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 post graduate degree programs the students 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 an 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

Department of English

Academic Year: 2021 – 22 (Odd & Even)

Course Outcomes

I BA English

ODD Semester

S No	Subject Code	Subject Name	Course Outcomes
1.	HBLG12	Language II – General English I/	**CO 1:** Learn new vocabularies **CO2:** Learn sentence structures **CO3:** Learn basic grammar **CO4:** Develop comprehension skill **CO5:** Read extensively on their own **CO6:** Develop an interest in the appreciation of language and literature
2.	HBLF12	Language II- Functional English I	**CO 1:** Learn basic grammar **CO2:** Learn new vocabularies **CO3:** Use contextual clues to guess meaning **CO4:** Develop comprehension skills **CO5:** Get an introduction to conversational English **CO6:** Develop an interest in the appreciation of language and literature
3.	HBEGC11	Core I - British Literature [1340-1660]	**CO 1:** Acquire knowledge of the age of Chaucer **CO 2:** Get an overall idea of the important works of great literary figures of the age **CO 3:** Understand the salient features of literary background of the perio d **CO 4:** Appreciate the artistry of early British Writers
4.	HBEGC12	Core II - Applied Grammar	**CO1:** Acquire a thorough knowledge of English grammar **CO2:** Attain accuracy in speaking and writing **CO3:** Understand and differentiate sentence patterns **CO4:** Enrich writing with appropriate grammatical structures
5.	HBEGA13	First Allied I - Social History of England	**CO1:** Get familiarized with the Social History of England **CO2:** Understand literary works in a better perspective **CO3:** Comprehend the important literary movements and history of England **CO4:** Understand the historical and cultural range of literature **CO5:** Paraphrase the unfamiliar historical incidents in England **CO6:** Obtain clear knowledge of the background study of English literature
6.	HBEGE14	Skill Based Elective I - Business English–I	**CO1:** Speak fluently in a business context **CO2:** Understand cultural differences in business communication **CO3:** Know the terms and vocabularies of verbal and non–verbal communication **CO4:** Develop a well-organized and persuasive presentation

EVEN Semester

S No	Subject Code	Subject Name	Course Outcomes
1.	HBLG22	Language II-General English II	**CO1:** Learn basic grammar **CO2:** Avoid common errors in using English **CO3:** Comprehend the gist as well as detailed information from a text **CO4:** Gain proficiency in the use of English Language. **CO5:** Improve their comprehension and expression of oral and written ideas in English **CO6:** Develop an interest in the appreciation of language and literature
2.	HBLF22	Language II - Language II-Functional English II	**CO1:** Deduce meaning from the text **CO2:** Use tenses correctly and frame grammatically correct sentences **CO3:** Converse in simple dialogues in English **CO4:** Comprehend the gist as well as detailed information from texts **CO 5:** Develop interest in the appreciation of language and literature **CO6:** Learn new vocabularies
3.	HBEGC21	Core III - British Literature [1664-1774]	**CO1:** Understand the influences of a variety of cultures on the development of early British literature **CO2:** Understand the genres such as Poetry, Prose, Drama and Fiction **CO3:** Recognize the literary trends and key aspects of the age **CO4:** Know the works of major British writers with literary and historical contexts
4.	HBEGC22	Core IV - Indian Writing in English	**CO1:** Understand the literary heritage of India **CO 2:** Recognize and understand the emergence of the cross-cultural Indian English Literature **CO3:** Get exposure to the vitalities of different genres **CO4:** Recognize the important contributions of Indian English writers
5.	HBEGA23	First Allied II - Literary Forms	**CO1:** Get accustomed to various literary genres **CO2:** Understand the evolution of literary genres **CO3:** Recognize poetry from a variety of cultures, languages and history **CO4:** Identify various types of dramatic art **CO5:** Read different literary genres with interpretative and analytical skills **CO6:** Comprehend and appreciate literature
6.	HBGE24	Skill Based Elective II - Business English–II	**CO1:** Gain proficiency in formal and informal communication **CO2:** Develop reading comprehension **CO3:** Develop a comprehensive approach to writing in business contexts **CO4:** Interact in English using comprehensive business communication skills
7.	HBES2	General Interest Course–I - Environment	**CO1**: Understand key concepts about the renewable and non-renewable resources of the environment. **CO2**: Appreciate the concept, Structure and ecological pyramids of ecosystem.

		al Studies	**CO3**: Reflect critically about the different Protection Act of Biodiversity and its conservation. **CO4**: Creates awareness about the environmental pollutions and its management. **CO5**: Understand the natural resource exhaustion, related health issues in humans
8.	HBEGX2PW	Extra Credit - Creative Writing [Mini Project]	**CO1:** Develop and hone skills in creating and editing **CO2:** Demonstrate ability to read and respond thoughtfully and critically in both oral and written form to other's work. **CO3:** Demonstrate knowledge of how to perform in a workshop situation. **CO4:** Recognize and write within the genres of nature and environmental issues

II BA English

ODD Semester

S No	Subject Code	Subject Name	Course Outcomes
1.	GBEGC31	Core V - British Literature [1790 - 1850]	**CO 1:** Have familiarity with Romantic Movement and its writers **CO 2:** Understand how works differ in theme from the works of the early periods **CO 3:** Discuss the tone and theme of Romantic period and its writers **CO 4:** Explain life and significance of the poet that help in analyzing literary works
2.	GBEGC32	Core VI - American Literature	**CO1:** Know about different writers hailing from America **CO 2:** Understand and appreciate the works of renowned Writers of Ame rica **CO 3:** Get the knowledge of the historical, cultural and social issues that influenced American Literature **CO 4:** Know the literary sensibility of American writers by learning various genres
3.	GBEGA33	Second Allied I - History of English Literature - I	**CO 1:** Know the development of Literature through the ages **CO 2:** Comprehend the changing ideas in literature **CO 3:** Understand the contributions made by major writers of each age **CO 4:** Understand the rise and fall of literary movements with its socio-political and socio-religious events **CO 5:** Know the literary history of texts from the Age of Chaucer to Dryden **CO 6:** Understand the social background and appreciate literature
4.	GBEGE34	Skill Based Elective III - Business	**CO 1:** Overcome barriers of communication. **CO 2:** Use electronic modes to communicate effectively **CO 3:** Develop presentation skills

		English - III	**CO 4:** Know to discuss and evaluate notes by listening and taking notes
5.	GBEGX3PW	Extra Credit - Travel Writing [Mini Project]	**CO 1:** Enhance their observation and narrative skills **CO 2:** Understand generic features of travel writing **CO 3:** Improve their writing skills **CO 4:** Write travel stories for magazines and websites
6.	GBNM3EG	Non Major Elective - Skills for Employment I	**CO 1:** Get ready for job market **CO 2:** Appear for interviews and make presentations confidently **CO 3:** Use English for communication **CO 4:** Learn Business English vocabularies

