop moral values and noble character
10	HBARE51 D	Modern Arabic Poetry	CO 1: Memorize the Poems CO 2: Explain and translate the poems CO 3: Interpret the meaning of poems in their own Language CO 4: Compare the various genres of Arabic Poetry with that of English Poetry CO 5: Criticize the themes of Arabic Poems
11	HBARE54 P	Arabic for Interaction III(Practical)	CO 1: Listen and memorize the vocabulary related to survival needs CO 2: Understand style of spoken Arabic CO 3: Practice situational conversations CO 4: Develop communication Skills
12	HBARE65	Translation Skills in Arabic	CO 1: Describe the theories of Translation CO 2: Understand the Techniques and strategies of Translation CO 3: Develop necessary skill to employ different translation methods CO 4: Able to compare between the sentence structures of Source and Target languages
13	HBARE61 A	Indo Arab Relation	CO 1: Describes the relationship between Sarandib and Arabian Peninsula CO 2: Review the reign of Arwi CO 3: Sketch out the trade relationships which boosted up the economy of both countries CO 4: Relate the present scenario of Indo- Arab Culture

			with the Past CO 5: Conceive a research work in the studied Area CO 6: Assess the significance of healthy relationship between countries
--	--	--	--

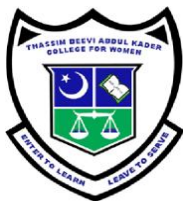
**Human Values:**

<b>S.No</b>	<b>Course Code</b>	<b>Course Name</b>	<b>Course Outcome</b>
1	IBARS14 1	History of Prophet Ibrahim (AS)-I	CO 1: Translate the Arabic language to enrich the history of early Prophets of Islam CO 2: Identify the faith of Islam through Prophetic history CO 3: Discover the historical and cultural background of Islam CO 4: Elaborate the development of Islam during the early life of Prophet CO 5: Evaluate the struggles of Prophet with current scenario
2	IBARA2 3	Qissathu Ashabil Kahf	CO 1: Summarize the seerah of Surah Kahf CO 2: Teach holistic histories CO 3: Analyze the faith and struggle of companions of cave CO 4: Estimate a connection between belief and behaviour and mannerisms CO 5: Measure the link between the events therein, the current events and reforms in our society
3	IBARS24 1	History of Prophet Ibrahim (AS)-II	CO 1: Explain the biography of Prophets CO 2: Identify the influence of Prophet's personality for the change in history and cultural background of Arabia CO 3: Examine the importance of major events in Prophet's life that led to the rise and spread of Islam CO 4: Discover the prophet's faith, sacrifices, struggles and beliefs CO 5: Establish the connection between belief, behavior and mannerisms
4	IBARA3 3	Seerah of Prophet Muhammad (PBUH)	CO 1: Illustrate the biography of Prophet Muhammad PBUH and his guidelines CO 2: Understand the historical and cultural background of Islam CO 3: Plan to learn life skills and develop human identity. CO 4: Criticize the pre Islamic period and evaluate the development of Islam during the early life of Prophet Muhammad PBUH CO 5: Develop leadership skills and gain the knowledge of political, economic and social reforms under the administration of Prophet Muhammad PBUH

5	IBARC4 2	Uloomul Quran	<p>CO 1: Memorize the names of chapters of Quran and describe the kinds of wahy</p> <p>CO 2: Classify and explain the Makki and Madhani verses</p> <p>CO 3: Apply the method of recitation of Al Quran by Sahabah Al Kiram</p> <p>CO 4: Analyse the type of verses</p> <p>CO 5: Discriminate between the Classical Arabic &amp; Modern Standard Arabic</p>
6	IBARC5 3	Hadeeth	<p>CO 1: Memorize, recite and quote the hadith for different situations</p> <p>CO 2: Categorize between the forms of nominal sentences through Hadith</p> <p>CO 3: Take part in the social morality with the teachings of Hadith</p> <p>CO 4: Discuss about the morality of Hadith</p> <p>CO 5: Assess the teachings of Hadith</p>
7	IBARE5 A	Seerah from Quran	<p>CO 1: Illustrate the biography of Prophet Muhammad PBUH and his guidelines</p> <p>CO 2: Understand the historical and cultural background of Islam</p> <p>CO 3: Plan to learn life skills and develop human identity.</p> <p>CO 4: Criticize the pre Islamic period and evaluate the development of Islam during the earlylife of Prophet Muhammad PBUH</p> <p>CO 5: Develop leadership skills and gain the knowledge of political, economic and social reforms under the administration of Prophet Muhammad PBUH</p>
8	IBARE5 C	Tafseerul Quran	<p>CO 1: Understand the style of Classical Arabic i.e, the language of Quran</p> <p>CO 2: Learn vocabularies of Quran</p>

			<p>CO 3: Recite the Quran with proper pronunciation</p> <p>CO 4: Understand the syntax of Classical Arabic</p> <p>CO 5: Discriminate between the Classical Arabic &amp; Modern Standard Arabic</p>
9	IBARC6 1	Family Ethics & Management	<p>CO 1: Recognize the purpose of life and family system</p> <p>CO 2: Apply the importance of values, goals and standards in the management of family</p> <p>CO 3: Analyze the management skills to resources especially time, money and energy</p> <p>CO 4: Verify the family issues and develop decision making ability</p> <p>CO 5: Construct a happy and healthy family</p>
10	IBLVE4	Life Skills and Value Education	<p><b>CO1:</b> Understand the concept of major religions in India</p> <p><b>CO2:</b> The values and ethics to tackle the fundamental question of human life</p> <p><b>CO3:</b> Understand the intention and help one's own self</p> <p><b>CO4:</b> Know what is morally right</p> <p><b>CO5:</b> Right way to treat fellow human</p>
11	IBHR3	Human Rights	<p><b>CO1:</b> Help to get basic knowledge relating the meaning and concept of human rights</p> <p><b>CO2:</b> Know that protective laws are made for the betterment of weaker section of society</p> <p><b>CO3:</b> Have knowledge on National and State Human Rights Commission</p> <p><b>CO4:</b> Will know the rights of women children dalits etc</p>
12	HBARC5 3	Hadeeth I	<p>CO 1: Memorize, recite and quote the hadith for different situations</p> <p>CO 2: Differentiate between the forms of Nominal sentences through Hadith</p> <p>CO 3: Practice and Relate the social morality with the teachings of Hadith</p> <p>CO 4: Able to persuade with the teachings of Hadith</p>
13	HBARC6 2	Hadeeth II	<p>CO 1: Recognize the Syntax of Hadeeth</p> <p>CO 2: Understand the grammatical concepts while infer the meaning of Hadeeth</p>

			<p>CO 3: Illustrate the Hadeeth grammatically and literally</p> <p>CO 4: Develop reflective thinking so that the students can relate the prior knowledge to the new</p>
14	HBARE5 A	Seerah from Quran	<p>CO 1: Describe the stories of Quran and quote examples</p> <p>CO 2: Understand the realities behind stories of Quran</p> <p>CO 3: Distinguish the good deeds and bad deeds distinguish the good deeds and bad deeds</p> <p>CO 4: Develop noble character by analysing the stories of Holy Quran and illustrate the same to other</p>
15	HBARE5 B	I'jazul Quran	<p>CO 1: Recognize the beauty and distinction of Holy Quran</p> <p>CO 2: Understand the Miraculous nature of Holy Quran</p> <p>CO 3: Examine the factors that causes the protection of Quraan Shareef to date</p> <p>CO 4: Illustrate the miraculous effects of the Quran Shareef on world</p>



## THASSIM BEEVI ABDUL KADAR COLLEGE FOR WOMEN

A Minority Institution Sponsored by Seethakathi Trust, Chennai.  
Recognized by DBT under Star College Scheme, Ministry of Science and Technology, Govt of India.  
An Autonomous Institution Affiliated to Alagappa University, Karaikudi.  
Accredited by NAAC with "A" Grade [CGPA:3.16] & ISO 9001:2015 Certified Institution.  
Recognized by UGC under 2(f) & 12 (B).  
Kilakarai – 623517, Ramanathapuram District

### DEPARTMENT OF HINDI

### ACADEMIC YEAR 2023-2024

### COURSE OUTCOMES

S NO	SUBJECT CODE	COURSE	Course Outcomes
1.	IBLH11	General Hindi I	After successful completion of this course, student will be able to <b>CO1:</b> Find the Hindi alphabet and outline in Hindi text <b>CO2:</b> Practice the grammatical sentence in day today life. <b>CO3:</b> Identify the Hindi numerals and other words. <b>CO4:</b> Improve the conversation in different situation. <b>CO5:</b> Develop comprehension skill through simple passage.
2.	IBLH21	General Hindi II	After successful completion of this course, student will be able to <b>CO1:</b> Find the Hindi words to construct grammatically correct sentences. <b>CO2:</b> Apply Hindi grammar for better communication <b>CO3:</b> Identify the poem in their own style <b>CO4:</b> Focus to formal and informal letter <b>CO5:</b> Conclude the basic concepts of the translation
3.	IBLH31	General Hindi III	<b>CO1:</b> Recall Hindi words and illustrate the lessons <b>CO2:</b> Illustrate the various aspects of Hindi prose <b>CO3:</b> Make use of hints development <b>CO4:</b> Discover the growth of modern poetry to understand the Poem of Medieval Poets Kabir & Tulsi <b>CO5:</b> Create the story in their own style

4.	IBLH41	General Hindi IV	<p><b>CO1:</b> Define the basic Hindi grammar and practice to use different types of tenses in Hindi language.</p> <p><b>CO2:</b> Demonstrate Hindi writing skills</p> <p><b>CO3:</b> Focus on conversation skill in Hindi</p> <p><b>CO4:</b> Discusses one act play, characters and writers</p> <p><b>CO5:</b> Develop the knowledge of tourism about certain (famous) places</p>
----	--------	------------------	--

#### VALUE ADDED PROGRAMMES

S NO	SUBJECT CODE	COURSE	Course Outcomes
1.	GCHI21PW	Spoken Hindi	<p><b>Course Objectives:</b></p> <p>1. To make the students familiarize with Hindi Vocabulary</p> <p>2. To achieve fluency in Hindi</p>
2.	GCTM21PW	Tourism	<p>Course Objectives:</p> <p>1. To impart deep knowledge about tourism</p> <p>2. To gain the knowledge of Historical places &amp; monuments</p>



### THASSIM BEEVI ABDUL KADAR COLLEGE FOR WOMEN

A Minority Institution Sponsored by Seethakathi Trust, Chennai.

Recognized by DBT under Star College Scheme, Ministry of Science and Technology, Govt of India.

An Autonomous Institution Affiliated to Alagappa University, Karaikudi.

Accredited by NAAC with "A" Grade [CGPA:3.16] & ISO 9001:2015 Certified Institution.

Recognized by UGC under 2(f) & 12 (B).

Kilakarai – 623517, Ramanathapuram District

**DEPARTMENT OF MATHEMATICS [2023-24]**

**MSc MATHEMATICS**

### ODD Semester

S. No	Subject Code	Subject Name	Course Outcomes
1	HMMXC111	Core I – Linear Algebra	<p>CO1: Analyze the concept of Vector spaces, Subspaces, Bases and Dimension</p> <p>CO2 : Explore the concept of Linear Transformation</p> <p>CO3: Compute the solution of system of linear Equations</p> <p>CO4: To find the solutions of Eigen value and Eigen Vectors, Diagonalization of matrices.</p> <p>CO5: To find the Jordan canonical forms of various linear transformation and thereby able to solve various problems.</p>
2	HMMXC12	Core II - Analysis-I	<p><b>CO1:</b> Classify the basic features of real and complex number system, countable and uncountable sets.</p> <p><b>CO2:</b> Categorize the sets of Basic Topology.</p> <p><b>CO3:</b> Prove the theorem using the concepts of monotonic functions.</p> <p><b>CO4:</b> Examine the different types of derivatives.</p> <p><b>CO 5:</b> Determine the concepts of Reimann-stieltjes integral and properties of the integral.</p>
3	HMMXC13	Core III - Ordinary and Partial Differential Equations	<p><b>CO 1:</b> Find the solutions of differential equations with homogeneous and nonhomogeneous equations.</p> <p><b>CO 2:</b> classify the regular singular point, Euler equation and Bessel equation.</p> <p><b>CO 3:</b> Solve higher order partial differential equations using exact equations successive approximation and Lipschitz condition.</p> <p><b>CO 4:</b> Solve the first order ordinary and partial differential equation.</p> <p><b>CO 5:</b> Evaluate the solution of first order differential equation using Cauchy's, Charpit's and Jaccobi's methods.</p>
4	HMMXC141	Core IV – Number Theory	<p>CO1: To solve congruences as application of Chinese remainder Theorem</p> <p>CO2: To know the concepts of Primitive roots and Power Residue</p> <p>CO3: To evaluate the Quadratic residue and Jacobi symbol and work on sum of two squares problems.</p> <p>CO4: To know the fundamentals of greatest integer function and recurrence functions</p> <p>CO5: To solve simple simultaneous linear Diophantine equations.</p>

	HMMXCE11A	DSE I – Graph Theory	<p>CO 1: To understand the basic concept of Graph Theory</p> <p>CO 2: Apply the concept of path to Euler tour, connectivity, Blocks and Hamilton cycles in the real life.</p> <p>CO 3: To know the concepts of Matching and perfect matching</p> <p>CO 4: Prove the theorems in Independent Set</p> <p><b>CO 5:</b> Apply the concept of Planner Graphs in a real life situations</p>
6	HMMXCE1B	DSE I - Stochastic Process	<p><b>CO 1:</b> Apply the concepts of Laplace transform of a probability distribution.</p> <p><b>CO2:</b> Find the solution of the problems in Markov Chains using stochastic process.</p> <p><b>CO3:</b> Discover the most important classification of States and Chains.</p> <p><b>CO4:</b> Examine the applications of Poisson process and Related Distributions.</p> <p><b>CO 5:</b> Analyze the concept of birth and death process in queuing theory.</p>
7	HMMXX1	Extra credit - Fuzzy Sets and Relations	<p>CO 1: Categorize the Crisp sets and fuzzy sets.</p> <p>CO 2: Apply the Basic Concepts of fuzzy logic in fuzzy sets.</p> <p>CO 3: Analyze the application of fHzy logic to real time systems.</p> <p>CO 4: Make use of operations on fuzzy sets.</p> <p>CO 5: Compute fuzzy relations on a single set.</p>
8	HMMXC31	Core IX - Functiona lAnalysis	<p><b>CO 1:</b> Illustrate the concept of normed space and Banach space</p> <p><b>CO 2:</b> Analyze the concept of orthogonality on Hilbert space</p> <p><b>CO 3:</b> Classify the different kinds of operators on Hilbert space</p> <p>CO 4: Examine the intervention of continuous linear function in proving Hahn Banach theorem</p> <p>CO 5: Use the concept of strong and weak convergence of sequence of operators and functional+</p>

9	HMMXC32	Core X - Topology-II	CO 1: Examine the concepts of separation axioms in proving Urysohn lemma and Urysohn Metrization theorem CO 2: Make use of compactness and connectedness in proving Tychonoff theorem CO 3: Explain Para compactness and apply its related theorems CO 4: Explore the concepts of complete metric space with illustrations CO 5: Conceptualize and apply the concept of compactness and completeness in Baire Spaces
10	HMMXC33	Core XI - Classical Mechanics	CO 1: Compute the solutions of the problems using DAlembert's Principle CO 2: Evaluate the differential equation of motion by using lagrangian method CO 3: Analyze the Hamilton's equation and variational principles CO 4: Evaluate the canonical integral associated with Hamilton's principle CO 5: Examine the transformations are Canonical or not
11	HMMXC34	Core XII - Probability andStatistics	CO 1: Identify basic concept of Random events, axioms of probability and independent events CO 2: Identify the concepts of multivariate distribution and the Correlation coefficient CO 3: Analyze the Binomial distribution, Poisson distribution, Gamma and Chi-square distribution and Normal distribution CO 4: Examine and describe the beta, t and F distribution of various applications in statistics. CO 5: Estimate the concepts in multivariate distribution
12	HMMXE3B	DSE III - Operations Research	CO 1: Formulate and solve pure and mixed integer programming models using Branch and Bound Algorithm and Cutting plane Algorithm CO 2: Make use of Dynamic programming and its applications to find the solution of the real life problems CO 3: Solve the problems using the concepts of Decision analysis CO 4: Analyze Pure Birth and Death Model CO 5: Determine the solution of the inventory problem using Inventory models

**MSc MATHEMATICS**  
**Even Semester (2023-24)**

S. No	Subject Code	Subject Name	Course Outcomes
1	HMMXC211	Core V –Algebra-I	CO 1: Analyze the nature of Sylow’s theorem CO 2: Explain the concept of direct product and finite abelian groups CO 3: Infer the concept of Ring Theory CO 4: Justify the theoretical aspects of vector space CO 5: Recapitulate the concepts of roots of polynomials
2	HMMXC22	Core VI -Analysis-II	<b>CO 1:</b> Apply uniform convergence method to proving the sequences of real functions. <b>CO 2:</b> Distinguish the exponential and logarithmic functions. <b>CO 3:</b> Analyze the concepts of functions of several variables. <b>CO 4:</b> Examine the derivatives of several variables. <b>CO 5:</b> Probe the ability to reflect on problems that are quite significant in the field of real analysis.
3	HMMXC231	Core VII – Topology	<b>CO 1:</b> Categorize the different types of topologies with examples. <b>CO 2:</b> Analyze the concept of continuity on product topology and metric topology. CO 3: Explain the concept of connectedness and components of the real line and able to apply in theorems. CO 4: Infer the aspects of compactness and its related theorems. <b>CO 5:</b> Examine the concept of Countability and separation axioms with illustrations.
4	HMMXC241	Core VIII – Partial Differential Equations	CO 1: Evaluate the solutions of first order differential equation using Cauchy’s, Charpit’s and Jacobi’s methods CO2: Find the solutions of Quasi-Linear Equations and Non-linear First Order P.D.E. CO 3: Classify the second order PDE and the solution of one dimensional wave equation CO4: Solve the boundary value problems using Cauchy’s, Dirichlet’s and Neumann problem CO5: Find the solutions of heat conduction problem in finite rod case and an infinite rod case.
5	HMMXE21A	DSE II – Numerical Methods	<b>CO 1:</b> Compute roots of the transcendental and polynomial equations using an appropriate numerical method <b>CO 2:</b> Inspect various method for solving the system of linear equations <b>CO 3:</b> Apply the concept of system of linear algebraic equations and Eigen value problems <b>CO 4:</b> Explain the concept of Numerical differentiation and integrations <b>CO 5:</b> Compute the numerical solutions of ordinary differential

			equations by suitable methods
6	HMMXC41	Core XIII- Differential Geometry	CO 1: Explain the concept of space curves CO 2: Describe the structures of curves and surfaces and find its involutes and evolutes of the curves CO 3: Determine the properties of helicoids CO 4: Make use of Geodesic curvature, to solve the problems CO 5: Illustrate the fundamental concepts in Normal property of geodesic and intrinsic values
7	HMMXC42	Core XIV– Advanced Statistics	CO 1: Solve the knowledge of applicable large sample theory of estimators and tests CO 2: Assume conceptual understanding of completeness and uniqueness CO 3: Analyze the comprehensive idea about the Bayesian Estimations CO 4: Evaluate the functions by using various significance test CO 5: Conclude the relationship between two quantitative variables with the use of linear regression
8	HMMXC43PW	Core XV - Project	CO 1: Make use of research methodology and techniques of the literature applicable to their own research CO 2: Determine solutions to the unsolved problems CO 3: Analyze the abilities and techniques in the critical evaluation of current research CO 4: Apply new ideas in the respective field of study and environment CO 5: Design innovative projects with the application of mathematical concepts towards scientific and societal development

**BSc MATHEMATICS****ODD Semester(2023-24)**

<b>S. No</b>	<b>SubjectCode</b>	<b>Subject Name</b>	<b>Course Outcomes</b>
1	IBMXC11	Core I - Calculus	CO 1: Identify the tangent, sub tangent, subnormal, polar sub tangent, polar subnormal of a curve CO 2: Evaluate envelope, radius and centre of curvature, evolute of a curve and polar equation CO 3: Analyze the concept of Asymptotes and Properties of definite integrals CO 4: Examine the techniques of integration CO 5: Compute the area and centroid of curvature by using double and triple integrals
2	IBMXC12	Core II - Theory of Equations	CO 1: Find the nature of the roots of an equation CO 2: Examine the relation between roots and coefficients of the equations CO 3: Solve the roots of the given equation by adopting different methods CO 4: Determine the solutions of cubic equations by applying the suitable methods CO 5: Evaluate the hyperbolic functions and inverse hyperbolic function
3	IBMXA131	AECC I - Mathematical Statistics - I	CO 1: Illustrate and differentiate the basic probability concepts CO 2: Analyze the probability density function to solve the problems CO 3: Evaluate relationship between joint p.m.f and joint p.d.f CO 4: Make use of poisson and binomial distribution to solve real life problems CO 5: Classify the Random variables and determine solution to the given problems by MGF
4	IBMXE14P	SEC I - Theory of Equations with SCILAB	CO 1: Identify the fundamental operations theory of equations CO 2: Notice the commands in MATLAB to solve problems in theory of equations CO 3: Apply the acquired knowledge on MATLAB to find roots of polynomials CO 4: Use MATLAB to solve algebraic equation CO 5: Make use of MATLAB for Horner's Method and Newton's Method of evaluating a real root

5	IBCPA131	AECC I - Numerical Methods	<p>CO 1: Assess the solution of Algebraic and Transcendental equations</p> <p>CO 2: Compute the missing values for unequal intervals using Divided difference and Lagrange's Method</p> <p>CO 3: Evaluate the approximate values of the first derivative, maximum and Minimum values of the Function using Newton's formula</p> <p>CO 4: Solve the problem and using the methods of Gauss elimination, Gauss- Jordan and iterative methods</p> <p>CO 5: Applying the method of numerical solutions of ordinary differential equation to examine the problem</p>
6	IBCYA131	AECC II- Discrete Mathematics	<p>CO 1: Compare the properties of sets and relations</p> <p>CO 2: Classify different types of functions and applied suitable technique to prove the theorems</p> <p>CO 3: Analyze the recurrence relation and generating functions</p> <p>CO 4: Use matrix concept and solve the Simultaneous linear equations</p> <p>CO 5: Apply the concept of graph theory technique to find the shortest path</p>
7	IBCHA13	AECC I - Mathematics-I	<p>CO 1: Establish the applications of Binomial theorem in terms of series</p> <p>CO 2: Classify exponential series and logarithmic series</p> <p>CO 3: Solve the roots of the given equation by adopting different methods</p> <p>CO 4: Use algebraic operations to find the rank of the matrices</p> <p>CO 5: Examine the concept of trigonometric function and hyperbolic functions</p>
8	IBMXC31	Core V- Numerical Analysis	<p><b>CO 1:</b> Identify the efficient numerical solutions of algebraic and transcendental equation</p> <p>CO 2: Classify finite differences</p> <p>CO 3: Analyze the concept of interpolation</p> <p>CO 4: Verify the numerical methods for various mathematical operations and tasks such as differentiation, integration</p> <p>CO 5: Find Numerical solutions by using Taylor Series, Euler's method and Runge Kutta method</p>
9	IBMXC32	Core VI – Real Analysis I	<p>CO 1: Compute the direct, inverse images and composition of functions</p> <p>CO 2: Make use of completeness property of <math>\mathbb{R}</math> in the real line</p> <p>CO 3: Evaluate the limit of the sequence</p> <p>CO 4: Analyze the concepts of subsequences, series and their application in various fields of sciences</p> <p>CO 5: Apply various tests to find the absolute convergence of an infinite series of realnumbers</p>

10	IBMXE34	Skill based elective III- Fourier Series	CO1: Find the solution of problem using trigonometric series CO2: Evaluate Fourier series using properties of odd and even function CO3: Classify trigonometric functions of sine and cosine and solve problems CO4: Evaluate Fourier series using change of Interval CO5: Compute the solution of Harmonic Analysis
11	IBITA33	AECC III – Discrete Mathematics	CO 1: Compare the properties of sets and relations CO 2: Classify different types of functions and applied suitable technique to prove the theorems CO 3: Analyze the recurrence relation and generating functions CO 4: Use matrix concept and solve the Simultaneous linear equations CO 5: Apply the concept of graph theory technique to find the shortest path
12	IBCSA33	AECC III – Statistics	CO 1: Build the skills in basic statistical concepts CO 2: Apply the various measures of statistical parameters in real life CO 3: Estimate the correlation coefficient for a bivariate frequency distribution and regression CO 4: Make use of Index numbers for solving the statistical problem CO 5: Analyze the time series and measure the trends of statistical data
13	IBCYA33	AECC III – Statistics	CO 1: Build the skills in basic statistical concepts CO 2: Apply the various measures of statistical parameters in real life CO 3: Estimate the correlation coefficient for a bivariate frequency distribution and regression CO 4: Make use of Index numbers for solving the statistical problem CO 5: Analyze the time series and measure the trends of statistical data
14	HBSYA33	AECC III- Psychological Statistics – Descriptive	CO 1: Understand the scales of measurements CO 2: Analyze the results of graphical representation of data CO 3: Apply the formula to compute the solution of mean, median, mode CO 4: Apply the formula and analyze when and where to use the measures of variability CO 5: Construct scatter diagram using linear correlation concept
15	IBOE3MX	Non-Major Elective I - Quantitative Aptitude for Competitive Examinations-I	CO 1: Solve time and work problems by using the formula CO 2: Analyze the Problems logically and approach the problems in a different manner CO 3: Apply the formulas for solving some real life problems CO 4: Build thinking ability skills CO 5: Compute the volume and surface area of solids

16	IBMXX3	Extra Credit - Logical Reasoning	<p>CO 1: Determine the solutions to a range of elementary problems using puzzle test</p> <p>CO 2: Demonstrate the ability to perform Logical Venn Diagrams and solve the problem</p> <p>CO 3: Use some techniques to Alphabet test</p> <p>CO 4: Inspect the Alpha Numeric Sequence Puzzle</p> <p>CO 5: Compute the problem quantitatively and use appropriate inserting the missing Character</p>
17	HBMXC51	Core X- Abstract Algebra – II	<p>CO 1: Understand the basic concepts of Vectorspaces</p> <p>CO 2: Use the definition and properties of linear transformations and matrices of LT and change of basis</p> <p>CO 3: Compute inner products and determine orthogonality on vector spaces</p> <p>CO 4: Compute with the characteristic polynomial, eigenvectors, eigenvalues and apply the basic results</p>
18	HBMXC52	Core XI- Dynamics	<p>CO 1: Understand the concept of Laws.</p> <p>CO 2: Understand the Mathematical Ideas.</p> <p>CO 3: Gain the knowledge of the Behavior of Object in Motion.</p> <p>CO 4: Develop a working knowledge to handle Practical Problems.</p>
19	HGBMX C53	Core XII- Astronomy	<p>CO 1 : Gain Knowledge about Spherical Concepts in Space and Plane Trigonometrical Formula.</p> <p>CO 2 : Know about Celestial Phenomenon.</p> <p>CO 3 : Discuss how light is used by Astronomersto learn about Universe.</p> <p>CO 4 : Acquained Knowledge about Lunar Librations in Moon.</p>
20	HBMXE5A	Core Elective I - Fourier and Laplace Transforms	<p>CO 1: Familiarize the students with the concept of Fourier transform.</p> <p>CO 2: Understand the Finite Fourier Transforms.</p> <p>CO 3: Gain knowledge of solving linearity properties of Laplace and inverse Laplace Transforms.</p> <p>CO 4: Understand differential and integral problems.</p> <p>CO 5: Know the initial and final value theorems of Laplace transform.</p> <p>CO 6: Know the relation between Fourier Transform and Laplace transform.</p>
21	HBMXE5B	Core Elective I - Combinatorics	<p>CO 1: This course will give students the combinatorial tools to model and analyze practical problems in various areas.</p> <p>CO 2: Students will be able to identify, formulate, and solve problems in Mathematics, including proof writing.</p> <p>CO 3: They will put to practice problem solving techniques that they know, and learn new ones</p> <p>CO 4: Students will be able to present technical information</p>

			<p>clearly in both oral and written formats.</p> <p><b>CO 5:</b> Understand a part of Discrete Mathematics that deals with enumeration and existence problems.</p> <p><b>CO6:</b> Familiar with fundamental appear in various other fields of Mathematics and Computer Science</p>
--	--	--	--

22	HBMXE5C	Core Elective II - Fluid Dynamics	<p><b>CO 1:</b> Able to find the gradient, divergence and curl of vector expressed in terms of orthogonal curvilinear coordinates.</p> <p><b>CO 2:</b> Identity the fundamental kinematics of fluid elements.</p> <p><b>CO3:</b> Explain how Bernoulli equation is related to conservation of energy.</p> <p><b>CO 4:</b> Develop the knowledge of axi-symmetric flows.</p> <p><b>CO 5:</b> Describe its applicability, potential and limitation.</p> <p><b>CO 6:</b> Familiar with two dimensional flow</p>
23	HBMXE5D	Core Elective II - Operations Research	<p><b>CO 1:</b> To familiarize the concepts of Linear Programming Problem</p> <p><b>CO 2:</b> Mathematical tools that are needed to solve the Optimization Problem</p> <p><b>CO 3:</b> Gain knowledge of solving the Transportation and Assignment Problem</p> <p><b>CO 4:</b> Understand the Optimization Technique in Games and Strategies Problem</p> <p><b>CO 5:</b> Gain knowledge of Network Construction</p> <p><b>CO 6:</b> Students can solve the Real life problem through OR techniques</p>
24	HBMXE54	Skill Based Elective V- Non-Verbal Reasoning	<p><b>CO 1:</b> Understand the basic concepts of logical reasoning skills</p> <p><b>CO 2:</b> Understand the basic concepts of quantitative ability</p> <p><b>CO3:</b> Test candidate's overall Knowledge Power of Reasoning</p> <p><b>CO 4:</b> To compete in various competitive exams like CAT, GATE, UPSC, GPSC etc.</p>
25	HBMXX5	Extra Credit – Quantitative Techniques	<p><b>CO 1:</b> Understand the concept of optimal sequence model and Processing through the job and machines.</p> <p><b>CO 2:</b> Know the concept of application of dynamic programming model in industries.</p> <p><b>CO 3:</b> Calculate the probabilities, and derive the marginal and conditional distributions of bivariate random variables.</p> <p><b>CO 4:</b> Understand of the values and use of quantitative</p>

			methods in administrative and optimal problem solving and decision making.
--	--	--	--

## BSc MATHEMATICS

### Even Semester

S. N O	Subject Code	Subject Name	Course Outcomes
1	IBMXC21	Core III - Analytical Geometry - 3D & Vector Calculus	CO1: Describe the concepts of planes and solve the related problems CO2: Explain geometrical shapes and coplanar lines CO3: Explicate the knowledge on the concepts of sphere CO4: Make use of different operators, explain the different concepts of vector differentiations CO5: Compute vector integration by using Green's theorem and its extension
2	IBMXC22	Core IV - Differential Equations	CO 1: Select the suitable method and find particular integral CO 2: Determine the solutions of differential equations by various methods CO 3: Analyze the concepts of simultaneous differential equations and solve the Problems CO 4: Compute the solution to the problem of linear equations of second order CO 5: Use Lagrange's and Charpit's methods to solve the partial differential equations
3	IBMXA231	AECC II - Mathematical Statistics II	CO 1: Analyze the concept of correlation and regression CO 2: Estimate and apply all aspects of theory of attributes CO 3: Classify the concepts of sampling, testing of hypothesis and critical region CO 4: Analyze the M.G.F of chi-square distribution CO 5: Justify the concept of Student's t-distribution and F-distribution
4	IBMXS24P	SEC II - Analytical Geometry with Geogebra	CO 1: Demonstrate and use Geogebra to find the Equations of a plane and angle between two planes CO 2: Utilize the Geogebra to solve the Equations of a line CO 3: Compare Angle between a line and a plane CO 4: Compute the solution of two lines that are coplanar CO 5: Verify the results of Equation of a circle and Intersection of two spheres
5	IBMX X2	Extra Credit - Arithmetic for Competitive Examinations	CO1: Solve the problems using fundamental rules CO2: Solve and simplify the problems CO3: Compute the average of numbers CO4: Apply the chain rule for solving the problems <b>CO5: Make use of Allegation or Mixture in problems</b>

6	IBCHA23	AECC II - Mathematics-II	CO 1: Examine the solutions of problem using forward difference formula and backward difference formula CO 2: Find the derivatives for higher order equations CO 3: Simplify different forms of integral concepts CO 4: Apply the construction of Fourier Series in different environment <b>CO 5:</b> Describe the different concept of Laplace transformations
7	IBMXC41	Core VII - Abstract Algebra – I	CO 1: Summarize the concept of groups and subgroups and able to find the groups CO 2: Make use of the concept of normal subgroups, able to construct Quotient group CO 3: Analyze the concepts of automorphism and permutation groups CO 4: Compare the types and elucidate the concept of homomorphism of rings CO 5: Distinguish the types of rings and establish relationship between various types of ideals
8	IBMXC42	Core VIII – Statics	CO 1: Explain the concept of the forces and to categorize its forces CO 2: Evaluate the parallel forces, moments and equilibrium CO 3: Examine the properties of Couples of forces CO 4: Illustrate the insides of coplanar forces and its conditions of equilibrium CO 5: Defend the experimental results on Friction
10	HBMXE45	SEC IV - R Tool Lab	CO 1: Classify the basics concept in R programming in terms of constructs, control statements and functions CO 2: Identify data analytics software CO 3: Enhance the problem solving, programming and debugging skill CO 4: Apply the R programming from a statistical perspective CO 5: Learn and implement the various data structures of R
11	IBMXX4	Extra Credit – Applications of Group Theory	CO 1: Understand the concept of Matrices and linear transformation CO 2: Apply the concepts of Matrices in applications of group theory CO 3: Make use of Group theory in Information theory CO 4: Analyze the concept of Linear transformation and matrices CO 5: Illustrate the concept of rank and nullity

12	IBOE4MX	OEC II: Quantitative Aptitude for Competitive Examinations II	CO 1: Make use of the concepts of Indices and Logarithms, solve the problems CO 2: Identify the concepts of Permutation and Circular Permutation CO 3: Discover the basic concepts of Arithmetic Progression and Geometric Progression CO 4: Evaluate the skills of the application of set theory CO 5: Justify the basic concept of Random events, axioms of probability and independent events
13	IBITA43	AECCIV - Statistics	CO 1: Build the skills in basic statistical concepts CO 2: Apply the various measures of statistical parameters in real life CO 3: Estimate the correlation coefficient for a bivariate frequency distribution and regression CO 4: Make use of Newton's and Lagrange's formula for solving the finite difference statistical problem CO 5: Analyze the time series and measure the trends of statistical data
14	IBCSA43	AECC IV – Operations Research	CO1: Apply Graphical and Simplex method to get optimality of Linear Programming Problem CO2: Analyze Assignment problem technique to make effective business decisions CO3: Make use of different strategies to find the solutions for games and events CO4: Assess Transportation Model for optimal solutions CO5: Adapt CPM/ PERT techniques to plan schedule and control project activities
15	IBSYA43	AECC IV Psychological Statistics - Inferential	CO 1: Examine and apply the concepts of normal curve to problem solving CO 2: Solve the sample mean of statistics CO 3: Analyze the concepts of significance between means CO 4: Test the chi square as a test of independent between two variables CO 5: Calculate analysis of variance
16	HBMXC61	Core XIII- Real Analysis – II	CO 1 : Understand the Countable Set, Metric space, Closed and Open set. CO 2 : Analyze the Limit Point. CO 3 : Understand the concept of Continuity. CO 4 : Demonstrate the Connectedness and Compactness.
17	HBMXC62	Core XIV- Number theory	CO 1: Apply Divisibility properties and the Fundamental theorem of Arithmetic. CO 2: Solve system of linear congruence and apply the Chinese Remainder theorem. CO3: Understand Fermat's little theorem to prove relations involving prime numbers. CO4: Understand the concept of Euler's phi theorem and Phi Functions

18	HBMXC63	Core XV- Numerical Analysis	<p><b>CO 1:</b> Be familiar with calculation and interpretation of errors in numerical computations</p> <p><b>CO 2:</b> Be familiar with numerical interpolation and approximation of functions</p> <p><b>CO 3:</b> Be familiar with numerical differentiation and integration</p> <p><b>CO 4:</b> Be familiar with numerical solution of differential equations.</p>
19	HBMXC64	Core XVI- Complex Analysis	<p><b>CO1:</b> Understand the significance of differentiability for complex functions and be familiar with the Cauchy Riemann equations.</p> <p><b>CO2:</b> Know the Taylor and Laurent expansions of simple functions, determining the Singularities and calculating residues.</p> <p><b>CO3:</b> Gain knowledge of Cauchy Residue theorem.</p> <p><b>CO4:</b> Apply in almost every branch of Mathematics and is one of the Powerful tools for the Mathematicians.</p>
20	HBMXE6A	Core Elective III – Discrete Mathematics	<p><b>CO 1:</b> Gain knowledge in recurrence relations and generating functions</p> <p><b>CO 2:</b> Understand the concept of logic operators.</p> <p><b>CO 3:</b> Understand the techniques for replacement process</p> <p><b>CO 4:</b> Recognize basic properties of lattices.</p> <p><b>CO 5:</b> Have a good foundation in the concept of Boolean Algebra.</p> <p><b>CO 6:</b> Apply knowledge about discrete Mathematics in problem solving.</p>
21	HBMXE6B	Core Elective III – Mathematical Modeling	<p><b>CO 1:</b> Learn techniques of mathematical modeling</p> <p><b>CO 2:</b> Construct appropriate Ordinary differential equations with relevant parameters and conditions.</p> <p><b>CO 3:</b> Ability to determine the basic theory of linear difference equations</p> <p><b>CO 4:</b> Understand the concept of graphs and directed graph.</p> <p><b>CO 5:</b> Gain knowledge about calculus of variations.</p> <p><b>CO 6:</b> Formulate and specify a real life problems</p>
22	HBMXE65	Skill Based Elective VI- Quantitative Aptitude	<p><b>CO 1:</b> After through learning of aptitude will be able to critically evaluate various real life situations by restoring to analysis of key issues and factors.</p> <p><b>CO 2:</b> Able to read between the lines and understand various language structures.</p> <p><b>CO 3:</b> Able to demonstrate various principles involved in solving mathematical problems and thereby reducing the time taken for performing job functions.</p> <p><b>CO 4:</b> Solve the sums by applying shortcut methods with the time management.</p>

**B Sc Data Science  
Odd Semester**

<b>S. No</b>	<b>Subject Code</b>	<b>Subject Name</b>	<b>Course Outcomes</b>
1	IBDSA13	AECC I – Mathematical Statistics – I	<b>CO 1:</b> Illustrate and differentiate the basic probability concepts <b>CO 2:</b> Analyze the Probability density function to solve the problems <b>CO 3:</b> Evaluate relationship between joint p.m.f and joint p.d.f <b>CO 4:</b> Make use of poisson and binomial distribution to solve real life problems <b>CO 5:</b> Classify the random variables and determine solution to the given problems by MGF
2	IBDSC31	Core V – Calculus & Differential Equations	<b>CO 1:</b> Understand and apply the basic concepts of limit and continuity <b>CO 2:</b> Make use of the methods to solve the sequence and series problems <b>CO 3:</b> Examine the methods of partial derivatives to solve the problems <b>CO 4:</b> Explicate and solve the examples using multiple integral <b>CO 5:</b> Evaluate the techniques of ordinary differential equations
	IBDSX3	Extra Credit – Logical Reasoning	<b>CO 1:</b> Determine the solutions to a range of elementary problems using puzzle test <b>CO 2:</b> Demonstrate the ability to perform logical Venn diagrams and solve the problem <b>CO 3:</b> Use analysis of variance techniques to Alphabet test <b>CO 4:</b> Inspect the alpha numeric sequence puzzle <b>CO 5:</b> Explicate graph coloring to solve the problems

**B Sc Data Science  
Even Semester**

<b>S. No</b>	<b>Subject Code</b>	<b>Subject Name</b>	<b>Course Outcomes</b>
--------------	---------------------	---------------------	------------------------

1	IBDSC21	Core III- Discrete Mathematics	<b>CO 1:</b> Construct truth tables and to prove the results <b>CO 2:</b> Apply the concept of generating functions to solve the relations <b>CO 3:</b> Use the concepts of induction and recursion to solve problems <b>CO 4:</b> Analyze counting concepts and apply to solve problems <b>CO 5:</b> Analyze the concepts of algebraic structure and codes in polynomial rings
2	IBDSA23	AECC II – Mathematical Statistics – II	<b>CO 1:</b> Analyze the concept of correlation and regression <b>CO 2:</b> Estimate and apply all aspects of theory of attributes <b>CO3:</b> Classify the concepts of sampling, testing of hypothesis and critical region <b>CO 4:</b> Analyze the M.G.F of chi-square distribution <b>CO 5:</b> Justify the concept of Student’s t-distribution and F-distribution
3	IBDSX2	Extra Credit- Arithmetic for Competitive Examinations	<b>CO1:</b> Compute the average of numbers <b>CO2:</b> Make use of Allegation or Mixture in problems <b>CO3:</b> Solve and simplify the real life problems <b>CO4:</b> Apply the chain rule for solving the problems <b>CO5:</b> Build the analytical and logical skills
4	IBDSC41	Core VII- Matrix Theory and Linear Algebra	<b>CO 1:</b> Make use of Gaussian elimination method to solve system of linear equations <b>CO 2:</b> Classify the properties of Determinants and use Cramer’s rule to solve the problems <b>CO 3:</b> Summarize the results obtained about solvability of the system, obtain several characterizations of the invertibility of a square matrix <b>CO 4:</b> Examine the concept of vector space of linear transformation using algebraic operations <b>CO 5:</b> Construct orthonormal basis for a matrix
5	IBDSX4	Extra Credit – Applications of Group Theory	<b>CO 1:</b> Understand the concept of Matrices and linear transformation <b>CO 2:</b> Apply the concepts of Matrices in applications of Group theory <b>CO 3:</b> Make use of Group theory in Information theory <b>CO 4:</b> Analyze the concept of Linear transformation and matrices <b>CO 5:</b> Illustrate the concept of rank and nullity