EVEN Semester

S No	Subject Code	Subject Name	Course Outcomes
1.	GBEGC41	Core VII - British Literature [Victorian to Modern Age]	**CO 1:** Analyse critical issues related to Victorian Literature and Society **CO 2:** Examine and identify central literary genres, conventions during Victorian Era and 20th Century **CO 3:** Understand the difference in themes from the works of the early periods **CO 4:** Describe the features of Modern Literature
2.	GBEGC42	Core VIII - New Literatures in English	**CO 1:** Know the writers from Commonwealth Countries **CO 2:** Understand the works of renowned writers of New Literatures **CO 3:** Understand the style and techniques followed in New Literatures **CO 4:** Understand and appreciate the cultural significance of various literatures
3.	GBEGC43	Core IX - Poetry and Psychology	**CO 1:** Understand the impact of psychology in literary readings **CO 2:** Manage stress with the help of literary journey through poetry **CO 3:** Incorporate imaginative techniques and develop writing skill **CO 4:** Become creative writers using poetry writing as a tool to escape from melancholy and celebrate happiness
4.	GBEGA44	Second Allied II - History of English Literature - II	**CO 1:** Know the development of Literature through the ages **CO 2:** Comprehend the changing ideas in literature **CO 3:** Understand the contributions made by major writers of each age **CO 4:** Familiarize with the age before Jonson to Modern Age **CO 5:** Appreciate different techniques employed by the writers of different ages **CO 6:** Understand the relation between socio-political and socio-religious events
5.	GBEGE45	Skill Based Elective IV -	**CO 1:** Overcome the barriers to communication and develop interview skills

		Business English – IV	**CO 2:** Use electronic modes to communicate effectively **CO 3:** Participate in group discussions effectively **CO 4:** Develop the presentation skills
6.	GBNM4EG	Non Major Elective - Skills for Employment II	**CO 1:** Organize official meetings **CO 2:** Learn the basics of business communication **CO 3:** Code and decode the information at the time of information transfer **CO 4:** Improve their technical skills
7.	GBVE4	General Interest Course – III - Values and Ethics	**CO 1:** Understand the concept of the major religions in India **CO 2:** The Values and Ethics to tackle the fundamental question of human life **CO 3:** Understand the intension and help one's own self **CO 4:** Know what is morally right **CO 5:** The right way to treat fellow human
8.	GBEGX4P	Extra Credit - Extra Reading Review [Practical]	**CO 1:** Improve their language **CO 2:** Enhance their concentration and develop reviewing skills **CO 3:** Appreciate any kind of discourse or literature **CO 4:** Develop their own interest in extra reading

III BA English

ODD Semester

S No	Subject Code	Subject Name	Course Outcomes
1.	GBEGC51	Core X - Phonetics and Transcription	**CO 1:** Comprehend the English speech system **CO 2:** Understand thoroughly the production, transmission and recepti on of sounds of English Language **CO 3:** Improve their pronunciation **CO 4:** Understand syllables and stress patterns
2.	GBEGC52	Core XI - Shakespeare	**CO 1:** Understand dramatic and theatrical conventions of Shakespeare **CO 2:** Analyse plot, characters, themes and stagecraft of Shakespearea n plays **CO 3:** Appreciate and enjoy the plays in relation to modern contexts **CO 4:** Analyse and appreciate the modes of tragedy and comedy
3.	GBEGC53	Core XII - Literary Criticism	**CO 1:** Have clear idea of the basic theoretical concepts **CO 2:** Develop their critical competence and sensibility **CO 3:** Apply theory to the texts and enrich their understanding of litera ture

			CO 4: Develop the analytical competence to trace the features and their aptness
4.	GBEGE5A	Core Elective I - Prose	**CO 1:** Understand the works of prose writers of different countries acr oss the world **CO 2:** Appreciate prose styles of different ages and different cultures **CO 3:** Analyse the poetic features depicted in prose style in the essays of popular writers of different cultures **CO 4:** Criticize prose writings **CO 5:** Appreciate additional and relevant information other than the elucidation of the central theme **CO 6:** Analyse sentence structures
	GBEGE5B	Core Elective I - Poetry	**CO 1:** Identify poetic devices employed by the poets **CO 2:** Familiarize themselves with the trends and individual traits of p oets **CO 3:** Appreciate critically the usages of metaphorical items of the poets **CO 4:** Understand between lines **CO 5:** Analyse the ethics, messages, visions and criticisms of the poets **CO 6:** Learn rhyme scheme
5.	GBEGE5C	Core Elective II - Drama	**CO 1:** Know the distinctive nature of drama as a genre and its variety **CO 2:** Compare their personal experience with drama **CO 3:** Know the methods of characterisation from dialogues **CO 4:** Develop the imaginative skill to watch mind's theatre **CO 5:** Analyse the significance of staging drama **CO 6:** Analyse critically to appreciate the value of the characters
	GBEGE5D	Core Elective II - Fiction	**CO 1:** Inculcate interest in fiction and its types **CO 2:** Appreciate the novels written by writers from different nationali ty **CO 3:** Understand the descriptive skill of novelists **CO 4:** Recognize the closeness created by the writer with the art **CO 5:** Define climax and anticlimax **CO 6:** Learn narrative techniques employed by the novelists
6.	GBEGE54	Skill Based Elective V - Business English – V	**CO 1:** Understand the technicalities of English language **CO 2:** Write and speak fault-free English **CO 3:** Learn the skills of business communication **CO 4:** Develop the managerial skills and competitive temperament
7.	GBEGX5PW	Extra Credit - Magazine Production	**CO 1:** Acquire knowledge in print and electronic media **CO 2:** Know the techniques of photography **CO 3:** Explore career opportunities

		[Project]	**CO 4:** Know the nuances of photography

EVEN Semester

S No	Subject Code	Subject Name	Course Outcomes
1.	GBEGC61	Core XIII - Religion and Literature	**CO 1:** Familiarize with various religions **CO 2:** Know the impact of religion in literature **CO 3:** Understand variety of interpretations of religion **CO 4:** Understand various forms and cultures **CO 5:** Analyse the relationship between religion and culture **CO 6:** Imbibe moralistic values through religion and literature
2.	GBEGC62	Core XIV - African American Literature	**CO 1:** Comprehend the emerging trends in African American Literature **CO 2:** Understand the upheaval in material condition of African Americans **CO 3:** Understand the trauma experienced by the African American people **CO 4:** Understand the theoretical concepts of race and racism
3.	GBEGC63	Core XV - Media Writing	**CO 1:** Identify the components of news article **CO 2:** Gain knowledge of writing for media **CO 3:** Understand the techniques of writing **CO 4:** Demonstrate mock interviews
4.	GBEGC64PW	Core XVI - Project	**CO 1:** Know to write project statement **CO 2:** Develop influential reading **CO 3:** Improve presentation skills **CO 4:** Surf for research resources
5.	GBEGE6	Core Elective III - English for Education and Career Abroad	**CO 1:** Gain introductory knowledge of TOEFL and IELTS **CO 2:** Develop their inferential and concluding skill in reading **CO 3:** Develop their listening skill in natural speech **CO 4:** Enhance their oral fluency **CO 5:** Improve their writing skill with a good flow **CO 6:** Take English proficiency tests as TOEFL and IELTS
	GBEGE6B	Core Elective III - English for Competitive Examinations	**CO 1:** Learn unfamiliar words and determine their meaning using a variety of strategies **CO 2:** Enhance students' fluency and proficiency in Writing **CO 3:** Train students in test taking strategies **CO 4:** Expose to material that facilitates aspects of grammar, writing and vocabulary **CO 5:** Become proficient users of English involving all the four skills **CO 6:** Communicate effectively and appropriately in real life situation
6.	GBEGE65	Skill Based Elective VI - Business	**CO 1:** Know the meaning of unfamiliar words **CO 2:** Learn new vocabularies, practice and use in speaking and writing