### Value Added Programme in Latex

S. No	Subject Code	Subject Name	Course Outcomes
1	HCLT1	Core I: Documentation Techniques in LATEX	<b>CO 1:</b> Create input file and documents. <b>CO 2:</b> Knows changing the type style, symbols, multilineFormulas. <b>CO 3:</b> Create Bibliography and table of content using Latex programme. <b>CO 4:</b> Insert Picture and change the colors using in graphics package in Latex. <b>CO 5:</b> Create line and page breaking and documentpage style and different types of Boxes using Latex. <b>CO 6:</b> Knows how to make numbering, definition and moving information around

2	HCLT21P	Core II – Pictures and Colours Lab	<p>Create a document using input files.</p> <p>Create a document using special symbols, dashes.</p> <p>Create a document using line breaks and foot notes.</p> <p>Create a document using sectioning command.</p> <p>Create a document using Quotations.</p> <p>Create a document using type style.</p> <p>Create a document using commands and environments.</p> <p>Create a document using mathematical formulas.</p> <p>Create a document using mathematical symbols.</p> <p>Create a document using arrays.</p> <p>Create a document using table.</p> <p>Create a document using bibliography.</p> <p>Create a document using page style.</p> <p>Create a document using pictures.</p> <p>Create a document using colors.</p> <p>Create a document using basic of the math index.</p> <p>Create a document using fine print.</p> <p>Create a document using bibliography database.</p> <p>Create a document using math mode environment.</p> <p>Create a document using tabbing environment.</p> <p>Create a document using line and page breaking.</p> <p>Create a document using boxes.</p> <p>Create a document using graphics packages.</p>
---	---------	--	---



## THASSIM BEEVI ABDUL KADAR COLLEGE FOR WOMEN

A Minority Institution Sponsored by Seethakathi Trust, Chennai.  
 Recognized by DBT under Star College Scheme, Ministry of Science and Technology, Govt of India.  
 An Autonomous Institution Affiliated to Alagappa University, Karaikudi.  
 Accredited by NAAC with "A" Grade [CGPA:3.16] & ISO 9001:2015 Certified Institution.  
 Recognized by UGC under 2(f) & 12 (B).  
 Kilakarai – 623517, Ramanathapuram District

### PG & RESEARCH DEPARTMENT OF COMMERCE ACADEMIC YEAR 2023-2024

#### COURSE OUTCOME

**B.COM Programme Code: UCO**  
**(Three Year Regular Programme)**  
**(For Students Admitted from 2022-2023)**

**Class: I B.COM (Odd Semester)**

S.NO	COURSE CODE	COURSE NAME	COURSE OUTCOME
1.	IBCOC11	Core I– Financial Accounting-I	CO1: Acquire knowledge in accounting principles and concepts CO2: Understand single entry system and convert it into double entry system CO3: Analyze, measure and modify rectification of errors CO4: Illustrate depreciation accounting with its factors, provision and methods CO5: Prepare final accounts
2.	IBCOS14P	SEC – P C Package Lab	CO1: Acquire practical knowledge in word processor CO2: Demonstrate the concepts of electronic spreadsheet management for business CO3: Use professional presentation for business purpose CO4: Explain database management tool CO5: Develop personal information management system
<b>Class: I B.COM (Even Semester)</b>			
1.	IBCOC21	Core III – Financial Accounting-II	CO1: Acquire knowledge in consignment accounts and its key concepts CO2: Explain joint venture accounts with its methods CO3: Construct accounts of non-trading concerns CO4: Deal with the hire purchase and installment accounts CO5: Prepare royalty accounts

2.	IBCOC22	Core IV – Marketing	CO1: Discuss the basic concepts of Marketing CO2: Explain the new product planning & development CO3: Indicate the objectives, factors and kinds of Pricing CO4: Create marketing promotion through advertisement in order to promote sales CO5: Choose the correct distribution channel for marketing a product
3.	IBCOA23	AECC II – Business Statistics	CO1: Gain Knowledge in statistical tools with its concepts CO2: Explain the central tendency CO3: Apply the measures of dispersion and variability CO4: Make Use of the techniques of investigating the relationship between two quantitative variables CO5: Work and Interpret on analysis of time series
4.	IBCOS24	SEC - Logical Reasoning	CO1: Explain critical thinking in academic and non-academic pursuits CO2: Discriminate the basic elements of arguments CO3: Analyse a basic working knowledge of propositional and predicate logic CO4: Examine logical relations among statements and analyse logically complex statements CO5: Calculate the substance and meaning of mathematical problems and solutions
5.	IBCOX2	Extra Credit – Business Communication	CO1: Acquire knowledge on communication CO2: Identify the theoretical framework for writing business letters CO3: Prepare quotations, letters and modern methods for communication CO4: Deal with banking correspondence CO5: Draft report for business
<b>Class: II B.COM (Odd Semester)</b>			
1.	IBCOC31	Core V – Cost Accounting	CO1: Acquire knowledge in basic concepts of Cost Accounting CO2: Explain the material and purchase control with its techniques and methods CO3: Compute labour cost and turnover, idle time, over time with price rate system and premium & bonus plan CO4: Deal with allocation and absorption of overheads CO5: Prepare contract and process accounts

2.	IBCOC32	Core VI – Partnership Accounting	CO1: Acquire knowledge in partnership accounting principles and procedures CO2: Explain treatment of goodwill with accumulated profit & losses and reserves CO3: Explain the accounting treatment at the time of partners retirement CO4: Deal with the settlement of Life Insurance policies CO5: Prepare the partnership accounts for amalgamation
3.	IBCOA33	AECC III – E-Commerce	CO1: Acquire knowledge in E-Commerce CO2: Explain E-Commerce and its components CO3: Explain the process of E-Commerce in performing business functions CO4: Describe the procurement and supply chain CO5: Deal with various payment methods
4.	IBCOS34	SEC -Digital Marketing	CO1: Gain knowledge in general aspects of Digital Marketing CO2: Experiment with web designing methodologies CO3: Understand the role of online advertising and social media marketing CO4: Frame various strategies in content marketing and its distribution channels CO5: Construct social media platform for marketing
5.	IBCOX3	Extra Credit – International Marketing	CO1: Acquire knowledge in the concepts of International Marketing CO2: Explain international marketing environments CO3: Deal with new product development process CO4: Frame international marketing strategies CO5: Suggest on international channels of distribution
<b>Class: II B.COM (Even Semester)</b>			
1.	IBCOC41	Core VII – Banking Law And Practice	CO1: Acquire knowledge in banking CO2: Understand the concepts of negotiable instruments CO3: Describe the role of paying banker and collecting banker CO4: Explain the role of various banks CO5: Share knowledge in modern banking

2.	IBCOC42	Core VIII – Financial Markets and Services	CO1: Acquire knowledge in financial system in India CO2: Explain new issues markets, SEBI and stock exchange CO3: Classify secondary market, listing and stock brokers CO4: Compare online trading with speculation and its concepts CO5: Share knowledge on mutual funds
3.	IBCOA43	AECC IV – Business Mathematics	CO1: Acquire knowledge in business mathematics CO2: Explain ratios and its applications in business CO3: Apply mathematical proportions in business decisions CO4: Use commercial arithmetics in day today life CO5: Excel in problem solving
4.	IBCOS44	SEC – Business Research Methods	CO1: Acquire basic knowledge in research CO2: Understand the steps to be followed in research CO3: Design for a good research CO4: Explain sampling and its impact CO5: Analyze data and draft reports
5.	IBCOX4PW	Extra Credit – Project	CO1: Plan, implement and control activities related to the projects CO2: Apply specialized knowledge and competency in areas of specialization CO3: Demonstrate effective analytical and critical thinking skills in an organizational context CO4: Prepare the students to face the challenges in the field CO5: Develop a balanced and diverse approach to solve problems on their own

**Class: III B.COM (ODD SEM)**

S.NO	COURSE CODE	COURSE NAME	COURSE OUTCOME
1.	HBCOC51 P	Core IX - Accounting Package For Business (Tally Prime)	CO1: Demonstrate create, alter and shut down company accounts CO2: Sort out accounting vouchers with F11 features CO3: Explicate different types of journals and ledgers CO4: Assess bank reconciliation statement and bill reports CO5: Construct trial balance, stock summary and final accounts
2.	HBCOE5A	Core X - Income Tax Theory, Law And Practice – I	CO1: Acquire basic knowledge in Income tax CO2: Explain assessment of income from salary CO3: Describe the assignment of income from house property CO4: Deal with the assessment of income from business or profession CO5: Compute capital gain and income from other sources
3.	HBCOC53	Core XI – Corporate Accounting	CO1: Acquire basic knowledge in shares issue and its accounting treatment CO2: Explain account concepts in issue of debentures CO3: Prepare final accounts and value, goodwill and shares CO4: Deal with the accounting treatments for reconstruction of joint stock companies CO5: Prepare accounts for liquidation
4.	HBCOE5A	DSE I - Commercial Law	CO1: Acquire knowledge in basic aspects of contract CO2: Understand contractual capacity CO3: Explain valid contracts and its impact CO4: Describe bailment & pledge CO5: Deal with contract of agency
5.	HBCOE5B	DSE I – Corporate Law	CO1: Acquire knowledge in basic aspects of company CO2: To understand different types of companies CO3: Explain memorandum of association and its impact CO4: Distinguish between memorandum of association and articles of association CO5: Prepare the accounts for a winding up company

6.	HBCOE5C	DSE II –Management Accounting	CO1: Acquire knowledge in the basic concepts of management accounting CO2: Measure and monitor cash flows of organisations CO3: Apply marginal costing and break-even analysis for decision making CO4: Assess business performance on the basis of ratios CO5: Deal with budgets for business planning
7.	HBCOS54	SEC - Corporate Compliance Management	CO1: Gain knowledge in composite legal due diligence in corporate activities CO2: Classify the various equity shares with Preferential rights CO3: Analyse the compliance management System CO4: Demonstrate various aspects of secretarial audit CO5: Evaluate and justify the requirements of financial institutions and corporate lenders
8.	HBCOE54	SKILL BASED ELECTIVE – SALESMANSHIP	CO1. Identify and understand the social influences that shape buyer behaviour. CO2. Understand the importance of brand communication. CO3. To understand and apply the knowledge of emotional appeals in making sales.
9.	HBWS5	GENERAL INTEREST COURSE IV - WOMEN STUDIES	CO1: Promote and disseminate knowledge about women's roles in society and economic trends which affect women's lives and status CO2: Assimilate analytical understandings of the significance of gender (relations) and foster study of conduits and configurations of power, causes, contexts and consequences of women's subordination CO3: Know the rights and laws for protection of women CO4: Know <i>women's psychological reactions to puberty, marriage, motherhood, abortion, birth control, menopause, etc.</i>

**CLASS : III B.COM (EVEN SEM)**

1	HBCOC6 2	Core XII – Accounting For Public Utility	CO1: Acquire knowledge in holding companies and their procedures CO2: Understand and explain the concepts of goodwill & shares and its valuation CO3: Analyze the balance sheet and final accounts of life insurance, general insurancebusiness holding subsidiary companies CO4: Evaluate final accounts under the double accounting system CO5: Deal with banking companies and government accounting
2	HBCOE6A	Core XIII - Income Tax Theory, Law And Practice – II	CO1: Acquire knowledge in clubbing of income CO2: Illustrate deductions in the computation of total income CO3: Plan the assessment procedure CO4: Assess the income of individual and Hindu undivided family CO5: Deal with the assessment of firms and companies
3	HBCOC64	Core XIV – Business Environment	CO1: Acquire knowledge in business and its environment CO2: Clear understanding between social and cultural environment CO3: Explain economic environment CO4: Integrate political environment with legal environment CO5: Analyze the business environment for globalization with its benefits, problems and challenges
4	HBCOC61	Core XV – Practical Auditing	CO1: Acquire practical knowledge in auditing CO2: Perform audit preparatory work CO3: Deal with vouching of transactions CO4: Verify and value assets CO5: Describe rights and duties of company auditor
5	HBCOE6B	DSE III – Services Marketing	CO1: Acquire knowledge in services and services marketing CO2: Explain service design and service marketing MIS in service industries CO3: Analyze the service location and channel of distribution in service industries CO4: Describe the marketing financial, banking, insurance and health services CO5: Deal with education, tourism, consultancy and telecommunication services

6	HBCOS65	SEC – Principles and Practices of Insurance	CO1: Acquire knowledge in the concepts of insurance CO2: Explain life insurance policies CO3: Deal fire insurance policies CO4: Describe marine insurance policies CO5: Appraise miscellaneous insurance services
---	---------	---	---

**PROGRAMME STRUCTURE**

**Programme Code: UCC**

**Class: I B.COM (CA) (Odd Semester)**

S.NO	COURSE CODE	COURSE NAME	COURSE OUTCOME
1	IBCCX3	Extra Credit– Marketing	CO1: Discuss the basic concepts of Marketing CO2: Explain the new product planning & development CO3: Indicate the objectives, factors and kinds of Pricing CO4: Create marketing promotion through advertisement in order to promote sales CO5: Choose the correct distribution channel for marketing a product
2	IBITA13	AECC – Accounting Principles & Package	CO1: Acquire knowledge in basic concepts of accounting CO2: Prepare journal entries, ledger accounts and trial balance CO3: Construct subsidiary books CO4: Deal with final accounts CO5: Reconcile between bank book and pass book
<b>Class: I B.COM (CA) (Even Semester)</b>			
1	IBCCC22	Core IV – Business Statistics	CO1: Gain Knowledge in statistical tools with its concepts CO2: Explain the central tendency CO3: Apply the measures of dispersion and variability CO4: Deal with correlation analysis CO5: Apply regression analysis
2	IBITA23	AECC – Cost Accounting & Package	CO1: Gain basic knowledge in cost and management accounting CO2: Understand material as an element of cost and its management and control CO3: Explain labour and its payment plan CO4: Apply marginal costing and break-even analysis in business decision making CO5: Prepare budgets for better business planning.

3	IBCPA33	AECC – Accounting Principles & Package	CO1: Acquire knowledge in basic concepts of accounting CO2: Prepare journal entries, ledger accounts and trial balance CO3: Construct subsidiary CO4: Deal with final accounts CO5: Reconcile between bank book and pass book
<b>Class: II B.COM (CA) (ODD Semester)</b>			
1	IBOE3CO	OEC – Modern Banking	CO1: Understand customer, banker and their relationship CO2: Acquire knowledge in different types of deposit accounts CO3: Explain all aspects of cheque CO4: Deal with E-Banking modes CO5: Describe different types of banks and their functions
<b>Class: II B.COM (CA) (even Semester)</b>			
1	IBOE4CO	IBOE4CO OEC – Salesmanship	CO1: Acquire knowledge on the basic concepts of salesmen CO2: Explain the duties need to be followed by the sales manager CO3: To understand selection of salesmen CO4: Deal with training of salesmen CO5: Describe the different types of salesmen

**Class: III B.COM CA (ODD SEM)**

S.NO	COURSE CODE	COURSE NAME	COURSE OUTCOME
1.	HBCOC51P	Core IX - Accounting Package For Business (Tally Prime)	CO1: Demonstrate create, alter and shut down company accounts CO2: Sort out accounting vouchers with F11 features CO3: Explicate different types of journals and ledgers CO4: Assess bank reconciliation statement and bill reports CO5: Construct trial balance, stock summary and final accounts
2.	HBCCE5A	Core X - Income Tax Theory, Law And Practice – I	CO1: Acquire basic knowledge in Income tax CO2: Explain assessment of income from salary CO3: Describe the assignment of income from house property CO4: Deal with the assessment of income from business or profession CO5: Compute capital gain and income from other sources

3.	HBCOC53	Core XI – Corporate Accounting	CO1: Acquire basic knowledge in shares issue and its accounting treatment CO2: Explain account concepts in issue of debentures CO3: Prepare final accounts and value, goodwill and shares CO4: Deal with the accounting treatments for reconstruction of joint stock companies CO5: Prepare accounts for liquidation
4.	HBCOC52	DSE I - Commercial Law	CO1: Acquire knowledge in basic aspects of contract CO2: Understand contractual capacity CO3: Explain valid contracts and its impact CO4: Describe bailment & pledge CO5: Deal with contract of agency
5.	HBCCE5B	DSE I – Company Law	CO1: Acquire knowledge in basic aspects of company CO2: To understand different types of companies CO3: Explain memorandum of association and its impact CO4: Distinguish between memorandum of association and articles of association CO5: Prepare the accounts for a winding up company
6.	HBCCE5C	DSE II –Management Accounting	CO1: Acquire knowledge in the basic concepts of management accounting CO2: Measure and monitor cash flows of organisations CO3: Apply marginal costing and break-even analysis for decision making CO4: Assess business performance on the basis of ratios CO5: Deal with budgets for business planning
7.	HBWS5	GENERAL INTEREST COURSE IV - WOMEN STUDIES	CO1: Promote and disseminate knowledge about women's roles in society and economic trends which affect women's lives and status CO2: Assimilate analytical understandings of the significance of gender (relations) and foster study of conduits and configurations of power, causes, contexts and consequences of women's subordination CO3: Know the rights and laws for protection of women CO4: Know <i>women's psychological reactions to puberty, marriage, motherhood, abortion, birth control, menopause, etc.</i>

**CLASS : III B.COM CA (EVEN SEM)**

1	HBCCC62	Core XII – Accounting For Public Utility	CO1: Acquire knowledge in holding companies and their procedures CO2: Understand and explain the concepts of goodwill & shares and its valuation CO3: Analyze the balance sheet and final accounts of life insurance, general insurance business holding subsidiary companies CO4: Evaluate final accounts under the double accounting system CO5: Deal with banking companies and government accounting
2	HBCCE6A	Core XIII - Income Tax Theory, Law And Practice – II	CO1: Acquire knowledge in clubbing of income CO2: Illustrate deductions in the computation of total income CO3: Plan the assessment procedure CO4: Assess the income of individual and Hindu undivided family CO5: Deal with the assessment of firms and companies
3	HBCCX4	Core XIV – Business Environment	CO1: Acquire knowledge in business and its environment CO2: Clear understanding between social and cultural environment CO3: Explain economic environment CO4: Integrate political environment with legal environment CO5: Analyze the business environment for globalization with its benefits, problems and challenges
4	HBCCC61	Core XV – Practical Auditing	CO1: Acquire practical knowledge in auditing CO2: Perform audit preparatory work CO3: Deal with vouching of transactions CO4: Verify and value assets CO5: Describe rights and duties of company auditor
5	HBCCE6B	DSE III – Services Marketing	CO1: Acquire knowledge in services and services marketing CO2: Explain service design and service marketing MIS in service industries CO3: Analyze the service location and channel of distribution in service industries CO4: Describe the marketing financial, banking, insurance and health services CO5: Deal with education, tourism, consultancy and telecommunication services

**B.COM PROFESSIONAL ACCOUNTING**  
**Three Year Regular Degree Programme**  
**(For Students Admitted from 2022-23)**

**Class: I B.COM PA / B.COM /BBA / (EVEN SEM)**

S.NO	COURSE CODE	COURSE NAME	COURSE OUTCOME
1	IBPAS24 / IBCOS24 / IBBAS34	SEC I - Logical Reasoning	CO1: Explain critical thinking in academic and non-academic pursuits CO2: Discriminate the basic elements of arguments CO3: Analyse a basic working knowledge of propositional and predicate logic CO4: Examine logical relations among statements and analyse logically complex statements CO5: Calculate the substance and meaning of mathematical problems and solutions
<b>CLASS : II B.COM PA (ODD SEM)</b>			
1	IBPAC32	Core VI - Advanced Financial Accounting	CO1: Explain the investments accounts and fire insurance claims CO2: Apply the methods of accounting for hire purchase transactions CO3: Analyse the instalment payment system and differentiate it from hire purchasetransactions CO4: Critically assess the accounting treatment with regard to branches CO5: Discuss the inter-departmental transfers and their accounting treatment
<b>CLASS : II B.COM PA (EVEN SEM)</b>			
1	HBPAS44	SEC IV - Goods and Services Tax	CO1: Understand the concepts of Goods and Services tax CO2: Explain the procedure, Amendment and Cancellation of registration CO3: Analyse the charge of GST CO4: Discriminate the exemptions from GST CO5: Get Knowledge in payment of tax
<b>CLASS : III B.COM PA (ODD SEM)</b>			
1.	HBPAC51P	CORE X – ACCOUNTING PACKAGE FOR BUSINESS (TALLY)	CO1: Knowledge about digitalized system of Monitoring CO2: Skills in data entry and maintain Balance sheet CO3: Competency in independent maintenance accounts under Tally.

2.	HBPAC52	CORE XI – COMMERCIAL LAW	CO1: Understand the general principles of the Law of Contract and its equitable and statutory rules relating to enforceable agreements. CO2: The negative impact of the agreements against public policy and its effect CO3: Knowledge of void agreements and its effects CO4: Understand the termination of a bailment and its implication CO5: Understand the rights of a pawn or and a pledge
3.	HBPAC53	CORE XII CORPORATE ACCOUNTING	CO 1: Understand corporate sectors accounting activities. CO 2: Knowledge in accounting treatment of share and debentures CO 3: Computation of profits and losses prior to incorporation. CO 4: Ability to differentiate corporate accounting from public accounting CO 5: Skills to deal with amalgamation and reconstruction.
4.	HBP AE5A	CORE ELECTIVE I – INCOME TAX LAW AND PRACTICE – I	CO 1: Knowledge in the provisions of income tax and its applications CO 2: Understand different residential status and tax exemptions CO 3: Income tax computation in a logical and effective way. CO 4: Skills to compute tax for income under different heads CO 5: Competency to deal with case law and legislation to given set of tax rules
1	HBP AE5C	Core X - Auditing And Assurance – I	CO1: Explain the basic principles of auditing CO2: Classify the various concepts such as working papers, audit evidence, internal check etc CO3: Analyse the internal control and computerized information system (CIS) CO4: Evaluate the vouching of receipt and trading transactions CO5: Deal with audit of receipts and payment transactions
2	HBPAS54 / HBCOS54	SEC V - Corporate Compliance Management	CO1: Gain knowledge in composite legal due diligence in corporate activities CO2: Classify the various equity shares with preferential rights CO3: Analyse the compliance management System CO4: Demonstrate various aspects of secretarial audit CO5: Evaluate and justify the requirements of financial institutions and corporate lenders
<b>CLASS : III B.COM PA (EVEN SEM)</b>			
1	HBPAC64	Core XV – Auditing and Assurance – II	CO1: Understand and verify the various kinds of assets and liabilities CO2: Outline the company audit and audit of debentures CO3: Administer the procedure of appointment, filling

			up of casual vacancies and removal of auditor CO4: Understand and reflect on auditor's reports CO5: Summarize the special audit and audit of local bodies
2.	HBPAC62	CORE XIV – ACCOUNTING FOR PUBLIC UTILITY	CO1: Acquire knowledge in company accounts and their procedures. CO2: Understand the concept of goodwill & shares and its valuation. CO3: Prepare balance sheet and final accounts of life insurance, general insurance business, holding and subsidiary companies. CO4: Prepare final accounts under the double accounting system. CO5: Understand and deal with banking company and government accounting.
3.	HBPAC63	CORE XV - INVESTMENT MANAGEMENT	CO 1: Understand the different investment avenues/alternatives CO 2: Understand the characteristics of different financial assets CO 3: Understand the value of equities and bonds CO 4: Knowledge of the various strategies followed by investment practitioners CO 5: To measure risk and return and understand their trade-off
4.	HBPAC64	CORE XVI -BUSINESS ENVIRONMENT	CO1: Understand key concepts from economic, political, and social analysis pertaining to the Business environment. CO2: Apply systems, concepts and methodologies to analyse and understand interactions between social, cultural, economic, political and global business environmental processes. CO3: Understand the key concepts of new economic policies that influence business environment. CO4: Knowledge in contemporary legal issues. CO5: Understand the transnational character of environmental problems, ways of addressing them, through interactions across local to global scales.
5.	HBPAC6A	CORE ELECTIVE III – INCOME TAX LAW AND PRACTICE – II	CO1: Knowledge and application of income tax provisions. CO2: Awareness on the tax environment prevailing in the country. CO3: Deal with compensation, retirement and tax exemption tax procedures. CO4: Understand the organizational setup of income tax authorities of India. CO5: Computation of tax under various heads of Income for individual, firm and company
6.	HBPAC65	SKILL BASED ELECTIVE MANAGEMENT INFORMATION SYSTEM	CO1: Know about the ingredients of Management Information System. CO2: Understand the information and system concepts. CO3: Understand the decision support system. CO4: Understand the product based information system.

			CO5: Understand the system based evaluation.
7.	HBSED6	EXTRA CREDIT - SKILLS FOR EMPLOYABILITY DEVELOPMENT	CO1: Able to understand the way of success through bringing some attitude changes among them CO2: Know how to build a positive personality CO3: Able to prepare resume and obtain interview and group discussion skills CO4: Prepare themselves for Quantitative Analytical Aptitude Test

<p align="center"><b>BBA Programme Code: UBA</b>  <b>(Three Year Regular Programme)</b>  <b>(For Students Admitted from 2023-2024)</b>  <b>CLASS : I BBA (ODD SEMESTER)</b></p>			
1	IBBAC11	Core I - Financial Accounting	CO 1: Understand the concepts and principles of financial accounting CO 2: Deploy critical thinking skills for analyse financial data CO 3: Evaluate the current auditing standards and acceptable practices CO 4: Apply accounting methods to evaluate project performance CO 5: Prepare the accounts of trading and non-trading concerns
2	IBBAC12/ IBCOC12 /IBPAC12	Core II - Principles of Management	CO 1: Acquire adequate knowledge on the global environment in which business operates CO 2: Understand the evolution of management thinking CO 3: Analyze the theories of motivation, leadership and communication CO 4: Examine valuable insights into the working of business organizations CO 5: Develop managerial skills required for the contemporary management practice
3	IBBAA13/ IBCOA13 /IBPAA1 3	AECC I– Business Economics	CO 1: Understand the significance of the basic concepts of business economics CO 2: Identify the significance of demand, supply, equilibrium and their determinants CO 3: Analyse the production function, cost and revenue analysis CO 4: Evaluate the performance of different markets CO 5: Develop skills to make economic analysis at macro level

**CLASS : I BBA (EVEN SEMESTER)**

1	IBBAC21	Core III – Marketing Management	CO 1: Recognize the marketing management concepts, principles and practices. CO 2: Understand the significance of marketing functions in the overall managerial context CO 3: Develop strategic thinking for effective marketing planning and decision making CO 4: Analyze the reasons for the rapid growth of sales promotion CO 5: Evaluate the performance of different channels of distribution
2	IBBAC22	Core IV - Corporate Communication	CO 1: Understand the communication methods, types and barriers CO 2: Demonstrate competency in communication and critical thinking skills CO 3: Compose, produce, and present effective business documents CO 4: Learn the appropriate ways to meet industry standards and apply critical evaluation techniques to business documents CO 5: Demonstrate coherent, ethical communication principles in business and industry
3	IBBAX2	Extra Credit - Event Management	CO 1: Identify the specific objectives of the host/client CO 2: Design a planning process that incorporates budgeting, project management, communication and evaluation tools CO 3: Understand the various event elements and employ them cost-effectively CO4: Play the role of the planner on site at the event, and the mind-set necessary to oversee successful event coordination CO 5: Prepare budget for events

**CLASS : II BBA (ODD SEMESTER)**

1	IBBAC32	Core VI – Business ethics and values	CO 1: Identify organizational challenges to ethical behaviour CO 2: Demonstrate knowledge of established methodologies for solving ethical problem CO 3: Apply moral reasoning to specific situations and defend its conclusion CO 4: Evaluate common beliefs about the role of ethics in business CO 5: Develop strategies for identifying and dealing with typical ethical issues
2	IBBAA33	AECC III –Production & Operations Management	CO 1: Understand the fundamental concepts of production & operations management CO 2: Describe the operation and production process CO 3: Evaluate the measures for sourcing & supply chain management CO 4: Develop alternative production planning CO 5: Ensure effective control system in aggregate production planning

**CLASS : II BBA (EVEN SEMESTER)**

1	IBBAC42	Core VIII – Project Management	CO 1: Understand project characteristics and various stages of a project CO 2: Analyse the techniques for project planning, scheduling and execution control CO 3: Comprehend the contract management, project procurement, service level agreement and productivity CO 4: Deal with risk management plan and analyse the role of stakeholders CO 5: Implement projects
---	---------	--------------------------------	---

2	IBBAA43	AECC IV – Strategic Management	CO 1: Acquire the basic knowledge in strategic management CO 2: Understand the concept of strategic analysis CO 3: Deal with portfolio and analytical models CO 4: Explain the issues of management information system CO 5: Suggest better resource allocation for strategic control
3	IBBAX4	Extra Credit - Industrial Relations	CO 1: Understand the basic concepts of industrial relations CO 2: Explain the role of trade union CO 3: Justify the status of collective bargaining in India CO 4: Deal with labour relations CO 5: Work on workers participation

**CLASS : III BBA (ODD SEMESTER)**

1	HBBAC51	Core IX - Investment Management	CO 1: Understand the characteristics of different financial assets CO 2: Examine the different investment avenues/ alternatives CO 3: Identify various strategies followed by investment practitioners CO 4: Evaluate risk and return and understand their trade-off CO 5: Explain different investment theories
2	HBBAC52	Core X - Business Environment	CO 1: Acquire knowledge on the effects of government policy on the economic environment CO 2: Comprehend the challenges of globalisation to Indian industries CO 3: Estimate the legal framework of multinational corporations in India CO 4: Explain human relationships in organisations CO 5: Evaluate various factors affecting business operations in different environment

3	HBBAC53	Core XI– Organizational Behaviour	<p>CO 1: Enumerate the evolution and growth of organisational behaviour</p> <p>CO 2: Identify the challenges and opportunities of organisational behaviour</p> <p>CO 3: Understand the ingredients of individual behaviour</p> <p>CO 4: Explain classical theories and their limitations</p> <p>CO 5: Understand and deal with organizational work changes</p>
4	HBBAE5A	DSE I - International Marketing	<p>CO 1: Identify the nuances and challenges of doing business in different cultural environment</p> <p>CO 2: Evaluate and design sustainable pricing strategies</p> <p>CO 3: Apply relevant distribution logistics</p> <p>CO 4: Gain knowledge in terms of international payment</p> <p>CO 5: Understand India’s recent export import policies</p>
5	HBBAES55	SEC V - Total Quality Management	<p>CO 1: Understand the quality norms of organisations</p> <p>CO 2: Explain the importance of quality management</p> <p>CO 3: Develop conversant with SWOT analysis</p> <p>CO 4: Apply benchmark for quality management</p> <p>CO 5: Deal with ISO certification process</p>

**CLASS : III BBA (EVEN SEMESTER)**

1	HBBAC61	Core XIII – Corporate Finance	CO 1: Understand both the theoretical and practical aspects of financial management in business organization CO 2: Access financial information from a wide variety of sources and use the information for research CO 3: Analyze the finances of individual corporations both in terms of their performance and capital requirements CO 4: Compute cost of capital for various sources CO 5: Explain the capital structure of a firm
2	HBBAC62PW	Core XIV Project	CO 1: Plan, implement and control activities related to the projects CO 2: Apply specialized knowledge and competencies in areas of specialisation CO 3: Demonstrate effective analytical and critical thinking skills in an organizational context CO 4: Prepare the students to face the challenges in the field CO 5: Develop a balanced and diverse approach to solve problems on their own
3	HBBAC63	Core XV-Management Information System	CO 1: Understand the ingredients of management information system CO 2: Develop the application of MIS in promoting managerial effectiveness CO 3: Examine the dimension of information system CO 4: Understand the recruitment and analysis CO 5: Explain the product based information system
4	HBBAC64	Core XVI - Human Resource Management	CO 1: Understand the evolution and scope of HRM CO 2: Assess the role of human resources policies and practices CO 3: Analyse the various operative functions of HRM CO 4: Identify the challenges of human resource management CO 5: Evaluate the e-HRM practices in industry

5	HBBAE6A	DSE III – Logistics and Supply Chain Management	CO 1: Identify and analyze business models, business strategies and corresponding competitive advantage CO 2: Plan warehouse and logistics operations for optimum utilization of resources CO 3: Incorporate and learn the critical element of logistics and supply chain management CO 4: Describe the ways to shift the business culture from work to overall process-driven result CO 5: Formulate and implement warehouse best practices and strategies
6	HBBAS65	SEC VI –Enterprise Resource Planning	CO 1: Understand the basic concepts of ERP systems for manufacturing or service companies CO 2: Identify the principles of ERP systems, their major components, and the relationships among these components CO 3: Assess major ERP components, including material requirements planning, master production scheduling, and capacity requirements planning CO 4: Evaluate the pre implementation phase and support CO 5: Develop knowledge of typical ERP systems
7	HBBAE6A	Extra Credit – Knowledge Management	CO 1: Understand complex theories and practice of knowledge and intellectual capital management CO 2: Apply theories to a wide range of scenarios CO 3: Create action plans for knowledge intensive organisations CO 4: Describe the aspects of industrial era management that may be inappropriate for knowledge intensive organisations and provide alternatives CO 5: Formulate a framework for thinking about knowledge intensive organisations

**OPEN ELECTIVE COURSES OFFERED FOR OTHER MAJOR STUDENTS  
(Other than B.Com, B.Com CA, B.Com Fintech, B.Com Honors and BBA)**

**Programme Structure  
(For Students Admitted from 2022 - 23)**

<b>CLASS : II YEAR (ODD SEMESTER)</b>			
1	IBOE3BA	OEC - Advertisement Management	CO 1: Understand the concepts, need, importance, utility of advertising, sales promotion and sales management CO 2: Examine the role of media in service sector CO 3: Identify critical marketing factors that influence advertising decisions CO 4: Develop an advertising campaign plan that reflects an Integrated Marketing Communication (IMC) perspective CO5: Manage sales force
<b>CLASS : II YEAR (EVEN SEMESTER)</b>			

2	IBOE4BA	OEC - Basics of Investment	CO 1: Acquire knowledge in different investment avenues/ alternatives CO 2: Understand the characteristics of different financial assets CO 3: Design various strategies followed by investment practitioners CO 4: Evaluate risk and return and understand the trade-off between them CO 5: Develop skills in trading activities
---	---------	----------------------------	---

**DISCIPLINE SPECIFIC ELECTIVE PAPER OFFERED FOR B.SC IT**

CLASS : III YEAR (EVEN SEMESTER)			
1	HBITE6B	DSE III –Organizational Behaviour	CO 1: Enumerate the evolution and growth of organisational behavior CO 2: Identify the challenges and opportunities of organisational behavior CO 3: Understand the ingredients of individual behaviour CO 4: Explain classical theories and their limitations; CO 5: Understand and deal with organizational work changes

**B.Com Fin Tech  
PROGRAMME STRUCTURE  
(Students Admitted from 2022-23)  
CLASS:I B.COM FINTECH(ODD SEMESTER)**

S.N O	COURSE CODE	COURSE NAME	COURSE OUTCOME
1	IBFTC111	Core I–Business Mathematics	CO1: Acquire knowledge in business mathematics CO2: Explain ratios and its applications in business CO3: Apply mathematical proportions in business decisions CO4: Use commercial arithmetics in day to day life CO5: Excel in problem solving
2	IBFTC12	Core II - Accounting Package for Business (Tally Prime)	CO1: Demonstrate create, alter and shut down company accounts CO2: Sort out accounting vouchers with F11 features CO3: Explicate different types of journals and ledgers CO4: Assess bank reconciliation statement and bill reports CO5: Construct trial balance, stock

			summary and final accounts
3	IBFTA13	AECC I Introduction to Financial Markets	CO1: Understand various constituents of capital market CO2: Remember the basic concepts relating to different avenues of investment CO3: Evaluate the difference between primary and the secondary market CO4: Apply knowledge related to derivatives market CO5: Analyze financial statement
4	IBFTS14	SEC I- Logical Reasoning	CO1: Explain critical thinking in academic and non-academic pursuits CO2: Discriminate the basic elements of arguments CO3: Analyse basic working knowledge of propositional and predicate logic CO4: Examine logical relations among statements and analyze logically complex statements CO5: Calculate the substance and meaning of mathematical problems and solutions

**CLASS: I B.COM FINTECH (EVEN SEMESTER)**

S.NO	COURSE CODE	COURSE NAME	COURSE OUTCOME
1	IBFTC21	Core - III Introduction to Financial Technology	CO1: Define the financial technology CO2: Apply the digital lending innovation and IoT CO3: Analyze the cyber security and block chain CO4: Evaluate the crowd funding and crowd investing funding models CO5: Create the distributed ledgers
2	IBFTC221	Core IV – R & Python for Finance	CO1: Understand the need and advantages of using python for financial analytics CO2: Apply advanced calculation, generate outputs, create variables, abstract from data using python. CO3: Remember python models and techniques that aid design, analysis and evaluation of financial decision-making. CO4: Analyze advanced machine learning models in finance using python CO5: Create Excel, Web and GUI

			based design for trading platforms to support analytics.
3	IBFTA23	AECC II–Financial Accounting	CO1:Acquire knowledge in accounting principles and concepts CO2:Understand single entry system and convert it in to double entry system CO3:Analyze,measure and modify rectification of errors CO4: Illustrate depreciation accounting with its factors, provision and methods CO5:Prepare final accounts
4	IBFTS24P	SEC – PC Package Lab	CO1:Acquirepracticalknowledgein word processor CO2: Demonstrate the concepts of electronic spreadsheet management for business CO3: Use professional presentation for business purpose CO4: Explain database management tool CO5: Develop personal information management system
5	IBFTX21	Extra Credit – Business Communication	CO1: Acquire knowledge on communication CO2: Identify the theoretical framework for writing business letters CO3: Prepare quotations, letters and modern methods for communication CO4: Deal with banking correspondence CO5: Draft report for business

**CLASS:II B.COM FINTECH (ODD SEMESTER)**

S.NO	COURSE CODE	COURSE NAME	COURSE OUTCOME
1	IBFTC31	Core V–Business Statistics	CO1: Gain Knowledge in statistical tools with its concepts CO2: Explain the central tendency CO3: Apply the measures of dispersion and variability CO4: Make Use of the techniques of investigating the relationship between two quantitative variables CO5:Work and Interpret on analysis of time series
2	IBFTC32	Core VI - Fintech and Cyber Security	CO1:Classifyand develop a Security model to prevent, detect and recover from the Attacks

			<p>CO2: Illustrate the methods and tools used for cybercrime investigation</p> <p>CO3: Develop various cyber threat models and threat management</p> <p>CO4: Examine Audit risk, management and protecting the assets</p> <p>CO5: Apply security principles to system design</p>
3	IBFTC33	Core VII – Digital Marketing for Financial Sector	<p>CO1: Demonstrate the understanding of Digital marketing and media concepts.</p> <p>CO2: Describe, define and apply the major components of Digital Marketing</p> <p>CO3: Learn and apply Facebook Marketing strategies.</p> <p>CO4: Utilize Google Adwords for efficient digital marketing scenarios</p> <p>CO5: Learn and implement techniques using youtube for real time marketing analytics and apply email marketing and content writing for developing and enhancing digital marketing.</p>
4	IBFTC34	Core VIII– AI / ML for Financial Sector	<p>CO1: Understand the basic definition and need for machine learning</p> <p>CO2: Understand the core aspects behind any machine learning project</p> <p>CO3: Ability to implement a machine learning project</p> <p>CO4: Ability to identify potential applications of machine learning in real time</p> <p>CO5: Apply the machine learning concepts in real life problems</p>
5	IBFTA35	AECC III– Banking Law and Practice	<p>CO1: Analysis the derivatives markets</p> <p>CO2: Recall the various derivative products</p> <p>CO3: Evaluate the option trading strategies for managing risk</p> <p>CO4: Understand the derivatives clearing and settlement mechanism</p> <p>CO5: Remember taxation on derivatives and understand the investor grievance mechanism</p>
6	IBFTS36	SEC- Customer Relationship Management	<p>CO 1: To understand CRM concepts and the role of CRM in managing customers.</p> <p>CO 2: To understand customer life cycle, key concepts and various stages of the sales cycle.</p> <p>CO 3: To understand the use of technology including internet to support corporate CRM strategy.</p> <p>CO 4: To understand customer</p>

			behaviour, relationship marketing, customer satisfaction and loyalty CO 5: To understand CRM in different sector such as Financial Services, Hospital, Telecom and Insurance, Airlines, and Hotels.
--	--	--	--

**CLASS:II B.COM FINTECH (EVEN SEMESTER)**

<b>S.N O</b>	<b>COURSE CODE</b>	<b>COURSE NAME</b>	<b>COURSE OUTCOME</b>
1	IBFTC41	Core IX–Management Accounting	CO1:Acquire knowledge in the basic concepts of management accounting CO2: Measure and monitor cash flows organizations CO3: Apply marginal costing and break-even analysis for decision making CO4:Assess business performance on the basis of ratios CO5:Deal with budgets for business planning
2	IBFTC42	Core X – Block Chain Management	CO1: Learn the basic concepts of distributed systems and structure of Block chain CO2: Gain insights on Bitcoin and understand the mechanics of Bitcoin transactions CO3: Know the importance of various crypto currencies CO4: Understand Block chain Learning and its application for various Business Models CO5: Analyze the Block chain Solutions and understand the idea of Block chain Society
3	IBFTC43	Core XI – Corporate Accounting	CO1: Acquire basic knowledge in shares issue and its accounting treatment CO2: Explain account concepts in issue of debentures CO3: Prepare final accounts and value, goodwill and shares CO4: Deal with the accounting treatments for reconstruction of joint stock companies CO5: Prepare accounts for liquidation
4	IBFTC44	Core XII– Financial Derivatives	CO1: Understand business ethics CO2: Outline Fintech ethics and its principles CO3: Explicate computer ethics and business values

			CO4: Execute and justify corporate governance CO5: Discuss governance and ethics in practice
5	IBFTA45	AECC IV-Fin Tech Ethics and Corporate Governance	CO1: Understand business ethics CO2: Outline Fintech ethics and its principles CO3: Explicate computer ethics and business values CO4: Execute and justify corporate governance CO5: Discuss governance and ethics in practice
6	IBFTS46	SEC - International Financial Reporting and Standards	CO1: Explain the concept of International Financial Reporting Standards (IFRS) CO2: Categorise various standards of financial reporting CO3: Distinguish various accounting standards across the world CO4: Assess corporate financial reports as per IFRS CO5: Discuss the relevance of IFRS with Indian accounting standards.
7	IBFTX4	Extra Credit – Project	CO1: Learn on their own, reflect on their learning and take appropriate actions to improve it CO2: Acquire skills to communicate effectively, clearly and coherently to get things done CO3: Develop plans to achieve project goals CO4: Plan and arrange for human and physical resources CO5: Develop stronger inclination towards flexibility and fearlessness in their approach to problem solving

**CLASS:III B.COM FINTECH (ODD SEMESTER)**

S.NO	COURSE CODE	COURSE NAME	COURSE OUTCOME
1	HBFTC51	Core XIII –Income Tax Theory, Law and Practices–I	CO1: Acquire basic knowledge in Income tax CO2: Explain assessment of income from salary CO3: Describe the assignment of income from house property CO4: Deal with the assessment of income from business or profession CO5: Compute capital gain and income from other

			sources
2	HBFTC52	Core XIV– Cost Accounting	<p>CO1:Acquire knowledge in basic concepts of Cost Accounting</p> <p>CO2: Explain the material and purchase control with its techniques and methods</p> <p>CO3: Compute labour cost and turnover, idle time, over time with price rate system and premium &amp; bonus plan</p> <p>CO4:Deal with allocation and absorption of overheads</p> <p>CO5:Prepare contract and process accounts</p>
3	IBFTC53	Core XV– Analytics for Finance	<p>CO1: Describe, define and apply the major components of the Financial Analytics and its importance in Fintech</p> <p>CO2: Describe, define and apply the major components of the Financial Analytics and its importance in Fintech</p> <p>CO3: Learn and apply the financial analytics process in Python</p> <p>CO4: Learn and implement the applications of Financial Analytics using R</p> <p>CO5: Apply python concepts and practices to advanced financial analytics</p>
4	IBFTC54	Core XVI - Big Data Analytics	<p>CO1:Describe Data sources, generations, data formats, Data Evolution, Data from various domains</p> <p>CO2:Determine Big Data Characteristics, Frameworks, components and Limitation of traditional approaches and map Big Vs. to Data Domains</p> <p>CO3:Analyse various domains of Data Characteristics, Platform, Programming Model and Design Data Analytic ecosystem, and data processing framework</p> <p>CO4: Evaluate the Concepts of Data Analytics Phases and Techniques</p> <p>CO5: Formulate Data Analytics Techniques practically using R environment</p>
5	IBFTE5A	DSE I- Fin Tech Start-ups and Innovations	<p>CO1: Apply the concept of FinTech innovation and Startup</p> <p>CO2: Explain the main financial technology (FinTech) innovations, their dark and light sides as well as the possible expected evolutions</p> <p>CO3:Analyze the challenges of regulators and understand which innovative regulatory approaches are needed in response to FinTech developments</p>

			<p>CO4: Illustrate the critical technology strategies and foundational technologies in FinTech</p> <p>CO5: Evaluate the dynamics of Fintech and how it is transforming the world of finance</p>
6	IBFTE5B	DSE I - Commercial Law	<p>CO1: Acquire knowledge in basic aspects of contract</p> <p>CO2: Understand contractual capacity</p> <p>CO3: Explain valid contracts and its impact</p> <p>CO4: Describe bailment &amp; pledge</p> <p>CO5: Deal with contract of agency</p>
7	IBFTE5C	DSE II Financial Modeling	<p>CO1: Learn the basic concepts of modeling and its perspective in analysis and auditing.</p> <p>CO2: Gain insights on Financial Statement and forecasting various finance parameters.</p> <p>CO3: Develop a financial model suitable that aids management and documentation</p> <p>CO4: Understand potential applications of Finance Models and its implementation</p> <p>CO5: Practice and implement Financial modeling in Python Environment.</p>
8	IBFTE5D	DSE II - Company Law	<p>CO1: Acquire knowledge in the basic concepts of contract</p> <p>CO2: Explain the contractual capacity of laws in business and profession</p> <p>CO3: Describe the elements of valid contract</p> <p>CO4: Understand the legal aspects of special contracts</p> <p>CO5: Enhance performance and discharge of contracts in business</p>
9	IBFTE5E	SEC-Corporate Compliance Management	<p>CO1: Gain knowledge in composite legal due diligence in corporate activities</p> <p>CO2: Classify the various equity shares with preferential rights</p> <p>CO3: Analyse the compliance management System</p> <p>CO4: Demonstrate various aspects of secretarial audit</p> <p>CO5: Evaluate and justify the requirements of financial institutions and corporate lenders</p>

**CLASS:III B.COM FINTECH (EVEN SEMESTER)**

S.NO	COURSE CODE	COURSE NAME	COURSE OUTCOME
1	HBFTC61	Fin Tech Intelligence	CO1: Understand emerging trends in FinTech CO2: Gain insights on Global trends in Digital Banking, Blockchain Technology, AI/ML CO3: Understand applications based on trends in FinTech
2	HBFTC62	Core XVIII-Income Tax Theory, Law and Practice–II	CO1: Acquire knowledge in clubbing of income CO2: Illustrate deductions in the computation of total income CO3: Plan the assessment procedure CO4: Assess the income of individual and Hindu undivided family CO5: Deal with the assessment of firms and companies
3	HBFTC63	Core XIX - Human Resource Management	CO 1: Understand the evolution and scope of HRM CO 2: Assess the role of human resources policies and practices CO 3: Analyse the various operative functions of HRM CO 4: Identify the challenges of human resource management CO 5: Evaluate the e-HRM practices in industry
4	HBFTC64	Core XX – Strategic Management	CO 1: Acquire the basic knowledge in strategic management CO 2: Understand the concept of strategic analysis CO 3: Deal with portfolio and analytical models CO 4: Explain the issues of management information system CO 5: Suggest better resource allocation for strategic control
5	HBFTE6A	DSE III - Security Analysis and Portfolio Management	CO1: Illustrate investments and its nature CO2: Classify various avenues and attributes of financial instruments CO3: Analyse securities by applying fundamental tools CO4: Assess securities by adopting technical tools CO5: Compile the concept of portfolio management and its services

6	HBFTE5B	DSE I - Commercial Law	CO1: Acquire knowledge in basic aspects of contract CO2: Understand contractual capacity CO3: Explain valid contracts and its impact CO4: Describe bailment & pledge CO5: Deal with contract of agency
7	HBFTE6B	DSE III – Logistics and Supply Chain Management	CO 1: Identify and analyze business models, business strategies and corresponding competitive advantage CO 2: Plan warehouse and logistics operations for optimum utilization of resources CO 3: Incorporate and learn the critical element of logistics and supply chain management CO 4: Describe the ways to shift the business culture from work to overall process-driven result CO 5: Formulate and implement warehouse best practices and strategies
8	HBFTS65	SEC - Total Quality Management	CO 1: Understand the quality norms of organisations CO 2: Explain the importance of quality management CO 3: Develop conversant with SWOT analysis CO 4: Apply benchmark for quality management CO 5: Deal with ISO certification process
9	HBFTX6	Extra Credit – Principles and Practices of Insurance	CO1: Acquire knowledge in the concepts of insurance CO2: Explain life insurance policies CO3: Deal fire insurance policies CO4: Describe marine insurance policies CO5: Appraise miscellaneous insurance services

**B.COM (HONOURS)**  
**PROGRAMME STRUCTURE**  
**(Students Admitted from 2023-24)**  
**CLASS: I B.COM (HONOURS) (ODD SEMESTER)**

S.N O	COURSE CODE	COURSE NAME	COURSE OUTCOME
1	IBHOC11	Core I - Basics of Financial Accounting*	CO1: Enable students to understand the purpose of financial accounting and the need of financial

			<p>statements.</p> <p>CO2: Exhibit the use of a double entry system in recording transactions and different types of accounting transactions for the preparation of the financial statements.</p> <p>CO3: Enable students to record the transaction in day books and calculate the value of inventory using FIFO and AVCO</p> <p>CO4: Develop the skill set to prepare the trial balance and rectify the error.</p> <p>CO5: Learn to apply conceptual knowledge in the preparation of standalone and consolidated financial statements and interpretation of financial statements</p>
2	IBHOC12	Core II Principles of Organization and Management	<p>CO1: Explain the different types of business organisations &amp; its stakeholders and the way they are structured.</p> <p>CO2: Identify and illustrate different levels of management.</p> <p>CO3: Describe the functions of management under different circumstances and demonstrate current and relevant functions of management.</p> <p>CO4: Analyse the organisation structure and familiarizes with the role of corporate governance.</p> <p>CO5: Illustrate the idea about the role of a leader and the impact of different leadership styles and theories.</p>
3	IBHOA131	AECC I – Business Mathematics	<p>CO1: Acquire knowledge in business mathematics</p> <p>CO2: Explain ratios and its applications in business</p> <p>CO3: Apply mathematical proportions in business decisions</p> <p>CO4: Use commercial arithmetics in day to day life</p> <p>CO5: Excel in problem solving</p>
4	IBHOS14	SEC- Customer Relationship Management	<p>CO 1: To understand CRM concepts and the role of CRM in managing customers.</p> <p>CO 2: To understand customer life cycle, key concepts and various stages of the sales cycle.</p> <p>CO 3: To understand the use of technology including internet to support corporate CRM strategy.</p> <p>CO 4: To understand customer behaviour, relationship marketing, customer satisfaction and loyalty</p> <p>CO 5: To understand CRM in different sector such as Financial Services, Hospital, Telecom and Insurance, Airlines, and Hotels.</p>

5	IBHOX2	Extra Credit – Business Communication	<p>CO1: Acquire knowledge on communication</p> <p>CO2: Identify the theoretical framework for writing business letters</p> <p>CO3: Prepare quotations, letters and modern methods for communication</p> <p>CO4: Deal with banking correspondence</p> <p>CO5: Draft report for business</p>

**CLASS:I B.COM (HONOURS) (EVEN SEMESTER)**

S.N O	COURSE CODE	COURSE NAME	COURSE OUTCOME
1	IBHOC21	Core III Financial Reporting*	<p>CO1: Explain the use of IFRS &amp; and various accounting concepts.</p> <p>CO2: Apply the IFRS and for various transactions in corporate entities.</p> <p>CO3: Identify and Understand the principles of recognizing revenue of the business.</p> <p>CO4: Prepare and present financial statements by incorporating the effects of the accounting standards.</p>
2	IBHOC22	Core IV - Advanced Financial Accounting	<p>CO1: Use appropriate software for recording transactions and preparing accounts under Hire Purchase and Instalment Purchase system;</p> <p>CO2: Apply appropriate software to workout royalty accounts and Prepare accounts relating to consignment business;</p> <p>CO3: Use the different accounting procedure for partnership</p> <p>CO4: Provide services to departmental stores in preparing departmental accounts; Guide business enterprises in preparing and submitting insurance claim statement against business losses;</p> <p>CO5: Compare commercial accounting system with Government accounting system and explain Government financial administration.</p>
3	IBHOA23	Core V Basics of Cost Accounting	CO1: Describe the different

			<p>elements of Production and non-production costs – administrative, selling, distribution and finance.</p> <p>CO2: Understanding the concept of costs with respect to material, labour and overheads</p> <p>CO3: Understanding the accounting of overheads and its allocation and apportionment.</p> <p>CO4: Prepare cost records and accounts in job and batch costing situations, and an understanding of methods of costing</p> <p>CO5: Use of budgets and standard costs for planning and control</p> <p>CO5: Excel in problem solving</p>
5	IBHOS25	SEC - Industrial Relations	<p>CO 1: Understand the basic concepts of industrial relations</p> <p>CO 2: Explain the role of trade union</p> <p>CO 3: Justify the status of collective bargaining in India</p> <p>CO 4: Deal with labour relations</p> <p>CO 5: Work on workers participation</p>

**CLASS: II B.COM (HONOURS) (ODD SEMESTER)**

<b>S.N O</b>	<b>COURSE CODE</b>	<b>COURSE NAME</b>	<b>COURSE OUTCOME</b>
1	IBHOC31	Core VI - Advanced Financial Reporting*	<p>CO1: Apply the provisions of relevant accounting standards in relation to accounting for government grants.</p> <p>CO2: Prepare an entity's statement of financial position and statement of profit or loss and other comprehensive income in accordance with the structure and content prescribed within IFRS</p> <p>CO3: Explain the concept of group and non-controlling assets.</p> <p>CO4: Prepare a consolidated statement of financial position for a simple group (parent and one subsidiary and associate) dealing with pre- and post-acquisition profits, non-controlling interests</p>

			and consolidated goodwill. CO5: Describe the concepts of integrated reporting.
2	IBHOC32	Core VII - Financial Management I*	CO1: Explain the nature and purpose of financial management CO2: Explain how government economic policy interacts with planning and decision-making in business. CO3: Calculate the level of working capital investment in current assets and discuss the key factors determining working capital cycle. CO4: Calculate internal rate of return and discuss its usefulness as an investment appraisal method. CO5: Apply probability analysis to investment projects and discuss the usefulness of probability analysis in assisting investment decisions.
3	IBHOC33	Core VIII - Management Accounting I*	CO1: Explain activity based costing (ABC), target costing, life cycle costing and total quality management (TQM) as alternative cost management techniques. CO2: Calculate & interpretation of Throughput Accounting Ratio (TPAR) – application in a multi-product entity CO3: Calculate & interpret break-even point and margin of safety. CO4: Workout optimum selling price with Marginal Costing and Revenue. CO5: Discuss and evaluate expected value using decision tree analysis.
4	IBHOA34	AECC III – Business Statistics	CO1: Gain Knowledge in statistical tools with its concepts CO2: Explain the central tendency CO3: Apply the measures of dispersion and variability CO4: Make Use of the techniques of investigating the relationship between two quantitative variables CO5: Work and Interpret on analysis of time series
5	IBHOS35	SEC -Digital Marketing	CO1: Gain knowledge in general

			<p>aspects of Digital Marketing</p> <p>CO2: Experiment with web designing methodologies</p> <p>CO3: Understand the role of online advertising and social media marketing</p> <p>CO4: Frame various strategies in content marketing and its distribution channels</p> <p>CO5: Construct social media platform for marketing</p>
6	IBHOX3	Extra Credit – International Marketing	<p>CO 1: Identify the nuances and challenges of doing business in different cultural environment</p> <p>CO 2: Evaluate and design sustainable pricing strategies</p> <p>CO 3: Apply relevant distribution logistics</p> <p>CO 4: Gain knowledge in terms of international payment</p> <p>CO 5: Understand India’s recent export import policies</p>

**CLASS: II B.COM (HONOURS) (EVEN SEMESTER)**

S.N O	COURSE CODE	COURSE NAME	COURSE OUTCOME
1	IBHOCH4	Core IX - Financial Management II*	<p>CO1: Describe the sources of business finance with their relative merits and demerits.</p> <p>CO2: Identify the capital structure theories and cost of capital.</p> <p>CO3: Classify the concepts of business valuation.</p> <p>CO4: Examine the concepts of financial risk management</p> <p>CO5: Explain the tools and techniques of financial risk management in the context of foreign currency risks &amp; interest rate risks</p>
2	IBHOC42	Core X –Income Tax Law and Practice	<p>CO1: Comprehend basic knowledge in Income tax</p> <p>CO2: Compute income from salary</p> <p>CO3: Compute income from house property</p> <p>CO4: Compute income from business or profession</p> <p>CO5: Compute capital gains and income from other sources</p>
3	IBHOC43	Core XI - Management	CO1: Illustrate the budgetary systems in an

		Accounting II*	<p>organisation</p> <p>CO2:Apply financial and non-financial performance indicators in organizations</p> <p>CO3:Explain financial and non-financial performance indicators in organizations</p> <p>CO4: Classify financial and non-financial performance indicators in organizations</p> <p>CO5:Describe the external considerations in performance management</p>
4	IBHOC44	Core XII Business Intelligence using Excel and Access	<p>CO1: Summarize the concept of excel formulas, tables, and queries</p> <p>CO2: Demonstrate the data in chart and graph. and report</p> <p>CO3: Utilize the data analysis tools and techniques to convert the data into information.</p> <p>CO4: Evaluate on pivot table, queries, working with fields, and t e f queries</p> <p>CO5: Develop the query, form, and report in Excel and Access.</p>
5	IBHOA45	AECC IV – Human Resource Management	<p>CO 1: Understand the evolution and scope of HRM</p> <p>CO 2: Assess the role of human resources policies and practices</p> <p>CO 3: Analyse the various operative functions of HRM</p> <p>CO 4: Identify the challenges of human resource management</p> <p>CO 5: Evaluate the e-HRM practices in industry</p>
6	IBHOS46	SEC-Corporate Compliance Management	<p>CO1: Gain knowledge in composite legal due diligence in corporate activities</p> <p>CO2: Classify the various equity shares with preferential rights</p> <p>CO3:Analysethe compliance management System</p> <p>CO4:Demonstratevariousaspectsofsecretarialaudit</p> <p>CO5:Evaluate and justify the requirements of financial institutions and corporate lenders</p>

**CLASS: III B.COM (HONOURS) (ODD SEMESTER)**

S.NO	COURSE CODE	COURSE NAME	COURSE OUTCOME
1	HBHOX4	Extra Credit –Enterprise Resource Planning	<p>CO 1: Understand the basic concepts of ERP systems for manufacturing or service companies</p> <p>CO 2: Identify the principles of ERP systems, their major components, and</p>

			<p>the relationships among these components</p> <p>CO 3: Assess major ERP components, including material requirements planning, master production scheduling, and capacity requirements planning</p> <p>CO 4: Evaluate the pre implementation phase and support</p> <p>CO 5: Develop knowledge of typical ERP systems</p>
2	HBHOC51	Core XIII - Indirect Taxation and GST*	<p>After completion of this course, student will be able to</p> <p>CO1: Explain the conceptual framework of GST</p> <p>CO2: Describe the concept of Supply and its rules</p> <p>CO3: Prepare and maintain accounts and records related to GST payments</p> <p>CO4: Identify the provisions and rules of IGST in practical</p> <p>CO5: Examine the types of customs duty and its procedures</p>
3	HBHOC52	Core XIV Audit and Assurance*	<p>After completion of this course, student will be able to</p> <p>CO1: Explain the concept of audit &amp; assurance and the functions of audit. Understand the audit framework as well as corporate governance framework.</p> <p>CO2: Demonstrate the handling of audit assignments and audit risks. Understand the preconditions of an audit. Appreciate the qualities of professional scepticism and professional judgment.</p> <p>CO3: Describe the evaluation of internal controls, techniques &amp; audit tests. Understand the internal audit function.</p> <p>CO4: Defend the techniques of audit evidence, review and reporting. Understand audit completion and review procedures.</p> <p>CO5: Identify the techniques of performing the audit of specific items. Understand various audit assertions.</p>
4	HBHOC53	Core XV - Accounting Package for Business (Tally Prime)	<p>CO1: Demonstrate create, alter and shut down company accounts</p>

			<p>CO2: Sort out accounting vouchers with F11 features</p> <p>CO3: Explicate different types of journals and ledgers</p> <p>CO4: Assess bank reconciliation statement and bill reports</p> <p>CO5: Construct trial balance, stock summary and final accounts</p>
5	HBHOC54	Core XVI - Business and Technology	<p>CO 1: Understand the business organisation, its stakeholders and external environment.</p> <p>CO 2: Understand the business organisation structure, functions and governance.</p> <p>CO 3: Understanding the accounting, reporting system and compliance.</p> <p>CO 4: Understand the ways of leading and managing the team.</p> <p>CO 5: Understand the professional ethics in accounting and business.</p>
6	HBHOE5A	DSE I - - Business Research Methods	<p>CO1: Explain the basic framework of research process and types of research</p> <p>CO2: Apply the various methodological tools for social and scientific research</p> <p>CO3: Develop research designs using research techniques</p> <p>CO4: Locate problem areas in organisational set up to organise, design, and conduct research for problem solving</p> <p>CO5: Execute skills in designing and drafting research report</p>
7	HBHOE5B	DSE I - Intellectual Property Rights	<p>CO1: Acquire basic knowledge in IPR</p> <p>CO2: Explain concepts of Patent</p> <p>CO3: Gain knowledge in securitization of Intellectual Property</p> <p>CO4: Prepare the patent documents</p> <p>CO5: Deal with copyrights</p>
8	HBHOE5C	DSE II – Financial Markets and Services	<p>CO1: Acquire knowledge in financial system in India</p>

			<p>CO2: Explain new issues markets, SEBI and stock exchange</p> <p>CO3: Classify secondary market, listing and stock brokers</p> <p>CO4: Compare online trading with speculation and its concepts</p> <p>CO5: Share knowledge on mutual funds.</p>
9	HBHOE5D	DSE II – Marketing Management	<p>CO 1: Recognize the marketing management concepts, principles and practices.</p> <p>CO 2: Understand the significance of marketing functions in the overall managerial context</p> <p>CO 3: Develop strategic thinking for effective marketing planning and decision making</p> <p>CO 4: Analyze the reasons for the rapid growth of sales promotion</p> <p>CO 5: Evaluate the performance of different channels of distribution</p>
10	HBHOS55P	SEC - Internship on GST	<p>CO1: Write an Internship report upon completion of their internship</p> <p>CO2: To work &amp; gain knowledge of real time business environment.</p> <p>CO3: To analyze best practices, system, processes, procedures and policies of a company/industry in different functional areas and bring forward the deviations.</p>

CLASS: III B.COM (HONOURS) (EVEN SEMESTER)

1.	HBHOC61W	Core - XVII – Project	<p>CO1: Learn on their own, reflect on their learning and take appropriate actions to improve it</p> <p>CO2: Acquire skills to communicate effectively, clearly and coherently to get things done</p> <p>CO3: Develop plans to achieve project goals</p> <p>CO4: Plan and arrange for human and physical resources</p> <p>CO5: Develop stronger inclination towards flexibility and fearlessness in their approach to problem solving</p>
----	----------	-----------------------	---

2.	HBHOC62	Core XVIII- Corporate Accounting	CO1: Articulate the process of issue of shares of a company CO2: Prepare financial statements such as Profit & Loss Account and Balance Sheet CO3: Prepare balance sheet after Internal Reconstruction of company CO4: Analyse the case study of major amalgamations of companies in India CO5: Illustrate the process of e-filing of annual reports of companies.
3.	HBHOC63	Core XIX - Performance Management	CO1: Understand and apply modern techniques of management accounting CO2: Apply the decision making techniques in the context of resource optimization, risk mitigation, and promote efficiency CO3: Prepare various budgets CO4: Align performance management with organizational strategy, values and goals CO5: Elaborate divisional performance analysis for organizations
4.	HBHOC64	Core XX – Corporate Law	CO1: Define and Explain provisions relating to incorporation of company and related documents. CO2: Understand company processes, meetings, and decisions. CO3: Analyze the laws relating to dividend distribution, accounts of the company and audit & auditors of the company. CO4: Understand the role of the Board of directors and their legal position. CO5: State regulatory aspects involved in oppression, mismanagement, corporate restructuring and Winding Up and to study the composition of Adjudicating Authority i.e., NCLT and NCLAT and its powers.
5.	HBHOC65	Core XXI - Security Analysis and Portfolio Management	CO1: Illustrate investments and its nature CO2: Classify various avenues and attributes of financial instruments CO3: Analyse securities by applying fundamental tools CO4: Assess securities by adopting technical tools CO5: Compile the concept of portfolio management and its services
6.	HBHOE6A	DSE III – Organisational Behaviour	CO1: Justify the importance of human behaviour for a healthy working atmosphere CO2: Individual and group behaviour, which influence organisational climate CO3: Evaluate different motivational theories and apply motivational strategies

			<p>in the organisational set up</p> <p>CO4: Suggest appropriate leadership styles for organizations</p> <p>CO5: Assess the elements of group dynamics and their impact in the organization.</p>
7.	HBHOE6B	DSE III – Business Environment	<p>CO1: Acquire knowledge in business and its environment</p> <p>CO2: Clear understanding between social and cultural environment</p> <p>CO3: Explain economic environment</p> <p>CO4: Integrate political environment with legal environment</p> <p>CO5: Analyze the business environment for globalization with its benefits, problems and challenges</p>
8.	HBHOS66	SEC - Management Information System	<p>CO 1: Understand the ingredients of management information system</p> <p>CO 2: Develop the application of MIS in promoting managerial effectiveness</p> <p>CO 3: Examine the dimension of information system</p> <p>CO 4: Understand the recruitment and analysis</p> <p>CO 5: Explain the product based information system</p>
9.	HBHOX6	Extra Credit - Total Quality Management	<p>CO 1: Understand the quality norms of organisations</p> <p>CO 2: Explain the importance of quality management</p> <p>CO 3: Develop conversant with SWOT analysis</p> <p>CO 4: Apply benchmark for quality management</p> <p>CO 5: Deal with ISO certification process</p>

**CLASS: I M.COM (ODD SEMESTER)**

1	IMCOC111	Core I - International Business Environment	<p>CO1: Understand, discuss and suggest on international business issues            CO2: Acquire knowledge in globalization</p> <p>CO3: Gain knowledge international perspective of global business challenges            CO4: Evaluate the impact of global business issues</p> <p>CO5: Apply market research to support an organization in international business decision Making</p>
2	IMCOC121	Core II - Advanced Business Statistics	<p>CO1: Understand and apply statistical concepts and procedures in business            CO2: Use measurement of relationship in business decision making            CO3: Implement probability analysis in day to day business management            CO4: Select and use the right choice of statistical testing mode            CO5: Administer and interpret hypothesis testing through standard error</p>
3	IMCOC13	Core III - Advanced Accountancy	<p>CO1: Understand and implement accounting principles, concepts and accounting standards.            CO2: Deal with accounting treatment in admission, retirement and death of a partner.            CO3: Administer the reconstruction of the firms.            CO4: Prepare insolvency and investment accounts.            CO5: Construct insolvency, voyage, insurance, hire purchase and installment accounts.</p>
4	IMCOC141	Core IV - Advanced Cost Accounting	<p>CO1: Explain material control and its techniques            CO2: Deal with allocation and apportionment of overheads            CO3: Apply different methods of costing            CO4: Analyze and control cost in process industries            CO5: Reconcile between cost and financial accounts</p>

5	IMCOE1A	DSE - I - Financial Markets and Services	CO1: Acquire knowledge on the functions of the financial system in reference to macro economy CO2: Explain on current structure and regulation of the Indian financial service sector CO3: Assess the various theoretical concepts underlying money and capital markets CO4: Comprehend the different financial institutions and the threats exposed to CO5: Deal with venture capital and non –banking companies
6	IMCOE1B	DSE- I - Business Management	CO1: Explain the role and functions of the business management CO2: Apply the various management theories in case studies CO3: Identify the goals and planning process in strategic management CO4: Evaluate the organizational effectiveness CO5: Demonstrate the importance of effective control system and its techniques
7	IMCOX1	Extra Credit- Practical Banking	CO1: Understand and explain the banking system in India CO2: Illustrate the RBI functions and its credit control measures CO3: Demonstrate various types of deposits and scheme of banking operations CO4: Deal in fund transfer through cheque, demand draft, and marking CO5: Differentiate between e-banking and traditional banking

CLASS: I M.COM (EVEN SEMESTER)

1	IMCOC21P	Core V - Financial Accounting Software Package (Lab)	CO1: Use the tally accounting software in business concern CO2: Explain the pay roll entries and display of payroll reports CO3: Apply the methods of costing, creation of voucher type and display transfer analysis CO4: Connect with MS excel, MS word through technology advancement CO5: Prepare bank reconciliation statement and receivable and payable bill with details
---	----------	--	--

2	IMCOC22	Core VI- Advanced Management Accounting	CO1: Differentiate between management accounting, financial and cost accounting CO2: Measure and monitor cash flow statement CO3: Apply marginal costing techniques for managerial decisions CO4: Prepare budgets and deal with budgetary control CO5: Administer implementation of standard costing and variance analysis for material, labour, and overhead
3	IMCOC23	Core VII - Organizational Behaviour	CO1: Justify the importance of human behaviour for a healthy working atmosphere CO2: Individual and group behaviour, which influence organisational climate CO3: Evaluate different motivational theories and apply motivational strategies in the organisational set up CO4: Suggest appropriate leadership styles for organizations CO5: Assess the elements of group dynamics and their impact in the organisation
4	IMCOC241	Core VIII - Business Research Methods	CO1: Explain the basic framework of research process and types of research CO2: Apply the various methodological tools for social and scientific research CO3: Develop research designs using research techniques CO4: Locate problem areas in organisational set up to organise, design, and conduct research for problem solving CO5: Execute skills in designing and drafting research report
5	IMCOE2A	DSE - II - Global Marketing	CO1: Apply the various approaches in global marketing CO2: Demonstrate the types of disequilibrium in global marketing CO3: Deal with global market entry issues CO4: Explain the functions of economic integration and trade blocks in global environment CO5: Evaluate and design sustainable marketing and business strategies in global environments
6	IMCOX2	Extra Credit - Insurance and Risk Management	CO1: Identify the various types of risks and explain the risk management techniques CO2: Explain commercial risk management applications, policies, and business liability CO3: Deal with various risks management possibilities CO4: Suggest suitable risk management techniques for retirement planning and annuities CO5: Design and develop risk management techniques for government and non- government sectors

CLASS: II M.COM (ODD SEMESTER)

1	IMCOC31	Core IX -Corporate Accounting	CO1: Prepare final accounts for companies under revised accounting standards CO2: Deal with the accounts for amalgamations, absorption, and alteration of share capital CO3: Explain the accounts of banking and accounts of insurance companies CO4: Follow up the preparation of consolidated profit and loss account and balance sheet CO5: Measure double accounts and human resource accounting
2	IMCOC32	Core X -Direct Taxes	CO1: Explain the basic concepts of direct taxes and tax exemptions CO2: Compute the taxable income under heads of salaries and house property CO3: Assess the taxable income under heads profits and gains of business or profession CO4: Apply the set off and carry forward of losses and deductions CO5: Deal with the income assessment of individual and companies
3	IMCOC33	Core XI -Investment Management	CO1: Gain clarity in the basic concepts of investments and strategies to be followed CO2: Compute the risk and return analysis of securities CO3: Analyze and evaluate relevant securities for investment CO4: Evaluate portfolio performance CO5: Measure the portfolio performance under CAPM
4	IMCOC34	Core XII -Human Resource Management	CO1: Explain the basic concepts of human resource CO2: Demonstrate recruitment procedure CO3: Deal with different training techniques for different employees CO4: Administer different types of management techniques and theories to improve motivation CO5: Differentiate between traditional and modern methods in performance appraisal

5	IMCOE3B	DSE -III- Entrepreneurship Development	CO1: Explain different types of entrepreneurs and their characteristics CO2: Plan to overcome the problems in starting a new venture CO3: Educate and encourage the institutional support to entrepreneur in India CO4: Evaluate and support institutional support to entrepreneurs with special focus to women CO5: Develop the project identification and project report preparation skills
---	---------	--	---

**CLASS: II M.COM (EVEN SEMESTER)**

1	IMCOC41	Core XIII - Financial Management	CO1: Specify the role and responsibilities of a financial manager/corporate financial officer CO2: Classify the different types of capital and capital structure CO3: Analyze how to apply the cost of capital and its application in capital budgeting decisions CO4: Evaluate and estimate the working capital management CO5: Discuss about dividend theory and policies regarding retained earnings
2	IMCOC42	Core XIV-Indirect Taxation	CO1: Explain various provisions of indirect taxes CO2: Deal with all aspects of supply of goods or services under CGST/ SGST CO3: Examine time and valuation taxable supply and levy and collection of CGST CO4: Administer supply of goods under interstate trade or commerce CO5: Discuss about valuation of goods and clearance of imported goods
3	IMCOC43PW	Core –XV-Project	CO1: Learn on their own, reflect on their learning and take appropriate actions to improve it CO2: Acquire the skills to communicate effectively and to present ideas clearly and coherently CO3: Develop plans with relevant people to achieve the project's goals CO4: Estimate the cost of human and physical resources required and manages to obtain the necessary resources CO5: Develop stronger inclination towards flexibility and fearlessness in their approach to problem solving

4	IMCOX41	Extra Credit - Total Quality Management	<p>CO1: Explain the concept of total quality management and its control</p> <p>CO2: Apply the statistical quality control by through control charts</p> <p>CO3: Assess the theories of sampling inspection, defect diagnosis and prevention</p> <p>CO4: Measure the quality management system and total quality control</p> <p>CO5: Develop the ISO model and implementation of ISO 9000-ISO 14000</p>
---	---------	---	--

**CERTIFICATE COURSE IN EVENT MANAGEMENT  
(For Students Admitted from 2022-23)**

CERTIFICATE COURSE			
1	GCEM1	Event Management – Theory	<ul style="list-style-type: none"> <li>• Planning of activities for an event</li> <li>• Budget Preparation</li> <li>• Look for Sponsors</li> <li>• Selection of Event Member Council</li> <li>• Duties allocated to Event Managers</li> <li>• Drafting an Agenda</li> <li>• Invitation</li> <li>• Choosing the right venue, date and time</li> <li>• Inviting the Resource Person</li> <li>• Organizing Events</li> <li>• Event Schedule (Timing of each program in the Event)</li> <li>• Check list form</li> <li>• Prize Distribution</li> <li>• Feedback Forms and Report of the Event</li> <li>• Post -Event Duties</li> </ul>
2	GCEM2P	Event Management Activities - Practicals	<ul style="list-style-type: none"> <li>• Planning of activities for an event</li> <li>• Budget Preparation</li> <li>• Look for Sponsors</li> <li>• Selection of Event Member Council</li> <li>• Duties allocated to Event Managers</li> <li>• Drafting an Agenda</li> <li>• Invitation</li> <li>• Choosing the right venue, date and time</li> <li>• Inviting the Resource Person</li> <li>• Organizing Events</li> <li>• Event Schedule (Timing of each program in the Event)</li> <li>• Check list form</li> <li>• Prize Distribution</li> <li>• Feedback Forms and Report of the Event</li> <li>• Post -Event Duties</li> </ul>



Department of Tamil

2023-24

Programme Outcomes

- PO 1:** வாழ்வியல் நெறிமுறைகளைக் கற்றுக்கொண்டு வாழ்க்கைக்குத் தேவையான அடிப்படையான அறிவுத்திறம் பெறுகின்றனர்
- PO 2:** இதழியல் பாடம் பயில்வதன்மூலம் சிறந்த பத்திரிக்கை நிரூபாகப் பணியாற்றும் வேலைவாய்ப்பினைப் பெறுகின்றனர்
- PO 3:** சமுதாயத்தில் தனித்து நின்று சிக்கலை எதிர்கொள்ளும் அளவிற்குத் திறமைகளை வளர்த்துக் கொள்கின்றனர்
- PO 4:** மொழியைப் பிழையின்றி பேசவும் எழுதவும் பயிற்சி பெற்று பேச்சாற்றல் மற்றும் எழுத்தாற்றல் திறமையோடு ஆராய்ச்சி நோக்கில் சிறந்த இலக்கியப் படைப்பாளிகளாக உருவாகின்றனர்
- PO 5:** நான்கு பருவத்திற்கும் தமிழை மொழிப்பாடமாகப் பயில்வதன் மூலம் அரசு நடத்தும் போட்டித் தேர்வுகளில் சிறந்த மதிப்பெண் பெற செம்மைப்படுத்தப்படுகின்றனர்
- PO 6:** நாட்டுப்புறக் கலைகளைப் பயில்வதன் மூலம் கலை உணர்வு பெற்று தன்மையிக்கையோடு செயல்படுகின்றனர்
- PO 7:** வேற்று மொழியிலிருந்து தமிழ் மொழிக்கு மொழிபெயர்த்து எழுதக் கூடிய திறன் பெறுகின்றனர்

S.No	Subject Code	Subject Title	Course Outcomes
1.	IBLT111	இக்கால இலக்கியமும் சிறுகதையும்	<p>பாட நெறி முடிவுகள்:</p> <p>பாடத்திட்டத்தை முடித்தவுடன் சமூக நோக்கில் வாழ்வியலை வெற்றிகரமாகக் கொண்டு செல்ல மாணவிகளால் முடியும்.</p> <p>CO 1: புத்திலக்கிய மரபுகளைப் புரிந்து கொண்டு வாழ்வியல் நோக்கில் செயல்படும் வழிமுறைகளைத் தெரிந்து கொள்கின்றனர் சிறுசேமிப்பு, தன்மையிக்கை, ஆரோக்கியம், உழைப்பு, தன்மாளம், உண்மை, அன்பு,பணிவு போன்றவற்றை இதன்வழி கற்றுக் கொள்கின்றனர்</p> <p>CO 2: இலக்கிய வரலாற்றின் வழி மொழியின் வளர்ச்சியைக் காலத்தோறும் மாறிவரும் இலக்கியங்களின் பல்வேறு வகையால் அறிந்து கொள்வர்</p> <p>CO 3: சமுதாயத்தில் நிகழக்கூடிய பிரச்சனைகளை எதிர்கொள்ளும் திறன் பெறுகின்றனர்</p> <p>CO 4: சொல்லழகு பொருளழகு முதலியவற்றை வரையறுத்துக் கூறுவது அணி என உணர்ந்து கொள்கின்றனர் கற்பவர்களுக்கு இன்பம் பயக்கும். சொல்லப் புதுத்த கருத்து தெளிவாகப் புலப்படும் தமிழ் இலக்கியச் செழிப்புக்கு மேலும் வலுவூட்டுவது அணி என்பதையும் பிழையின்றி பேசவும் எழுதவும் கற்றுக் கொள்கின்றனர்</p> <p>CO 5: சிறுகதை மற்றும் கவிதைகளைப் படைக்கும் படைப்பாளிகளாகின்றனர் இலக்கியங்களின் வழி கவிதைகள் புனைவதைக் கற்றுக் கொண்டும் தனித்திறனுடனும் தன்மையிக்கையோடும் வாழக் கற்றுக் கொள்கின்றனர்</p>
2.	IBLT211	காப்பிய இலக்கியமும் புதினமும்	<p>பாட நெறி முடிவுகள்:</p> <p>பாடத்திட்டத்தை முடித்தவுடன் சமூக நோக்கில் வாழ்வியலை வெற்றிகரமாகக் கொண்டு செல்ல மாணவிகளால் முடியும்.</p> <p>CO 1: தமிழ் இலக்கியங்கள் அன்று முதல் இன்று வரை பெற்று வரும் சிறப்பை உணர்ந்து வாழ்வியல் நெறிமுறைகளைக் கற்றுக் கொள்ளும் திறன் உடையவர்களாகின்றனர்</p> <p>CO 2: காப்பியங்களின் வழி நபிகள் நாயகத்தின் போதைகளை அறிந்து கொள்கின்றனர் மாளிடரின் மங்கல நிகழ்வான திருமணத்தை ஆளியக் நிலையிலும் நிகழ்த்தி மகிழும் வழக்கம் பல்வேறு சமயங்களிலும் உண்டென அறிகின்றனர்</p>