		English – VI	**CO 3:** Develop their skills in telephoning and emailing **CO 4:** Develop their key skills that prepare them for interviews, meetings and team project

I MA English

ODD Semester

S No	Subject Code	Subject Name	Course Outcomes
1.	GMEGC11	Core I - British Literature [Chaucer to Milton]	**CO1**: Get an overall view of British Literature from the age of Chaucer to 1660 **CO2**: Know the major writers of this period **CO3**: Recognize the impact of major events in literature **CO4:** Gain knowledge of the major traditions of Literature **CO5:** Develop an ability to read texts in relation to their historical and cultural contexts **CO6:** learn through situations in literature and apply them in real life
2.	GMEGC12	Core II - British Literature [Dryden to Pope]	**CO1:** Get a wider and clear picture of British Literature of this period **CO2:** Get an introduction to major writers of British Literature of the Restoration Period & the 18th Century **CO3:** Explores how writers from a vast array of cultural traditions have used the creative resources of language **CO4:** Develop an interest to appreciate literature **CO5:** Explore the entire range of human experiences **CO6:** Understand complex literary texts
3.	GMEGC131	Core III - Indian English Literature	**CO1:** Acquire elaborate knowledge of various perspectives of Indian English Literature **CO2:** Know the Indian traditions and Western cultures through the voice s of Indian writers **CO3:** Enjoy the experience of reading native literature **CO4:** Appreciate literature's ability to elicit aesthetic feeling **CO5:** Understand the literary heritage of India **CO6:** Gain knowledge of themes for further research
4.	GMEGC141	Core IV - American Literature	**CO1:** Understand significant developments in the History of American Literature **CO2:** Develop and understand the history and cultural progress of the country through literature **CO3:** Comprehend the perceptions and experiences of American authors **CO4:** Identify fundamental elements of American culture **CO5:** Examine the impact of multicultural communities and literatures on the establishment of American identity **CO6:** Perceive and appreciate literature

5.	GMEGE1A	Core Elective I - Writing Skills	**CO1:** Assimilate information from texts to develop a main idea **CO2:** Adopt new writing techniques using their imagination **CO3:** Use writing as a tool for thinking and learning **CO4:** Strengthen their writing skill altogether **CO5:** Understanding word order, sentence structures and coherence **CO6:** Practice unique qualities of professional writing
	GMEGE1B1	Core Elective I - Teaching of English	**CO1:** Know the role of English language in India and the rationale for learning English as a second language **CO2:** Acquire knowledge of current trends in the teaching of English **CO3:** Invent tools of their own to teach English in a better way **CO4:** Demonstrate innovative methods and instructional aids **CO5:** Understand the levels of teaching methods **CO6:** Articulate clear questions and ideas in classroom discussions
6.	GMEGX1	Extra Credit – Media Studies	**CO1:** Obtain a wide knowledge about mass media and its power **CO2:** Learn the nuances of presenting the news **CO3:** Learn the functions and processes of the Media **CO4:** Learn to collect information on data **CO5:** Grasp the complex relationship between media and society **CO6:** Write articles for media creatively

EVEN Semester

S No	Subject Code	Subject Name	Course Outcomes
1.	GMEGC21	Core V - British Literature [Wordsworth to Tennyson]	**CO1:** Demonstrate familiarity with the major writers of the Romantic and Victorian period **CO2:** Get a wide and clear idea of British Literature of the Roman tic and Victorian period **CO3:** Understand the influences of a variety of cultures on the development of British literature during this era **CO4:** Read literature within such contexts as nationality, historical period, ethnicity, and culture. **CO5:** Understand and appreciate literature as a valuable source of intellectual, emotional, and aesthetic experience reflecting and enriching the human experience. **CO 6:** Demonstrate an understanding of texts, critical theories, library skills for literary research.
2.	GMEGC22	Core VI - Women's Writing in English	**CO1:** Distinguish body of literature that has emerged with growin g feminist awareness of women's lives and their representation **CO2:** Examine how women's texts pay attention to the historical and political conditions of their times **CO3:** Recognize and discuss aspects of women's writings

			CO4: Discuss critical and theoretical debates relating to women's writings **CO5:** Demonstrate awareness of cultural and intercultural concerns relating to women's writings **CO6:** Analyse literary texts through feminine perspective
3.	GMEGC231	Core VII - Ecological Literary Studies	**CO1:** Gain interest in environmental issues **CO2:** Learn by comparing their landscape with those of the writings **CO3:** Understand the theoretical approaches to landscape **CO4:** Appreciate representation of ecological art **CO5:** Understand and address ecological issues **CO6:** Get the knowledge about ecology based literary texts
4.	GMEGC24	Core VIII - Research Methodology	**CO1:** Write research statements **CO2:** Prepare a well-structured and well-written research project **CO3:** Follow the correct methodology for their writings **CO4:** Develop influential reading **CO5:** Evaluate authenticity for the sources they find **CO6:** Surf for research sources
5.	GMEGE2APW	Core Elective II - Magazine Production	**CO1:** Learn the skills of photography **CO2:** Learn to write captions **CO3:** Gain practical knowledge through field visits **CO4:** Learn and apply principles of design, format, and layout **CO5:** Learn to write creatively **CO6:** Understand the concepts of script writing
	GMEGE2BPW	Core Elective II - Print Media Internship [Mini Project]	**CO1:** Learn different processes of print media **CO2:** Integrate material from outside sources logically with their own writings **CO3:** Apply for an internship or career position **CO4:** Gain basic understanding of print media **CO5:** Consider how media influences thinking **CO6:** Understand levels of usage and production of newspapers and magazines
6.	GMEGX2	Extra Credit - Fluency in English / Online Courses (SWAYAM / MOOCS / NPTEL)	**CO1:** Develop communication skills based on the four basic skills - Listening, Speaking, Reading and Writing. **CO2:** Write effective and coherent paragraphs. **CO3:** Integrate ideas **CO4:** Attain fluency in English