			<p>CO 3: மக்களிடையே அருகிவரும் பண்பாட்டு உணர்ச்சியை மீண்டும் தலையெடுத்து வளரச் செய்ய வேண்டும்.அவ்வணர்ச்சியை இளம் உள்ளங்களில் விதைப்பது சாலப் பயன் தரும் என்ற எண்ணத்தை உணர்ந்துகொள்கின்றனர்</p> <p>CO 4: தமிழ்மொழிப் பயிற்சி பெறும் விதமாக எழுத்து, சொல், யாப்பு என இலக்கணத்தைக் கற்றுக் கொள்கின்றனர்</p> <p>CO 5: காப்பிய இலக்கியக் கல்வியை எளிமையில்(ருந்து ஆழமாகிக்கி் கற்பிக்கும் முறையைக் கற்றுக் கொள்கின்றனர்</p>
3.	IBLT31	<b>இடைக்கால இலக்கியமும் ஊடகவியலும்</b>	<p>பாட நெறி முடிவுகள்:</p> <p>பாடத்திட்டத்தை முடித்தவுடன் சமூக நோக்கில் வாழ்வியலை வெற்றிகரமாகக் கொண்டு செல்ல மாணவிகளால் முடியும்.</p> <p>CO 1: பக்தி இலக்கியங்கள் வாயிலாக ஆன்மீகச் சிந்தனைகளையும் ஒழுக்கநெறிகளையும் கற்றுக் கொள்கின்றனர்</p> <p>CO 2: சமய இலக்கியங்களைக் கற்பதன் மூலம் சமூக ஒற்றுமையையும் மதநல்லினக்கத்தையும் அறிந்து கொள்கின்றனர்</p> <p>CO 3: இதழியல் படிப்பதன் மூலம் மக்கள் தகவல் தொடர்பு பற்றித் தெரிந்து கொள்வதோடு சமூகப் பண்பாடு மற்றும் வரலாற்றுப் பின்னணியையும் தெரிந்து கொள்கின்றனர்</p> <p>CO 4: இலக்கணப் படைப்பினை அறிந்து வாசிப்பு நட்பங்களோடு மொழியைப் பிழையின்றி பேசவும் எழுதவும் கற்றுக் கொள்கின்றனர்</p> <p>CO 5: தமிழ் இலக்கிய வரலாற்றினை அறிந்து கொண்டு இலக்கிய வளர்ச்சியில் பரந்துபட்ட நிலையைக் கொண்டு அரசுப் பொதுத்தேர்வு எழுதும் திறனைப் பெறுகின்றனர்</p>
4.	IBLT41	<b>பழந்தமிழ் இலக்கியமும் நாட்டுப்புறவியலும்</b>	<p>பாட நெறி முடிவுகள்:</p> <p>பாடத்திட்டத்தை முடித்தவுடன் சமூக நோக்கில் வாழ்வியலை வெற்றிகரமாகக் கொண்டு செல்ல மாணவிகளால் முடியும்.</p> <p>CO 1: தமிழ் இலக்கியங்களின் வாயிலாக பண்டைக்கால மக்களின் வாழ்வியல் விழுமியங்களைத் தெரிந்து கொள்கின்றனர்</p> <p>CO 2: பரந்துபட்ட தமிழ் இலக்கிய வரலாற்றினை உணர்ந்து அறவழியில் வாழும் வாழ்வியல் சிந்தனைகளைக்கற்றுக்கொள்கின்றனர்</p> <p>CO 3: நாட்டுப்புற மக்களின் வரலாறு பண்பாடு நாகரிகம் அறிந்து கொள்வதோடு மாறுட மதிப்புகளைப் பற்றிக் கற்றுக் கொண்டு சமூகச் சிக்கல்களை எதிர்கொள்ளும் திறன் பெறுகின்றனர்</p> <p>CO 4: மொழி வளர்ச்சிக்குரிய இலக்கணத்தின் பயன் அறிந்து மொழியினைப் பிழையின்றி பேசவும் எழுதவும் கற்கவும், தமிழ் இலக்கணத்தின் இன்றியமையாமையையும் உணர்ந்து கொள்கின்றனர்</p> <p>CO 5: நடைமுறை வாழ்வியலுக்குத் தேவைப்படும் படைப்புத் திறனை மேம்படுத்துவதுடன் வாசிப்பு நட்பங்களையும் அறிந்து ஆங்கிலத்தை தமிழாக்கம் செய்யவும் பயிற்சி பெறுகின்றனர்</p>

5.	IBOE3TA	சிறப்புத்தமிழ்- I	<p>பாட நெறி முடிவுகள்:</p> <p>பாடத்திட்டத்தை முடித்தவுடன் சமூக நோக்கில் வாழ்வியலை வெற்றிகரமாகக் கொண்டு செல்ல மாணவிகளால் முடியும்.</p> <p>CO 1: தமிழின் சிறப்பை உணர்வதோடு தமிழ் மொழியின் வளர்ச்சி நிலைகளைப் பற்றி அறிந்து கொள்கின்றனர்</p> <p>CO 2: உலகப்பொதுமனையின் வழி மாணவிகள் சமூகமாந்தரிடம் நடந்து கொள்ளக் கூடிய பொதுப்பண்புகளை வளர்த்துக் கொள்கின்றனர்</p> <p>CO 3: புதுக்கவிதைகளை கற்றுக்கொள்வதன் மூலம் வாழ்வியலின் தத்துவங்களை அறிந்து கொள்வதோடு சமூகச் சூழலில் ஏற்படக்கூடிய சிக்கல்களை எதிர்கொள்ளத் துணிகின்றனர்</p> <p>CO 4: தகவல் தொடர்புச் சாதனங்கள் தமிழ் வளர்ச்சிக்குப் பயன்படுவதை அறிந்து கொள்கின்றனர்</p> <p>CO 5: மாணவர்கள் மொழித்திறன் பயிற்சியும் படைப்பாற்றல் திறனும் பெறுகின்றனர்</p>
6.	IBOE4TA	சிறப்புத்தமிழ்- II	<p>பாட நெறி முடிவுகள்:</p> <p>பாடத்திட்டத்தை முடித்தவுடன் சமூக நோக்கில் வாழ்வியலை வெற்றிகரமாகக் கொண்டு செல்ல மாணவிகளால் முடியும்.</p> <p>CO 1: நடைமுறை வாழ்வியலுக்குத் தேவையான கல்வியின் சிறப்பினை அறிந்து கொள்வதோடு தங்கள் வாழ்க்கைக்குத் தேவையான ஒழுக்க நெறிகளையும் கற்றுக் கொள்கின்றனர்</p> <p>CO 2: இலக்கியப் படைப்பாளனாக உருவாகக் கூடிய முயற்சியை மேற்கொள்கின்றனர்</p> <p>CO 3: வாழ்வியல் விழுமியங்களை உணர்ந்து சமூகப் பிரச்சனைகளை எதிர்கொள்ளும் திறனை வளர்த்து கொள்கின்றனர்</p> <p>CO 4: சமூகத்தில் நிகழக் கூடிய எதிர்வினைகளை நேர்கொள்ளும் திறனைப் பெறுகின்றனர்</p> <p>CO 5: இலக்கணங்களைக் கற்றுக் கொள்வதன் மூலம் தமிழ் மொழியைச் சொற்பிழையின்றி எழுதக் கற்றுக் கொள்கின்றனர்</p>
7.	IBOE3TE	அடிப்படைத்தமிழ்- I	<p>பாட நெறி முடிவுகள்:</p> <p>பாடத்திட்டத்தை முடித்தவுடன் சமூக நோக்கில் வாழ்வியலை வெற்றிகரமாகக் கொண்டு செல்ல மாணவிகளால் முடியும்.</p> <p>CO 1: தமிழ் எழுத்துகளை உச்சரிக்கும் முறை பற்றிக் கற்றுக் கொள்கின்றனர்</p> <p>CO 2: எழுத்துகளைக் கொண்டு சொற்களை உருவாக்கும் திறன் பெறுகின்றனர்</p> <p>CO 3: சொற்களை உச்சரிப்பதன் வாயிலாக எழுத்துகளுக்குள்ளான வேறுபாடுகளையும் அவை தருகின்ற பொருளையும் அறிந்து கொள்கின்றனர்</p> <p>CO 4: மொழியைக் கொண்டு சொற்கள் அமைக்கும் தனித்திறனை வளர்த்துக் கொள்கின்றனர்</p> <p>CO 5: மொழியைப் பிழையின்றி பேசவும் எழுதவும் மொழித்திறனை மேம்படுத்தவும் தெரிந்து கொள்கின்றனர்</p>

8.	IBOE4TE	அடிப்படைத்தமிழ்- II	<p>பாட நெறி முடிவுகள்:</p> <p>பாடத்திட்டத்தை முடித்தவுடன் சமூக நோக்கில் வாழ்வியலை வெற்றிகரமாகக் கொண்டு செல்ல மாணவிகளால் முடியும்.</p> <p>CO 1: தமிழ் மொழி கூறும் வாழ்வியல் நெறிமுறைகளைக் கற்றுக் கொள்வதோடு ஆளுமைத் திறனை வளர்த்துக்கொள்கின்றனர்</p> <p>CO 2: மொழியின் தொன்மை, இலக்கியங்கள் வாயிலாக மொழி வளர்ச்சியையும் தனித்திறனையும் கற்றுக் கொள்கின்றனர்</p> <p>CO 3: வாசிப்பு நுட்பங்களை அறிந்து கொண்டு படைப்பாளுமைத் திறனைப் பெற்று தமிழ் இலக்கணத்தின் இன்றியமையாமையை உணர்கின்றனர்</p> <p>CO 4: தமிழைப் பிழையின்றி பேசவும் எழுதவும் கற்றுக் கொள்கின்றனர்</p> <p>CO 5: பிற மொழிச் சொற்களை தமிழ் மொழிக்கு மாற்றி எழுதும் திறன் பெறுகின்றனர்</p>
----	---------	---------------------	---

**Department of English**  
**Academic Year: 2023 – 24 (Odd & Even)**  
**Course Outcomes**

**I BA English – 2023 Batch (I Series - Revised)**  
**ODD Semester**

S No	Subject Code	Subject Name	Course Outcomes
1.	IBLEI12	Language II – Language through Literature I – Level I	<b>CO 1:</b> Read and interpret poetry <b>CO 2:</b> Develop speaking skill <b>CO 3:</b> Organize thoughts in writing <b>CO 4:</b> Improve reading skill <b>CO 5:</b> Deduct structure from text
2.	IBLEII12	Language II – Language through Literature I – Level II	<b>CO 1:</b> Recognize correct pronunciation <b>CO 2:</b> Develop reading skill <b>CO 3:</b> Organize the ideas into a coherent paragraph <b>CO 4:</b> Construct meaningful sentences <b>CO 5:</b> Deduct the grammatical structures from the text
3.	IBEGC11	Core I - British Literature [from 14 <sup>th</sup> century to 18 <sup>th</sup> century]	<b>CO 1:</b> Acquire knowledge of the early British writers from 14 <sup>th</sup> to 18 <sup>th</sup> Century <b>CO 2:</b> Analyse and interpret the language of the British writers <b>CO 3:</b> Interpret the different genres employed during the period and the contribution of the Writers prescribed for the study <b>CO 4:</b> Significantly point out the religious and cultural temperament of the period <b>CO 5:</b> Develop skills to read, understand and appreciate literary text of the early British Writers
4.	IBEGC12	Core II - Grammar and Writing Skills	<b>CO 1:</b> Recognize the grammar skills involved in writing sentences and paragraphs <b>CO 2:</b> Analyse and self–correct when using targeted grammatical structures <b>CO 3:</b> Compare and contrast targeted grammatical structures meaningfully and appropriately in oral and written production <b>CO 4:</b> Identify and understand the meaning of targeted grammatical structures in written and spoken form <b>CO 5:</b> Diagnose and demonstrate grammar structures in real life context
5.	IBEGA13	AECC I - Social History of England	<b>CO 1:</b> Trace the historical and political background of England until Modern Age

			<b>CO 2:</b> Identify the religious changes prevailed in England <b>CO 3:</b> Examine the impact of various revolutions which shaped the literature of England <b>CO 4:</b> Elucidate the diversity of human nature in connection with the society, politics and literature <b>CO 5:</b> Evolve the knowledge on English society and literature
6.	IBEGS14	SEC I - Presentation Skills / Online Internship <sup>#</sup>	<b>CO 1:</b> Understand the concepts of business presentation <b>CO 2:</b> Overcome nervousness for presentation <b>CO 3:</b> Assess their own speaking and presentation skills <b>CO 4:</b> Distinguish presentation weak spots and areas for improvement <b>CO 5:</b> Become a Confident and effective speaker /presenter

### I BA English – 2023 Batch (I Series - Revised)

#### EVEN Semester

S No	Subject Code	Subject Name	Course Outcomes
1.	IBLEI22	Language II – Language through Literature II – Level I	<b>CO 1:</b> Remember the meaning of words <b>CO 2:</b> Demonstrate formal and informal speech <b>CO 3:</b> List out ideas in writing <b>CO 4:</b> Produce own script and design skit for performance <b>CO 5:</b> Determine adverbs and preposition from text
2.	IBLEII221	Language II – Language through Literature II – Level II	<b>CO 1:</b> Identify the meaning of words <b>CO 2:</b> Apply the reading strategies <b>CO 3:</b> Distinguish compound words and clipped words <b>CO 4:</b> Develop writing skill <b>CO 5:</b> Determine the grammatical structures from the text
3.	IBEGC21	Core III - British Literature [from 19 <sup>th</sup> century to 21 <sup>st</sup> century]	<b>CO 1:</b> Explain the knowledge of growth and development of British Literature <b>CO 2:</b> Identify the specific features of particular periods <b>CO 3:</b> Analyze the themes, structure and style adopted by British writers <b>CO 4:</b> Justify the impact of historical events that shaped literature <b>CO 5:</b> Develop and compare the works of historical movements in British Literature
4.	IBEGC22	Core IV - Indian Writing in English / NPTEL <sup>o</sup>	<b>CO 1:</b> Recognize poetry from a variety of cultures, languages and historic periods <b>CO 2:</b> Express their ideas clearly and respond appropriately <b>CO 3:</b> Critically analyse the Indian literary texts <b>CO 4:</b> Understand distinctive features of novels, fiction

			and essays <b>CO 5:</b> Develop a holistic idea of Indian Writing in English and their history
5.	IBEGA23	AECC II - History of English Literature	<b>CO 1:</b> Interpret literary texts <b>CO 2:</b> Gain knowledge in the development of English drama from 16 <sup>th</sup> century to 21 <sup>st</sup> century <b>CO 3:</b> Define the development of English fiction from the 17 <sup>th</sup> century to the 21 <sup>st</sup> century <b>CO 4:</b> Conceptualize various types of drama <b>CO 5:</b> Get a wide exposure of eminent writers
6.	IBEGS24	SEC II - Professional Communication / Online Internship <sup>#</sup>	<b>CO 1:</b> Understand the concepts of professional communication <b>CO 2:</b> Improve the academic writing skills <b>CO 3:</b> Organise the ideas for professional interactions <b>CO 4:</b> Examine the elimination of conflicts and confusions <b>CO 5:</b> Contribute to greater productivity and promotes team Building
7.	IBEGX2P/ IBEGX2O	Extra Credit - Video Editing (Practical)/ Online Course*	<b>CO 1:</b> Understand the concept of video editing <b>CO 2:</b> Apply video editing tools to modify the video <b>CO 3:</b> Explore the newness in video editing for professional development <b>CO 4:</b> Evaluate digital video projects, identify items for improvement, and implement changes <b>CO 5:</b> Create digital video projects

**II BA English – 2022 Batch (I Series)  
ODD Semester**

S No	Subject Code	Subject Name	Course Outcomes
1.	IBLEI32	Language II - Language through Literature III – Level I	<b>CO 1:</b> Express the language in clarity <b>CO 2:</b> Associate the ideas in writing <b>CO 3:</b> Take part in any interview <b>CO 4:</b> Transform learnt language skills at workplace <b>CO 5:</b> Deduct and determine sentence patterns and sentence types from text
2.	IBLEII32	Language II - Language through Literature III – Level II	<b>CO 1:</b> Remember meanings of words <b>CO 2:</b> Connect the structures of languages <b>CO 3:</b> Organize the ideas into a coherent paragraph <b>CO 4:</b> Construct meaningful sentences <b>CO 5:</b> Deduce and determine the grammatical structures from the text
3.	IBEGC31	Core V - American Literature	<b>CO 1:</b> Explain the literary works of different literary periods <b>CO 2:</b> Compare the poems of the American writers <b>CO 3:</b> Analyze the perceptions and experiences of American authors <b>CO 4:</b> Identify fundamental principles of American culture

			<b>CO 5:</b> Examine the impact of multicultural communities in literatures
4.	IBEGC32	Core VI - Phonetics and Transcription	<b>CO 1:</b> Understand the English phonemes with the articulation <b>CO 2:</b> Identify various sound productions and their pronunciation in English <b>CO 3:</b> Compare and contrast the variations of speech sounds in English <b>CO 4:</b> Agree the appropriate pronunciation of each English word through the transcribed phonemes <b>CO 5:</b> Improve the knowledge of transcribing the English words using IPA symbols
5.	IBEGA33	AECC I - Literary Genres and Terms	<b>CO 1:</b> Recognize various literary genres and terms and its kinds <b>CO 2:</b> Distinguish the variety of cultures, languages, and history through genres <b>CO 3:</b> Predict the various types of literary art <b>CO 4:</b> Assess different literary genres with interpretative and analytical skills <b>CO 5:</b> Integrate and appreciate pieces of literature of various genres
6.	IBEGS34	SEC III - Business Communication / Online Internship <sup>#</sup>	<b>CO 1:</b> Understand the theoretical and practical aspects of business communication <b>CO 2:</b> Apply the business skills (presentations, negotiating, telephoning, teleconferences, etc.) <b>CO 3:</b> Analyse each skills needed for approaching different types of interview skills <b>CO 4:</b> Formulate the Group discussions, generate creative thinking among the participants, and offer solution to specific problems <b>CO 5:</b> Develop and express ideas, opinions, and information in appropriate forms
7.	IBEGX3P/I BEGX30	Extra Credit - Film Appreciation (Practical)/Online Course*	<b>CO 1:</b> Understand the different film techniques <b>CO 2:</b> Identify the thematic elements of films and its genres <b>CO 3:</b> Analyze the different film genres <b>CO 4:</b> Justify the film appreciation based on theoretical aspects <b>CO 5:</b> Create a film review and appraise the film
8.	IBOE3EG	OEC - Writing for the Web	<b>CO 1:</b> Understand the principles of writing content for web <b>CO 2:</b> Demonstrate skills in integrating photos, graphics, video, and text on web site <b>CO 3:</b> Reorganize ideas according to interactive media and social media <b>CO 4:</b> Create an own online blog <b>CO 5:</b> Compare theory and practice of web writing techniques

**II BA English – 2022 Batch (I Series)**  
**EVEN Semester**

S No	Subject Code	Subject Name	Course Outcomes
1.	IBLEI42	Language II - Language through Literature IV – Level I	<b>CO 1:</b> Restate the content in clarity <b>CO 2:</b> Dramatise the literary content <b>CO 3:</b> Develop good communication skill <b>CO 4:</b> Build knowledge in using internet <b>CO 5:</b> Persuade language in text
2.	IBLEII42	Language II - Language through Literature IV – Level II	<b>CO 1:</b> Classify the meanings of words <b>CO 2:</b> Practice blending of words <b>CO 3:</b> Develop speaking skill <b>CO 4:</b> Create resume for job <b>CO 5:</b> Deduce and determine the grammatical structures from the text
3.	IBEGC41	Core VII - Shakespeare	<b>CO 1:</b> Demonstrate the various textures of Shakespearean works <b>CO 2:</b> Classify the plots, characters, themes and structures of given text <b>CO 3:</b> Examine the features of Shakespearean works <b>CO 4:</b> Interpret Shakespeare's plays and sonnets <b>CO 5:</b> Elaborate and compare Shakespeare's theme and character with the society today, with special reference to his plays and sonnets
4.	IBEGC42	Core VIII - Introduction to English Language Teaching	<b>CO 1:</b> Understand the concept of English Language Teaching <b>CO 2:</b> Apply the innovative methods in language teaching <b>CO 3:</b> Analyze various approaches and methods of English Language Teaching <b>CO 4:</b> Assess the language skills required for English Language Teaching <b>CO 5:</b> Adapt the methods and approaches in Teaching of English
5.	IBEGA43	AECC II - Film and Literature	<b>CO 1:</b> Explain the theory of adaptation and Film Narrative <b>CO 2:</b> Identify dynamic adaptations in the areas of form, genre and theme <b>CO 3:</b> Compare and Contrast literary works and its film adaptation <b>CO 4:</b> Critically analyze the transition from the written to the visual medium <b>CO 5:</b> Appraise Literature and Film
6.	IBEGS44	SEC IV - English for Career Development / Online Internship <sup>#</sup>	<b>CO 1:</b> Understand the nature and scope of the communication media <b>CO 2:</b> Apply the skills of advertising in online platforms <b>CO 3:</b> Discover the creative and career skills in real life situations <b>CO 4:</b> Decide the professional skills required for websites <b>CO 5:</b> Design and write for webs, blogs and advertisements

7.	IBLVE4	General Interest Course – III - Life Skills and Value Education	<b>CO 1:</b> Understand the value based life <b>CO 2:</b> Develop the essential steps to become a responsible leader <b>CO 3:</b> Choose the values and ethics in life to become a good citizen <b>CO 4:</b> Build interpersonal skill in personal and professional life <b>CO 5:</b> Prove as self-confident and self-motivated to face the competitive world
8.	IBEGX4P/IBEGX4O	Extra Credit - Script Writing (Practical)/Online Course*	<b>CO 1:</b> Understand the professional technique of script writing <b>CO 2:</b> Develop the creativity in the process of script writing <b>CO 3:</b> Identify the professional skills and expertise required for a screen or radio script <b>CO 4:</b> Decide script writing as a career by producing original stories, characters and dialogues <b>CO 5:</b> Design script for drama, short film or screen play
9.	IBOE4EG	OEC – Communicative English	<b>CO 1:</b> Understand the basic concepts of communication <b>CO 2:</b> Apply the skills of communication to communicate effectively <b>CO 3:</b> Examine the effective usage of grammar in functional English <b>CO 4:</b> Scrutinize the art of pronunciation <b>CO 5:</b> Construct and edit the letters, reports and resume on their own

**III BA English – 2021 Batch (H Series)  
ODD Semester**

S No	Subject Code	Subject Name	Course Outcomes
1.	HBEGC51	Core X - Phonetics and Transcription	<b>CO 1:</b> Comprehend the English speech system <b>CO 2:</b> Understand thoroughly the production, transmission and reception of sounds of English Language <b>CO 3:</b> Improve their pronunciation <b>CO 4:</b> Understand syllables and stress patterns
2.	HBEGC52	Core XI - Shakespeare	<b>CO 1:</b> Understand dramatic and theatrical conventions of Shakespeare <b>CO 2:</b> Analyse plot, characters, themes and stagecraft of Shakespearean plays <b>CO 3:</b> Appreciate and enjoy the plays in relation to modern contexts <b>CO 4:</b> Analyse and appreciate the modes of tragedy and comedy
3.	HBEGC53	Core XII - Literary Criticism	<b>CO 1:</b> Have clear idea of the basic theoretical concepts <b>CO 2:</b> Develop their critical competence and sensibility <b>CO 3:</b> Apply theory to the texts and enrich their understanding of literature <b>CO 4:</b> Develop the analytical competence to trace the features and their aptness

4.	HBEGE5A	Core Elective I - Prose	<p><b>CO 1:</b> Understand the works of prose writers of different countries across the world</p> <p><b>CO 2:</b> Appreciate prose styles of different ages and different cultures</p> <p><b>CO 3:</b> Analyse the poetic features depicted in prose style in the essays of popular writers of different cultures</p> <p><b>CO 4:</b> Criticize prose writings</p> <p><b>CO 5:</b> Appreciate additional and relevant information other than the elucidation of the central theme</p> <p><b>CO 6:</b> Analyse sentence structures</p>
	HBEGE5B	Core Elective I - Poetry	<p><b>CO 1:</b> Identify poetic devices employed by the poets</p> <p><b>CO 2:</b> Familiarize themselves with the trends and individual traits of poets</p> <p><b>CO 3:</b> Appreciate critically the usages of metaphorical items of the poets</p> <p><b>CO 4:</b> Understand between lines</p> <p><b>CO 5:</b> Analyse the ethics, messages, visions and criticisms of the poets</p> <p><b>CO 6:</b> Learn rhyme scheme</p>
5.	HBEGE5C	Core Elective II - Drama	<p><b>CO 1:</b> Know the distinctive nature of drama as a genre and its variety</p> <p><b>CO 2:</b> Compare their personal experience with drama</p> <p><b>CO 3:</b> Know the methods of characterisation from dialogues</p> <p><b>CO 4:</b> Develop the imaginative skill to watch mind's theatre</p> <p><b>CO 5:</b> Analyse the significance of staging drama</p> <p><b>CO 6:</b> Analyse critically to appreciate the value of the characters</p>
	HBEGE5D	Core Elective II - Fiction	<p><b>CO 1:</b> Inculcate interest in fiction and its types</p> <p><b>CO 2:</b> Appreciate the novels written by writers from different nationality</p> <p><b>CO 3:</b> Understand the descriptive skill of novelists</p> <p><b>CO 4:</b> Recognize the closeness created by the writer with the art</p> <p><b>CO 5:</b> Define climax and anticlimax</p> <p><b>CO 6:</b> Learn narrative techniques employed by the novelists</p>
6.	HBEGE54	Skill Based Elective V - Business English–V	<p><b>CO 1:</b> Understand the technicalities of English language</p> <p><b>CO 2:</b> Write and speak fault-free English</p> <p><b>CO 3:</b> Learn the skills of business communication</p> <p><b>CO 4:</b> Develop the managerial skills and competitive temperament</p>
7.	HBWS5	General Interest Course–IV - Women Studies	<p><b>CO1:</b> Promote and disseminate knowledge about women's roles in society and economic trends which affect women's lives and status</p> <p><b>CO2:</b> Assimilate analytical understandings of the significance of gender (relations) and foster study of conduits and configurations of power, causes, contexts and consequences of women's subordination</p> <p><b>CO3:</b> Know the rights and laws for protection of women</p> <p><b>CO4:</b> Know <i>women's psychological reactions to puberty, marriage, motherhood, abortion, birth control, menopause, etc.</i></p>

8.	HBEGX5PW	Extra Credit - Magazine Production [Project]	<b>CO 1:</b> Acquire knowledge in print and electronic media <b>CO 2:</b> Know the techniques of photography <b>CO 3:</b> Explore career opportunities <b>CO 4:</b> Know the nuances of photography
----	----------	--	--

**III BA English – 2021 Batch (H Series)  
EVEN Semester**

S No	Subject Code	Subject Name	Course Outcomes
1.	HBEGC61	Core XIII - Religion and Literature	<b>CO 1:</b> Familiarize with various religions <b>CO 2:</b> Know the impact of religion in literature <b>CO 3:</b> Understand variety of interpretations of religion <b>CO 4:</b> Understand various forms and cultures <b>CO 5:</b> Analyse the relationship between religion and culture <b>CO 6:</b> Imbibe moralistic values through religion and literature
2.	HBEGC62	Core XIV - African American Literature	<b>CO 1:</b> Comprehend the emerging trends in African American Literature <b>CO 2:</b> Understand the upheaval in material condition of African Americans <b>CO 3:</b> Understand the trauma experienced by the African American people <b>CO 4:</b> Understand the theoretical concepts of race and racism
3.	HBEGC63	Core XV - Media Writing	<b>CO 1:</b> Identify the components of news article <b>CO 2:</b> Gain knowledge of writing for media <b>CO 3:</b> Understand the techniques of writing <b>CO 4:</b> Demonstrate mock interviews
4.	HBEGC64PW	Core XVI - Project	<b>CO 1:</b> Know to write project statement <b>CO 2:</b> Develop influential reading <b>CO 3:</b> Improve presentation skills <b>CO 4:</b> Surf for research resources
5.	HBEGE6A	Core Elective III - English for Education and Career Abroad	<b>CO 1:</b> Gain introductory knowledge of TOEFL and IELTS <b>CO 2:</b> Develop their inferential and concluding skill in reading <b>CO 3:</b> Develop their listening skill in natural speech <b>CO 4:</b> Enhance their oral fluency <b>CO 5:</b> Improve their writing skill with a good flow <b>CO 6:</b> Take English proficiency tests as TOEFL and IELTS
6.	HBEGE6B	Core Elective III - English for Competitive Examinations	<b>CO 1:</b> Learn unfamiliar words and determine their meaning using a variety of strategies <b>CO 2:</b> Enhance students' fluency and proficiency in Writing <b>CO 3:</b> Train students in test taking strategies <b>CO 4:</b> Expose to material that facilitates aspects of grammar, writing and vocabulary <b>CO 5:</b> Become proficient users of English involving all the four skills <b>CO 6:</b> Communicate effectively and appropriately in real life situation

7.	HBEGE65	Skill Based Elective VI - Business English–VI	<b>CO 1:</b> Know the meaning of unfamiliar words <b>CO 2:</b> Learn new vocabularies, practice and use in speaking and writing <b>CO 3:</b> Develop their skills in telephoning and emailing <b>CO 4:</b> Develop their key skills that prepare them for interviews, meetings and team project
8.	HBSED6	Extra Credit - Skills for Employability Development	<b>CO1:</b> Able to understand the way of success through bringing some attitude changes among them <b>CO2:</b> Know how to build a positive personality <b>CO3:</b> Able to prepare resume and obtain interview and group discussion skills <b>CO4:</b> Prepare themselves for Quantitative Analytical Aptitude Test

### I MA English – 2023 Batch (I Series Revised)

#### ODD Semester

S No	Subject Code	Subject Name	Course Outcomes
1.	HMEGC11	Core I - Modern Literature (From late 19 <sup>th</sup> to 21 <sup>st</sup> century)	<b>CO 1:</b> Understand and infer the language of the Modern period <b>CO 2:</b> Classify the work of art in accordance with social and political happenings <b>CO 3:</b> Analyse the essence of various genres of Modern period <b>CO 4:</b> Examine the influence of science in Modern literature <b>CO 5:</b> Discuss the different writing styles of authors from the late 19 <sup>th</sup> century to 21 <sup>st</sup> century
2.	HMEGC121	Core II - Comparative Literature	<b>CO 1:</b> Understand the basic concepts in comparative literature <b>CO 2:</b> Identify the theories involved in comparing the genres, works and styles <b>CO 3:</b> Apply the theories of comparison to compare any literature across the world <b>CO 4:</b> Critically analyze the works of comparative Literature <b>CO 5:</b> Develop a comparative study on their own
3.	HMEGC13	Core III - Indian and Diasporic Literature	<b>CO 1:</b> Demonstrate the social and political controversies in India <b>CO 2:</b> Utilize knowledge about Indian cultural ethos and its uniqueness <b>CO 3:</b> Analyze the innovative and artistic use of language employed by the Indian writers <b>CO 4:</b> Criticize the cultural changes and alienation in immigrant experience <b>CO 5:</b> Develop and perceive the values and human concern inherent in the Indian cultural context

4.	HMEGC141	Core IV - Translation Studies	<p><b>CO 1:</b> Define and explain the meaning of translation and kinds of translation procedures</p> <p><b>CO 2:</b> Identify the problems faced by the translators in the process of translating literary and sacred texts</p> <p><b>CO 3:</b> Examine the importance of Translation Studies in general</p> <p><b>CO 4:</b> Justify critical evaluation and appreciate the translated genres</p> <p><b>CO 5:</b> Establish the act of translating any text by themselves</p>
5.	HMEGE11A/	DSE I - Teaching of English/	<p><b>CO 1:</b> Understand the methods of language learning and teaching</p> <p><b>CO 2:</b> Plan curriculum and design syllabus</p> <p><b>CO 3:</b> Apply different approaches in language teaching</p> <p><b>CO 4:</b> Develop the skills of listening, speaking, reading and writing</p> <p><b>CO 5:</b> Assess language skills</p>
	HMEGE1B	DSE I - Travel Writing / Online Internship <sup>#</sup>	<p><b>CO 1:</b> Define and understand the qualities of good travel writing</p> <p><b>CO 2:</b> Identify the growth of travel writing from national to global level</p> <p><b>CO 3:</b> Analyze travel writing in relation to gender</p> <p><b>CO 4:</b> Appreciate the role of travel in refining one's own self and society</p> <p><b>CO 5:</b> Create a travelogue on their own</p>
6.	HMEGX1/ HMEGX10	Extra Credit - Content Writing /Online Course*	<p><b>CO 1:</b> Understand the scope and fundamentals of content writing</p> <p><b>CO 2:</b> Apply the techniques and styles of writing and editing</p> <p><b>CO 3:</b> Discover the creative skills required for E-commerce sites</p> <p><b>CO 4:</b> Determine relevant prospects for content writing</p> <p><b>CO 5:</b> Design a web content</p>

**I MA English - 2023 Batch (I Series - Revised)  
EVEN Semester**

S No	Subject Code	Subject Name	Course Outcomes
1.	HMEGC21	Core V - American Literature	<p><b>CO 1:</b> Understand the concept and themes of American literature</p> <p><b>CO 2:</b> Analyse the thoughts and feelings experienced by the American poets</p> <p><b>CO 3:</b> Explore the norms, values and traits of American culture</p> <p><b>CO 4:</b> Discover the artistic and personal expression of the American writers</p> <p><b>CO 5:</b> Develop creative thoughts sensitive to the whole spectrum of human experience</p>

2.	HMEGC221	Core VI - English Language and Linguistics	<p><b>CO 1:</b> Understand the origin and growth of English language</p> <p><b>CO 2:</b> Identify the changes in English language over the past fifteen hundred years or more</p> <p><b>CO 3:</b> Analyze the significance of English language with various levels and branches of linguistics</p> <p><b>CO 4:</b> Assess how different social and cultural contexts affect the nature of language and meaning</p> <p><b>CO 5:</b> Discuss the theory and aspects of English language and linguistics</p>
3.	HMEGC231	Core VII - Women's Literature & Gender Studies / NPTEL <sup>o</sup>	<p><b>CO 1:</b> Explain the history, developments and context of Women's Literature</p> <p><b>CO 2:</b> Identify the common and particular challenges that women face</p> <p><b>CO 3:</b> Discover the role played by the female writers in achieving fame equally to men</p> <p><b>CO 4:</b> Defend feminist critical approaches and explain their roles in building ideas</p> <p><b>CO 5:</b> Discuss scholarly works from various feminist-oriented context and methodological standpoint</p>
4.	HMEGC24	Core VIII - Postmodern Literature	<p><b>CO 1:</b> Understand the transition from modernism to postmodernism</p> <p><b>CO 2:</b> Categorize the postmodern theories in literature</p> <p><b>CO 3:</b> Discover the trends in postmodern literature</p> <p><b>CO 4:</b> Appraise the themes and features in postmodern literature</p> <p><b>CO 5:</b> Construct the work in connection with the postmodern literature</p>
5.	HMEGE21AP	DSE II - Magazine Production	<p><b>CO 1:</b> Learn the skills of photography and Reporting Skills</p> <p><b>CO 2:</b> Experience writing and presentation of campus and / non campus issues / topics in a Magazine format</p> <p><b>CO 3:</b> Apply the principles of design, format, layout and advertising</p> <p><b>CO 4:</b> Learn the concepts of script writing</p> <p><b>CO 5:</b> Produce an in-house magazine</p>
	HMEGE2BPW	DSE II - Print Media/Internship <sup>#</sup> [Mini Project]	<p><b>CO 1:</b> Understand the concepts of Print Media Internship</p> <p><b>CO 2:</b> Apply various skills and knowledge to become a print media professional</p> <p><b>CO 3:</b> Discover innovative ideas in print media</p> <p><b>CO 4:</b> Establish interpersonal relationship with media persons</p> <p><b>CO 5:</b> Produce concepts and layout based on print media</p>
6.	HMEGX2/ HMEGX2O	Extra Credit - Case Study /Online Course*	<p><b>CO 1:</b> Understand the characteristics of case study in research</p> <p><b>CO 2:</b> Apply the techniques of case study in projects or research</p> <p><b>CO 3:</b> Compare and contrast types of case studies</p> <p><b>CO 4:</b> Criticize their own and peers' research projects</p> <p><b>CO 5:</b> Create a case study design</p>

**II MA English – 2022 Batch (I Series)**  
**ODD Semester**

S No	Subject Code	Subject Name	Course Outcomes
1.	HMEGC31	Core IX - Psychology and Literature	<p><b>CO 1:</b> Understand and recall the basic psychological concepts and theories</p> <p><b>CO 2:</b> Identify the principles of human behaviour and motivation in literary perspective</p> <p><b>CO 3:</b> Analyze the psyche of the popular characters in literature</p> <p><b>CO 4:</b> Interpret the characters' behaviour in relation with their psychological trauma</p> <p><b>CO 5:</b> Construct a psychological analysis of any literary work by applying the theories of psychology</p>
2.	HMEGC32	Core X - Principles of Literary Criticism	<p><b>CO 1:</b> Understand the origin of English Critical Traditions and its influence on the domain of criticism</p> <p><b>CO 2:</b> Develop the critical concepts and associate them with the evolving genre</p> <p><b>CO 3:</b> Differentiate the ways of intellectualizing the work of art</p> <p><b>CO 4:</b> Develop the ability to read the works of literary, rhetorical, and cultural criticism</p> <p><b>CO 5:</b> Integrate literary texts with the theory and produce literary criticism</p>
3.	HMEGC33	Core XI - Research Methodology and Academic Writing / NPTEL <sup>o</sup>	<p><b>CO 1:</b> Understand the basic concept of academic writing</p> <p><b>CO 2:</b> Identify different research sources and format of a research paper</p> <p><b>CO 3:</b> Examine different methodologies of documentation</p> <p><b>CO 4:</b> Discover major trends and techniques in research and mechanics of writing</p> <p><b>CO 5:</b> Prepare and publish articles in literary journal</p>
4.	HMEGE3APW	DSE III - Documentary Preparation	<p><b>CO 1:</b> Understand the concept of documentary preparation</p> <p><b>CO 2:</b> Apply the creative skills to prepare a documentary</p> <p><b>CO 3:</b> Analyse the techniques of camera and editing</p> <p><b>CO 4:</b> Transform the editing skills from campus to work</p> <p><b>CO 5:</b> Produce a documentary</p>
	HMEGE3BPW	DSE III - Electronic Media Internship [Mini Project]	<p><b>CO 1:</b> Understand the concepts of Electronic Media Internship</p> <p><b>CO 2:</b> Apply various skills and knowledge to become a media professional</p> <p><b>CO 3:</b> Discover innovative ideas in electronic media</p> <p><b>CO 4:</b> Establish interpersonal relationship with media persons</p> <p><b>CO 5:</b> Produce concepts and layout based on digital media</p>
5.	HMEGX3/ HMEGX30	Extra Credit - Employability Skills/ Online Course*	<p><b>CO 1:</b> Identify a planned approach towards career</p> <p><b>CO 2:</b> Associate skills and interests with chosen career path</p> <p><b>CO 3:</b> Take part in group discussions</p> <p><b>CO 4:</b> Develop thinking ability</p> <p><b>CO 5:</b> Perceive personal interviews through mock interviews</p>

**II MA English – 2022 Batch (I Series)**  
**EVEN Semester**

<b>S No</b>	<b>Subject Code</b>	<b>Subject Name</b>	<b>Course Outcomes</b>
1.	HMEGC41	Core XII - Subaltern Literature	<p><b>CO 1:</b> Explain the basic concept of subaltern</p> <p><b>CO 2:</b> Identify the sufferings of socially, politically and economically neglected and oppressed</p> <p><b>CO 3:</b> Infer the modern subaltern culture and its impact</p> <p><b>CO 4:</b> Interpret the impact created by the writers and their writing style</p> <p><b>CO 5:</b> Construct one's own identity and public persona according to the norms and standards of Society</p>
2.	HMEGC42	Core XIII - Green Studies	<p><b>CO 1:</b> Understand the ecological concern, and eco-culture of various literature</p> <p><b>CO 2:</b> Recognize the Eastern and Western Ecocritical tools</p> <p><b>CO 3:</b> Analysis historical perspective of Eco-Cultural Literature</p> <p><b>CO 4:</b> Evaluate the relation between humans and then natural world in literature</p> <p><b>CO 5:</b> Create ecological thinking and cultural background</p>
3.	HMEGC43PW	Core XIV - Project-Dissertation / Online Internship <sup>#</sup>	<p><b>CO 1:</b> Understand the strategies of textual interpretation appropriate to different literary genres</p> <p><b>CO 2:</b> Apply the principles of literary criticism to analyze the text</p> <p><b>CO 3:</b> Analyze the research concepts and contexts clearly and effectively</p> <p><b>CO 4:</b> Measure the qualitative and quantitative evaluation processes to original data</p> <p><b>CO 5:</b> Develop a project and cite source according to MLA documentation style and maintain academic integrity in their work</p>
4.	HMEGX4/H MEGX40	Extra Credit - Book Review/Online Course*	<p><b>CO 1:</b> Understand the concept of book review</p> <p><b>CO 2:</b> Specify the methods of reviewing a book</p> <p><b>CO 3:</b> Analyze the techniques of reviewing a book</p> <p><b>CO 4:</b> Examine the process of writing a review</p> <p><b>CO 5:</b> Produce the review for a literary work</p>

### Value Added Programme – Course Outcome

S No	Subject Code	Subject Name	Course Outcomes
1.	ICSB1 ICSB2P	Spoken Proficiency in English - Basic (Theory & Practical)	<b>CO 1:</b> Speak in English with appropriate pronunciation <b>CO 2:</b> respond fluently in English <b>CO 3:</b> communicate in both formal and informal contexts <b>CO 4:</b> deliver speech in English <b>CO 5:</b> build self confidence
2.	ICSA1 ICSA2P	Spoken Proficiency in English – Advanced (Theory & Practical)	<b>CO 1:</b> Speak in English with appropriate pronunciation <b>CO 2:</b> respond proficiently in English <b>CO 3:</b> communicate in both formal and informal contexts <b>CO 4:</b> deliver speech in English <b>CO 5:</b> build self confidence
3.	HCTS1	Core I - Teaching Skills	<b>CO 1:</b> Know the role of English in India in the right perspective and the rationale for learning English as a second language <b>CO 2:</b> Acquire knowledge of the current trends in the teaching of English <b>CO 3:</b> Invent their own tools to teach English in better way <b>CO 4:</b> Prepare lesson plans <b>CO 5:</b> Acquire classroom management skills
4.	HCTS2P	Core II - Teaching Skills (Practical)	<b>CO 1:</b> Develop basic ability of teaching <b>CO 2:</b> Practical teaching experience <b>CO 3:</b> Undergo the real time training to meet out the recent challenges <b>CO 4:</b> Learn and familiarize the components of teaching <b>CO 5:</b> Improve the technicality of teaching skills for effective classroom teaching
5.	ICJS1 ICJS2P	Core I - Japanese Spoken Language (Theory) Core II - Japanese Spoken Language (Practical)	<b>CO 1:</b> Speak in Japanese with appropriate pronunciation <b>CO 2:</b> respond for Japanese phrases <b>CO 3:</b> communicate in both formal and informal contexts <b>CO 4:</b> deliver speech in Japanese <b>CO 5:</b> build self confidence
6.	HDTS1	Core I - Teaching Skills - Paper I	<b>CO 1:</b> Know the rationale for learning and teaching English as a second language <b>CO 2:</b> Acquire knowledge of the current trends in the teaching of English <b>CO 3:</b> Invent their own tools to teach English in better way <b>CO 4:</b> Identify students with learning disabilities and teach accordingly <b>CO 5:</b> Motivate and encourage students to pursue their goal
7.	HDTS2	Core II - Teaching Skills - Paper II	<b>CO 1:</b> Know the role of English in India in the right perspective and the rationale for learning English as a second language <b>CO 2:</b> Demonstrate proficiency in teacher role <b>CO 3:</b> Develop the skill of teaching method <b>CO 4:</b> Prepare lesson plans <b>CO 5:</b> Learn How to Assess Students

8.	HDTS3P	Core III - Teaching Skills - Practical	<b>CO 1:</b> Experience teaching in a classroom setting <b>CO 2:</b> Acquire presentation skills for teaching <b>CO 3:</b> Learn to write report <b>CO 4:</b> Learn different methods of teaching <b>CO 5:</b> Acquire classroom management skills
----	--------	--	--

# THASSIM BEEVI ABDUL KADER COLLEGE FOR WOMEN

A Minority Institution Sponsored by Seethakathi Trust, Chennai  
Recognized by DBT under Star College Scheme, Ministry of Science and Technology, Govt. of India  
An Autonomous Institution Affiliated to Alagappa University, Karaikudi  
Accredited by NAAC with 'A' Grade (CGPA: 3.16) & ISO 9001: 2015 Certified Institution  
Recognized by UGC with 2(f) & 12(B)  
Kilakarai-623517, Ramanathapuram District, Tamil Nadu

## DEPARTMENT OF COMPUTER SCIENCE AND RESEARCH CENTRE

Academic Year: 2023 – 2024

### Course Outcomes

#### Class: I MCA (Odd Semester)

S. No.	Course Code	Course Name	Course Outcomes
1.	IMCAC111	Core I– Java Programming	<b>CO1:</b> Explain the concepts of Java Basics, Control Structures, Loops, Functions, Arrays, Classes, Inheritance, Thread, Applet, Swing, Servlet and JSP <b>CO2:</b> Utilize the techniques of AWT and Swing to create various fields <b>CO3:</b> Examine an implementation of Applet with Java for setting up fonts and its style <b>CO4:</b> Evaluate different types of JDBC drivers, connectivity and exceptions <b>CO5:</b> Design the web application using swing, servlet, JSP and JDBC
2.	IMCAC121	Core II - Data Structures and Algorithms	<b>CO1:</b> Explain the concepts of data structures and its classification, Linked lists, Graphs and B Trees <b>CO2:</b> Apply data structures and its algorithms in real time applications <b>CO3:</b> Analyze the efficiency of graphs and searching algorithms <b>CO4:</b> Compare different sorting algorithms <b>CO5:</b> Develop different algorithm design techniques
3.	IMCAC131	Core III - RDBMS	<b>CO1:</b> Explore about DBMS architecture, database designs, database modeling <b>CO2:</b> Extend about ER-Diagram and UML, Relational Algebra and Relational Calculus <b>CO3:</b> Distinguish the normalization theory (1NF-2NF- 3NF- BCNF) <b>CO4:</b> Apply Structured query language (SQL) and Constraints <b>CO5:</b> Evaluate various transaction processing, concurrency control mechanisms and database protection mechanisms
4.	IMCAC14	Core IV - Optimization Techniques	<b>CO1:</b> Explain characteristics of Operational Research, Computational Efficiency of the Simplex

			<p>Technique, Transportation Problems, Assignment problem and Duality</p> <p><b>CO2:</b>Apply Graphical, Simplex methods, Assignment Problem, Transportation Problem and Dual Simplex Method methods to get optimal solution for Linear Programming</p> <p><b>CO3:</b>Analyse the optimal solutions of different Linear Programming methods such as Graphical, Simplex method, Assignment Problem and Transportation Problem and Dual Simplex methods for making effective business decisions</p> <p><b>CO4:</b>Compare Solutions of as Graphical, Simplex and Dual Simplex method</p> <p><b>CO5:</b>Generate dual of LPP and dual of Transportation Problem</p>
5.	IMCAC151P	Core V - Java Programming Lab	<p><b>CO1:</b> Demonstrate the concepts such as OOPs, Array to implement Java code</p> <p><b>CO2:</b> Apply an event handling using swing and AWT components</p> <p><b>CO3:</b> Illustrate the concept of Applets in Java program</p> <p><b>CO4:</b> Discover the database access through Java code using JDBC connectivity</p> <p><b>CO5:</b> Create dynamic web pages using Servlet and JSP</p>
6.	IMCAC16P	Core VI - Data Structures and Algorithms with Python Lab	<p><b>CO1:</b> Describe the Python language syntax including control statements, loops and functions to write programs for a wide variety problem in mathematics.</p> <p><b>CO2:</b> Examine the core data structures in python to store, process and sort the data.</p> <p><b>CO3:</b>Basic knowledge of condition checking</p> <p><b>CO4:</b>Implement the structure of algorithm</p> <p><b>CO5:</b>Examine the file and array concept</p>
7.	IMCAX1P/ IMCAX10	Extra Credit I - RDBMS Lab/*Online Course	<p><b>CO1:</b>Demonstrate DDL, DML and TCL Commands</p> <p><b>CO2:</b>Apply the basic concepts of Database Systems and Applications</p> <p><b>CO3:</b>Illustrate the use of implementing constraints in tables</p> <p><b>CO4:</b>Implement normalization queries using SQL in database creation and interaction</p> <p><b>CO5:</b>Design ER-models to represent simple database application scenarios</p>

**Class: IMCA (Even Semester)**

S. No.	Course Code	Course Name	Course Outcomes
1.	IMCAC21	Core VII - Web Technology	<p><b>CO1:</b> Explain the fundamentals of web development technologies</p> <p><b>CO2:</b> Apply the different tags to develop a dynamic webpage using JavaScript, JSP and ASP</p>

			<p><b>CO3:</b> Able to write a well formed /valid XML document</p> <p><b>CO4:</b> Justify best technologies for solving web client/server problems</p> <p><b>CO5:</b> Build web pages using various web design languages</p>
2.	IMCAC22	Core VIII - Computer Organization	<p><b>CO1:</b> Define the fundamental organization of a computer system</p> <p><b>CO2:</b> Explain the concept of sequencing, designing, pipeline and vector processing methods</p> <p><b>CO3:</b> Examine the function of input-output organization</p> <p><b>CO4:</b> Compare various pipeline concepts</p> <p><b>CO5:</b> Distinguish the organization of various parts of a system memory hierarchy</p>
3.	IMCAC23P	Core IX - Web Designing Lab	<p><b>CO1:</b> Explain the basics of all HTML tags to create the static web page</p> <p><b>CO2:</b> Apply the concepts of table and list in HTML</p> <p><b>CO3:</b> Examine the use of style sheets, frames and hyperlinks</p> <p><b>CO4:</b> Evaluate the concept of validation using JavaScript</p> <p><b>CO5:</b> Create a dynamic website</p>
4.	IMCAC24P	Core X - Data Analytics Lab	<p><b>CO1:</b> Outline Excel functions to solve mathematical, text, date and time operations, R functions for numerical operations and Scilab functions for matrix operations</p> <p><b>CO2:</b> Demonstrate the concepts of sorting, filtering using Excel</p> <p><b>CO3:</b> Illustrate statistical operations using R</p> <p><b>CO4:</b> Evaluate the Regression and Clustering</p> <p><b>CO5:</b> Develop programs to solve equations by Gauss elimination, Gauss Jordan Method and Gauss Seidel</p>
5.	IMCAE2A	DSE I – a. Cloud and Distributed Computing	<p><b>CO1:</b> Identify the features of Cloud Computing and Virtualization</p> <p><b>CO2:</b> Demonstrate the leader election and cloud native computing</p> <p><b>CO3:</b> Classify types of cloud assets, Software-Defined Networking and Network Function Virtualization</p> <p><b>CO4:</b> Justify cloud storage, Identity and Access Management</p> <p><b>CO5:</b> Generate the Classical Distributed Algorithms, the Industry Systems and Cloud applications</p>
6.	IMCAE21C	DSE I– c. Data Analytics	<p><b>CO1:</b> Describe Data sources, generations, data formats, Data Evolution, Data from various domains</p> <p><b>CO2:</b> Determine Big Data Characteristics, Frameworks, components and Limitation of traditional approaches and map Big Vs to Data Domains</p>

			<p><b>CO3:</b> Analyse various domains of Data Characteristics, Platform, Programming Model and Design Data Analytic ecosystem, and data processing framework</p> <p><b>CO4:</b> Evaluate the Concepts of Data Analytics Phases and Techniques</p> <p><b>CO5:</b> Formulate Data Analytics Techniques practically using R environment</p>
7.	IMCAE2D	DSE II – a. Compiler Design	<p><b>CO1:</b> Define common forms of parsers</p> <p><b>CO2:</b> Illustrate compiler construction tools and describes the Functionality of each stage of compilation process</p> <p><b>CO3:</b> Construct Grammars for Natural Languages and find the Syntactical errors/Semantic errors during the compilations using parsing techniques</p> <p><b>CO4:</b> Analyze different representations of intermediate code</p> <p><b>CO5:</b> Design to construct new compiler for new languages</p>
8.	IMCAE21E	DSE II – b. Cryptography and Network Security	<p><b>CO1:</b> Define various Cryptographic Techniques</p> <p><b>CO2:</b> Demonstrate various data encryption techniques</p> <p><b>CO3:</b> Explain the encryption standard and asymmetric ciphers</p> <p><b>CO4:</b> Analyze Hashing and Digital Signature techniques</p> <p><b>CO5:</b> Discuss various Security Applications</p>
9.	IMCAE2F	DSE II – c. BlockChain Technologies	<p><b>CO1:</b> Illustrate the Fundamental Concepts of Block chain and uses of Bitcoin</p> <p><b>CO2:</b> Apply Cryptography Algorithms in block chain</p> <p><b>CO3:</b> Classify a transactions in Bitcoin</p> <p><b>CO4:</b> Explain the concept Decentralization, BitCoin, Ethereum in Block chain</p> <p><b>CO5:</b> Develop Private block chain environment and smart contracts in recent trends by using Ethereum</p>
10.	IMCAX2P/ IMCAX2O	Extra Credit II - #Internship/ *Online Course	<p><b>CO1:</b> Understand self-understanding, self-confidence, and interpersonal skills</p> <p><b>CO2:</b> Assess Strengths, Weaknesses, Opportunities and Threats (SWOT) and explore career options and gain general work experience</p> <p><b>CO3:</b> Examine any specific learning outcomes identified in supplemental documentation provided as part of the internship application process</p> <p><b>CO4:</b> Apply various soft skills such as time management, positive attitude and communication skills during performance of the tasks assigned in internship organization</p> <p><b>CO5:</b> Create the document which contains company profile by compiling the brief history, management</p>

			structure, products / services offered, key achievements and market performance for organization of internship
--	--	--	--

**Class: I BSc Information Technology (Odd Semester)**

S. No.	Course Code	Course Name	Course Outcomes
1.	IBITC111	Core I - Principles of Information Technology	<p><b>CO1:</b> Summarize the concept of computer system, architecture, network, memory</p> <p><b>CO2:</b> Explain how computers are networked and how an operating system interacts with hardware</p> <p><b>CO3:</b> Illustrate the working of voice and data communication systems and networks</p> <p><b>CO4:</b> Evaluate and measure the performance of computer security and virus</p> <p><b>CO5:</b> Develop the applications in multimedia and cloud computing</p>
2.	IBITC12	Core II - Digital Electronics	<p><b>CO1:</b> Remember the basic structure of number system methods like binary, octal and hexadecimal</p> <p><b>CO2:</b> Apply the functions to simplify the logical expressions</p> <p><b>CO3:</b> Analyze the operations of various logical circuits</p> <p><b>CO4:</b> Evaluate the functions of the memory organization</p> <p><b>CO5:</b> Create the sequential and combinational logic circuits</p>
3.	IBITS141P	SEC I - Office Automation Lab	<p><b>CO1:</b> Illustrate various options of office application</p> <p><b>CO2:</b> Demonstrate different types of formats, formulas and transition in office application</p> <p><b>CO3:</b> Develop reports to solve the problems of manual report handling</p> <p><b>CO4:</b> Compare the options of different Microsoft office applications to use appropriately</p> <p><b>CO5:</b> Build a presentation, advertisement, reports etc for enterprises</p>

**Class: I BSc Information Technology (Even Semester)**

S. No.	Course Code	Course Name	Course Outcomes
1.	IBITC21	Core III - Programming in C	<p><b>CO1:</b> Describe the basic programming knowledge of C, operators and expressions</p> <p><b>CO2:</b> Demonstrate data input and output, control statements &amp; functions</p> <p><b>CO3:</b> Analyse program structure and arrays</p> <p><b>CO4:</b> Evaluate strings and pointers</p> <p><b>CO5:</b> Formulate structures, unions and file handling</p>
2.	IBITC22P	Core IV - Programming in C Lab	<p><b>CO1:</b> Remember the control structures and loops</p> <p><b>CO2:</b> Apply the concepts of functions and pointers</p> <p><b>CO3:</b> Analyze the concepts of structures and arrays</p> <p><b>CO4:</b> Evaluate string handling functions</p>

			<b>CO5:</b> Create programs with pointers, arrays and structures
3.	IBITS24P	SEC II - Designing Lab	<b>CO1:</b> Recognize the uses of various tools and effects in GIMP <b>CO2:</b> Identify the steps to start designing with images <b>CO3:</b> Simplify the process of designing, editing, masking etc. to solve the difficulties of designers <b>CO4:</b> Support studios to create passport size photo <b>CO5:</b> Design visiting card, ID card, birthday card, logo etc.
4.	IBITX2P/ IBITX2O	Extra Credit I - Corel Draw Lab/ * Online Course	<b>CO1:</b> Describe the concepts of tools and techniques in CorelDraw <b>CO2:</b> Apply the concept of Creation and modification of objects for graphic design purposes <b>CO3:</b> Analyze various tools to design Flyers <b>CO4:</b> Develop any kind of LOGO using techniques in CorelDraw <b>CO5:</b> Build design magazine and presentations

**Class: I BSc Computer Science (Odd Semester)**

S. No.	Course Code	Course Name	Course Outcomes
1.	IBCSC111	Core I - Fundamentals of Computers	<b>CO1:</b> Summarize the basics of computers and its generations <b>CO2:</b> Illustrate number systems and its conversions <b>CO3:</b> Analyze the uses of internal and external components of computers <b>CO4:</b> Select appropriate input and output devices for digital literacy according to its intended use <b>CO5:</b> Formulate the methods to handle Multimedia Applications
2.	IBCSC12	Core II - Computer Organization	<b>CO1:</b> Define the fundamental organization of a computer system <b>CO2:</b> Explain the concept of sequencing, designing, pipeline and vector processing methods <b>CO3:</b> Examine the function of input-output organization <b>CO4:</b> Compare various pipeline concepts <b>CO5:</b> Distinguish the organization of various parts of a system memory hierarchy
3.	IBCSC131P	Core III - Office Automation Lab	<b>CO1:</b> Illustrate various options of Office Application <b>CO2:</b> Demonstrate different types of formats, formulas and transition in office application <b>CO3:</b> Develop reports to solve the problems of manual report handling <b>CO4:</b> Compare the options of different Microsoft Office Applications to use appropriately <b>CO5:</b> Build a presentation, Advertisement, Reports etc. for enterprise

4.	IBCSA14	AECC I - Digital Electronics	<p><b>CO1:</b> Remember the basic structure of number system methods like binary, octal and hexadecimal</p> <p><b>CO2:</b> Apply the functions to simplify the logical expressions</p> <p><b>CO3:</b> Analyze the operations of various logical circuits</p> <p><b>CO4:</b> Evaluate the functions of the memory organization</p> <p><b>CO5:</b> Create the sequential and combinational logic circuits</p> <p><u>Digital Electronics Lab</u></p> <p><b>CO1:</b> Recognize logic functions</p> <p><b>CO2:</b> Identify the steps for truth tables, and Boolean algebra expressions</p> <p><b>CO3:</b> Simplify the process of the laws of Boolean algebra to simplify circuits and Boolean algebra expressions</p> <p><b>CO4:</b> Support combinational logic circuits</p> <p><b>CO5:</b> Build the Diodes Characteristics</p>
5.	IBCSS15P	SEC I - Multimedia Lab - I	<p><b>CO1:</b> Recognize the uses of various tools and effects in GIMP</p> <p><b>CO2:</b> Identify the steps to start designing with images</p> <p><b>CO3:</b> Simplify the process of designing, editing and masking to solve the difficulties of designers</p> <p><b>CO4:</b> Support studios to create passport size photo</p> <p><b>CO5:</b> Design Visiting card, ID card, Birthday card, logo etc.</p>

**Class: I BSc Computer Science (Even Semester)**

S. No.	Course Code	Course Name	Course Outcomes
1.	IBCSA21	Core IV - Programming in C	<p><b>CO1:</b> Describe the basic programming knowledge of C, operators and expressions</p> <p><b>CO2:</b> Demonstrate data input and output, control statements &amp; functions</p> <p><b>CO3:</b> Analyse program structure and arrays</p> <p><b>CO4:</b> Evaluate strings and pointers</p> <p><b>CO5:</b> Formulate structures, unions and file handling</p>
2.	IBCSA22P	Core V - Programming in C Lab	<p><b>CO1:</b> Remember the control structures and loops</p> <p><b>CO2:</b> Apply the concepts of functions and pointers</p> <p><b>CO3:</b> Analyze the concepts of Structures and arrays</p> <p><b>CO4:</b> Evaluate string handling functions</p> <p><b>CO5:</b> Create programs with pointers, arrays, structures</p>
3.	IBCSA231P	AECC II - IoT Lab	<p><b>CO1:</b> Understand the concept of Internet of Things</p> <p><b>CO2:</b> Implement interfacing of various sensors with Arduino</p> <p><b>CO3:</b> Demonstrate the ability to transmit data wirelessly between different devices</p>

			<b>CO4:</b> Show an ability to get the sensor data <b>CO5:</b> Design different interfacing applications
4.	IBCSS24P	SEC II - Multimedia Lab - II	<b>CO1:</b> Recognize the uses of various tools in Blender <b>CO2:</b> Predict the steps that are needed to create animation <b>CO3:</b> Critically analyze the required options to create animation with respect to its nature <b>CO4:</b> Evaluate the use of 'Motion tween' in the given concept <b>CO5:</b> Create animated scenes, animated logos, animated cartoon characters etc
5.	IBCSX2P/ IBCSX2O	Extra Credit I - Coral Draw Lab/ *Online Course	<b>CO1:</b> Describe the concepts of tools and techniques in CorelDraw <b>CO2:</b> Apply the concept of Creation and modification of objects for graphic design purposes. <b>CO3:</b> Analyze various tools to design Flyers. <b>CO4:</b> Develop any kind of LOGO using techniques in CorelDraw <b>CO5:</b> Build design magazine and presentations

**Class: I BSc Cyber Security (Odd Semester)**

S. No.	Course Code	Course Name	Course Outcomes
1.	IBCYC111	Core I - Fundamentals of Computers	<b>CO1:</b> Summarize the basics of computers and its generations <b>CO2:</b> Illustrate number systems and its conversions <b>CO3:</b> Analyze the uses of internal and external components of computers <b>CO4:</b> Select appropriate input and output devices for digital literacy according to its intended use <b>CO5:</b> Formulate the methods to handle multimedia applications
2.	IBCYC121	Core II - Programming in C	<b>CO1:</b> Describe the basic programming knowledge of C, operators and expressions <b>CO2:</b> Demonstrate data input and output, control statements & functions <b>CO3:</b> Analyze program structure and arrays <b>CO4:</b> Evaluate strings and pointers <b>CO5:</b> Formulate structures, unions and file handling
3.	IBCYC141P	Core III - Programming in C Lab	<b>CO1:</b> Remember the control structures and loops <b>CO2:</b> Apply the concepts of functions and pointers <b>CO3:</b> Analyze the concepts of Structures and arrays <b>CO4:</b> Evaluate string handling functions <b>CO5:</b> Create programs with pointers, arrays, structures
4.	IBCYC151P	SEC I - Office Automation Lab	<b>CO1:</b> Illustrate various options of Office Application <b>CO2:</b> Demonstrate different types of formats, formulas and transition in office application <b>CO3:</b> Develop reports to solve the problems of manual report handling

			<p><b>CO4:</b> Compare the options of different Microsoft Office Applications to use appropriately</p> <p><b>CO5:</b> Build a presentation, Advertisement, Reports etc for enterprise</p>
--	--	--	---

**Class: I BSc Cyber Security (Even Semester)**

S. No.	Course Code	Course Name	Course Outcomes
1.	IBCYC211	Core IV - Data Structures	<p><b>CO1:</b> Remember the basic concepts of C Language, structure and algorithm</p> <p><b>CO2:</b> Make use of operator, structure, union and pointers</p> <p><b>CO3:</b> Compare Stack, Queue, Tree, Graph, linked list and its operations</p> <p><b>CO4:</b> Explain control statements, types of data structure, data structure operations, types of linked list, stack, queue, tree and graph</p> <p><b>CO5:</b> Elaborate tree traversal, searching and sorting techniques</p>
2.	IBCYC22P	Core V - Data Structures using C Lab	<p><b>CO1:</b> Recall linear and non-linear data structures</p> <p><b>CO2:</b> Illustrate non-linear data structures</p> <p><b>CO3:</b> Perform the different operations of search trees</p> <p><b>CO4:</b> Relate graph traversal algorithms</p> <p><b>CO5:</b> Create sorting and searching algorithms</p>
3.	IBCYA23	AECC II - Digital Electronics	<p><b>CO1:</b> Remember the basic structure of number system methods like binary, octal and hexadecimal</p> <p><b>CO2:</b> Apply the functions to simplify the logical expressions</p> <p><b>CO3:</b> Analyze the operations of various logical circuits</p> <p><b>CO4:</b> Evaluate the functions of the memory organization</p> <p><b>CO5:</b> Create the sequential and combinational logic circuits</p>
4.	IBCYS24P	SEC II - Linux and Shell Programming Lab	<p><b>CO1:</b> Summarize shell commands, scripts, managing files, pipes and redirections</p> <p><b>CO2:</b> Apply appropriate Linux commands to make effective use of the environment to solve problems</p> <p><b>CO3:</b> Illustrate shell scripts to perform repetitive tasks using while and for loops</p> <p><b>CO4:</b> Evaluate shell functions</p> <p><b>CO5:</b> Derive command-line arguments</p>
5.	IBCYX2P / IBCYX2O	Extra Credit I - Corel Draw Lab / *Online Course	<p><b>CO1:</b> Describe the concepts of tools and techniques in CorelDraw</p> <p><b>CO2:</b> Apply the concept of Creation and modification of objects for graphic design purposes</p> <p><b>CO3:</b> Analyze various tools to design Flyers</p> <p><b>CO4:</b> Develop any kind of LOGO using techniques in CorelDraw</p> <p><b>CO5:</b> Build design magazine and presentations</p>

**Class: I BCA (Odd Semester)**

S. No.	Course Code	Course Name	Course Outcomes
1.	IBCPC11	Core I - Programming in C	<b>CO1:</b> Describe the basic programming knowledge of C, operators and expressions <b>CO2:</b> Demonstrate data input and output, control statements & functions <b>CO3:</b> Analyse program structure and arrays <b>CO4:</b> Evaluate strings and pointers <b>CO5:</b> Formulate structures, unions and file handling
2.	IBCPC12P	Core II - Programming in C Lab	<b>CO1:</b> Remember the control structures and loops <b>CO2:</b> Apply the concepts of functions and pointers <b>CO3:</b> Analyze the concepts of Structures and arrays <b>CO4:</b> Evaluate string handling functions <b>CO5:</b> Create programs with pointers, arrays, structures
3.	IBCPC141	Core III - Fundamentals of Computers	<b>CO1:</b> Summarize the basics of computers and its generations <b>CO2:</b> Illustrate number systems and its conversions <b>CO3:</b> Analyze the uses of internal and external components of computers <b>CO4:</b> Select appropriate input and output devices for digital literacy according to its intended use <b>CO5:</b> Formulate the methods to handle Multimedia Applications
4.	IBCPS15P	SEC I - Office Automation Lab	<b>CO1:</b> Illustrate various options of Office Application <b>CO2:</b> Demonstrate different types of formats, formulas and transition in office application <b>CO3:</b> Develop reports to solve the problems of manual report handling <b>CO4:</b> Compare the options of different Microsoft Office Applications to use appropriately <b>CO5:</b> Build a Presentation, Advertisement, Reports etc for enterprises

**Class: I BCA (Even Semester)**

S. No.	Course Code	Course Name	Course Outcomes
1.	IBCPC21	Core IV - Object oriented Programming in C++	<b>CO1:</b> Outline principles of object oriented programming paradigm, tokens, expressions and control structure <b>CO2:</b> Illustrate functions in C++, the concept of classes and objects <b>CO3:</b> Analyse operator overloading, type conversions and inheritance extending classes <b>CO4:</b> Relate pointers, virtual functions, polymorphism and managing console I/O Operations <b>CO5:</b> Formulate working with files, templates and exception handling

2.	IBCPC22P	Core V - Object Oriented Programming in C++ Lab	<p><b>CO1:</b> Remember the different programming paradigm such as procedure oriented and object oriented programming methodology and conceptualize elements of OO methodology</p> <p><b>CO2:</b> Apply the concepts of object oriented programming</p> <p><b>CO3:</b> Analyze the usage of pointers and exception handling</p> <p><b>CO4:</b> Evaluate the concepts of inheritance and overloading features.</p> <p><b>CO5:</b> Create programs with the usage of Files, templates and exception Handling</p>
3.	IBCPA23	AECC II - Digital Electronics	<p><b>CO1:</b> Remember the basic structure of number system methods like binary, octal and hexadecimal</p> <p><b>CO2:</b> Apply the functions to simplify the logical expressions</p> <p><b>CO3:</b> Analyze the operations of various logical circuits</p> <p><b>CO4:</b> Evaluate the functions of the memory organization</p> <p><b>CO5:</b> Create the sequential and combinational logic circuits</p>
4.	IBCPA24P	AECC III - Digital Electronics Lab	<p><b>CO1:</b> Recognize logic functions</p> <p><b>CO2:</b> Identify the steps for truth tables, and Boolean algebra expressions</p> <p><b>CO3:</b> Simplify the process of the laws of Boolean algebra to simplify circuits and Boolean algebra expressions</p> <p><b>CO4:</b> Support combinational logic circuits</p> <p><b>CO5:</b> Build the Diodes Characteristics</p>
5.	IBCPS251P	SEC II - Web Designing Lab(HTML and Java Scripting Language)	<p><b>CO1:</b> Understand the basic tags in HTML and create the programs in that tags</p> <p><b>CO2:</b> Create a web page by applying frames and own personal web pages</p> <p><b>CO3:</b> Develop a web page for advertising purposes</p> <p><b>CO4:</b> Design web pages for own company and institution</p> <p><b>CO5:</b> Create interactive web page using Script</p>
6.	IBCPX2P/ IBCPX2O	Extra Credit I - Coral Draw Lab/ * Online Course	<p><b>CO1:</b> Describe the concepts of tools and techniques in CorelDraw</p> <p><b>CO2:</b> Apply the concept of Creation and modification of objects for graphic design purposes</p> <p><b>CO3:</b> Analyze various tools to design Flyers</p> <p><b>CO4:</b> Develop any kind of LOGO using techniques in CorelDraw</p> <p><b>CO5:</b> Build design magazine and presentations</p>

**Class: II MCA (Odd Semester)**

S. No.	Course Code	Course Name	Course Outcomes
--------	-------------	-------------	-----------------

1.	IMCAC31	Core XI - Software Development Framework	<p><b>CO1:</b> Interpret the basic concepts of .NET, Problem of the state, data, Management Validation and Rich controls</p> <p><b>CO2:</b> Determine types, objects and namespaces, Enumerators and Iterators and Error Handling</p> <p><b>CO3:</b> Illustrate Table Controls, ASP.Net Applications and the Web Server, Interfaces and Structures</p> <p><b>CO4:</b> Evaluate on Exception Handling, Serializing objects, Direct Data Access</p> <p><b>CO5:</b> Develop XML classes and XML Validation, web forms and use web controls</p>
2.	IMCAC32	Core XII - Data Mining and Warehousing	<p><b>CO1:</b> Explore the Basic Concepts of Data Mining</p> <p><b>CO2:</b> Analyze the Classification algorithm and Error Prediction</p> <p><b>CO3:</b> Improve the knowledge about Types of Classification Methods in Data Mining</p> <p><b>CO4:</b> Determine the types of Data clustering methods and Types of Data Mining</p> <p><b>CO5:</b> Evaluate Data Mining Application with Latest Trends</p>
3.	IMCAC33P	Core XIII - Software Development Framework Lab	<p><b>CO1:</b> Build console applications</p> <p><b>CO2:</b> Perform Windows and web Applications</p> <p><b>CO3:</b> Demonstrate validation controls in web form</p> <p><b>CO4:</b> Illustrate Data Grid control to database in Web application</p> <p><b>CO5:</b> Compose Data Repeater and Datalist Controls</p>
4.	IMCAC34P	Core XIV - Data Mining Lab	<p><b>CO1:</b> Recall the basic concepts of data mining</p> <p><b>CO2:</b> Apply data mining techniques</p> <p><b>CO3:</b> Analyze new data mining tools.</p> <p><b>CO4:</b> Evaluate recent trends in data mining such as web mining, spatial-temporal mining</p> <p><b>CO5:</b> Predict the output of different types of algorithms</p>
5.	IMCAE3A	DSE III – a. Artificial Intelligence and Expert Systems	<p><b>CO1:</b> Illustrate knowledge on Artificial Knowledge concepts</p> <p><b>CO2:</b> Apply all searching algorithms and Hill-climbing procedures</p> <p><b>CO3:</b> Analyze their gaming skills and learn about Expert system</p> <p><b>CO4:</b> Evaluate the learners for aspiring careers in the field of Artificial Intelligence</p> <p><b>CO5:</b> Develop the game playing and planning of expert systems</p>
6.	IMCAE3B	DSE III – b. Digital Image Processing	<p><b>CO1:</b> Explain the origins, components, elements of visual perception, basic intensity, transformation, discrete Fourier transform, color models, noise models and morphological algorithms of image processing</p> <p><b>CO2:</b> Apply fundamental steps, smoothing, sharpening, segmentation and classification to the image</p>

			<p><b>CO3:</b>Analyze relationship between pixels, mathematical tools, fuzzy techniques, filters, wavelet transforms, region grouping, splitting and merging</p> <p><b>CO4:</b>Determine histogram, the color image compression</p> <p><b>CO5:</b>Solve noise for color image</p>
7.	IMCAE3C	DSE III – c. Organizational Behaviour	<p><b>CO1:</b> Describe the development of the field of organizational behaviour and explain the micro and macro approaches</p> <p><b>CO2:</b> Demonstrate the applicability of analysing the complexities associated with management of individual behavior in the organization and how the organizational behavior can integrate in understanding the motivation (why) behind behavior of people in the organization</p> <p><b>CO3:</b> Analyse and compare different models used to explain individual behaviour related to motivation and rewards and the complexities associated with management of the group behavior in the organization</p> <p><b>CO4:</b> Evaluate the applicability of the concept of organizational behavior to understand the behavior of people in the organization</p> <p><b>CO5:</b> Formulate the various leadership styles and the role of leaders in a decision making process</p>
8.	IMCAE3D	DSE IV – a. Operating Systems	<p><b>CO1:</b> Remember the structure of operating system and scheduling algorithms</p> <p><b>CO2:</b> Apply the concept of process scheduling, deadlocks and its recovery</p> <p><b>CO3:</b> Analyze the background of memory with segmentation and paging</p> <p><b>CO4:</b> Evaluate file management with file organization, and disk scheduling</p> <p><b>CO5:</b> Create Securing systems and facilities</p>
9.	IMCAE3E	DSE IV – b. Open Source Technologies	<p><b>CO1:</b>Demonstrate install and run Linux operating system</p> <p><b>CO2:</b>Apply the MYSQL database concepts</p> <p><b>CO3:</b>Develop website and control using PHP and MYSQL</p> <p><b>CO4:</b>Explain Install open source web technologies MySQL and PHP</p> <p><b>CO5:</b>Illustrate the Python software making process</p>
10.	IMCAE3F	DSE IV – c. Internet of Things	<p><b>CO1:</b>Recall the importance of smart objects and smart environment</p> <p><b>CO2:</b>Define IoT and M2M</p> <p><b>CO3:</b>Create IoT platforms using design methodology</p> <p><b>CO4:</b>Perform WiFi data communications, remote data storage in cloud, and handle the data using web applications</p> <p><b>CO5:</b> Develop potential problems and solutions using IoT</p>

**Class: II MCA (Even Semester)**

S. No.	Course Code	Course Name	Course Outcomes
1.	IMCAC411	Core XV - Software Project Management	<b>CO1:</b> Summarize Software Process Models <b>CO2:</b> Illustrate the steps involved in Software Project Management and activity planning, Risk Management using case studies <b>CO3:</b> Apply Software effort Estimation Methods <b>CO4:</b> Evaluate Software Project Management Tools <b>CO5:</b> Design the Agile techniques in Software Project Management
2.	IMCAC42	Core XVI - Machine Learning	<b>CO1:</b> Understand the need for machine learning for various problem solving <b>CO2:</b> Demonstrate Decision Tree Learning Algorithm, Back propagation algorithm, Gibbs Algorithm, K-Nearest Neighbor Learning and Temporal Difference Learning with examples <b>CO3:</b> Categorize the various supervised, semi-supervised and unsupervised learning algorithms in machine learning <b>CO4:</b> Apply different classification techniques in real time examples <b>CO5:</b> Design appropriate machine learning algorithms for different problems
3.	IMCAC43PW	Core XVII - Project	<b>CO1:</b> Identify goals, constraints, deliverables, performance criteria and resource requirements in consultation with stakeholders <b>CO2:</b> Implement the plan by executing the code <b>CO3:</b> Integrate the various aspects of software development for the total project <b>CO4:</b> Construct the entire software project according to the specific problem <b>CO5:</b> Check the software project by executing with the various data
4.	IMCAX4P/ IMCAX4O	Extra Credit IV - Document Preparation Lab (LATEX) / *Online Course	<b>CO1:</b> Identify bibliography database <b>CO2:</b> Relate math mode, and fine print <b>CO3:</b> Apply mathematical symbol to create the document <b>CO4:</b> Select clauses, tpestyle, commands, and page style <b>CO5:</b> Create Latex documents

**Class: II BSc Information Technology (Odd Semester)**

S. No.	Course Code	Course Name	Course Outcomes
1.	IBITC31	Core V - Programming in C++	<b>CO1:</b> Describe the principles of object oriented programming paradigm, C++ tokens, expressions and control structures <b>CO2:</b> Illustrate functions in C++, the concept of classes and objects

			<p><b>CO3:</b> Analyse operator overloading, type conversions and inheritance extending classes</p> <p><b>CO4:</b> Relate pointers, virtual functions, polymorphism and managing console I/O operations</p> <p><b>CO5:</b> Formulate working with files, templates and exception handling</p>
2.	IBITC32P	Core VI - Programming in C++ Lab	<p><b>CO1:</b> Remember the different programming paradigm such as procedure oriented and object- oriented programming methodology and conceptualize elements of OO methodology</p> <p><b>CO2:</b> Apply the concepts of object oriented programming</p> <p><b>CO3:</b> Analyze the usage of pointers and exception handling</p> <p><b>CO4:</b> Evaluate the concepts of inheritance and overloading features.</p> <p><b>CO5:</b> Create programs with the usage of files, templates and exception Handling</p>
3.	IBITS34P	SEC III – Web Designing Lab (HTML and JavaScript Language)	<p><b>CO1:</b> Understand the basic tags in HTML and create the programs in that tags</p> <p><b>CO2:</b> Create a web page by applying frames and own personal web pages</p> <p><b>CO3:</b> Develop a web page for advertising purposes</p> <p><b>CO4:</b> Design web pages for own company and institution</p> <p><b>CO5:</b> Create interactive web page using script</p>
4.	IBITX3P/ IBITX3O	Extra Credit II - Visual Basic Lab/ * Online Course	<p><b>CO1:</b> Demonstrate the basics in Visual basic programming in terms of constructs, control statements and functions</p> <p><b>CO2:</b> Apply visual studio software</p> <p><b>CO3:</b> Enhance problem solving, programming and debugging skills</p> <p><b>CO4:</b> Plan the VB programming language</p> <p><b>CO5:</b> Analyze and implement the various events of VB</p>

**Class: II BSc Information Technology (Even Semester)**

S. No.	Course Code	Course Name	Course Outcomes
1.	IBITC411	Core VII - RDBMS	<p><b>CO1:</b>Explore about DBMS architecture, database designs, database modeling</p> <p><b>CO2:</b>Extend about ER-Diagram and UML, Relational Algebra and Relational Calculus</p> <p><b>CO3:</b>Distinguish the normalization theory</p> <p><b>CO4:</b>Apply Structured query language (SQL) and Constraints</p> <p><b>CO5:</b>Evaluate various transaction processing, concurrency control mechanisms and database protection mechanisms</p>
2.	IBITC42P	Core VIII - RDBMS Lab	<b>CO1:</b> Build DDL, DML and TCL commands

			<p><b>CO2:</b> Make use of implementing constraints in tables</p> <p><b>CO3:</b> Apply to create block structure programming language</p> <p><b>CO4:</b> Create the concepts of functions.</p> <p><b>CO5:</b> Develop the procedures, exceptions, triggers in PL/SQL block</p>
3.	IBITS44P	SEC IV - Programming in PHP Lab	<p><b>CO1:</b> Describe the fundamentals of PHP language in trivial problem solving.</p> <p><b>CO2:</b> Determine solution to a problem and apply control structures.</p> <p><b>CO3:</b> Simplify the use of strings and string handling functions.</p> <p><b>CO4:</b> Justify real time applications using PHP language features.</p> <p><b>CO5:</b> Build skill on problem solving by constructing algorithms</p>
4.	IBITX4P/ IBITX4O	Extra Credit III - R Tool Lab	<p><b>CO1:</b> Demonstrate the basics in R programming in terms of constructs, control statements and functions</p> <p><b>CO2:</b> Apply data analytics software</p> <p><b>CO3:</b> Enhance problem solving, programming and debugging skills</p> <p><b>CO4:</b> Plan the R programming from a statistical perspective</p> <p><b>CO5:</b> Analyze and implement the various data structures of R</p>

### Class: II BSc Computer Science (Odd Semester)

S. No.	Course Code	Course Name	Course Outcomes
1.	IBCSC311	Core VI - .NET Programming	<p><b>CO1:</b> Interpret the basic concepts of .NET, Problem of the state, data, Management Validation and Rich controls</p> <p><b>CO2:</b> Determine types, objects and namespaces, Enumerators and Iterators and Error Handling</p> <p><b>CO3:</b> Illustrate Table Controls, ASP.Net Applications and the Web Server, Interfaces and Structures</p> <p><b>CO4:</b> Evaluate on Exception Handling, Serializing objects, Direct Data Access</p> <p><b>CO5:</b> Develop XML classes and XML Validation, web forms and use web controls</p>
2.	IBCSC321P	Core VII - .NET Programming Lab	<p><b>CO1:</b> Build console applications</p> <p><b>CO2:</b> Perform Windows and web Applications</p> <p><b>CO3:</b> Demonstrate validation controls in web form</p> <p><b>CO4:</b> Illustrate Data Grid control to database in Web application</p> <p><b>CO5:</b> Compose Data Repeater and Data list Controls</p>
3.	IBCSS34P	SEC III - Web Designing Lab (HTML and Scripting Language)	<p><b>CO1:</b> Understand the basic tags in HTML and create the programs in that tags</p>