II MA English

ODD Semester

S No	Subject Code	Subject Name	Course Outcomes
1.	GMEGC31	Core IX - British Literature [Modern Age]	**CO1:** Get a wide and clear picture of British Literature of this period **CO2:** Introduction to the major writers of the period **CO3:** Communicate ideas related to the literary works **CO4:** Appreciate the artistry of early British writers **CO5:** Understand the influences of a variety of cultures on the development of British literature **CO6:** Understand the style and trends prevalent in this age
2.	GMEGC32	Core X - English Language and Linguistics	**CO1:** From a narrow view of understanding language to a wider understanding **CO2:** Learn the characteristics of English language through ages and stages **CO3:** Understand and describe the historical development of English language **CO4:** Understand and apply different approaches of language acquisition **CO5:** Apply the patterns of linguistics to analyse sentence structures **CO6:** Use linguistics to comprehend language
3.	GMEGC33	Core XI - Muslim Writing in English	**CO1:** Know the literature of the marginalized **CO2:** Understand new perspective on reading literature with a new culture and tradition **CO3:** Analyze genres and literary terms which will widen the literary perspective **CO4:** Know major themes used by Muslim writers **CO5:** Develop in-depth the understanding of a fundamental and progressive view of Islam about women **CO6:** Apply theoretical concepts to the subject matter
4.	GMEGC34	Core XII - Literature for Social Transformation	**CO1:** Understand the social problems and transformations through literature **CO2:** Perceive various literatures on social transformation **CO3:** Comprehend how literature has the capacity to change one's thinking as an individual **CO4:** Understand how literature involves and enables social transformation
5.	GMEGE3APW	Core Elective III - Documentary Preparation	**CO1:** Produce a documentary / short film **CO2:** Explore their creative skills **CO3:** Learn the technicalities of cameras and other equipment **CO4:** Develop their editing skills **CO5:** Write scripts for documentary **CO6:** Apply technical skills to carry out basic operation of lighting, sound and post production systems

	GMEGE3BPW	Core Elective III - Electronic Media Internship [Mini Project]	**CO1:** Integrate material from the outside sources logically in their own writings **CO2:** Create various skill, knowledge and attitude of budding media professionals **CO3:** Practice various theories of communication and contemporary research **CO4:** Understand about media and its processes **CO6:** Become multi-skilled media producers
6.	GMEGX3P	Extra Credit - Village Placement Programme [Practical]	**CO1:** Develop their teaching skills by teaching for government school students of the village **CO2:** Develop life skills needed for their self-sufficient living **CO3:** Plan and manage the financial requirements **CO4:** Improve their coordinating skills by working with peers

EVEN Semester

S No	Subject Code	Subject Name	Course Outcomes
1.	GMEGC41	Core XIII - New Literature in English [Colonial and Postcolonial Literature]	**CO1:** Acquire a highly comprehensive knowledge of Commonwealth Literature **CO2:** Learn various literary and cultural traditions which have influenced many creative works in English language **CO3:** Learn literary works from various genres of Commonwealth Literature **CO4:** Understand and appreciate literature as a valuable source of intellectual, emotional, spiritual, and aesthetic experience that enriches readers' lives **CO5:** Develop critical thinking towards colonial literature **CO6:** Understanding of the relationship between Great Britain and nations that were once colonised
2.	GMEGC42	Core XIV - Literary Theory	**CO1:** Build in mind the primary concepts of theory **CO2:** Understand modern theories of literature **CO3:** Develop their critical competence and sensibility **CO4:** Differentiate the ways of conceptualizing the work of art **CO5:** Develop the ability to read the works of literary, rhetorical, and cultural criticism **CO6:** Illuminate literary texts and enrich the understanding to enjoy literature
3.	GMEGC43PW	Core XV - Project-Dissertation	**CO1:** Develop a project and cite sources according to conventional documentation style, and maintain academic integrity in their work **CO2:** Integrate material from outside sources logically with their own writing **CO3:** Develop researching skills

			CO4: Understand strategies of textual interpretation appropriate to different literary genres **CO5:** Prepare and organize ideas to give effective presentations **CO6:** Apply the principles of literary criticism to the analysis of Project-Dissertation

S.NO	Subject Code	Subject Title	COS
1	IBLT11	இக்கால இலக்கியமும் சிறுகதையும்	CO1. புத்திலக்கிய மரபுகளைப் புரிந்து கொண்டு வாழ்வியல் நோக்கில் செயல்படும் வழிமுறைகளைத் தெரிந்து கொள்கின்றனர். சிறுசேமிப்பு, தன்னம்பிக்கை, ஆரோக்கியம், உழைப்பு, தன்மானம், உண்மை, அன்பு, பணிவு போன்றவற்றை இதன்வழி கற்றுக் கொள்கின்றனர். CO2. இலக்கிய வரலாற்றின் வழி மொழியின் வளர்ச்சியைக் காலந்தோறும் மாறிவரும் இலக்கியங்களின் பல்வேறு வகையால் அறிந்து கொள்வர். CO3. சமுதாயத்தில் நிகழக்கூடிய பிரச்சனைகளை எதிர்கொள்ளும் திறன் பெறுகின்றனர். CO4. சொல்லழகு பொருளழகு முதலியவற்றை வரையறுத்துக் கூறுவது அணி என உணர்ந்து கொள்கின்றனர். கற்பவர்களுக்கு இன்பம் பயக்கும். சொல்லப் புகுந்த கருத்து தெளிவாகப் புலப்படும். தமிழ் இலக்கியச் செழிப்புக்கு மேலும் வலுவூட்டுவது அணி என்பதையும் பிழையின்றி பேசவும் எழுதவும் கற்றுக் கொள்கின்றனர். CO5. சிறுகதை மற்றும் கவிதைகளைப் படைக்கும் படைப்பாளிகளாகின்றனர். இலக்கியங்களின் வழி கவிதைகள் புனைவதைக் கற்றுக் கொண்டும் தனித்திறனுடனும் தன்னம்பிக்கையோடும் வாழக் கற்றுக் கொள்கின்றனர்.
2	IBLT21	காப்பிய இலக்கியமும் புதினமும்	CO1. தமிழ் இலக்கியங்கள் அன்று முதல் இன்று வரை பெற்று வரும் சிறப்பை உணர்ந்து வாழ்வியல் நெறிமுறைகளைக் கற்றுக் கொள்ளும் திறன் உடையவர்களாகின்றனர். CO2. காப்பியங்களின் வழி நபிகள் நாயகத்தின் போதனைகளை அறிந்து கொள்கின்றனர். மானிடரின் மங்கல நிகழ்வான திருமணத்தை ஆன்மீக நிலையிலும் நிகழ்த்தி மகிழும் வழக்கம் பல்வேறு சமயங்களிலும் உண்டென அறிகின்றனர. **4** CO3. மக்களிடையே அருகிவரும்