			<p><b>CO2:</b> Create a web page by applying frames and own personal web pages</p> <p><b>CO3:</b> Develop a web page for advertising purposes</p> <p><b>CO4:</b> Design web pages for own company and institution</p> <p><b>CO5:</b> Create interactive web page using Script</p>
4.	IBCSX3P/ IBCSX3O	Extra Credit II - Programming in Visual Basic Lab / *Online Course	<p><b>CO1:</b> Demonstrate the basics of visual Basic programming in terms of control statements and functions</p> <p><b>CO2:</b> Apply the basic concepts of user defined function</p> <p><b>CO3:</b> Enhance problem solving, programming and debugging skills</p> <p><b>CO4:</b> Plan to implement the menu creation</p> <p><b>CO5:</b> Analyze and implement the various data control</p>

**Class: II BSc Computer Science (Even Semester)**

S. No.	Course Code	Course Name	Course Outcomes
1.	IBCSC41	Core VIII - Data Structures and Algorithms	<p><b>CO1:</b> Explain the basics concept of data structures and Algorithm stacks, queues and lists</p> <p><b>CO2:</b> Distinguish about knowledge of tree and graphs concepts</p> <p><b>CO3:</b> Analyze the concepts about searching and sorting techniques</p> <p><b>CO4:</b> Demonstrate the types of Trees</p> <p><b>CO5:</b> Evaluate about Algorithm and step by step approach in solving problems with the help of fundamental data structure</p>
2.	IBCSC42P	Core IX - Data Structures using C++ Lab	<p><b>CO1:</b> Recall the basics of C++ to declare variable, create a class and etc.,</p> <p><b>CO2:</b> Apply various structure of data</p> <p><b>CO3:</b> Analyzing the difference between various data structure</p> <p><b>CO4:</b> Evaluate the expression using preorder, inorder and postorder</p> <p><b>CO5:</b> Elaborate the data structure operations and sort algorithm</p>
3.	IBCSS441P	SEC IV - Data Analytics Using Statistical Methods Lab	<p><b>CO1:</b> Demonstrate the basics in python programming in terms of constructs, control statements and functions</p> <p><b>CO2:</b> Apply data analytics software</p> <p><b>CO3:</b> Enhance problem solving, programming and debugging skills</p> <p><b>CO4:</b> Plan the python programming from a statistical perspective</p> <p><b>CO5:</b> Analyze and implement the various data structures of python</p>

4.	IBCSX4P/ IBCSX4O	Extra Credit III - R Tool Lab /# Internship	<b>CO1:</b> Demonstrate the basics in R programming in terms of constructs, control statements and functions <b>CO2:</b> Apply data analytics software <b>CO3:</b> Enhance problem solving, programming and debugging skills <b>CO4:</b> Plan the R programming from a statistical perspective <b>CO5:</b> Analyze and implement the various data structures of R
----	---------------------	--	---

### Class: II BSc Cyber Security (Odd Semester)

S. No.	Course Code	Course Name	Course Outcomes
1.	IBCYC31	Core VI - Database Security	<b>CO1:</b> Describe the concepts of Database security and access control <b>CO2:</b> Demonstrate the database systems structure <b>CO3:</b> Analyze security auditing and security testing <b>CO4:</b> Determine Database issues in Trust Management <b>CO5:</b> Build skill for solving complex problems in a team of database workers
2.	IBCYC32P	Core VII - RDBMS Lab	<b>CO1:</b> Build DDL, DML and TCL Commands <b>CO2:</b> Make use of implementing constraints in tables <b>CO3:</b> Apply to create block structure programming language <b>CO4:</b> Create the concepts of functions. <b>CO5:</b> Develop the procedures, exceptions, triggers in PL/SQL block
3.	IBCYC34P	SEC III - Web Designing Lab (HTML and Scripting Language )	<b>CO1:</b> Explain the basics of all HTML tags to create the static web page <b>CO2:</b> Apply the concepts of table and list in HTML <b>CO3:</b> Examine the use of style sheets, frames and hyperlinks <b>CO4:</b> Evaluate the concept of validation using Javascript <b>CO5:</b> Create a dynamic website
4.	IBCYX3P/ IBCYX3O	Extra Credit II - Programming in Visual Basic Lab / *Online Course	<b>CO1:</b> Demonstrate the basics in visual basic programming in terms of control statements and functions <b>CO2:</b> Apply the basic concept user defined function <b>CO3:</b> Enhance problem solving, programming and debugging skills <b>CO4:</b> Plan to implement the menu creation <b>CO5:</b> Analyze and implement the various data control

### Class: II BSc Cyber Security (Even Semester)

S. No.	Course Code	Course Name	Course Outcomes
1.	IBCYC41	Core VIII - Principles of Cyber Security	<b>CO1:</b> Classify the concept of threat, risks and security planning

			<p><b>CO2:</b> Apply theoretical concepts in different security phases</p> <p><b>CO3:</b> Analyze security concepts needs in cloud and database</p> <p><b>CO4:</b> Examine the concepts and do security in database and organization</p> <p><b>CO5:</b> Develop policies and procedures for database and cloud security and design security architecture for an organization</p>
2.	IBCXC42P	Core IX - .NET Programming Lab	<p><b>CO1:</b> Build console applications</p> <p><b>CO2:</b> Perform Windows and web Applications</p> <p><b>CO3:</b> Demonstrate validation controls in web form</p> <p><b>CO4:</b> Illustrate Data Grid control to database in Web application</p> <p><b>CO5:</b> Compose Data Repeater and Data list Controls</p>
3.	IBCY544P	SEC IV - Graphics and Animation Lab (Flash)	<p><b>CO1:</b> Recognize the uses of various tools in macromedia flash</p> <p><b>CO2:</b> Predict the steps that are needed to create animation</p> <p><b>CO3:</b> Critically analyze the required options to create animation with respect to its nature</p> <p><b>CO4:</b> Evaluate the use of 'Insert Motion tween'</p> <p><b>CO5:</b> Create animated scenes, animated logos, animated cartoon characters etc</p>
4.	IBCYX4P/ IBCYX4O	Extra Credit III - R Tool Lab / # Internship	<p><b>CO1:</b> Demonstrate the basics in R programming in terms of constructs, control statements and functions</p> <p><b>CO2:</b> Apply data analytics software</p> <p><b>CO3:</b> Enhance problem solving, programming and debugging skills</p> <p><b>CO4:</b> Plan the R programming from a statistical perspective</p> <p><b>CO5:</b> Analyze and implement the various data structures of R</p>

**Class: II BCA (Odd Semester)**

S. No.	Course Code	Course Name	Course Outcomes
1.	IBCPC311	Core VI - Data Base Management System	<p><b>CO1:</b> Explore about DBMS architecture, database designs, database modeling</p> <p><b>CO2:</b> Extend about ER-Diagram and UML, Relational Algebra and Relational Calculus</p> <p><b>CO3:</b> Distinguish the normalization theory</p> <p><b>CO4:</b> Apply Structured query language (SQL) and Constraints</p> <p><b>CO5:</b> Evaluate various transaction processing, concurrency control mechanisms and database protection mechanisms</p>
2.	IBCPC32P	Core VII - Data Base Management System Lab	<p><b>CO1:</b> Build DDL, DML and TCL Commands</p> <p><b>CO2:</b> Make use of implementing constraints in tables</p>

			<p><b>CO3:</b> Apply to create block structure programming language</p> <p><b>CO4:</b> Create the concepts of functions.</p> <p><b>CO5:</b> Develop the procedures, exceptions, triggers in PL/SQL block</p>
3.	IBCPS34P	SEC III - Web Designing Lab(HTML and Java Scripting Language)	<p><b>CO1:</b> Understand the basic tags in HTML and create the programs in that tags</p> <p><b>CO2:</b> Create a web page by applying frames and own personal web pages</p> <p><b>CO3:</b> Develop a web page for advertising purposes</p> <p><b>CO4:</b> Design web pages for own company and institution</p> <p><b>CO5:</b> Create interactive web page using Script</p>
4.	IBCPX3P/ IBCPX3O	Extra Credit II - Programming in Visual Basic Lab/ * Online Course	<p><b>CO1:</b> Demonstrate the basics in visual basic programming in terms of control statements and functions</p> <p><b>CO2:</b> Apply the basic concept user defined function</p> <p><b>CO3:</b> Enhance problem solving, programming and debugging skills</p> <p><b>CO4:</b> Plan to implement the menu creation</p> <p><b>CO5:</b> Analyze and implement the various data control</p>

**Class: II BCA (Even Semester)**

S. No.	Course Code	Course Name	Course Outcomes
1.	IBCPC41	Core VIII - Data Structures and Algorithms	<p><b>CO1:</b> Explain the basics concept of data structures and Algorithm stacks, queues and lists</p> <p><b>CO2:</b> Distinguish about knowledge of tree and graphs concepts</p> <p><b>CO3:</b> Analyze the concepts about searching and sorting techniques</p> <p><b>CO4:</b> Demonstrate the types of Trees</p> <p><b>CO5:</b> Evaluate about Algorithm and step by step approach in solving problems with the help of fundamental data structure</p>
2.	IBCPC42	Core IX - Operating System	<p><b>CO1:</b> Remember the structure of operating system and scheduling algorithms</p> <p><b>CO2:</b> Apply the concept of process scheduling, deadlocks and its recovery</p> <p><b>CO3:</b> Analyze the background of memory with segmentation and paging</p> <p><b>CO4:</b> Evaluate file management with file organization, and disk scheduling</p> <p><b>CO5:</b> Create Securing systems and facilities</p>
3.	IBCPA43	AECC V - Computer Organization and Architecture	<p><b>CO1:</b> Define the fundamental organization of a computer system</p> <p><b>CO2:</b> Explain the concept of sequencing, designing, pipeline and vector processing methods</p>

			<b>CO3:</b> Examine the function of input-output organization <b>CO4:</b> Compare various pipeline concepts <b>CO5:</b> Distinguish the organization of various parts of a system memory hierarchy
4.	IBCPS44P	SEC IV - Linux and Shell Programming Lab	<b>CO1:</b> Summarize shell commands, scripts, managing files, pipes and redirections <b>CO2:</b> Apply appropriate Linux commands to make effective use of the environment to solve problems <b>CO3:</b> Illustrate shell scripts to perform repetitive tasks using while and for loops <b>CO4:</b> Evaluate shell functions <b>CO5:</b> Derive command-line arguments
5.	IBCPX4/ IBCPX4O	Extra Credit III - R Tool / # Internship	<b>CO1:</b> Demonstrate the basics in R programming in terms of constructs, control statements and functions <b>CO2:</b> Apply data analytics software <b>CO3:</b> Enhance problem solving, programming and debugging skills <b>CO4:</b> Plan the R programming from a statistical perspective <b>CO5:</b> Analyze and implement the various data structures of R

**Class: III BSc Information Technology (Odd Semester)**

S. No.	Course Code	Course Name	Course Outcomes
1.	HBITC51P	Core XI - Programming in Java Lab	<b>CO1:</b> Hands on experience with the basics of java program <b>CO2:</b> Improve skills to develop multi-threaded programs <b>CO3:</b> Demonstrate Exception handling program <b>CO4:</b> Acquire skills to implement GUI components (Console and GUI based) and event-driven programming
2.	HBITC52	Core XII - Programming in Java	<b>CO1:</b> Gain knowledge about basic Java language syntax and semantics to write Java programs <b>CO2:</b> Understand the fundamentals of OOPs <b>CO3:</b> Know principles of inheritance, packages and interfaces <b>CO4:</b> Acquire the knowledge of exception handling and applet programming
3.	HBITC53	Core XIII - Operating System	<b>CO1:</b> Gain knowledge about basic Java language syntax and semantics to write Java programs <b>CO2:</b> Understand the fundamentals of OOPs <b>CO3:</b> Know principles of inheritance, packages and interfaces <b>CO4:</b> Acquire the knowledge of exception handling and applet programming
4.	HBITE5A	Elective I – a) Enterprise Resource Planning	<b>CO1:</b> Know the Overview of ERP

			<p><b>CO2:</b> Analyse the methodology for implementing ERP</p> <p><b>CO3:</b> Familiarity with Human Resource and ERP Package</p> <p><b>CO4:</b> Know the roles of different companies involved in ERP Market</p> <p><b>CO5:</b> Learn different applications and resources of ERP</p> <p><b>CO6:</b> Reshaping towards Future direction</p>
5.	HBITE5B	Elective I – b) Compiler Design	<p><b>CO1:</b> Know about compiler and translators</p> <p><b>CO2:</b> Understand the Lexical Analysis and basic parsing techniques</p> <p><b>CO3:</b> Knowledge on automatic construction of efficient parsers</p> <p><b>CO4:</b> Learn syntax directed translation and symbol tables</p> <p><b>CO5:</b> Familiarity with error detection and recovery</p> <p><b>CO6:</b> Acquire code optimization and generation technique</p>
6.	HBITE5C	Elective II – a) Web Services	<p><b>CO1:</b> Understand web services benefits &amp; drawbacks</p> <p><b>CO2:</b> Obtain knowledge about XML and WSDL</p> <p><b>CO3:</b> Expertise to exchange messages with SOAP</p> <p><b>CO4:</b> Know how to build web services with different Tool kits</p> <p><b>CO5:</b> Understand how to create web services with java and .NET</p> <p><b>CO6:</b> Know the implementation of web services in the real world</p>
7.	HBITE5D	Elective II – b) E-Commerce	<p><b>CO1:</b> Understand the concepts of E-commerce</p> <p><b>CO2:</b> Overview of internet and WWW</p> <p><b>CO3:</b> Acquire the knowledge of Consumer &amp; Business Oriented Commerce</p> <p><b>CO4:</b> Categories E-Services, web advertising and Publishing</p>
8.	HBITE54P	Skill Based Elective - Visual Programming Lab	<p><b>CO1:</b> Acquire the skills for developing applications</p> <p><b>CO2:</b> Implement GUI program using various control in tool box</p> <p><b>CO3:</b> Implement to use databases</p> <p><b>CO4:</b> Get knowledge to animate pictures</p>
9.	HBITX5 / HBITX5O	Extra Credit - Visual Programming / *Online Certification	<p><b>CO1:</b> Understand concepts of variables, data types and arrays</p> <p><b>CO2:</b> Learn to use buttons, menus, dialog boxes and grid control</p> <p><b>CO3:</b> Learn to access data objects and connectivity to ODBC</p> <p><b>CO4:</b> Know to generate data reports and usage of ActiveX controls</p>

**Class: III BSc Information Technology (Even Semester)**

S. No.	Course Code	Course Name	Course Outcomes
1.	HBITC611	Core XIV - Software Engineering	<p><b>CO1:</b> Classify the varieties of software and models for software development</p> <p><b>CO2:</b> Know how to gather requirements and design a software</p> <p><b>CO3:</b> Implement testing strategies to test the software for errors and omissions</p> <p><b>CO4:</b> Manage the risks and ensure quality of the software developed</p>
2.	HBITC621	Core XV - Computer Networks	<p><b>CO1:</b> Explain the concepts of computer networks</p> <p><b>CO2:</b> Apply the protocols of computer networks in network design and implementation</p> <p><b>CO3:</b> Analyse functions of each layer in the OSI and TCP/IP reference model</p> <p><b>CO4:</b> Compare the working principle of various layer protocols</p>
3.	HBITC63	Core XVI - Computer Graphics	<p><b>CO1:</b> Know the concepts of computer graphics</p> <p><b>CO2:</b> Ability to understand output primitives and transformation</p> <p><b>CO3:</b> Familiarity to windowing and clipping</p> <p><b>CO4:</b> Know 3D concept, color and illumination</p>
4.	HBITC64PW	Core XVII - Project	<p><b>CO1:</b> Enhance team building skills</p> <p><b>CO2:</b> Perspective towards formulate strategies</p> <p><b>CO3:</b> Make decisions effective and efficient</p>
5.	HBITE6B	Elective III - b) Ethical Hacking	<p><b>CO1:</b> Learning the importance of information security and understanding Hacktivism</p> <p><b>CO2:</b> Analyse different scanning and enumeration methodologies and tools</p> <p><b>CO3:</b> Understand various hacking techniques and attacks</p> <p><b>CO4:</b> Know different types of keyloggers</p> <p><b>CO5:</b> Exposing programming languages for security professionals</p> <p><b>CO6:</b> Familiarity with the different phases in penetration testing</p>
6.	HBITE65P	Skill Based Elective - Open Technology Lab (Python)	<p><b>CO1:</b> Acquire the skills for developing python script</p> <p><b>CO2:</b> Knowledge to create simple application window</p> <p><b>CO3:</b> Ability to create web site</p> <p><b>CO4:</b> Know to create simple blogs.</p>

**Class: III BSc Computer Science (Odd Semester)**

S. No.	Course Code	Course Name	Course Outcomes
1.	HBCSC51	Core X - Programming in Java	<p><b>CO1:</b> Gain knowledge about basic Java language syntax and semantics to write Java programs</p> <p><b>CO2:</b> Understand the fundamentals of OOPs</p> <p><b>CO3:</b> Know the principles of inheritance, packages and interfaces</p>

			<b>CO4:</b> Acquire the knowledge about exception handling and applet programming
2.	HBCSC52P	Core XI - Programming in Java Lab	<b>CO1:</b> Gain hands on experience with the basics of Java program <b>CO2:</b> Implement multi-threaded programs <b>CO3:</b> Handling Exception <b>CO4:</b> Acquire skills to implement GUI components (Console and GUI based) and event-driven programming
3.	HBCSC53	Core XII - RDBMS	<b>CO1:</b> Able to know the basic concepts of DBMS and RDBMS <b>CO2:</b> Understand the concept of distributed and object oriented databases <b>CO3:</b> Know about database design and transaction processing management <b>CO4:</b> Acquire the knowledge about security in database
4.	HBCSE5A	Elective I - a. Web Technology	<b>CO1:</b> Enhance the students to understand Internet protocols, Web clients and Web servers <b>CO2:</b> Know the use of XHTML and HTML elements in building a website <b>CO3:</b> Understand how to include CSS while creating a website <b>CO4:</b> Gain knowledge to include java script to enhance website development <b>CO5:</b> Understand the concepts of servlets <b>CO6:</b> Obtain knowledge about the role of cookies in website maintenance
5.	HBCSE5B	Elective I - b. Cloud Computing	<b>CO1:</b> Know basic of cloud computing <b>CO2:</b> Understand the concepts of virtualization <b>CO3:</b> Know different types of clouds and its uses in different types of environments <b>CO4:</b> Understand basics cloud services <b>CO5:</b> Understand Aneka and its implementation to act as a cloud application platform <b>CO6:</b> Gain experience to work for cloud services
6.	HBCSE5C	Elective II – a. Software Development Framework	<b>CO1:</b> Understand the basic concepts of .net and different languages <b>CO2:</b> Differentiate the value and reference type <b>CO3:</b> Acquire the knowledge of class and web controls <b>CO4:</b> Know the data base concept with .Net <b>CO5:</b> Learn about ADO.NET and its data access <b>CO6:</b> Implement console and web application program
7.	HBCSE5D	Elective II – b. PHP	<b>CO1:</b> Understand basics of PHP <b>CO2:</b> Knowledge about variables and data types <b>CO3:</b> Learnt about control structures <b>CO4:</b> Acquire knowledge about Arrays and user defined functions

			<b>CO5:</b> Understand files and databases <b>CO6:</b> Implement interactive web pages
8.	HBCSE54P	Skill Based Elective - RDBMS Lab	<b>CO1:</b> Gain hands on experience with MySQL queries <b>CO2:</b> Create queries to use DDL, DML and TCL queries <b>CO3:</b> Implement built-in functions <b>CO4:</b> Implement constraints

### Class: III BSc Computer Science (Even Semester)

S. No.	Course Code	Course Name	Course Outcomes
1.	HBCSC611	Core XIII - Software Engineering	<b>CO1:</b> Classify the varieties of software and models for software development <b>CO2:</b> Know how to gather requirements and design a software <b>CO3:</b> Implement testing strategies to test the software for errors and omissions <b>CO4:</b> Manage the risks and ensure quality of the software developed
2.	HBCSC621	Core XIV - Computer Networks	<b>CO1:</b> Explain the concepts of computer networks <b>CO2:</b> Apply the protocols of computer networks in network design and implementation <b>CO3:</b> Analyse functions of each layer in the OSI and TCP/IP reference model <b>CO4:</b> Compare the working principle of various layer protocols
3.	HBCSC63	Core XV - Open Technology	<b>CO1:</b> Acquire the skills for fundamentals, types and variable <b>CO2:</b> Knowledge to use control structures <b>CO3:</b> Learnt about lists, dictionary, function, files and exceptions <b>CO4:</b> Get knowledge about GUI and graphics
4.	HBCSC64P W	Core XVI - Project	<b>CO1:</b> Analytically collect requirements, plan, analyze, design, construct and test the code <b>CO2:</b> Solve real time problems <b>CO3:</b> Make decisions effective and efficient and document the various aspects of software development <b>CO4:</b> Enhance team building skills
5.	HBCSE6A	Elective III – a. Mobile Application Development	<b>CO1:</b> Know the history of mobile and its ecosystem <b>CO2:</b> Understand designing context, mobile strategy and types of mobile application <b>CO3:</b> Gain knowledge about mobile information architecture and its design <b>CO4:</b> Know about mobile 2.0, mobile web development and iphone web apps <b>CO5:</b> Understand adapting device strategies and supporting devices <b>CO6:</b> Create mobile application simulations

6.	HBCSE6B	Elective III – b. Compiler Design	<b>CO1:</b> Know about compiler and translators <b>CO2:</b> Understand the Lexical Analysis and basic parsing techniques <b>CO3:</b> Knowledge on automatic construction of efficient parsers <b>CO4:</b> Learn syntax directed translation and symbol tables <b>CO5:</b> Familiarity with error detection, recovery, code optimization and generation technique <b>CO6:</b> Implement compiler phases programs
7.	HBCSE651P	Skill Based Elective - Data Analytics Using Statistical Methods Lab	<b>CO1:</b> Recall the statistical methods <b>CO2:</b> Apply statistics methods to develop models <b>CO3:</b> Evaluate different statistical test methods <b>CO4:</b> Derive the predictive analysis result

### Class: III BSc Cyber Security (Odd Semester)

S. No.	Course Code	Course Name	Course Outcomes
1.	HBCYC51	Core X - Programming in Java	<b>CO1:</b> To gain knowledge about basic Java language syntax and semantics to write Java programs <b>CO2:</b> To understand the fundamentals of OOPs <b>CO3:</b> To know the principles of inheritance, packages and interfaces <b>CO4:</b> To acquire the knowledge about exception handling and applet programming
2.	HBCYC52P	Core XI - Programming in Java Lab	<b>CO1:</b> To Gain hands on experience with the basics of Java program <b>CO2:</b> To know about Implement multi-threaded programs <b>CO3:</b> To learn about the concepts of Handling Exception <b>CO4:</b> To Acquire skills to implement GUI components (Console and GUI based) and event-driven programming
3.	HBCYC53	Core XII - Ethical Hacking	<b>CO1:</b> To learn the importance of information security and understanding Hacktivism <b>CO2:</b> To analyse different scanning and enumeration methodologies and tools <b>CO3:</b> To understand various hacking techniques and attacks <b>CO4:</b> To know different types of keyloggers <b>CO5:</b> To expose programming languages for security professionals <b>CO6:</b> To get the familiarity with the different phases in penetration testing
4.	HBCYE5A	Elective I – a. Information Security	<b>CO1:</b> To understand the importance of Information security and the Job oriented opportunities. <b>CO2:</b> To Know the various principles of information security

			<b>CO3:</b> To Describe the common body of knowledge and it's domains <b>CO4:</b> To Know the basics of Cryptography
5.	HBCYE51B	Elective I – b. Data Mining and Warehousing	<b>CO1:</b> To get knowledge about Data Preprocessing Steps <b>CO2:</b> To acquire knowledge about types of classification methods in Data Mining <b>CO3:</b> To analyse types of Data clusters and methods <b>CO4:</b> To learn types of Data Mining
6.	HBCYE5C	Elective II – a. Operating System Security	<b>CO1:</b> To get knowledge about operating system <b>CO2:</b> To acquire knowledge about the memory management and swapping methods <b>CO3:</b> To acquire knowledge about the operating system goals and security <b>CO4:</b> To learn about the security of windows and unix
7.	HBCYE5D	Elective II – b. Cyber Forensics	<b>CO1:</b> To learn investigation tools and techniques, analysis of data <b>CO2:</b> To identify evidence, Technical Aspects & Legal Aspects related to cybercrime. <b>CO3:</b> To get the knowledge about Cloud Forensics and Report writing. <b>CO4:</b> To learn the concepts of Digital Forensics Analysis and Validation and E-mail and Social Media Investigations
8.	HBCYE54P	Skill Based Elective - PHP LAB	<b>CO1:</b> To get the Familiarity in designing webpage using HTML tags <b>CO2:</b> Able to include Audio and Video <b>CO3:</b> Ability to work in IDE Environment <b>CO4:</b> Performing the Mathematical Calculations

**Class: III BSc Cyber Security (Even Semester)**

S. No.	Course Code	Course Name	Course Outcomes
1.	HBCYC61	Core XIII - Wireless Security	<b>CO1:</b> To understand the fundamentals of wireless security. <b>CO2:</b> To understand the security issues in bluetooth and Wi-Fi. <b>CO3:</b> To explore the security issues in WiMAX and mobile telecommunication networks. <b>CO4:</b> To understand the security issues in ad-hoc and wireless sensor networks. <b>CO5:</b> To study the hacking techniques in IEEE 802.11.
2.	HBCYC62	Core XIV - Cyber Law	<b>CO1:</b> To make learner conversant with social & intellectual property issues from cyberspace. <b>CO2:</b> To explore the legal and policy developments in various countries to regulate cyberspace <b>CO3:</b> To develop the understanding of relationship between commerce and cyberspace

			<p><b>CO4:</b> To give learners in depth knowledge of information technology act and legal frame work of right to privacy, data security and data protection.</p> <p><b>CO5:</b> To make study about crypto currency, bitcoin prediction market, block chain.</p>
3.	HBCYC63	Core XV - Malware Analysis	<p><b>CO1:</b> To possess the skills necessary to carry out independent analysis of modern malware samples using both static and dynamic analysis techniques.</p> <p><b>CO2:</b> To understand the executable formats, Windows and API, and analysis techniques.</p> <p><b>CO3:</b> To extract investigative leads from host and network based indicators associated with a malicious program.</p> <p><b>CO4:</b> To apply techniques and concepts to unpack, extract, decrypt, or bypass new anti analysis techniques in future malware samples.</p> <p><b>CO5:</b> To achieve proficiency with industry standard tools including IDA Pro.</p>
4.	HBCYC64P W	Core XVI - Project	<p><b>CO1:</b> To collect requirements, plan, analyze, design, construct and test the code analytically</p> <p><b>CO2:</b> To solve real time problems</p> <p><b>CO3:</b> To make decisions effective and efficient and document the various aspects of software development</p> <p><b>CO4:</b> To enhance team building skills</p>
5.	HBCYE6A	Elective III – a. Cloud Computing & Security	<p><b>CO1:</b> To get the knowledge about Strengths and limitations of cloud computing</p> <p><b>CO2:</b> To identify the architecture, infrastructure and delivery models of cloud computing</p> <p><b>CO3:</b> To study virtualization concept and to address the core concepts of cloud computing</p> <p><b>CO4:</b> To explain the core issues of the cloud computing and to analyse various cloud programming models</p>
6.	HBCYE6B	Elective III – b. Intellectual Property Rights	<p><b>CO1:</b> To introduce fundamental aspects of Intellectual property Rights to students who are going to play a major role in development and management of innovative projects in industries</p> <p><b>CO2:</b> To disseminate knowledge on patents, patent regime, registration aspects in India&amp; abroad.</p> <p><b>CO3:</b> To disseminate knowledge on copyrights and its related rights and registration aspects</p> <p><b>CO4:</b> To disseminate knowledge on trademarks and registration aspects</p> <p><b>CO5:</b> To disseminate knowledge on Design, Geographical Indication (GI), Plant Variety and Layout Design Protection and their registration aspects</p> <p><b>CO6:</b> To aware about current trends in IPR and Govt. steps in fostering IPR</p>

7.	HBCYE65P	Skill Based Elective - Multimedia Lab	<p><b>CO1:</b> To gain a working knowledge of various tools available in toolbar</p> <p><b>CO2:</b> To create, modify, resizing, and adjusting resolution of image</p> <p><b>CO3:</b>To create own design like student_ID card, visiting card and greeting card</p> <p><b>CO4:</b> To use different tools of flash player to create an effective animated picture</p> <p><b>CO5:</b> To understand how to combine multiple pictures and make them to animate for a specified duration</p> <p><b>CO6:</b>To learn to deal with frames for the pictures of an animated scene</p>
----	----------	--	--

**Class: III BCA (Odd Semester)**

S. No.	Course Code	Course Name	Course Outcomes
1.	HBCPC51	Core XI - Programming in Java	<p><b>CO1:</b> To gain knowledge about basic Java language syntax and semantics to write Java programs</p> <p><b>CO2:</b> To understand the fundamentals of OOPs</p> <p><b>CO3:</b> To know principles of inheritance, packages and interfaces</p> <p><b>CO4:</b> Acquire the knowledge of exception handling and applet programming</p>
2.	HBCPC52P	Core XII - Programming in Java Lab	<p><b>CO1:</b> Hands on experience with the basics of java program</p> <p><b>CO2:</b> Improve skills to develop multi-threaded programs</p> <p><b>CO3:</b> Demonstrate Exception handling program</p> <p><b>CO4:</b> Acquire skills to implement GUI components (Console and GUI based) and event- driven programming</p>
3.	HBCPC53	Core XIII - Internet of Things	<p><b>CO1:</b> To prepare the student for better application of internet technology.</p> <p><b>CO2:</b> To understand the application areas of IOT</p> <p><b>CO3:</b> To understand building blocks of Internet of Things and characteristics</p> <p><b>CO4:</b> To gain the knowledge of domain specific</p>
4.	HBCPE5A	Elective I – a. Software Testing	<p><b>CO1:</b> To make the student more proficient with error free software development</p> <p><b>CO2:</b> To study fundamental concepts in software testing, including software testing objectives, process, criteria, strategies, and methods.</p> <p><b>CO3:</b> To discuss various software testing issues and solutions in software unit test; integration, regression, and system testing.</p> <p><b>CO4:</b> To understand the methodology of Testing</p> <p><b>CO5:</b> To know about the internationalization and adhoc testing</p>

5.	HBCPE5B	Elective I – b. Cloud Computing	<b>CO1:</b> To enable the students to learn the basic functions, principles and concepts of cloud Systems. <b>CO2:</b> To develop the cloud services <b>CO3:</b> To understand the knowledge about programming model <b>CO4:</b> TO understand the cloud security
6.	HBCPE5C	Elective II – a. Software Development Framework	<b>CO1:</b> Student will be able to acquire the software development skills in .NET to identify and describe the purpose of various components of .NET <b>CO2:</b> To understand the .NET language and it's type <b>CO3:</b> To gain the knowledge about ASP.Net Applications <b>CO4:</b> To understand the validation and controls <b>CO5:</b> To understand the about the ADO.Net and SQL Basics
7.	HBCPE5D	Elective II – b. Theory of Computation	<b>CO1:</b> To understanding the language computation <b>CO2:</b> To know about Regular Expression and Regular Grammar <b>CO3:</b> To gain the knowledge about Context free grammar <b>CO4:</b> To know about the Pushdown automata
8.	HBCPE54P	Skill Based Elective - PHP Lab	<b>CO1:</b> Familiarity in designing webpage using HTML tags <b>CO2:</b> Able to include Audio and Video <b>CO3:</b> Ability to work in IDE Environment <b>CO4:</b> Performing the Mathematical Calculations

**Class: III BCA (Even Semester)**

S. No.	Course Code	Course Name	Course Outcomes
1.	HBCPC61	Core XIV - Software Engineering	<b>CO1:</b> Plan a software project <b>CO2:</b> Identify the requirement and analyse the cost <b>CO3:</b> Familiarity to implement code <b>CO4:</b> Ability to perform test, maintenance and to assure the quality of software
2.	HBCPC62	Core XV - Computer Networks	<b>CO1:</b> Define and distinguish different network models <b>CO2:</b> Gain knowledge about Transmission media <b>CO3:</b> Understand how error detection and correction is performed <b>CO4:</b> Identify Address mapping and multicasting and perform congestion control and remote login
3.	HBCPC63	Core XVI - Computer Graphics	<b>CO1:</b> Know the concepts of computer graphics <b>CO2:</b> Ability to understand output primitives and transformation <b>CO3:</b> Familiarity to windowing and clipping <b>CO4:</b> Know 3D concept, color and illumination
4.	HBCPC64PW	Core XVII - Project	<b>CO1:</b> Enhance team building skills <b>CO2:</b> Perspective towards formulate strategies <b>CO3:</b> Make decisions effective and efficient

5.	HBCPE6A	Elective III – a. Mobile Application Development	<b>CO1:</b> Understand the Mobile Application <b>CO2:</b> Know about the android app <b>CO3:</b> Acquire the knowledge of Android use and develop the Android Application <b>CO4:</b> Acquire the knowledge of Android user interface
6.	HBCPE6B	Elective III - b. Compiler Design	<b>CO1:</b> Know about compiler and translators <b>CO2:</b> Understand the Lexical Analysis and basic parsing techniques <b>CO3:</b> Knowledge on automatic construction of efficient parsers <b>CO4:</b> Learn syntax directed translation and symbol tables <b>CO5:</b> Familiarity with error detection and recovery <b>CO6:</b> Acquire code optimization and generation technique
7.	HBCPE65P	Skill Based Elective - Multimedia Lab I (Flash)	<b>CO1:</b> Able to use different tools of flash player to create an effective animated picture <b>CO2:</b> Understand how to combine multiple pictures and make them to animate for a specified duration <b>CO3:</b> Learn to deal with frames for the pictures of an animated scene <b>CO4:</b> Demonstrate various animation objects

#### Class: II Year Open Elective Course (Odd Semester)

S. No.	Course Code	Course Name	Course Outcomes
1.	IBOE3ITP	OEC - PC Package Lab	<b>CO1:</b> Recall various options of Office Applications <b>CO2:</b> Identify the icons to work with document, presentation, spreadsheet and database <b>CO3:</b> Simplify the process of creating reports to solve the problems of manual report handling <b>CO4:</b> Compare the options of different Office Applications to use appropriately <b>CO5:</b> Create Presentations, Advertisements, Reports etc for enterprises

#### Class: II Year Open Elective Course (Even Semester)

S. No.	Course Code	Course Name	Course Outcomes
1.	IBOE4ITP	OEC - PC Assembly Lab	<b>CO1:</b> Identify Indicators, Switches, Connectors and Layout of the system <b>CO2:</b> Demonstrate the configuration of BIOS setup and OS installation <b>CO3:</b> Illustrate control panel settings <b>CO4:</b> Determine device installation <b>CO5:</b> Build the assembling and disassembling of Laptop

#### Class: I BSc Data Science (Odd Semester)

S. No.	Course Code	Course Name	Course Outcomes
1.	IBDSC11	Core I - Programming in C	<b>CO 1:</b> Describe the basic programming knowledge of C, operators and expressions <b>CO 2:</b> Demonstrate data input and output, control statements & functions <b>CO 3:</b> Analyze program structure and arrays <b>CO 4:</b> Evaluate strings and pointers <b>CO 5:</b> Formulate structures, unions and file handling
2.	IBDSC12	Core II - R Programming	<b>CO 1:</b> Describe key terminologies, concepts and techniques employed in Statistical Analysis <b>CO 2:</b> Demonstrate fundamentals of statistical analysis in R environment <b>CO 3:</b> Analyse the purpose of exploration using Descriptive and Inferential Statistics <b>CO 4:</b> Evaluate the variety of Hypothesis Tests to aid Decision Making <b>CO 5:</b> Create application of Linear Regression in multivariate context for predictive purpose
3.	IBDSS14P	SEC I - Programming in C Lab	<b>CO1:</b> Remember the control structures and loops <b>CO2:</b> Apply the concepts of functions and pointers <b>CO3:</b> Analyze the concepts of structures by creating student mark list and electricity bill <b>CO4:</b> Evaluate string handling functions <b>CO5:</b> Create programs with pointers, arrays and structures

**Class: I BSc Data Science (Even Semester)**

S. No.	Course Code	Course Name	Course Outcomes
1.	IBDSC22	Core IV - Python Programming	<b>CO1:</b> Outline lists, tuples, and dictionaries in Python programs <b>CO2:</b> Demonstrate the concepts of loops and decision statements in Python <b>CO3:</b> Illustrate functions and pass arguments in Python <b>CO4:</b> Design object-oriented programs with Python classes <b>CO5:</b> Develop Python applications
2.	IBDSS24P	SEC II - Data Analytics Lab - I	<b>CO1:</b> Outline Excel functions to solve mathematical, text, date and time operations <b>CO2:</b> Demonstrate the concepts of sorting, filtering using Excel <b>CO3:</b> Illustrate Data validation feature of spread sheet <b>CO4:</b> Evaluate Statistical operations using Pivot Table tool <b>CO5:</b> Develop spread sheet with visualization using charts

**Class: II BSc Data Science (Odd Semester)**

S. No.	Course Code	Course Name	Course Outcomes
1.	IBDSC32	Core VI - Structured Query language	<p><b>CO1:</b> Describe the basic concepts and the applications of Database Systems</p> <p><b>CO2:</b> Demonstrate basics of SQL and queries using SQL</p> <p><b>CO3:</b> Illustrate Normalization</p> <p><b>CO4:</b> Evaluate indexing and ordering in No SQL</p> <p><b>CO5:</b> Create No SQL data bases</p>
2.	IBDSA33	AECC I - Natural Language Processing	<p><b>CO1:</b> Describe the approaches to Syntax and Semantics in NLP</p> <p><b>CO2:</b> Demonstrate various methods for Statistical approaches to Machine Translation</p> <p><b>CO3:</b> Illustrate Topic Modelling and Probabilistic Models for Information Extraction.</p> <p><b>CO4:</b> Implement and deploy programs based on Relationship Extraction, POS Tagging and Clustering Algorithms based on NLP.</p> <p><b>CO5:</b> Build Models which extract information from Textual Unstructured Data</p>
3.	IBDSS34P	SEC III - PHP Lab	<p><b>CO1:</b> Describe the fundamentals of PHP Language in trivial problem solving</p> <p><b>CO2:</b> Determine solution to a problem and apply control structures</p> <p><b>CO3:</b> Simplify the use of Strings and String Handling functions</p> <p><b>CO4:</b> Justify real time applications using PHP language features.</p> <p><b>CO5:</b> Build skill on problem solving by constructing algorithms</p>

**Class: II BSc Data Science (Even Semester)**

S. No.	Course Code	Course Name	Course Outcomes
1.	IBDSC42	Core VIII - Machine Learning & Artificial Intelligence	<p><b>CO 1:</b> Describe the wide variety of Statistical and Machine Learning Algorithms</p> <p><b>CO 2:</b> Demonstrate Machine Learning techniques</p> <p><b>CO 3:</b> Analyze the performance of machine learning algorithms</p> <p><b>CO 4:</b> Evaluate performance of machine learning algorithms and select the best one based on the solution.</p> <p><b>CO 5:</b> Create Programming Framework to obtain acceptable decisions for the Real-World problems.</p>
2.	IBDSA43	AECC II - Big Data Analytics	<p><b>CO1:</b> Explain the fundamentals of Big Data and its Applications in various Domains</p> <p><b>CO2:</b> Apply HDFS File Structure, Map Reduce Framework to solve complex problems</p> <p><b>CO3:</b> Analyze the technologies behind Big Data</p> <p><b>CO4:</b> Implement Hive/ Hbase shell pertaining to relational data handling under Hadoop.</p> <p><b>CO5:</b> Build applications integrating R with Hadoop</p>

3.	IBDSS44P	SEC IV - Data Analytics Lab – II	<b>CO1:</b> Outline R functions to perform numerical operations <b>CO2:</b> Demonstrate the concepts of import/export operations <b>CO3:</b> Illustrate data pre-processing operations <b>CO4:</b> Evaluate Statistical operations <b>CO5:</b> Develop an application using K-Means algorithm with visualization
----	----------	-------------------------------------	--

### Value Added Programme in Web Designing

S. No.	Course Code	Course Name	Course Outcomes
1.	ECWD1	Core I - Web Designing	<b>CO1:</b> Understand the fundamentals of computer and all HTML tags <b>CO2:</b> Use the concepts of tables, list, frames and hyperlinks in designing interactive page <b>CO3:</b> Analyze the different types of style sheets and its uses <b>CO4:</b> Evaluate the concept of validation and form action using Java Script <b>CO5:</b> Design a dynamic webpages implementing all the features
2.	ECWD21P	Core II - Web Designing Lab	<b>CO 1:</b> Understand the basics of all HTML tags to create the static web page <b>CO 2:</b> Apply the concepts of table and list <b>CO 3:</b> Examine the use of style sheets, frames and hyperlinks <b>CO 4:</b> Evaluate the concept of validation using Java Script <b>CO 5:</b> Create a dynamic website

### Value Added Programme in PC Assembly

S. No.	Course Code	Course Name	Course Outcomes
1.	ICPA1	Core I - PC Assembly	<b>CO 1:</b> Understand and identify the fundamentals of computer & Front, Rear Panel Indicators <b>CO 2:</b> Demonstrate and layout the components of Motherboard <b>CO 3:</b> Examine an assembling and configuration of computers <b>CO 4:</b> Discover the troubleshooting and maintenance to improving system performance <b>CO 5:</b> Build the laptops with proper installation of external devices
2.	ICPA2P	Core II - PC Assembly Lab	<b>CO 1:</b> Identify Indicators, Switches, Connectors and Layout of the system <b>CO 2:</b> Demonstrate the configuration of BIOS setup and OS installation <b>CO 3:</b> Illustrate control panel settings <b>CO 4:</b> Determine device installation <b>CO 5:</b> Build the assembling and disassembling of Laptop

**Summer Crash Courses**

<b>S. No.</b>	<b>Course Code</b>	<b>Course Name</b>	<b>Course Outcomes</b>
1.	SCCOAP	Special Course I - Office Automation Lab	<b>CO1:</b> Understand the basics of create, edit and save file <b>CO2:</b> Apply the fundamental techniques to manipulate the tables <b>CO3:</b> Analyse to create presentation using image/video content <b>CO4:</b> Evaluate forms, queries and reports in database <b>CO5:</b> Develop basic skills in office application

2.	SCCWDP	Special Course II - Web Designing Lab	<b>CO 1:</b> Understand the basic tags in HTML <b>CO 2:</b> Apply the concepts of table and list <b>CO 3:</b> Illustrate the use of audio/ video content in web page <b>CO 4:</b> Evaluate the concept of hyperlink and frames <b>CO 5:</b> Build interactive web page using CSS
3.	SCCPAP	Special Course III - PC Assembly and Installation Lab	<b>CO 1:</b> Understand the Front and Rear Panel Indicators, Switches and Connectors <b>CO 2:</b> Identify the layout of the system components <b>CO 3:</b> Analyze the configuration of BIOS setup programs <b>CO 4:</b> Evaluate the installation of Operating System, Disk Driver and various devices <b>CO 5:</b> Design an assembling and disassembling of Laptop to identify the parts



## THASSIM BEEVI ABDUL KADAR COLLEGE FOR WOMEN

A Minority Institution Sponsored by Seethakathi Trust, Chennai.  
 Recognized by DBT under Star College Scheme, Ministry of Science and Technology, Govt of India.  
 An Autonomous Institution Affiliated to Alagappa University, Karaikudi.  
 Accredited by NAAC with "A" Grade [CGPA:3.16] & ISO 9001:2015 Certified Institution.  
 Recognized by UGC under 2(f) & 12 (B).  
 Kilakarai – 623517, Ramanathapuram District

ACADEMIC YEAR 2023-2024

### DEPARTMENT OF PSYCHOLOGY

#### UG PROGRAMME BSC PSYCHOLOGY

S.NO	SUBJECT NAME	SUBJECT CODE	COURSE OUTCOME
1.	General Psychology	IBSYC11	CO1: Define and trace the basic concepts in psychology CO2: Experiment with the current developments in psychology CO3: Analyze the sensory and perception process CO4: Reveal the importance of motivation- emotion and other factors CO5: Develop their skills and knowledge in psychology
2.	Developmental Psychology- I	IBSYC12	CO1: Define and trace knowledge of the significant factors which affect individuals throughout the lifespan: socioeconomic- ethnic- cultural- family- gender- marital status- and sexual orientation CO2: Identify the knowledge of physical and psychological development of early lifespan development CO3: Sequence the developmental milestone CO4: Estimate the early developmental history to determine impact on child and adolescent functioning CO5: Improve to minimize the developmental issues
3.	Biological Psychology	IBSYA13	CO1: Enumerate and specify the knowledge towards the concept of Biological Psychology CO2: Make use of the acquired knowledge relating to neuron- hormones and brain CO3: Dissect the structure and functions of human Physiology CO4: Interpret the importance of physiology in the field of Psychology CO5: Promote the knowledge gained into behavioral understanding
4.	Personality Development	IBSYS14	CO1: Relate and illustrate the terms of personality CO2: Interview the persons with different personality CO3: Discover the individual attitudinal behaviours CO4: Influence the importance of one's own self CO5: Evolve knowledge to empower oneself

5.	<b>Developmental Psychology – II</b>	<b>IBSYC21</b>	CO1: Find and outline the basic knowledge on physical and cognitive development from adolescence to adulthood and old age CO2: Apply developmental concepts and theories to everyday relationships and situations CO3: List the learning of developmental growth CO4: Inspect the psychological issues involved in death and bereavement CO5: Maximize the psychosocial development from adolescence to adulthood and old age
6.	<b>Experimental Psychology-I (Lab)</b>	<b>IBSYC22P</b>	CO 1: Define and specify the principles of sensory process CO 2: Experiment with various senses and its perceptions CO 3: Function the students with their practical exposure to asses- diagnose and interpret various psychological concepts CO 4 : Evaluate the basic skills of Experiment CO 5: Build the knowledge of using psychometric tools
7.	<b>Social Psychology</b>	<b>IBSYA23</b>	CO1: Label and infer the key factors in social Psychology and to perceive and understand individuals CO2: Make use of applied social psychology CO3: Analyse how to perceive and understand one,,s self CO4: Validate the social world and apply Psychology in life CO5: Develop and predict human behavior
8	<b>Psychology of Personal Happiness</b>	<b>IBSYS24</b>	CO1: Define and trace the concepts of positive emotions in their real life CO2: Apply the strengths and virtues in their personal life CO3: Inspect the positive emotional states and its process CO4: Validate the effect of forgiveness and gratitude CO5: Invent new ways to stay positive
9	<b>Psychological First Aid- John Hopkins Model</b>	<b>IBSYX2</b>	CO1: Define and list the potential risk factors of crisis events and the concepts of PFA CO2: Identify to do PFA with safety- dignity and adapt to the culture of the person CO3: Explicate the Use of effective communication skills in crisis situations CO4: Determine the Action principles of PFA to help people in crisis situations CO5: Build the John Hopkins Model to provide PFA in various crisis events.
10	<b>Social Psychology - I</b>	<b>HBSYC31</b>	CO 1: Help the students outline the key factors in social Psychology and to perceive and understand individuals CO 2: Able to analyze how to perceive and understand one’s self CO 3: Evaluate the social world and apply Psychology in life CO 4: Able to analyze major psychosocial issues

11	<b>Cognitive Psychology</b>	<b>HBSYC32</b>	<p><b>CO1:</b> Understanding the methods to study cognitive concepts</p> <p><b>CO2:</b> Knowing various perceptual processes</p> <p><b>CO3:</b> Demonstrate knowledge and understanding of well-established theories in cognitive Psychology</p> <p><b>CO4:</b> understanding problem solving and creative aspects of cognition</p>
12	<b>Psychological Statistics</b>	<b>HBSYA33</b>	<p><b>CO 1:</b> Understand the basic concepts in psychological statistics</p> <p><b>CO 2:</b> Able to plot graphs for various data</p> <p><b>CO 3:</b> Able to understand the nature of data</p> <p><b>CO 4:</b> gain the knowledge of analyzing the data</p> <p><b>CO 5:</b> Know about the applications of statistical test</p> <p><b>CO 6:</b> able to apply this knowledge in the field of research</p>
13	<b>Health Psychology</b>	<b>HBSYS34</b>	<p><b>CO 1:</b> Students will be able to learn the basic concepts of health Psychology.</p> <p><b>CO 2:</b> Students will be able to learn the health related behaviours.</p> <p><b>CO 3:</b> Students will be able to learn the concept of stress and its managing strategies.</p> <p><b>CO 4:</b> Students will be able to relate health Psychology with other field of science.</p>
14	<b>Training Programme</b>	<b>HBSYX3</b>	<p><b>CO 1:</b> Understand the actual ground reality of the profession</p> <p><b>CO 2:</b> Make them capable to face the challenges in the field</p> <p><b>CO 3:</b> Mold the pupil empathetically towards specially challenged people of our society</p> <p><b>CO 4:</b> Improve their professional skills</p>
15	<b>Social Psychology-II</b>	<b>HBSYC41</b>	<p><b>CO 1:</b> Help the students outline the key factors in social Psychology and to perceive and understand individuals</p> <p><b>CO 2:</b> Analyze how to perceive and understand one's self</p> <p><b>CO 3:</b> Evaluate the social world and apply Psychology in life</p> <p><b>CO 4:</b> Compare and contrast the research methodologies used in the scientific study of human Social Behaviour</p>
16	<b>Psychopathology – I</b>	<b>HBSYC42</b>	<p><b>CO 1:</b> Introduce students to historical conceptions and perspectives of psychopathology</p> <p><b>CO 2:</b> Impart knowledge and skills required for diagnosis of psychological conditions</p> <p><b>CO 3:</b> Orient students on different psychological disorders, its causes and treatment</p> <p><b>CO 4:</b> Consider the impact of these psychological problems on the individual and the wider social context</p>
17	<b>Experimental Psychology - II</b>	<b>HBSYA43P</b>	<p><b>CO 1:</b> Learn the principles of learning process</p> <p><b>CO 2:</b> Understand the various learning techniques</p> <p><b>CO 3:</b> Gain the knowledge of using psychometric tools</p> <p><b>CO 4:</b> Provide practical exposure to assess, diagnose and interpret various psychological Concepts</p>
18	<b>Sports Psychology</b>	<b>HBSYS44</b>	<p><b>CO 1:</b> Introduce students to the Basic Concepts of Sports Psychology</p> <p><b>CO 2:</b> Familiarize students with the importance of Psychology in sports</p> <p><b>CO 3:</b> Understand the importance of motivation in sports</p> <p><b>CO 4:</b> Know the role of anxiety in performances</p> <p><b>CO 5:</b> Familiarize with various skills based training programmes in the field</p> <p><b>CO 6:</b> Know the importance of exercise</p>

19	Life skills Education	HBSYSE45	<p>CO1: Define and Identify different life skills required in personal and professional life</p> <p>CO2: To increase one's knowledge and awareness of emotional competency and emotional intelligence at place of study/work.</p> <p>CO3: To provide opportunity for realising one's potential through practical experience.</p> <p>CO4: To develop interpersonal skills and adopt good leadership behaviour for empowerment of self and others.</p> <p>CO5: To set appropriate goals, manage stress and time effectively.</p> <p>CO6: Understand the basics of teamwork and leadership</p>
20	Internship	HBSYX4P	<p>CO 1: Gain practical knowledge</p> <p>CO 2: Understand the ground reality of profession</p> <p>CO 3: Acquire practical skills</p> <p>CO 4: Learn to write clinical case studies</p>
21	Psychopathology -II	GBSYC51	<p>CO1: Familiarize students with different Psychological disorders</p> <p>CO2: Orient students on causes, symptoms and treatment of different psychological disorders</p> <p>CO3: Familiarize with the DSM – IV multi-axial classification of mental disorders and criteria for diagnosing these disorders</p> <p>CO4: Able to apply these theoretical perspectives in reviewing</p>
			each of the psychopathological conditions
22	Personality development	GBSYC52	<p>CO1: Provide knowledge to empower one self</p> <p>CO2: Understand the enriching factors of personality</p> <p>CO3: Provide knowledge on the importance of positive relationships</p> <p>CO4: Develop interpersonal skills to the students</p>
23	Basic Research Methodology	GBSYC53	<p>CO1: Learn the principles of research design</p> <p>CO2: Identify the research problem</p> <p>CO3: Get basic knowledge on data collection</p> <p>CO4: Enable the students in report writing</p>
24	Human Resource Management	GBSYE5A	<p>CO1: To orient students towards the concept of HRM</p> <p>CO2: To include skill involved job analysis,recruitment,and training and performance appraisal</p> <p>CO3: To Provide innovative solutions to problem in the field of HRM</p> <p>CO4: To be able to identify and appreciate the significance of the ethical issue in HR</p> <p>CO5: To Explain the importance of human resource and their effective management in organization</p> <p>CO6:To develop, implement, and evaluate organizational development strategies aimed at promoting organizational effectiveness</p>

25	<b>Organizational Behaviour</b>	<b>GBSYE5B</b>	<p>CO1: Familiarize students about the factors that contribute to achieving organizational Effectiveness at the individual, group and structural level</p> <p>CO2: Expose them to organizational system, change and its management</p> <p>CO3: Orient them to the concept of work stress and its management</p> <p>CO4: Provide basic knowledge of key approaches and Models relating to Organizational Behaviour</p> <p>CO5: Identify specific steps managers can take to motivate the employees</p> <p>CO6: Apply different concepts relating to managing of conflicts, change, time and stress</p>
26	<b>Forensic Psychology</b>	<b>GBSYE5C</b>	<p>CO1: Describe current issues, problems, and trends in the field of forensic Psychology</p> <p>CO2: Apply basic research methods in Psychology, including research design, data analysis, and interpretation</p> <p>CO3: Use forensic assessment strategies, including interviews and observations to solve problems related to forensic Psychology</p> <p>CO4: Understand the legal issues in the profession of forensic Psychology</p> <p>CO5: Comprehending the student approaches in understanding criminal behaviours</p> <p>CO6: Making the student aware about the nature of criminal behaviour</p>
27	<b>Counseling Psychology</b>	<b>GBSYE5D</b>	<p>CO1: This advanced course will focus on the attempt, and the need, to understand the behaviours, actions and patterns of criminals</p> <p>CO2: Antisocial personality disorder and its impact on the criminal mind</p> <p>CO3: Comprehending the students about different approaches in understanding criminal behaviour</p> <p>CO4: Become aware of ethical and legal issues in counselling</p>
28	<b>Counselling Psychology</b>	<b>GBSYE54</b>	<p>CO1: Orient students about the importance of Guidance and Counselling</p> <p>CO2: Understand the nature of counseling situation</p> <p>CO3: Understand the various areas of counselling</p> <p>CO4: Become aware of Ethical and Legal issues in Counselling</p>
29	<b>Emerging trends in Psychology</b>	<b>GBSYX5</b>	<p>CO1: Gain knowledge on recent studies in Psychology</p> <p>CO2: Know the current scenarios in Psychology</p> <p>CO3: Understand the newly emerged scopes of Psychology</p> <p>CO4: Explore new trends of Psychology</p>
30	<b>Basic Psychotherapies</b>	<b>GBSYC61</b>	<p>CO1: Understand the meaning of therapy and faced by beginning therapists.</p> <p>CO2: Gain insight into the theoretical approaches of psychopathology.</p> <p>CO3: Understand the application of these theoretical principles in treating.</p> <p>CO4: Improve aesthetic professional skills of the students.</p>

31	Neuropsychology	GBSYC62	<p>CO1: Provide knowledge and understanding of brain mind and behaviour relationship with the help of current development in the field of neuroscience, scientific theories, clinical and real life examples.</p> <p>CO2: Facilitate a dynamic understanding of the field by discussing neuroimaging techniques, case examples, and current researches</p> <p>CO3: Challenging the students to examine the field of Neuropsychology as framework for understanding behaviour and mental processes .</p> <p>CO4: Able to understand the link between neurological disorders and therapeutic practice.</p>
32	School Counselling	GBSYC63	<p>CO1: Orient students about the importance of School Counselling.</p> <p>CO2: Make them understand the Models of School Counselling</p> <p>CO3: Make them understand the various areas of School Counselling.</p> <p>CO4: Make them aware of deal with Suicidal thoughts, Depression, and Life Meaning</p>
33	Consumer Psychology	GBSYE6A	<p>CO1: Help the students to get basic knowledge relating to the impact of information technology on consumption patterns</p> <p>CO2: Describe the steps and techniques of consumer behaviour research including a discussion of qualitative and quantitative research models.</p> <p>CO3: Orient students about market segmentation, targeting and positioning.</p> <p>CO4: Understand consumer behavior in an informed systematic way</p> <p>CO5 : Understand the processes used when individuals, group or organizations make consumption decisions.</p> <p>CO6: Understand how the selection, use and disposal of consumer goods affect almost every aspect of</p>
			our daily lives.
34	Psychology of Women	GBSYE6B	<p>CO1: Provide awareness on the basic nature of women.</p> <p>CO2: Explain and be able to identify gender bias in research.</p> <p>CO3: Understand Cognitive ability and personality characteristics of women.</p> <p>CO4: Understand the role of women</p> <p>CO5: Know about Gender discrimination in Society</p> <p>CO6: Understand Gender comparison in Cognitive abilities and Attitudes about Achievement.</p>
35	Cyber Psychology	GBSYE6C	<p>CO1: Have an understanding about cyber space</p> <p>CO2: Make awareness on the importance of psychological aspect in cyber network.</p> <p>CO3: Understanding cybercrimes and issues of cyber bullying, cyber staling etc.</p> <p>CO4: Increasing impact of the digital medium in human rights</p>

37	Skills for employability	GBSED6	CO1: Able to understand the way of success through bringing some attitude changes among them. CO2: Know how to build a positive personality CO3: Able to prepare resume and obtain interview and group discussion skills. CO4: Prepare themselves for Quantitative Analytical Aptitude Test
37	Women studies	FBWS5/GBWS5	CO1: Promote disseminate knowledge about women's roles in society and economic trends which affect women's lives and status CO2: Assimilate analytical understandings of the significance of gender (relations) and foster study of conduits and configurations of power, causes, contexts and consequences of women's subordination CO3: Know the rights and laws for protection of women CO4: Know women's psychological reactions to puberty, marriage, motherhood, abortion, birth control, menopause, etc.

**PG PROGRAMME  
MSC PSYCHOLOGY**

1.	Cognitive Psychology-Applied I	HMSYC11	CO1: Acquiring basic knowledge of core concepts in human cognition CO2: Examine the process involved in cognition CO3: Applications of research based on perception and memory to real life settings CO4: Evaluating the errors in cognition CO5: Developing an appreciation of how cognitive psychology principles can be applied to real life setting
2	Clinical Psychology	HMSYC12	CO1: Choose and infer the varieties of clinical interviews CO2: Make use of the various assessments of memory-intelligence and personality CO3: Analyze the various behavioral assessments methods CO4: Assess the Intelligence and Memory through Clinical assessment CO5: Improve the student knowledge on Intelligence and memory- personality and behavior
3	Psychopathology	HMSYC131	CO1: Define and infer different psychological disorders CO2: Identify treatments for different psychological disorder CO3: Analyze the causes- symptoms and treatment of different psychological disorders CO4: Agree with the DSM-IV multiracial classification of mental disorders and the criteria for diagnosing these disorders CO5: Predict these theoretical perspectives in reviewing each of the psychopathological Conditions through every phase of life
4	Experimental psychology-I ( Lab)	HMSYC14P1	CO1: Understand the concepts of learning sensation, attention, personality, intelligence and creativity CO2: Expanded knowledge of various assessment and procedures. CO3: Administer, analyze and interpret results from various psychological tools CO4: Deduct the findings from an assessment CO5: Discuss the findings from experiments and tests in one's own word

5	<b>Indian School of Psychology/ Positive Psychology</b>	<b>HMSYE1A/ HMSYE1B</b>	<p>CO1: Enumerate and infer the meaning and importance of Indian psychology in the present  CO2: Organize the preconceived notion about various social and health issues and its impact.  CO3: Motivate the awareness about basics of psychology in Indian perspective.  CO4: Test various theories of Indian psychology.  CO5: Modify various doctrines of Indian psychology. /</p> <p>CO1: Define and infer the concepts of Positive Psychology  CO2: Make use of Emotional states and process  CO3: Discover their strengths and virtues and have a positive exposure of life  CO4: Justify the reasons for their happiness and visualize life positively even under hardships  CO5: Promote forgiveness and gratitude among their relationships</p>
6	<b>Counseling Psychology</b>	<b>HMSYC21</b>	<p>CO1: Relate and outline the importance of guidance and counselling  CO2: Utilize the nature of counseling situations  CO3: Dissect the various areas of counseling  CO4: Importance ethical and legal issues in counseling  CO5: Formulate the students to understand the meaning-basic concepts-purpose and importance of counseling in everyday life and skills required for counselling</p>
7	<b>Cognitive Psychology-II</b>	<b>HMSYC22</b>	<p>CO1: Relate and infer the basic concepts in psychology  CO2: Identifying the recent advancements in cognitive psychology  CO3: Analyze the basic knowledge about sensory processes in connections with psychological context  CO4: Assess the depth theories in forgetting</p>
			<p>CO5: Improve the student knowledge on motivational-emotional and other aspects of behavior</p>
8	<b>Research Methodology and Statistics</b>	<b>HMSYC23</b>	<p>CO1: Define and outline the different stages of research  CO2: Apply the various research methods  CO3: Discover appropriate research tools  CO4: Evaluate the basic knowledge on data collection  CO5: Create the skill of reporting the research</p>
9	<b>Experimental Psychology II- (Lab)</b>	<b>HMSYC24P</b>	<p>CO1: Define and outline the principles of sensory process  CO2: Experiment with the various senses and its perceptions  CO3: Distinguish practical exposure to assess- diagnose and interpret various psychological concepts  CO4: To test human behavior using psychological experiments.  CO5: Improve the knowledge of using psychometric</p>

10	International classification of Diseases / Special Education	HMSYE2A/ HMSYE2B	<p>CO1: Define and summarize the concept of abnormal behavior-classification and methods of assessment.</p> <p>CO2: Identify various pathological disorders &amp; ICD-10 criteria of diagnosis. Introduce students to historical conceptions and perspectives of psychopathology</p> <p>CO3: Examine knowledge and skills required for diagnosis of psychological conditions</p> <p>CO4: Support students about the importance of different psychological disorders- its causes and treatment</p> <p>CO5: Change the impact of these psychological problems on the individual and the wider social context.</p> <p>CO1: Relate and explain different psychological disorders related with children.</p> <p>CO2: Identify causes, symptoms and treatment of different psychological disorders.</p> <p>CO3: Analyze historical conceptions and perspectives of psychopathology</p> <p>CO4: Discover knowledge and skills required for diagnosis of psychological conditions</p> <p>CO5: Build awareness about need of special education</p>
11	Neuropsychology	GMSYC31	<p><b>CO1:</b> Provide knowledge and understanding of brain and behavior relationship with the help of current development in the field of neuroscience.</p> <p><b>CO2:</b> Facilitate a dynamic understanding of the field by discussing case examples and current researches.</p> <p><b>CO3:</b> Challenging the students to examine the field of neuropsychology as a framework for understanding behavior and mental processes.</p> <p><b>CO4:</b> Able to understand the link between neurological disorders and therapeutic practice.</p> <p><b>CO5:</b> Understand the structure of the nervous system, brain and functions of different lobes</p> <p><b>CO6:</b> Understand the evaluation and interventions of brain pathology</p>
12	Psychotherapeutics	GMSYC32	<p><b>CO1:</b> Understand the meaning of therapy</p> <p><b>CO2:</b> Gain insight into the theoretical approaches of psychotherapy</p> <p><b>CO3:</b> Understand the application of theoretical principles in treating</p> <p><b>CO4:</b> Improve aesthetic professional skills of the students.</p> <p><b>CO5:</b> Orient towards the nature, goals and prerequisites of psychotherapy</p> <p><b>CO6:</b> Understand about the different schools and techniques in psychotherapy</p>

13	<b>Rehabilitation Psychology</b>	<b>GMSYC33</b>	<p><b>CO1:</b> Understand the nature and extent of problems faced by specific categories of people who badly require safe shelter and rehabilitation.</p> <p><b>CO2:</b> Understand The Government response toward rescue, intervention and rehabilitation for people who require immediate attention.</p> <p><b>CO3:</b> Understand The national and international efforts for rehabilitation of street children, trafficked children, people affected by natural calamities and/or war and HIV/AIDS infected people.</p> <p><b>CO4:</b> Familiarize students with different psychological disorders.</p> <p><b>CO5:</b> Orient students on causes, symptoms and treatment of different psychological disorders.</p> <p><b>CO6:</b> Increase the helping tendency of the student towards specially challenged people</p>
14	<b>Experimental Psychology- III (Lab) Internship Programme</b>	<b>GMSYC34P</b>	<p><b>CO1:</b> Gain practical knowledge.</p> <p><b>CO2:</b> Understand the ground reality of profession</p> <p><b>CO3:</b> Learn to write clinical case studies.</p>
15	<b>Human Resource Management/ Training &amp; Development in Organization</b>	<b>GMSYE3A/ GMSYE3B</b>	<p><b>CO1:</b> Familiarize students about the factors that contribute to achieving organizational effectiveness, at the individual, group and structural level</p> <p><b>CO2:</b> Expose them to organizational system, change and its management.</p> <p><b>CO3:</b> Orient them to the concept of work stress and its management</p> <p><b>CO4:</b> Provide basic knowledge of key approaches and Models relating to Organizational Behavior.</p> <p><b>CO5:</b> Identify specific steps managers can take to motivate the employees.</p> <p><b>CO6:</b> Apply different concepts relating to managing of conflicts, change, time and stress.</p> <p><b>CO1:</b> Understand various concepts in Training and Development.</p> <p><b>CO2:</b> Gain an in-depth understanding of various Training Methods</p> <p><b>CO3:</b> Understand the principles of Organization Development and its Techniques</p> <p><b>CO4:</b> Provide basic knowledge of key approaches and Models relating to Organizational Behavior.</p>
			<p><b>CO5:</b> Identify specific steps managers can take to motivate the employees.</p> <p><b>CO6:</b> Apply different concepts relating to managing of conflicts, change, time and stress.</p>
16	<b>Project Work</b>	<b>GMSYC41PW</b>	<p><b>CO1:</b> Create thrust towards research.</p> <p><b>CO2:</b> Develop research aptitude among students.</p> <p><b>CO3:</b> Develop ability to apply various tools and techniques to solve day-to-day life problems.</p>



## THASSIM BEEVI ABDUL KADAR COLLEGE FOR WOMEN

A Minority Institution Sponsored by Seethakathi Trust, Chennai.  
 Recognized by DBT under Star College Scheme, Ministry of Science and Technology, Govt of India.  
 An Autonomous Institution Affiliated to Alagappa University, Karaikudi.  
 Accredited by NAAC with "A" Grade [CGPA:3.16] & ISO 9001:2015 Certified Institution.  
 Recognized by UGC under 2(f) & 12 (B).  
 Kilakarai – 623517, Ramanathapuram District

### DEPARTMENT OF NUTRITION AND DIETETICS

#### ACADEMIC YEAR 2023-24

DEPARTMENT OF HOME SCIENCE AND RESEARCH CENTRE		
COURSE CODE	COURSE TITLE	OUTCOME(S)
<b>M Sc HOME SCIENCE - NUTRITION AND DIETETICS</b>		
IMNDC11	Advanced Food Chemistry	CO 1: Recall knowledge base of core food chemistry with an emphasis on chemical changes during processing and storage and explain the chemistry, structure, and properties of various food constituents CO 2: Identify the nature of food components and their qualities in order to evaluate the changes in final products CO 3: Distinguish the functions of various food-processing components. CO 4: Discuss the effect of processing on the physiochemical and functional qualities of various food ingredients CO 5: Prioritize the roles of several constituents in food storage and shelf-life extension
IMNDC12	Advanced Human Nutrition	CO1: Relate human nutrition to the maintenance of health and the prevention of disease and understand the metabolic role of nutrients and their complex interrelationships CO2: Identify the relationship between physiological structure, biochemical status and nutrient availability CO3: Analyze the Bioavailability, excess and deficiency condition of all nutrients CO4: Utilize current scientific literature to investigate nutrition and the valid use of supplements CO5: Critically evaluate and derive requirements for specific nutrients and familiarize with the recent advances in human nutrition

IMNDC13	· Integrated Course-Advanced Food Microbiology	<p>CO1: Recall the types of microorganisms in food processing and compare their characteristics and behaviour and understand the knowledge of sample preparation in microbiological analysis</p> <p>CO2: Identify microorganisms in food fermentation product and describe their roles</p> <p>CO3: Differentiate the roles of bacteria, mycotoxin, viruses and parasites to food borne diseases and compare pathogens that cause infection and intoxication</p> <p>CO4: Explain the principles of food microbiology to evaluate food related cases in daily Application</p> <p>CO5: Familiarize the concept of HACCP in Food Industry</p>
IMNDC14	Research Methodology and Statistics	<p>CO1: Define and identify the knowledge of the scientific method, purpose and approaches to research</p> <p>CO2: Illustrate the statistical techniques to research data for analyzing and interpreting data</p> <p>CO3: Explain the types of research, with research process and research designs</p> <p>CO4: Assess the appropriate sampling techniques for research work</p> <p>CO5:</p>

		Summarize the sampling process for data collection
IMNDE1A/	a.Public Health Nutrition	<p>CO1: Define the concept of public health nutrition and discuss the challenges and scope of public health nutrition in India</p> <p>CO2: Select and use appropriate modes of communication to obtain and share evidence based public health nutrition knowledge</p> <p>CO3: Assess the nutritional status by using direct or indirect methods</p> <p>CO4: Summarize the global, national, regional and state level prevalence of protein energy malnutrition</p> <p>CO5: Formulate various teaching aids for extension education and educate the people and family regarding nutritional care</p>

IMNDE1B	b.Sensory Evaluation	<p>CO1: Define sensory evaluation and understanding of sensory evaluation and consumer testing methods and of their underlying principles</p> <p>CO2: Apply sensory evaluation techniques in sensory assessment situations</p> <p>CO3: Analyze the standard methods of sensory evaluation using essential techniques</p> <p>CO4: Explain the human sensory perceptions, particularly the chemical and trigeminal senses and their relevance to the evaluation of food and beverage sensory properties</p> <p>CO5: Capacity to formulate foods that meet specified sensory requirements and which are intended to contribute to reduce community health concerns</p>
IMNDX1/ IMNDX1O	<p>Institutional Food Service Management /</p> <p>*Online Course (Food Nutrition for Healthy Living- Swayam)</p>	<p>CO1: Recall the various types of food services and gain the knowledge about the Institutional food service management</p> <p>CO2: Identify a variety of managerial, production, and service positions that are typical of the food service industry</p> <p>CO3: Analyze the steps involved in menu planning and menu designing</p> <p>CO4: Distinguish between commercial and institutional food service facilities</p> <p>CO5: Develop general knowledge on the origin and development of food service in hotels, restaurants and institutions</p>
IMNDC21	Medical Nutrition Therapy I	<p>CO1: Define medical nutrition therapy and recall the etiology, physiologic and metabolic anomalies of acute and chronic diseases</p> <p>CO2: Explain the therapeutic role of diet and nutritional care concerning weight management, fevers &amp; infections and diseases of the gastrointestinal tract and hepatobiliary system</p> <p>CO3: Assess the nutritional status of critically illness patients</p> <p>CO4: Evaluate the nutritional care based on pathophysiology, prevention/ and treatment of the various diet-related disorders/ diseases</p> <p>CO5: Develop practical skills for modify the diet as per the disease condition</p>

IMNDC22P	Medical Nutrition Therapy I Practicals	<p>CO1: Understand the importance of diet in health and disease conditions and explain the process of objective setting in the delivery of a nutritional care plan for a client</p> <p>CO2: Emphasis skill development in planning therapeutic diets using food exchange lists</p> <p>CO3: Explain the dietary essentials for recovery and maintenance of various systems</p> <p>CO4: Compare and contrast derived nutritive value with RDA using software</p> <p>CO5: Develop practical skills for modify the diet as per the disease condition</p>
IMNDC23	Advanced Nutritional Biochemistry	<p>CO 1: Understand and augment the biochemistry knowledge at the postgraduate level</p> <p>CO 2: Apply the knowledge to Insight the interrelationships between various metabolic pathways</p> <p>CO 3: Inspect and understand the basics of genetic material and their metabolism</p> <p>CO 4: Assess an elaborate knowledge on Acid-Base regulation</p> <p>CO5: Integrate their ideas on the application of enzymes in various fields</p>
IMNDC24	Nutrition Through Life Cycle	<p>CO1: Gain knowledge about food pyramid, vegetarian diet, menu planning and nutritional needs during infancy to adolescents and explain the nutrition education for specific lifecycle stages</p> <p>CO2: Identify and describe potential diseases and disorders, and their risk factors affecting nutrient needs at each state of the life cycle</p> <p>CO3: Assess nutrition issues/ conditions, and recommend nutrition intervention/ support</p> <p>CO4: Evaluate and plan strategies and diets for improving nutritional status of individuals at each stage of the life cycle</p> <p>CO5: Design food plans to meet the needs of humans at various life cycle stages</p>
IMNDE2A/	a.Guidance and Counselling in Nutrition Education /	<p>CO1: Define and outlining the concept of nutritional assessment and counselling using case studies</p> <p>CO2: Examine the characteristics of counselors and counselling process</p> <p>CO3: Analyze the counselling approaches and techniques</p> <p>CO4: Assess the knowledge on various areas of counselling</p> <p>CO5: Build a self-improving programmes for social and personal problems</p>

IMNDE2B	b.Food Packaging Technology	<p>CO1: Define food packaging and discuss the importance and functions of food packaging</p> <p>CO2: Apply the principles of innovative packaging technologies for use with food products</p> <p>CO3: Analyze the Chemical and physical properties of packaging materials</p> <p>CO4: Evaluate different packaging materials based on various types of analysis in the laboratory</p> <p>CO5: Create awareness on current issues related to quality and safety aspects of food packaging</p>
IMNDX2PW/ IMNDX2O	Scientific Writing for Project / *Online Course (Maternal Infant Young Child Nutrition-Swayam)	<p>CO1: Recall the strategies and reasons for publishing research and discuss the different types of scientific writing</p> <p>CO2: Apply the knowledge on implementing outlines as a guide to plan the manuscript</p> <p>CO3: Analyze and reflect on your thinking processes and growth to identify strategies for improving academic writing and language skills</p> <p>CO4: Evaluate the drafting process based on the script outline and re- reading the content to precise the writing for project</p> <p>CO5: Write a series of analytical, creative, and coherent writing projects, including original research with primary and secondary sources</p>
IMNDC31	Medical Nutrition Therapy II	<p>CO1: Recall the etiology, symptoms and dietary management of degenerative disease and Integrate knowledge of research principles and methods associated with nutrition and dietetics practice</p> <p>CO2: Apply the knowledge of medical terminology and medical abbreviations associated with nutrition related diseases and conditions</p> <p>CO3: Assess the nutritional status of critically ill patients and formulate different therapeutic diets for various disease conditions</p> <p>CO4: Demonstrate initiative and judgment using a professional, ethical and entrepreneurial approach advocating for excellence in nutrition and dietetics</p> <p>CO5: Independently plan and execute a research project regarding nutrition and dietetics practice</p>

IMNDC32P	Medical Nutrition Therapy II Practicals	<p>CO1: Relate the causes, symptoms and onset of various types of degenerative diseases and describe the acquired skill development in planning therapeutic diets using food exchange list</p> <p>CO2: Apply the skills for preparing appropriate therapeutic diets</p> <p>CO3: Analyze the nutrient content of therapeutic diet</p> <p>CO4: Assess the nutritional status using various nutritional assessment tools</p> <p>CO5: Plan menu for the given disease condition and compare and contrast with R.D.A using software</p>
IMNDC33	· Integrated Course- Nutraceuticals and Functional Foods	<p>CO1: Retrieve the historical perspective of nutraceuticals and physiology of human nutrition and explain the importance of nutraceuticals in the context of the human well-being</p> <p>CO2: Illustrate the occurrence, chemical nature and medicinal benefits of natural nutraceuticals belong to different phytochemical categories</p> <p>CO3: Explain the functional components from Plant, Animal and microbial Sources.</p> <p>CO4: Evaluate the standards of evidence required for efficacy and safety assessment of nutraceutical and functional foods</p> <p>CO5: Summarize the application of Food biotechnology for improving the formulation of potential functional ingredients / foods will be mastered</p>
IMNDC34P	Food Analysis Practicals	<p>CO 1: Understand the technical terminology and scientific units related to food analysis</p> <p>CO 2: Implement the principles behind analytical techniques associated with food and the importance of accuracy and reproducibility in analysis</p> <p>CO 3: Analyze and compare various parameters such as pH, moisture, ash, nitrogen, protein, lipid, carbohydrate, etc. in food samples</p> <p>CO 4: Evaluate the appropriate analytical technique when presented with a practical problem</p> <p>CO 5: Design an appropriate analytical approach to solve a practical problem</p>

IMNDE3A/	a. Food Safety and Quality Control	<p>CO1: Learn standards related to food safety and quality and understand the knowledge about International food safety legislation</p> <p>CO2: Apply the knowledge on the requirements for compliance with national and International food standards</p> <p>CO3: Demonstrate knowledge of quality management systems, their implementation and the practical steps needed for implementation</p> <p>CO4: Conduct risk assessments of food safety problems including genetic modification</p> <p>CO5: Critically evaluate the recent developments in the control of food safety</p>
IMNDE3B	b.Sports Nutrition	<p>CO1: Outline evidence based nutritional strategies to enhance recovery and understand the knowledge of physiological response to exercise affects nutritional requirements</p> <p>CO2: Explain the relationship between exercise, nutrition and energy balance for the control of body composition and chronic disease risk factors</p> <p>CO3: Interpret data to assess body composition changes in elite athletes and demonstrate an ability to use these guidelines to provide general nutrition advice for achieving or maintaining a healthy bodyweight</p> <p>CO4: Evaluate dietary strategies to influence the health and performance of elite and recreational athletes</p> <p>CO5: Communicate sports nutrition advice accurately and effectively to non-specialist audiences</p>
IMNDC41	Geriatric Nutrition	<p>CO1: Gain Knowledge of Nutrition, Health and Gerontology and understand the process of physical and social changes taking place during the elderly people life</p> <p>CO2: Identify the nutritional implications of these changes in terms of nutrient and dietary requirements</p> <p>CO3: Determine different techniques of nutritional assessment of the elderly</p> <p>CO4: Examine the sensory problems and chronic degenerative disease during ageing</p> <p>CO5: Develop the knowledge about geriatric guidance and counseling and write the role of Government and NGOs in economic status of geriatrics</p>

IMNDC42P	# Dietetic Internship in Hospital	CO1: Identify nutrition-related problems and determine nutrition interventions and describe the work of inter professional teams and the roles of others with whom the registered dietitian nutritionist collaborates in the delivery of food and nutrition services CO2: Interpret the relevance of food and nutrition for the disease CO3: Analyze the food habits and brief about the dietary modification CO4: Discuss the impact of health care policy and different health care delivery systems on food and nutrition services to the consultant and Graduates will be prepared to pass the national level Registered level dietitian examination CO5: Persuade the patients with appropriate online diet counselling techniques
IMNDC43PW	Dissertation	CO1: State a nutritional problem prevalent in local community settings and draft a research design for solving CO2: Apply the appropriate nutritional concepts to research techniques. CO3: Analyze the research problems in the field of nutrition and dietetics CO4: Examine the statistical tools for data collection and interpret results CO5: Create innovative solutions to existing nutrition problems in community
IMNDX4/ IMNDX40	Diabetic Care and Education / *Online Course (Food science and Processing-Swayam)	CO1: Recite and relating the knowledge of diabetes pathologies CO2: Examine the modifications in nutrients and dietary requirements for therapeutic condition CO3: Categorize the recent concepts in the dietary management of diabetes CO4: Reflecting the skills in planning and preparation of therapeutic diets for diabetes CO5: Solve the complications by diabetic care and education

**B Sc HOME SCIENCE- NUTRITION AND DIETETICS**

<b>Course Code</b>	<b>Course Title</b>	<b>Course Outcome</b>
IBNDC11	Food Science	CO1: Recall the different types of food groups and discuss the cooking methods adopting best practices CO2: Determine the composition and nutritive value of different food groups and role of cookery CO3: Analyze the physical and chemical changes occurring in different foodstuffs during various cooking process CO4: Assess the principles in cooking and its effect on sensory attributes and nutrients CO5: Summarize the effect of processing and storage on nutritional

		composition of foods
IBNDC12P	Food Science Practicals	CO1: Know the concept of cooking techniques and describe use of equipment for food preparation CO2: Identify the different food groups and physical and chemical changes during cooking process CO3: Link the acquired skills in food handling techniques CO4: Evaluate the sensory analysis of recipes CO5: Prepare different recipes using basic food groups
IBNDS14P	Yoga for Holistic health Practicals	CO 1: Understand the physical body and health concepts CO2: Apply and practice physical and mental stability in daily life CO3: Outline self-discipline and self-control in modern culture CO4: Integrate moral values CO5: Attain a higher level of consciousness
IBNDC21	Human Nutrition	CO1: Find the basic nutrients for human wellbeing and summarizing the types and role of micro and macro-nutrients CO2: Illustrate the metabolic role of nutrients and their complex interrelationships CO3: Inspect the functions, sources and requirements of Basic Nutrients for human beings CO4: Conclude the importance of Macronutrients and Micronutrients CO5: Discuss the various methods of energy determination