			பண்பாட்டு உணர்ச்சியை மீண்டும் தலையெடுத்து வளரச் செய்ய வேண்டும். அவ்வுணர்ச்சியை இளம் உள்ளங்களில் விதைப்பது சாலப் பயன் தரும் என்ற எண்ணத்தை உணர்ந்துகொள்கின்றனர். CO4. தமிழ்மொழிப் பயிற்சி பெறும் விதமாக எழுத்து, சொல், யாப்பு என இலக்கணத்தைக் கற்றுக் கொள்கின்றனர். CO5. காப்பிய இலக்கியக் கல்வியை எளிமையிலிருந்து ஆழமாக்கிக் கற்பிக்கும் முறையைக் கற்றுக் கொள்கின்றனர்.
3	IBLT31	இடைக்கால இலக்கியமும் ஊடகவியலும்	CO1.பக்தி இலக்கியங்கள் வாயிலாக ஆன்மீகச் சிந்தனைகளையும் ஒழுக்கநெறிகளையும் கற்றுக் கொள்கின்றனர். CO2. சமய இலக்கியங்களைக் கற்பதன் மூலம் சமூக ஒற்றுமையையும் மதநல்லிணக்கத்தையும் அறிந்து கொள்கின்றனர. **6** CO3. இதழியல் படிப்பதன் மூலம் மக்கள் தகவல் தொடர்பு பற்றித் தெரிந்து கொள்வதோடு சமூகப் பண்பாடு மற்றும் வரலாற்றுப் பின்னணியையும் தெரிந்து கொள்கின்றனர். CO4. இலக்கணப் படைப்பினை அறிந்து வாசிப்பு நுட்பங்களோடு மொழியைப் பிழையின்றி பேசவும் எழுதவும் கற்றுக் கொள்கின்றனர். CO5. தமிழ் இலக்கிய வரலாற்றினை அறிந்து கொண்டு இலக்கிய வளர்ச்சியில் பரந்துபட்ட நிலையைக் கொண்டு அரசுப் பொதுத்தேர்வு எழுதும் திறனைப் பெறுகின்றனர்.

4	IBLT41	பழந்தமிழ் இலக்கியமும் நாட்டுப்புறவியலும்	CO1.தமிழ் இலக்கியங்களின் வாயிலாக பண்டைக்கால மக்களின் வாழ்வியல் விழுமியங்களைத் தெரிந்து கொள்கின்றனர். CO2.பரந்துபட்ட தமிழ் இலக்கிய வரலாற்றினை உணர்ந்து அறவழியில் வாழும் வாழ்வியல் சிந்தனைகளைக் கற்றுக்கொள்கின்றனர். 8 CO3.நாட்டுப்புற மக்களின் வரலாறு பண்பாடு நாகரிகம் அறிந்து கொள்வதோடு மானுட மதிப்புகளைப் பற்றிக் கற்றுக் கொண்டு சமூகச் சிக்கல்களை எதிர்கொள்ளும் திறன் பெறுகின்றனர்.. CO4.மொழி வளர்ச்சிக்குரிய இலக்கணத்தின் பயன் அறிந்து மொழியினைப் பிழையின்றி பேசவும் எழுதவும் கற்கவும், தமிழ் இலக்கணத்தின் இன்றியமையாமையையும் உணர்ந்து கொள்கின்றனர். CO5.நடைமுறை வாழ்வியலுக்குத் தேவைப்படும் படைப்புத் திறனை மேம்படுத்துவதொடு வாசிப்பு நுட்பங்களையும் அறிந்து ஆங்கிலத்தை தமிழாக்கம் செய்யவும் பயிற்சி பெறுகின்றனர்.
5	IBOE3TA	சிறப்புத் தமிழ்-I	CO1. தமிழின் சிறப்பை உணர்வதோடு தமிழ் மொழியின் வளர்ச்சி நிலைகளைப் பற்றி அறிந்து கொள்கின்றனர். CO2. உலகப்பொதுமறையின் வழி மாணவிகள் சமூகமாந்தரிடம் நடந்து கொள்ளக் கூடிய பொதுப்பண்புகளை வளர்த்துக் கொள்கின்றனர். CO3. புதுக்கவிதைகளை கற்றுகொள்வதன் மூலம் வாழ்வியலின் தத்துவங்களை அறிந்து கொள்வதோடு சமூகச் சூழலில் ஏற்படக்கூடிய சிக்கல்களை எதிர்கொள்ளத் துணிகின்றனர். CO4. தகவல் தொடர்புச் சாதனங்கள் தமிழ் வளர்ச்சிக்குப் பயன்படுவதை

			அறிந்து கொள்கின்றனர். CO5. மாணவர்கள் மொழித்திறன் பயிற்சியும் படைப்பாற்றல் திறனும் பெறுகின்றனர்
6	IBOE4TA	சிறப்புத் தமிழ்-II	CO1. நடைமுறை வாழ்வியலுக்குத் தேவையான கல்வியின் சிறப்பினை அறிந்து கொள்வதோடு தங்கள் வாழ்க்கைக்குத் தேவையான ஒழுக்க நெறிகளையும் கற்றுக் கொள்கின்றனர். CO2. இலக்கியப் படைப்பாளனாக உருவாகக் கூடிய முயற்சியை மேற்கொள்கின்றனர். CO3. வாழ்வியல் விழுமியங்களை உணர்ந்து சமூகப் பிரச்சனைகளை எதிர்கொள்ளும் திறனை வளர்த்து கொள்கின்றனர். CO4. சுமூகத்தில் நிகழக் கூடிய எதிர்வினைகளை நேர்கொள்ளும் திறனைப் பெறுகின்றனர். CO5. இலக்கணங்களைக் கற்றுக் கொள்வதன் மூலம் தமிழ் மொழியை சொற்பிழையின்றி எழுதக் கற்றுக் கொள்கின்றனர். 12
7	IBOE3TE	அடிப்படைத் தமிழ்-I	CO1. தமிழ் எழுத்துகளை உச்சரிக்கும் முறை பற்றிக் கற்றுக் கொள்கின்றனர். CO2. எழுத்துகளைக் கொண்டு சொற்களை உருவாக்கும் திறன் பெறுகின்றனர். CO3. சொற்களை உச்சரிப்பதன் வாயிலாக எழுத்துகளுக்குள்ளான வேறுபாடுகளையும் அவை தருகின்ற பொருளையும் அறிந்து கொள்கின்றனர். CO4. மொழியைக் கொண்டு சொற்கள் அமைக்கும் தனித்திறனை வளர்த்துக் கொள்கின்றனர். CO5. மொழியைப் பிழையின்றி பேசவும் எழுதவும் மொழித்திறனை மேம்படுத்தவும் தெரிந்து கொள்கின்றனர்.

8	IBOE4TE	அடிப்படைத் தமிழ்-II	CO1. தமிழ் மொழி கூறும் வாழ்வியல் நெறிமுறைகளைக் கற்றுக் கொள்வதோடு ஆளுமைத் திறனை வளர்த்துக்கொள்கின்றனர். CO2. மொழியின் தொன்மை, இலக்கியங்கள் வாயிலாக மொழி வளர்ச்சியையும் தனித்திறனையும் கற்றுக் கொள்கின்றனர் CO3. வாசிப்பு நுட்பங்களை அறிந்து கொண்டு படைப்பாளுமைத் திறனைப் பெற்று தமிழ் இலக்கணத்தின் இன்றியமையாமையை உணர்கின்றனர். CO4. தமிழைப் பிழையின்றி பேசவும் எழுதவும் கற்றுக் கொள்கின்றனர். CO5. பிற மொழிச் சொற்களை தமிழ் மொழிக்கு மாற்றி எழுதும் திறன் பெறுகின்றனர்.

2.6.1 Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Environment and Sustainability, Human Values into the Curriculum Gender:

S.N	***Course Code***	***Course Name***	***Course Outcome***
1.	HBARC11	Beginner Arabic I	CO1: Identify the Various types Arabic Letters & Arabic vowels CO2: Classify the vocabularies and pronounce with proper spelling & stress CO3: Understand the unique patterns of nouns and construct (conjugate) the same CO4: Discriminate between the phrase constructions of English & Arabic
2.	HBARC12	Arabic Grammar I	CO1: Memorize and define facts and concepts related to Parts of Speech in Arabic CO2: Explain and classify the parts of speech depending upon their types CO3: Able to use types of nouns, structures of verbs and diacritical marks while reading and writing Arabic Sentences and translate them CO4: Frame different kinds of phrases and sentences by applying grammatical rules
3.	HBARA13	Islamic History I	CO1: Describe the biography of Prophet CO2: Understand the historical and cultural background of Pre-Islamic Arabia and comparewith that of Islamic Era CO3: Examine the importance of major events in Prophet's life that led to the rise and spread of Islam CO4: Identify the influence of Prophet's personality for the change in history and cultural background of Arabia CO5: Relate the struggles and sacrifices of Prophet

			with current scenario CO6: Able to assess the Prophet's moral personality, family life, political and military entity andderive experiences and behaviours from it
4.	HBARE14	Islamic Life Skills I	CO1: Memorize supplications CO2: Review Prophet's Biography and develop human identity CO3: Develop the habit of reciting supplications in day to day activities CO4: Develop leadership skills and Human identity
5.	HBARC21	Beginner Arabic II	CO1: Memorize and List new vocabularies CO2: Understand the special syntax features of Modern Standard Arabic CO3: Translate simple sentences from Arabic to English and vice versa CO4: Construct simple sentences by applying Grammatical Rules
6.	HBARC22	Arabic Grammar II	CO1: Memorize various forms of verbs, understand and identify its structure CO2: Construct (conjugate) different verbs in various formats CO3: Discriminate between phrase and sentence constructions of Arabic and English languages CO4: Reconstruct the words into various forms verbs such as Active and passive participles, adverbs, elative and etc.
7.	HBARA23	Islamic History II	CO1: Describe the biographies of Pious Caliphs CO2: Understand the historical and cultural background of Islamic Arabia

			CO3: Examine the importance of major events during Caliphate that led to the rise and spread of Islam CO4: Identify the influence of pious caliphs personality for the change in history and cultural background of Arabia CO5: Relate the struggles and sacrifices of pious caliphs with current scenario CO6: Able to assess the pious caliphs' moral personality, family life, political and military entity and derive experiences and behaviour from it
8.	HBARE24	Islamic Life Skills II	CO1: Recognize duties and responsibilities CO2: Understand the own identity CO3: Develop social responsibilities CO4: Analyze the Islam's concern to women
9.	HBARC31	Applied Arabic Grammar I	CO1: Recall unique patterns of Arabic verbs and conjugation of the same CO2: Understand the number system of Arabic Language CO3: Translate and construct simple sentences by applying Grammatical Rules CO4: Apply and analyze the grammatical concepts

10.	HBARC32	Arabic for Interaction I	CO1: Memorize vocabularies which are applicable for day to day life CO2: Understand and read Arabic with ease with a basic idea of spoken styles and usage ofArab world CO3: Develop communication skills CO4: Recognize the situation language and situation vocabulary in different domains of life and develop communication skills
11.	HBARA33	Classical Arabic Prose I	CO1: Memorize the Quran with proper pronunciation CO2: Understand the language of Quran and Summarize the message of each chapter CO3: Sketch out the Tajweed rules of Studied chapters of Quran CO4: Relate the teachings of Quran with day-to-day affairs CO5: Develop the Translation skill CO6: Able to relate between belief, Behaviour and Mannerisms by analyzing teachings of Quran
12.	HBARC41	Applied Arabic Grammar II	CO1: Identify and understand the unique patterns of weak and doubled verbs CO2: Construct (conjugate) the weak and doubled verbs CO3: Develop communication skill CO4: Classify the verbs based on the nature of letters
13.	HBARC42P	Arabic for Interaction II (Practical)	CO1: Memorize vocabularies which are applicable foray to day life CO2: Understand the spoken Language of Arab world

			CO3: Apply the language in real life occasions CO4: Develop communication Skills
14.	HBARC43	Introduction to Al Quran	CO1: Memorize the names of chapters of Quran and describe the kinds of Wahy CO2: Classify and explain the Makki and Madhani Verses CO3: Apply the method of recitation Al Quran by Sahabah Al Kiram CO4: Analyse the type of Verses
15.	HBARA44	Classical Arabic Prose II	CO1: Memorize the chapters of Quran with proper pronunciation and define Tajweed rules CO2: Classify the vocabularies of Quran depending upon its category CO3: Apply the Tajweed rules while reciting Holy Quran CO4: Illustrate the reason for the revelation of Verses CO5: Design the lexicon for each Surah CO6: Able to persuade by analysing the teachings of Quran
16.	HBARC51	Applied Arabic Grammar III	CO1: Describe parts of speech in Arabic CO2: Get a wide knowledge on unique types of Arabic nouns CO3: Develop communication skills through conversation CO4**:** Differentiate between the phrase constructions

			of English & Arabic
17.	HBARC52	Modern Arabic Prose I	CO1: Memorize Modern Standard Arabic Vocabularies and group according to its category CO2: Understand the syntax and translate Arabic sentences into English CO3: Analyse sentences grammatically CO4: Compile own lexicon and develop LSRW skills
18.	HBARC53	Hadeeth I	CO1: Memorize, recite and quote the hadith for different situations CO2: Differentiate between the forms of Nominal sentences through Hadith CO3: Practice and Relate the social morality with the teachings of Hadith CO4**:** Able to persuade with the teachings of Hadith
19.	HBARE5A	Seerah from Quran	CO1: Describe the stories of Quran and quote examples CO2: Understand the realities behind stories of Quran CO3: Distinguish the good deeds and bad deeds distinguish the good deeds and bad deeds CO4: Develop noble character by analysing the stories of Holy Quran and illustrate the same toothers