IBNDC22P	Human Physiology Practicals	<p>CO 1: Understand the human physiological aspect of organs and distinguish the components of blood and urine</p> <p>CO 2: Apply knowledge to practice to handle tools related to blood analysis</p> <p>CO 3: Analyze the biochemical values on blood and urine by different experiments</p> <p>CO 4: Compare the normal and abnormal biochemical values on blood and urine</p> <p>CO 5: Create an awareness on First aid practice</p>
IBNDA23	Human Physiology	<p>CO 1: Recall the anatomy of various organs in the human system and explain their role in the maintenance of healthy individuals</p> <p>CO 2: Apply the knowledge to understand the functions of various organs in the human system</p> <p>CO 3: Analyze the Physiological changes at different stages of life</p> <p>CO 4: Compare how the functions of organs are integrated to maximum efficiency</p> <p>CO 5: Summarize the importance of hormones in various organs of the human system</p>
IBNDS24P	Surface Embellishments Practicals	<p>CO1: Outline the basic embroidery stitches</p> <p>CO2: Analyze the different methods of surface ornamentation techniques</p> <p>CO3: Identify and represent traditional embroideries of India using basic stitches</p> <p>CO4: Recommend the appropriate surface embellishment techniques to enhance the value of home furnishing and apparel fabrics</p> <p>CO5: Design and develop appropriate designs for embroidery in textile products</p>
IBNDX2/ IBNDX2O	Food Hygiene and Sanitation /*Online Course(Maternal Infant Young Child Nutrition-Swayam)	<p>CO1: Recall the importance of hygiene and sanitation in food industry and understand the knowledge relating to the significance of pest control</p> <p>CO2: Identify measures/procedures that will reduce or eliminate accidents in food preparation and service areas</p> <p>CO3: Analyze the pre-requisite procedures in food industry</p> <p>CO4: Evaluate the standards and procedures for keeping the facilities and equipment sanitary</p> <p>CO5: Provide the special Training of supervisory personnel in sanitation procedures</p>

IBNDC31	Nutritional Biochemistry	<p>CO 1: Recall the biochemical mechanisms of nutrition and metabolism and understand the knowledge of the principles of Biochemistry</p> <p>CO 2: Apply the knowledge to recognize the classification, structure and functions of macromolecules</p> <p>CO 3: Integrate the anabolic and catabolic pathways of all metabolic cycles</p> <p>CO 4: Assess the chemistry of micronutrients and their biochemical role</p> <p>CO 5: Summarize the activity of enzymes and co-enzymes in all metabolic pathways</p>
IBNDC32P	Nutritional Biochemistry Practicals	<p>CO 1: Understand and recognize the rule and regulations in the biochemistry lab to practice and perform the experiments in the safest way</p> <p>CO 2: Apply the knowledge to execute the qualitative determination of macromolecules.</p> <p>CO 3: Experiment with the parameters such as pH, Moisture, Ash, etc. in various food samples</p> <p>CO 4: Measure the quantity of nutrients in the various food samples</p> <p>CO 5: Create insight on advanced analytical instrument</p>
IBNDA33	· Integrated Course -Food Microbiology	<p>CO1: Understand the different microorganisms that can cause spoilage of foods and be able to detect them and explain the occurrence and interactions of microorganisms with food</p> <p>CO2: Illustrate the role of microorganisms in food safety</p> <p>CO3: Experiment the techniques in control of food spoilage</p> <p>CO4: Evaluate the methods of quality and microbiological control of foods</p> <p>CO5: Develop skills useful to detect the microorganisms in food</p>
IBNDS34P	Nutrition Garden Practicals	<p>CO1: Understand the importance of cultivation and discuss the various types layout.</p> <p>CO2: Illustrate the various types of soil and fertilizers.</p> <p>CO3: Explain the different beds for cultivation.</p> <p>CO4: Experiment the different methods of cultivation of plants</p> <p>CO5: Develop the practical skills on preparing their own nutria-garden</p>

IBNDX3/ IBNDX3O	Marine Food Processing /*Online Course (Nutrition, Therapeutic and Health- NPTEL)	CO 1: Recall the factors that influence the quality and shelf-life of seafood and explaining the marine ecosystem CO2: Identify losses due to post-harvest, processing, and storage CO3: Analyze the nutritional advantages of marine products CO4: Solve spoilage problem by using various preservation and packaging techniques CO5: Evaluate the shelf life by experimenting with different processing and packaging methods
IBNDC41	Nutrition for Life Span	CO1: Identify the nutrient requirements during each stage of lifecycle CO2: Execute the diet plan for normal and special children CO3: Explain the importance of nutrition during physiological stages CO4: Evaluate the dietary pattern of adolescents, adult and old age CO5: Summarize the physiological, biological and psychological changes throughout life cycle
IBNDC42P	Nutrition for Life Span Practicals	CO1: Define the terminologies of human life span and explain nutritional requirements at different stages of the lifespan CO2: Prepare a menu planning for different age group CO3: Calculate the nutrients in the planned diet chart CO4: Validate the calculated nutrients to RDA CO5: Construct the food guidelines for different age group
IBNDA43	Human Development and Family Relationships	CO1: List out the stages of human development and demonstrate an understanding of the biological, psychological, social and cultural influences of lifespan human development CO2: Examine the development aspects (both normal and exceptional) from conception to old age CO3: Analyze the behaviour development of children CO4: Conclude the knowledge on the importance of children with special needs CO5: Compile complete knowledge about the family relations and sex education

IBNDS44P	Food Product Development Practicals	CO1: Define and interpreting the significance of dietary changes in the development of new products CO2: Identify a product's quality and sensory characteristics; CO3: Examine the food packaging in foods CO4: Construct the food product based on your knowledge of food ingredients and functional foods CO5: Assess the theoretical and practical knowledge in order to reproduce existing food products
IBNDX4/ IBNDX4O	Information, Education and Communication Material in Education. /*Online Course(Food and Nutrition for Healthy Living–Swayam)	CO1: Recall the process of preparing appropriate IEC materials and understanding the knowledge of communication CO2: Illustrate the various types of IEC materials CO3: Categorizing the emerging trends in educational technology CO4: Examining the communication technology in teaching CO5: Preparing the pedagogical tool for education
IBNDC51	Diet Therapy I	CO1: Recollect the principles of planning diet and discuss the role of dietician and basic concept of diet therapy CO2: Determine the routine hospital diets, special feeding techniques CO3: Point out the etiology, symptoms and complications for any life style disease CO4: Assess the nutritional requirement for acute and chronic illness CO5: Plana whole day menu for the acute and chronic illness
IBNDC52P	Diet Therapy I Practicals	CO1: Describe the importance of menu for different illness and explain the need of menu modification CO2: Apply the therapeutic diets using food exchange lists. CO3: Structure the dietetic practices followed in Indian hospital CO4: Detect the nutritive value of Indian foods CO5: Calculate a whole day menu for acute and chronic illness
IBNDC53	Community Nutrition	CO1: Identify the nutritional problems in India and gain knowledge on measures to overcome malnutrition CO2: Articulate the greater exposure to assessment of nutritional status CO3: Analyze knowledge about assessment of nutrition education CO4: Assess the concepts of health and epidemiology of communicable diseases CO5: Create awareness on nutritional programmes in national and international organizations

IBNDE5A/	a. Family Resource Management /	CO1: Define the principles and elements involved in management CO2: Apply the concepts of management process in family CO3: Distinguish the different aspects of human and non-human resources CO4: Assess knowledge about the standard of living and decision making process CO5: Manage the different forms of resources
IBNDE5B	b. Basics of Textile and Apparel	CO1: Recall the basic concept of textile and apparel and understanding the knowledge of textile material CO2: Identifying the methods of fabric formation and processing CO3: Analyzing the concept of apparel design elements and fashion cycle CO4: Assessing the design development and apparel production CO5: Develop knowledge about Indian traditional textiles and embroidery
IBNDE5C/	a. Food Service Management/	CO1: Explain the interdependent components of the international hospitality and tourism industry and understand the roles of national and state visitors' authorities, marketing and sales CO2: Apply management skills needed in a food service production CO3: Emphasize problem solving tools with in food service careers CO4: Evaluate the professional lodging specific technical skills, supervisory techniques and management skills in food service management CO5: Monitor the quality control in food product and service
IBNDE5D	b. Post-harvest Technology	CO1: Recall the principle underlying Post-Harvest Technology and understand the knowledge of post-harvest management of foods CO2: Classify the importance and methods of post-harvest conservation of foods CO3: Outline the post-harvest processing in Major crops CO4: Estimate the shelf stability of product in storage and post-harvest processing of temperate crops CO5: Determine the quality parameters of plantation crops during Post-harvest operations

IBNDS54P	Food Preservation Practicals	<p>CO1: Define food preservation and indicate the different types natural and chemical preservatives used for food preservation</p> <p>CO2: Apply the methods of preserving foods by adding salt (Vathal Vadakkam)</p> <p>CO3: Demonstrate on different methods of food preservation techniques</p> <p>CO4: Evaluate the different preparation methods of spice products</p> <p>CO5: Formulate the different preparation methods of fermented</p>
IBWE5	Women Entrepreneurship	<p>CO 1: Understand the role of women entrepreneurship in different facets of society</p> <p>CO 2: Know the various livelihood supports for women Employment opportunities</p> <p>CO 3: Elucidate the role of various developmental schemes supporting women entrepreneurship</p> <p>CO 4: Examine the various governmental and non-governmental support offered to the entrepreneurs</p> <p>CO 5: Critically analyze various entrepreneurship schemes in India</p>
IBNDC61	Diet therapy II	<p>CO1: Recall the clinical condition of therapeutic condition and describe the modifications in nutrients and dietary requirements for therapeutic condition</p> <p>CO2: Implement the foods to specific disease pathologies that require diet modification in order to restore homeostasis in patients</p> <p>CO3: Analyze the nutritional and food requirements for different therapeutic conditions</p> <p>CO4: Assess the knowledge on etiology, clinical manifestation, metabolic aberrations and complications linked with adverse food reactions</p> <p>CO5: Build recent concepts in dietary management of different diseases and preparation of therapeutic diets for various disease</p>

IBNDC62P	Diet therapy II Practicals	<p>CO1: Identify the discovered diets during the different therapeutic conditions and interpret normal health to therapeutic conditions</p> <p>CO2: Inspect skill development in planning therapeutic diets using food exchange lists</p> <p>CO3: Choose an accurate dietary assessment, calculate the nutritional requirements, plan appropriate nutritional care, and explain the process of objective setting in the delivery of a nutritional care plan for a client</p> <p>CO4: Compare the calculated nutrients with RDA</p> <p>CO5: Generate the plan menu for low immunity people</p>
IBNDC63	· Integrated Course Food Safety and Quality Control	<p>CO1: Recall the application of food quality and food safety system and explain the international systems of standards</p> <p>CO2: Illustrate the importance of food quality standards</p> <p>CO3: Examine the chemical and microbiological quality of food samples</p> <p>CO4: Evaluate the adulteration in food samples</p> <p>CO5: Review of legislative approaches for the management of food safety</p>
IBNDC64P	#Dietetic Internship	<p>CO1: Identify nutrition-related problems and determine and evaluate nutrition interventions</p> <p>CO2: Explain the work of inter professional teams and the roles of others with whom the registered dietitian nutritionist collaborates in the delivery of food and nutrition services.</p> <p>CO3: Interpret and apply nutrition concepts to evaluate and improve the nutritional health of individuals with medical conditions</p> <p>CO4: Apply the knowledge for diet counseling and competent to manage catering outlet</p> <p>CO5: Determine and translate nutrient needs into menus for individuals and groups across the lifespan, in diverse cultures and religions</p>
IBNDE6A/	a. Food Adulteration	<p>CO1: Know the standards for quality assessment and food safety against adulteration for various foods and understand the adulteration of common foods and their adverse impact on health</p> <p>CO2: Relate the concept of adulteration in food products.</p> <p>CO3: Detect the adulteration in food samples</p> <p>CO4: Comprehend certain skills of detecting adulteration of common foods</p> <p>CO5: Familiarize with critical assessment and control points for quality assurance.</p>

IBNDE6B	b. Nutrition for Sports and Physical Fitness	<p>CO1: Recall the concept of nutrition on sports and fitness and understanding of the relationship between nutrition and exercise performance</p> <p>CO2: Apply the concept of fluid balance in sports person</p> <p>CO3: Analyze the weight management in fitness and sports people</p> <p>CO4: Assess on different types of micronutrients need for their fitness</p> <p>CO5: Role-play on Antioxidant in sports and Fitness</p>
IBNDS65P	Food Adulteration Practicals	<p>CO1: Highlight the common food adulterants and discuss the advantage and disadvantages of food adulterants</p> <p>CO2: Summarize the knowledge in the aspects of adulteration</p> <p>CO3: Explain the various adulterants used in food samples by testing the samples</p> <p>CO4: Investigate the food adulteration by its qualitative analysis</p> <p>CO5: Create awareness about adulteration by finding the chemical materials present in food substances</p>
IBNDX6/ IBNDX6O	<p>Waste Management in food industries</p> <p>/*Online Course.(Food Science and Processing - Swayam)</p>	<p>CO1: Define and summarizing the agricultural waste and by products that are beneficial</p> <p>CO2: Categorize a variety of waste-treatment equipment</p> <p>CO3: Establish various wastewater treatment and disposal technologies</p> <p>CO4: Choose from a number of waste water treatment options, all of which are available from a various sources</p> <p>CO5: Evaluate how byproducts and waste materials are utilized</p>
IBOE3HS	Food Preservation Techniques	<p>CO1: Recognize the principles of food preservation and explain the different types of preservation techniques</p> <p>CO2: Practice the skills in methods of food preservation</p> <p>CO3: Prioritize the perishable and non-perishable foods from microbial contamination and microbial spoilage</p> <p>CO4: Critique the doses of preservatives and irradiation rays in foods to control the food spoilage</p> <p>CO5: Formulate the preservation of foods using salt, sugar, and chemicals</p>

**CERTIFICATE PROGRAMME IN FOOD PROCESSING AND PRESERVATION**

HCFP1	Food Processing and Preservation	CO1: Define food preservation and understand the basic knowledge of microbial application in food preservation CO2: Apply the knowledge in preserving foods by laboratory and household measures CO3: Demonstrate on different methods of food preservation techniques CO4: Evaluate the microbial quality of foods CO5: To make the students understand the basic principles underlying food Preservation
HCFP2P	Food Processing and Preservation Practicals	CO1: Define food preservation and understand the basic knowledge of microbial application in food preservation CO2: Apply the knowledge in preserving foods by laboratory and household measures CO3: Analyze the practical knowledge on principles and methods of preservation CO4: Enable students to do recipes based on preservation methods CO5: Make the students understand the basic principles underlying food preservation

**CERTIFICATE PROGRAMME IN CLINICAL DIETETICS**

HCCD1	Clinical Dietetics	CO1: Recollect the principles of planning diet and discuss the role of dietician and basic concept of diet therapy CO2: Determine the routine hospital diets, special feeding techniques CO3: Point out the etiology, symptoms and complications for any life style disease CO4: Assess the nutritional requirement for acute and chronic illness CO5: Plan a whole day menu for the acute and chronic illness
HCCD2P	Clinical Dietetics Practicals	CO1: Describe the importance of menu for different illness and explain the need of menu modification CO2: Apply the therapeutic diets using food exchange lists. CO3: Structure the dietetic practices followed in Indian hospital CO4: Detect the nutritive value of Indian foods CO5: Calculate a whole day menu for acute and chronic illness

**CERTIFICATE PROGRAMME IN YOGA FOR HOLISTIC HEALTH**

HCYH1	Introduction to yoga	CO1: Understand the physical body and health concepts CO2: Possess the basic Knowledge on Loosening Exercises and Asana and Pranayama CO3: Impart the Knowledge on Kriyas and Meditation. CO4: Introspect to improve the behavioural changes CO5: Develop the mentalprosperityof human
HCYH2P	Yoga Practical	CO1: Promote Positive Health in the Student through Yoga CO2: Impart skills in them to practice yoga CO3: Regulate the inter-personal, behavioural concepts of human life overcome various physical and mental stress of life activities CO4: Impart skills in them to introduce Yoga for health to general public and Yoga fortotal personality development of students CO5:Promote positivehealth,prevention of stress relatedhealth problems and rehabilitation through Yoga
<b>DIPLOMA IN BAKERY AND CONFECTIONERY</b>		
IDBC11	BakeryTheory I	CO1: Outline the various properties of raw materials in bakeryand confectionery industries CO2: Discuss methods involved in manufacture of bakery products CO3: Compile technical knowledge in bakery CO4: Explain the physical factors of dough CO5: Knowthe importance ofproper food plant design and safety
IDBC12	Confectionery Theory I	CO1: Explain the different ingredients used in confectionery CO2: Demonstrate working knowledge of Chocolate and Sugar confectionery CO3: Understand Food Microbiology, Food Contamination and Spoilage CO4: List down the steps in preparing Icings and frozen dessert CO5: Elaborate the role offood additives in bakeryand confectionery
IDBC13P	BakeryPracticals I	CO1: Identify anddifferentiate the small and large equipment in bakery CO2: Identifyand check for quality of different types ofingredients used in bakery CO3: Prepare and Present yeast fermented products CO4: Prepare and Present flavored breads CO5: Prepare and Present Breakfast bread

IDBC14P	Confectionery Practicals I	<p>CO1: Define and explain different pastries and derivatives</p> <p>CO2: Make plan &amp; identify the different ingredients to prepare different icing</p> <p>CO3: Prepare and Present international cakes and puddings</p> <p>CO4: Prepare and Store Ice Creams, Toffees and Indian Sweets</p> <p>CO5: Ability to work with chocolate and sugar to create design, plates and show pieces</p>
IDBC15	Entrepreneurial Skills and Productivity	<p>CO1: Acquire the knowledge to create a new business plans</p> <p>CO2: Understand the functions of entrepreneur</p> <p>CO3: Improve the entrepreneurship skills</p> <p>CO4: Risk assessment of entrepreneur</p> <p>CO5: Explore the financial management in an enterprise</p>
IDBC21	Bakery Theory II	<p>CO1: Highlight the processing methods used in baking and confectionery industries</p> <p>CO2: Know about the various types of food products made using baking technology</p> <p>Have a basic idea about baking and confectionery manufacture and quality control</p> <p>CO4: Know about the importance of each ingredient in the bakery and how it affects the overall product and its sensory and quality parameters.</p> <p>CO5: Able to start a small scale bakery and confectionery unit.</p>
IDBC22	Confectionery Theory II	<p>CO1: Understand the importance and role of various ingredients used in bakery and confectionary</p> <p>CO2: Explain the importance of food costing and costing techniques.</p> <p>CO3: Understand the different types of biscuits, cookies and their methods of manufacturing</p> <p>CO4: Develop standard recipes and adjust the quantities using adjustment factor</p> <p>CO5: Understand the different types of sugar confectionary products and their process products.</p>

IDBC23P	BakeryPracticals II	<p>CO1: Explore the concepts and processes required to produce a selection of specialty breads to include yeast/gluten breads and enriched dough</p> <p>CO2: Demonstrate the ingredients of different 3 cakes and baking procedure</p> <p>CO3: Design preparation methods to finishing techniques</p> <p>CO4: Acquire skills in the preparation of food</p> <p>CO5: Demonstrate mastery of all basic baking formulas necessary to manage a pastry operation or department.</p>
IDBC24P	ConfectioneryPracticals II	<p>CO1: Explore with innovation the concepts of composition, taste, design, texture and current trends for pastry through practical skills and related theory.</p> <p>CO2: Develop techniques to adapt classical dishes and confectionery products to a contemporary style.</p> <p>CO3: Evaluate and apply the techniques necessary to create a comprehensive range of chocolate work.</p> <p>CO4: Creative modern plated desserts, and individual pastry products.</p> <p>CO5: Ability to work with chocolate and sugar to create design, plates and showpieces</p>
<b>Certificate course in Food Preservation Technology</b>		
GCFP1	Food Preservation Technology	<p>CO1. After successful completion of this course, student will be able to:</p> <p>CO2. Define food preservation and understand the basic knowledge of microbial application in food preservation</p> <p>CO3. Apply the knowledge in preserving foods by laboratory and house hold measures</p> <p>CO4. Demonstrate on different methods of food preservation techniques</p> <p>CO5. Evaluate the microbial quality of foods</p>

## M.Sc. FASHION DESIGNING

COURSE CODE	COURSE TITLE	OUTCOME(S)
IMFDC11	Core I - Textile Science	CO 1: Identify the recent textile fibres and their process CO 2: Gain knowledge on manufacturing process of yarns CO 3: Differentiate the production process and properties of natural and man-made fibers CO 4: Discuss the latest developments in high performance fibers CO 5: Know the yarn manufacturing process and various fabric formation
IMFDC12	Core II - Home Textiles	CO1: Understand the home furnishing, identifying suitable materials and products CO2: Apply care and maintenance of home furnishing products CO3: Analyze the types of floor coverings and its maintenance CO4: Evaluate the recent trends in home furnishing CO5: Prepare the doors and windows coverings
IMFDC13P	Core III - Home Textiles Practicals	CO1: Understand the home furnishing, identifying suitable materials and products CO2: Enable to start their own Home Furnishing Shop CO3: Enhance their Skills in creating their own Home Furnishing Items CO4: Establish themselves as Home Furnishing Chain Store Consultant CO5: To become an Effective Home Furnishing Freelance Designer.
IMFDC14P	Core IV - Fashion Draping and Garment Construction Practicals	CO 1: Acquire the skills of draping on dress form by an introduction to terminology, understanding fundamentals and advanced techniques of draping CO 2: Identify about custom fitted, basic pattern to prepare many different styles CO 3: Analyse the various parts of the garments CO 4: Manipulate the basic draping into designer costumes drape CO 5: Develop the structure of a garment design using draping techniques
IMFDE1A	DSE I –a. Protective Clothing	CO 1: Understand the meaning and uses of protective clothing CO 2: Appraise suitable fibers, yarns, fabrics and finishes for protective clothing CO 3: Understand the methods of creating suitable fabrics for protective clothing CO 4: Plan protective clothing to suit the needs of the wearer CO 5: Develop protective clothing

IMFDE1B	DSE I –b. Sustainability in Textile and Fashion	CO1: Improve their ability to creative ideas in research and development to make sustainable textiles. CO 2: Execute environmentally friendly textile manufacturing in working place. CO 3: Describe the need for Sustainable textiles and fashion CO 4: Select Sustainable Textile design and processing methods CO 5: Manufacture sustainable textile products for all types of customer needs.
IMFDX1	Extra Credit - Clothing Appearance and Fit	CO1: Understand the Perceptions of body appearance and its relations to clothing CO2: Apply the concepts of assessment of clothing appearance and fit, Virtual Reality,3D Body scanning, Sizing systems CO3: Evaluate the principles of cosmetic textiles in textile industry. CO4: Analyse the Human Anthropometrics and systems CO5: Create the Impact of physical Appearance on attributions of specific traits
IMFDC21	Core V - Textile Testing and Quality Control	CO 1: Describe the terms related to testing CO 2: Understand the concepts and principles underling the tests and its equipment CO 3: Apply the knowledge and conduct the tests CO 4: Appraise the quality of the fiber, yarn and fabric CO 5: Test the fiber, yarn and fabrics
IMFDC22P	Core VI - Textile Testing Practicals	CO 1: Understand the concepts and principles underling the tests and its equipment CO 2: Test the fiber, yarn and fabrics CO 3: Establish results from the readings obtained from the tests performed CO 4: Appraise the quality of the fiber, yarn and fabric CO 5: Apply the knowledge and conduct the tests during research activities Laundro meter
IMFDC23P	Core VII - Advanced Illustration Design Art and Painting Practicals	CO1: Develop World art forms in paper CO2: Redraw the Indian paintings CO3: Understand the nuances of art forms and paintings CO4: Analyse the design details CO5: Recreate the art and painting designs in garment styles
IMFDC24P	Core VIII - CAD in Textile and Fashion Practicals	CO1: Identify the variety of digital image making techniques, understanding the technical illustration, pattern manipulation and design layout CO2: Apply the pattern, grading and design development to the fashion industry CO3: Analyze the draping of Fabric on the Croquis r children, women and men CO4: Design digital textile weave structure and jacquard design CO5: Create Texture Mapping and Virtual Fashion

IMFDE2A	DSE II –a. Export Trade and Documentation	CO1: Understand the importance of quality control, identifying the apparel quality control process CO2: Integrate consumer, aesthetic and quantitative trend information into the product development process CO3: Estimate the new value into an existing product or line while holding costs CO4: Evaluate the fabric and sewing defects CO5: Manage the fabric quality and standards
IMFDE2B	DSE II –b. Visual Merchandising	CO1: Understand the purpose of merchandising, identifying marketing strategies in the industries CO2: Interpret merchandising plan and sales forecasting CO3: Organize creative design process of merchandising CO4: Analyze the elements of costing, sourcing and pricing CO5: Develop the production systems and implement quality control
IMFDX2PW	Extra Credit - Scientific Writing for Project	CO1: Recall the strategies and reasons for publishing research and discuss the different types of scientific writing CO2: Apply the knowledge on implementing outlines as a guide to plan the manuscript CO3: Analyze and reflect on your thinking processes and growth to identify strategies for improving academic writing and language skills CO4: Evaluate the drafting process based on the script outline and re- reading the content to precise the writing for project CO5: Write a series of analytical, creative, and coherent writing projects, including original research with primary and secondary sources
IMFDC31	Core IX – Knitting Technology	CO1: Understand the Knitting machine and working principles. CO2: Understand the Knitting fabric and its techniques. CO3: Knowledge on various web structures and formation. CO4: Understand the Warp Knitting processes. CO5: Understand the advanced Electronics knitting processes.
IMFDC32	Core X - Research Methodology and Statistics	CO1: Define and identify the knowledge of the scientific method, purpose and approaches to research CO2: Illustrate the statistical techniques to research data for analyzing and interpreting data CO3: Explain the types of research, with research process and research designs CO4: Assess the appropriate sampling techniques for research work CO5: Summarize the sampling process for data collection
IMFDC33P	Core XI – Computer Application in Pattern Making and Grading Practicals	CO 1: Identify the variety of digital image making techniques, understanding the technical illustration, pattern manipulation and design layout CO 2: Apply the pattern, grading and design development to the fashion industry CO 3: Analyze the pattern grading for children, women and men CO 4: Illustrate a garment designing children, women’s and men’s garment CO 5: Create a different styles of pattern

IMFDC34P	Core XII - Internship in Retail Store Outlet/ Boutique Management	CO1: To learn about the functioning of garment industry working of various department particularly production. CO2: Knowledge about different departments of the retail store, their function and information flow during work CO3: Analyze the feel of the work environment CO4: Demonstrate the various opportunities in the retail outlet CO5: Experiment with different styles garment illustrating techniques
IMFDE3A	DSE III –a. Technical Textile	CO1: Understand the difference between conventional and technical textiles. CO2: Understand the requirement and applications of filtration textiles. CO3: Understand the concept of geo textile, Oeko textiles and home textiles. CO4: The essential properties and application of medical textiles, protective textiles, and sports textiles CO5: Understand the sport and industrial applications of textile materials
IMFDE3B	DSE III –b. Dyeing and Printing Technology	CO1: State the dyeing and printing technology, understand sequence of processing CO2: Demonstrate the dyes and printing machineries for various industries CO3: Estimated dyes for types of fabrics CO4: Knowledge about the advance finishing techniques in dyeing CO5: Create the fabric samples using dyeing mechanism
IMFDC41	Core XIII – Non-Woven and Nanotechnologies	CO1: Understand the fiber preparation processes. CO2: Understand the nonwoven fabric and its techniques. CO3: Knowledge on various web structures and formation. CO4: Understand the web bonding processes. CO5: Understand the advanced non-woven finishing processes.
IMFDC42P	Core XIV - Advanced Costume Designing and Construction Practicals	CO1: Understand the special needs of the wearer CO2: Design garment styles for people with special needs CO3: Create special garments to suit the personal needs of the wearer CO4: Select fabrics and accessories to suit the garment style and the needs of an individual CO5: Create custom made garments for special people like pregnant, women, physically
IMFDC43PW	Core XV- Dissertation	CO 1: Make use of research methodology and techniques of the literature applicable to their own research CO 2: Determine solutions to the unsolved problems CO 3: Analyze the abilities and techniques in the critical evaluation of current research CO 4: Apply new ideas in the respective field of study and environment CO 5: Design innovative projects with the application of mathematical concepts towards scientific and societal development

IMFDX4	Extra Credit – Eco Textiles	CO1: Improve their ability to creative ideas in research and development to make Eco textiles. CO 2: Execute environmentally friendly textile manufacturing in working place. CO 3: Describe the need for Eco textiles and fashion CO 4: Select Natural Textile design and processing methods CO 5: Manufacture sustainable textile products for all types of customer needs.
--------	-----------------------------	---

**B.Sc. FASHION DESIGNING**

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>OUTCOME(S)</b>
IBFDC111	Core I – Basic Garments Construction	CO 1: State the functions of sewing machines and identify the parts CO 2: Apply the finishing method to the fabric CO 3: Analyze the basic types of sleeves, collar and pockets. CO 4:Experiment the components of apparel designing CO 5: Create different finishes and its applications
IBFDC121P	Core II – Basic Garment Construction Practicals	CO 1: State the functions of sewing machines and identify the parts CO 2: Apply the finishing method to the fabric CO 3: Analyze the basic types of sleeves, collar and pockets. CO 4:Experiment the components of apparel designing CO 5: Create different finishes and its applications
IBFDA13P	Ability Enhancement Compulsory Course –I Fashion Illustration I – Practicals	CO 1: Understand the basic fashion sketching and classify the various head theories CO 2: Illustrate the different texture and designs CO 3: Draw the different styles of garment designing CO 4:Experiment the coloring techniques- pencil drawing, posters, watercolors CO 5: Develop the own individual styles
IBFDC211	Core III – Pattern Making and Grading	CO 1: Understand the basics of pattern making and list out the types of pattern CO 2: Illustrate the designs and selection of pattern making principles CO 3: Assess the basic pattern sets using pattern making techniques CO4:Examine the garment fitting, alteration methodologies and assembling techniques CO 5:Develop creative designs through draping, drafting, flat pattern method
IBFDC221P	Core IV - Pattern Making Practicals	-

IBFDA23P	Ability Enhancement Compulsory Course II – Fashion Illustration II Practicals	CO 1: Recall the different styles of illustration the classifying with accessories CO 2: Sketch the movement of fashion figures CO 3: Analyze the various proportions CO 4: Develop skills in the field of drawing CO 5: Create the trendy fashion figures
IBFDX2P	Extra Credit – Fashion Accessory Designing Practicals	CO1: Understand the fashion accessories; identify the recent trends and product development CO2: Experiment motif based on different hand knitting methods CO3: Prepare the accessories by refashioning fabrics CO4: Develop the various styles of fashion accessories CO5: Create innovative accessory designs
IBFDC211	Core V -Fashion Studies	CO1: Identify the meaning of fashion, understanding the fashion studies CO2: Discover the current trends in fashion CO3: Apply the fashion elements and design principles CO4: Investigate fashion psychology and evaluation CO5: Create a new design implementation of fashion
IBFDC32P	CORE VI - Construction for Children's Apparel Practicals	CO1: Understand the kid's costume and classified suitable wear for different age groups CO2: Apply the patternmaking techniques for constructing garment CO3: Estimate the layout and cost of the garment CO4: Evaluate measurements required and materials suitable CO5: Create different kids wear garments
IBFDA33I	Ability Enhancement Compulsory Course I – Boutique Internship	CO1: Understand the structure and, identify the process of the boutique CO2: Analyze the functions of various sections in the organization CO3: Predict the short term and long terms targets of an organization CO4: Justify the impact of organization for the Society CO5: Create client data as per recruitments with planning and execution
IBFDS44	Extra Credit - Clothing Care and Maintenance	CO 1: Understand the care and maintenance of fabrics, classifying the process. CO 2: Determine the suitable methods of washing, drying, ironing and storing of the fabric CO 3: Appraise the types of equipment used in the cleaning fabrics CO 4: Evaluate the methods of caring to be used for a better life of clothes CO 5: Develop the care and maintenance of fabric packaging and finishing
IBFDC411	Core VII – Wet Processing	CO1: State the dyeing and printing process, understand sequence of processing CO2: Demonstrate the dyes and printing equipment and machineries CO3: Estimate dyes for types of fabrics CO4: Experiment the dyeing and printing methods CO5: Create the fabric samples using dyeing, printing methods

IBFDC421P	C o r e V I I I- Wet Processing-Practicals	CO1: State the dyeing and printing process, understand sequence of processing CO2: Demonstrate the dyes and printing equipment and machineries CO3: Estimate dyes for types of fabrics CO4: Experiment the dyeing and printing methods CO5: Create the fabric samples using dyeing, printing methods
IBFDA43P	Ability Enhancement Compulsory Course II– Construction for Women’s Apparel Practical	CO1: Understand the body structure and identify the suitable fabric for women's wear CO2: Interpret methods of drafting for different types of garments CO3: Experiment the list out the measurements required and materials suitable CO4: Estimate the cost of the garment CO5: Create the various designs in women's wear
IBFDX4P	Extra Credit –Internship in Textile Processing- Manufacturing Unit	CO1: Understand the structure of textile industry, identify the process unit CO2: Analyze the methods adopted in the training place CO3: Predict the short term and long terms targets of an organization CO4: Analyze the textile processing procedure CO5: Create the report for end of the textile processing internship
IBFDC511	Core IX - Fabric Structure and Design	CO1: Understand the fabric structure and classifying the weaving, knitting processes CO2: Illustrate the design, draft, peg plan of weaves and knit Structure CO3: Apply the methods of compound fabric CO4: Compare the different types of woven and knit structure CO5: Create and develop textiles designs
IBFDC521P	Core X - Fabric Structure and Designing Practical	CO1: Understand the fabric structure and classifying the weaving, knitting processes CO2: Illustrate the design, draft, peg plan of weaves and knit Structure CO3: Apply the methods of compound fabric CO4: Compare the different types of woven and knit structure CO5: Create and develop textiles designs
IBFDC53P	Core XI– Construction of Men’s Apparel Practical	CO1: Understand the men’s apparel, identifying the suitable fabric CO2: Interpret methods of drafting for different types of garments CO3: Experiment the list out the measurements required and materials suitable CO4: Estimate the cost of the garment CO5: Create a various design in men’s wear
IBFDC54P	Core XII – Computer Aided Design CAD Practical I	CO1: Understand the designing software, identifying the menus and tools CO2: Develop elements and principles of design using software CO3: Create motif design for embroidery CO4: Illustrate a garment designing children, women’s and men’s garment CO5: Create digital logo, label for branded garments

IBFDC61	Core XIII - Fashion Retailing and Consumer Behavior	CO1: Identify fashion product retailing; understand a theoretical and technological knowledge of current business CO2: Determine the retail business and retail stores, professional practices leading to marketing and merchandising fashion products both locally and globally CO3: Analyze the retail merchandising private brand labels and trade shows CO4: Evaluate the measures of productivity, merchandising and pricing CO5: Arranged retail store layout and visual merchandising for presentation
IBFDC62	Core XIV - Textile Testing	CO1: Understand the testing terminology and identifying the statistical tools in textile testing CO2: Apply the varies testing for fiber to fabric CO3: Analyze the garment testing method CO4: Evaluate the fiber and yarn properties CO5: Develop the Knowledge of textile testing methods
IBFDC63P	Core XV - Computer Aided Design CAD Practicals II	CO1: Identify the variety of digital image making techniques, understanding the technical illustration, pattern manipulation and design layout CO2: Apply the pattern, grading and design development to the fashion industry CO3: Analyze the pattern grading for children, women and men CO4: Design digital textile weave structure and jacquard design CO5: Prepare digital business card and customer profile
IBFDC64P	Core XVI– Fashion Portfolio Project	CO1: Understand the development of portfolio presentation techniques, identifying research and forecasting of recent themes CO2: Apply the inspiration to the theme portfolio CO3: Create portfolio board according to an individual theme CO4: Research and relate fashion design to a broader socio economic, historical, and environmental context CO5: Create a collection of portfolio garments in various season
IBFDC65	Core XVII - Fashion Photography and Modeling [Theory cum Practicals]	CO1: Understand the basics of photography, identifying elements and principles CO2: Demonstrate the part of camera parts and types of DSLR camera CO3: Compare natural and artificial lights in camera CO4: Develop knowledge in modeling walk, photogenic skills CO5: Prepare fashion photographs in various angles and types of photography
IBFDX6W	Extra Credit- Mini Project	CO1: Understand the working structure of company identifying the design development department CO2: Analyze the methods of design development CO3: Assess the process through work experience within the company CO4: Develop the portfolio boards regarding project theme CO5: Create the report for complete project

IBFDE5A	DSE I – a. Fashion Merchandising and Marketing	CO1: Understand the purpose of merchandising, identifying marketing strategies in the industries CO2: Interpret merchandising plan and sales forecasting CO3: Organize creative design process of merchandising CO4: Analyze the elements of costing, sourcing and pricing CO5: Develop the production systems and implement quality control
IBFDE5B	DSE I - b. Apparel Business Accounting and Entrepreneurship	CO1: Identify the business accounting, understanding entrepreneurship skills among the students in the textile/apparel field CO2: Explaining the accounting procedure and process of setting up new enterprises to the students CO3: Analyze the managing role of the entrepreneur CO4: Developing awareness in the rules and policies of the enterprises CO5: Organizing production process and business support to entrepreneur
IBFDE5C	DSE II - a. Apparel Quality Control	CO1: Understand the importance of quality control, identifying the apparel quality control process CO2: Integrate consumer, aesthetic and quantitative trend information into the product development process CO3: Estimate the new value into an existing product or line while holding costs CO4: Evaluate the fabric and sewing defects CO5: Manage the fabric quality and standards
IBFDE5D	DSE II. b -Apparel Production Management	CO1: Understand the production structure, identifying production management of the global textile/apparel industries CO2: Demonstrate effective leadership, teamwork, and communication skills CO3: Explain the plant location and balance the garment industry CO4: Evaluate the work measurement of apparel production management CO5: Develop the present merchandise lines for identified market segments
IBFDE6A	Discipline Specific Elective III a. Fashion Communication	CO1: Identify the clothing and fashion classify the fashion communication CO2: Apply the fashion design work of others and providing constructive criticism for ongoing work CO3: Justifying ideas suitable for photography and fashion publication CO4: Compose fashion articles and future for digital media CO5: Create knowledge of fashion magazines and brochures for advertisement
IBFDE6B	Discipline Specific Elective III b. Event Design and Management	CO1: Understand the principles of event management, identifying the theme base event CO2: Construct a suitable background effect using different fabrics CO3: Compose and plan for various events CO4: Illustrate different styles and layout for furniture and flower arrangement CO5: Organize the event skillfully

IBFDS14	Skill Enhancement Course I - Fiber to Yarn	CO 1: Understand the natural and man-made fibers, identifying their uses CO 2: Determine the properties and manufacturing process of textile fibers CO 3: Analyze the yarn development process CO 4: Compare the Sewing thread with textile yarn CO 5: Summarize the classification and quality of fiber and yarn
IBFDS24	Skill Enhancement Course II – History of Fashion and Traditional Design	CO 1: Understanding the origin of costumes and classifying its history CO 2: Determine the regional variation of costume and designs, motifs in different states CO 3: Awareness about the historic and traditional costumes in various occasions CO 4: Apprise the various traditional methods used for decorative designing CO 5: Develop various dyeing and printing and their terminologies
IBFDS34P	Skill Enhancement Course II – Draping Techniques in Fashion Practicals	CO1: Acquire the skills of draping on dress form by an introduction to terminology, understanding fundamentals and advanced techniques of draping CO2: Identify about custom fitted, basic pattern to prepare many different styles CO3: Analyze the various parts of the garments CO4: Manipulate the basic draping into designer costumes drape CO5: Develop the structure of a garment design using draping techniques
IBFDS44P	Skill Enhancement Course IV - Surface Embellishment Practicals	CO1: Understand the basic embroidery stitches and classifying the variations CO2: Analyze the different methods of surface ornamentation techniques CO3: Analyze the traditional embroideries of India CO4: Recommend the appropriate surface embellishment techniques to enhance the value of home furnishing and apparel fabrics CO5: Design and develop appropriate designs for embroidery in textile products
IBFDS55P	Skill Enhancement Course V – Boutique Management	CO1: Understand the structure of boutique, identifying the management processes CO2: Interpret a boutique infrastructure requirements and visual merchandising techniques CO3: Organize and manage the human resources CO4: Analyze boutique marketing tools and material sourcing CO5: Prepare the financial resources for a boutique

IBFDS66P	Skill Enhancement Course VI – Fashion Styling Practicals	CO1: Understand the skills to develop design capability in lifestyle, classifying the products and styles CO2: Acquire the beauty products and identify recent trends CO3: Cultivate aesthetic sensibilities and build on craftsmanship skills CO4: Analyze the various events and situation handling CO5: Develop personal grooming and makeup skills
<b>VALUE ADDED PROGRAMME IN APPAREL DESIGNING &amp; CONSTRUCTION</b>		
FCAD11P	Apparel Designing & Construction Practicals	CO1: State the functions of sewing machines and identify the parts CO2: Interpret methods of drafting for different types of garments CO3: Experiment the components of apparel designing. CO4: Estimate the cost of the garment. CO5: Create a various design in women's wear

Principal  
Thassim Beevi Abdul Kader  
College for Women, Kilakarai.