20.	HBARE5B	I'jazul Quran	CO1: Recognize the beauty and distinction of Holy Quran CO2: Understand the Miraculous nature of Holy Quran CO3: Examine the factors that causes the protection of Quraan Shareef to date CO4: Illustrate the miraculous effects of the Quran Shareef on world
21.	HBARE5C / HBARE5D	Classical Arabic Prose III	CO1: Learn and memorize the classical vocabulary of Quran CO2: Infer the meaning of chapters of Quran CO3: Demonstrate the importance of being fair, equitable and just to all people CO4: Able to relate the themes of the Quran chapters CO5: Able to evaluate and reframe their life style with the guidance of Quran CO6: Develop moral values and noble character
22	HBARE5D	Modern Arabic Poetry	CO1: Memorize the Poems CO2: Explain and translate the poems CO3: Interpret the meaning of poems in their own Language CO4: Compare the various genres of Arabic Poetry with that of English Poetry CO5: Able to criticize the themes of Arabic Poems CO6: Able to develop the creativity and imagination

			to write poems of their own
23.	HBARE54P	Arabic for Interaction III (Practical)	CO1: Listen and memorize the vocabulary related to survival needs CO2: Understand style of spoken Arabic CO3: Practice situational conversations CO4: Develop communication Skills
24.	HBARC61	Family Ethics & Management	CO1: Recognize the purpose of life and family system CO2: Understand the importance of values, goals and standards in the Management of Family CO3: Apply the management skills to resources especially time, money and energy CO4: Analyse the family issues and develop decision making ability CO5: Able to construct a happy and healthy family CO6: Determine work simplification techniques
25.	HBARC62	Hadeeth II	CO1: Recognize the Syntax of Hadeeth CO2: Understand the grammatical concepts while infer the meaning of Hadeeth CO3: Illustrate the Hadeeth grammatically and literally CO4: Develop reflective thinking so that the students can relate the prior knowledge to the new

26.	HBARC63	Modern Arabic Prose II	CO1: Memorize Modern Standard Arabic Vocabularies and group according to its category CO2: Understand the Syntax and Translate Arabic Sentences into English CO3: Analyse sentences grammatically CO4: Compile own lexicon and develop LSRW skills
27.	HBARC64P	Hiflul Quran Practical	CO1: Memorize the Quran with proper pronunciation CO2: Identify various methods of recitation CO3: Apply the Tajweed Rules CO4: Able to identify the beauty and style of Quran CO5: Develop Time Management skills CO6: Develop cognitive skills like Remembering, reasoning & attention
28.	HBARE6A	Indo Arab Relations	CO1: Describes the relationship between India and Arabian Peninsula CO2: Review the reign of Mughals CO3: Sketch out the trade relationships which boosted up the economy of both countries CO4: Relate the present scenario of Indo- Arab Culture with the Past CO5: Able to Contrive a research work in the studied Area CO6: Able to assess the significance of healthy relationship between countries Introduction - India and Arabian Peninsula - Arab rule – Ghaznawids -

			Delhi Sultanate
29.	HBARE6B	History of Modern Arabic Literature	CO1: Recognize literary awakening in the Arab World CO2: Differentiate between literary themes and genres of Classical and Modern Arabic literature (both Prose and Poem) CO3: Illustrate the development of Arabic Novel literature CO4: Analyse the contribution of Arab Countries for the development of Modern Arabic Literature CO5: Able to compose poems CO6: Criticize the various literary elements by comparing English and Arabic Literature
30.	HBARE65	Translation Skills in Arabic	CO1: Describe the theories of Translation CO2: Understand the Techniques and strategies of Translation CO3: Develop necessary skill to employ different translation methods CO4: Able to compare between the sentence structures of Source and Target languages
31.	HBARX4P	Arabic Typing Practical	CO1: Memorize computer terms in English as well as Arabic CO2: Understand the keyboard techniques

32.	HBWS5	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 women's psychological reactions to puberty, marriage, motherhood, abortion, birth control, menopause, etc.
33.	HBLA11	Basic Arabic I	CO1: Learn the vowels of Arabic language CO2: Learn new vocabularies CO3: Able to pronounce vocabularies with proper spelling & stress CO4: Develop listening & speaking skills CO5: Acquire the skills of reading and writing CO6: Apply the new vocabularies for everyday situations

34	HBLA21/	Basic Arabic II	CO 1: Learn new vocabularies and understand the sentence structure CO 2: Pronounce the Arabic words with proper stress CO 3: Understand the sentence structure of Arabic language and parts of speech CO4: Discriminate between the phrase construction of English and Arabic CO5: Able to frame simple sentences CO6: Translate simple sentences from Arabic to English and vice versa
35	HBLIA11	Intermediate Arabic I	CO1: Learn new vocabularies CO2: Learn parts of speech in Arabic language CO3: Understand the special syntax features of Modern Standard Arabic CO4: Discriminate between the phrase construction of English and Arabic CO5: Able to frame simple sentences by applying Grammatical Rules CO6: Translate simple sentences from Arabic to English and vice versa

36.	HBLIA21	Intermediate Arabic II	CO1: Understand the unique nature of Arabic language CO2: To understand Arabic grammatical concepts through lessons CO3: Understand the special syntax features of Classical Arabic and MSA CO4: Frame simple sentences in Arabic by applying grammatical rules CO5: Learn number system of Arabic Language CO6: Able to analyse the Prophetic narrations grammatically

2.6.1Course Outcomes

S NO	COURSE	Course Outcomes
1.	General Hindi I	After successful completion of this course, student will be able to **CO1:** Find the Hindi alphabet and outline in Hindi text **CO2:** Practice the grammatical sentence in day today life. **CO3:** Identify the Hindi numerals and other words. **CO4:** Improve the conversation in different situation. **CO5:** Develop comprehension skill through simple passage.
2.	General Hindi II	After successful completion of this course, student will be able to **CO1:** Find the Hindi words to construct grammatically correct sentences. **CO2:** Apply Hindi grammar for better communication **CO3:** Identify the poem in their own style **CO4:** Focus to formal and informal letter **CO5:** Conclude the basic concepts of the translation
3.	General Hindi III	**CO1:** Recall Hindi words and illustrate the lessons **CO2:** Illustrate the various aspects of Hindi prose **CO3:** Make use of hints development **CO4:** Discover the growth of modern poetry to understand the Poem of Medieval Poets Kabir & Tulsi **CO5:** Create the story in their own style
4.	General Hindi IV	**CO1:** Define the basic Hindi grammar and practice to use different types of tenses in Hindi language. **CO2:** Demonstrate Hindi writing skills **CO3:** Focus on conversation skill in Hindi **CO4:** Discuses one act play, characters and writers **CO5:** Develop the knowledge of tourism about certain (famous) places

DEPARTMENT OF HOME SCIENCE AND RESEARCH CENTRE		
COURSE CODE	**COURSE TITLE**	**OUTCOME(S)**
M Sc HOME SCIENCE - NUTRITION AND DIETETICS		
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	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 CO2: Identify microorganisms in food fermentation product and describe their roles CO3: Differentiate the roles of bacteria, mycotoxin, viruses and parasites to food borne diseases and compare pathogens that cause infection and intoxication CO4: Explain the principles of food microbiology to evaluate food related cases in daily Application CO5: Familiarize the concept of HACCP in Food Industry
IMNDC14	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
IMNDE1A/	a.Public Health Nutrition	CO1: Define the concept of public health nutrition and discuss the challenges and scope of public health nutrition in India CO2: Select and use appropriate modes of communication to obtain and share evidence based public health nutrition knowledge CO3: Assess the nutritional status by using direct or indirect methods CO4: Summarize the global, national, regional and state level prevalence of protein energy malnutrition CO5: Formulate various teaching aids for extension education and educate the people and family regarding nutritional care

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

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

IMNDE2B	b.Food Packaging Technology	CO1: Define food packaging and discuss the importance and functions of food packaging CO2: Apply the principles of innovative packaging technologies for use with food products CO3: Analyze the Chemical and physical properties of packaging materials CO4: Evaluate different packaging materials based on various types of analysis in the laboratory CO5: Create awareness on current issues related to quality and safety aspects of food packaging
IMNDX2PW/ IMNDX2O	Scientific Writing for Project / *Online Course (Maternal Infant Young Child Nutrition- Swayam)	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
IMNDC31	Medical Nutrition Therapy II	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 CO2: Apply the knowledge of medical terminology and medical abbreviations associated with nutrition related diseases and conditions CO3: Assess the nutritional status of critically ill patients and formulate different therapeutic diets for various disease conditions CO4: Demonstrate initiative and judgment using a professional, ethical and entrepreneurial approach advocating for excellence in nutrition and dietetics CO5: Independently plan and execute a research project regarding nutrition and dietetics practice

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

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

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 dietician 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 dietician 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/ IMNDX4O	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
BSC HOME SCIENCE- NUTRITION AND DIETETICS		

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

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

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

IBNDC62P	Diet therapy II Practicals	CO1: Identify the discovered diets during the different therapeutic conditions and interpret normal health to therapeutic conditions CO2: Inspect skill development in planning therapeutic diets using food exchange lists 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 CO4: Compare the calculated nutrients with RDA CO5: Generate the plan menu for low immunity people
IBNDC63	· Integrated Course Food Safety and Quality Control	CO1: Recall the application of food quality and food safety system and explain the international systems of standards CO2: Illustrate the importance of food quality standards CO3: Examine the chemical and microbiological quality of food samples CO4: Evaluate the adulteration in food samples CO5: Review of legislative approaches for the management of food safety
IBNDC64P	#Dietetic Internship	CO1: Identify nutrition-related problems and determine and evaluate nutrition interventions 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. CO3: Interpret and apply nutrition concepts to evaluate and improve the nutritional health of individuals with medical conditions CO4: Apply the knowledge for diet counseling and competent to manage catering outlet CO5: Determine and translate nutrient needs into menus for individuals and groups across the lifespan, in diverse cultures and religions
IBNDE6A/	a. Food Adulteration	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 CO2: Relate the concept of adulteration in food products. CO3: Detect the adulteration in food samples CO4: Comprehend certain skills of detecting adulteration of common foods CO5: Familiarize with critical assessment and control points for quality assurance.

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

IBOE4HSP	Basic and Advanced Hand Embroidery Practicals	CO1: Outline the basic embroidery stitches CO2: Analyze the different methods of surface ornamentationtechniques CO3: Identify the advance embroidery works 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
IBCHA14/ IBMBA13	AECC-I Biochemistry I	CO 1: Relate the physical and chemical properties of various biomolecules andunderstand the knowledge of the principles of Biochemistry CO 2: Apply the knowledge to recognize the classification, structure and functions of Macromolecules CO 3: Integrate the properties of all Macromolecules. CO 4: Inspect and understand the basics of genetic material CO 5: Summarize the chemistry of micronutrients and their biochemical role
IBCHA24/ IBMBA23	AECC-II Biochemistry II	CO 1: Recall the metabolic pathways of various biomolecules and understand the activity ofenzymes and co-enzymes in all metabolic pathways CO 2: Apply the knowledge to recognize the anabolic and catabolic pathways of all metabolic cycles CO 3: Calculate and understand the energyproduction in everymetabolic pathway. CO 4: Inspect and understand the dogma of life. CO 5: Summarize the Energycalculation for all metabolic pathways
IBFDC11	Fundamentals of Apparel Designing [Theory cum Practicals]	CO 1: State the functions of sewing machines and identify the parts CO 2: Applythe 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: Createdifferent finishes and its applications

IBFDC12	Principles of Pattern Making	CO 1: Understand the basics of pattern making and list out the types of pattern CO 2: Illustrate the designs and selectionof pattern making principles CO 3: Assessthe basic pattern setsusing pattern making techniques CO 4: Examine thegarment fitting, alteration methodologies and assembling techniques CO 5: Develop creative designs through draping, drafting, flat pattern method
IBFDA13P	Fashion Illustration I Practicals	CO 1: Understand the basic fashion sketching and classifythe 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, water colors CO 5: Develop theown individualstyles
IBFDS14	Fibre 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
IBFDC21P	Fashion Illustration II Practicals	CO 1: Recall the different styles of illustrationtheclassifying 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
IBFDC22	Historic Costumes &Traditional Design	CO 1: Understanding the origin of costumes and classifying is history CO 2: Determine theregionalvariationof 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 variousdyeing and printing and their terminologies

IBFDA23P	Construction for Children's Apparel Practicals	CO1: Understand the kid's costume and classified suitable wear for different age groups CO2: Apply the pattern making 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
IBFDS24P	Surface Embellishments Practicals	CO1: Understand the basic embroiderystitches and classifying the variations CO2: Analyze the different methods ofsurface ornamentation techniques CO3: Analyze the traditionalembroideries 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
IBFDX2P	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 accessorydesigns
IBFDC31	FashionStudies	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
IBFDC32	Wet Processing – Dyeing [Theory Cum Practicals]	CO1: Statethe 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 thedyeing and printing methods CO5: Create the fabric samples using dyeing, printing methods

IBFDA33P	Construction for Women’s Apparel Practicals	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
IBFDS34P	Draping Techniques Practicals	CO1: Acquire the skills of draping on dress form by an introduction to terminology, understanding fundamentals and advanced techniques of draping CO2: Identifyabout customfitted, basic pattern to prepare manydifferent styles CO3: Analyze the various parts ofthe garments CO4: Manipulate the basic draping into designer costumes drape CO5: Developthe structure of a garment design using draping techniques
IBFDX3P/ IBFDX3O	"""Boutique Internship /*Online Course"" (Advanced TextilePrinting Technology-NPTEL)	CO1: Understand the structure and, identifythe process ofthe boutique CO2: Analyze the functions of various sections in the organization CO3: Predict the short term and long terms targets of an organization CO4: Justifythe impact oforganization for the Society CO5: Create client data as per recruitments withplanning and execution
IBFDC41P	Construction for Men’s Apparel Practicals	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 measurementsrequired and materials suitable CO4: Estimatethe cost of the garment CO5: Create avarious design in men’s wear
IBFDC42	· Integrated Course - Technical Textiles	CO1: Understand the technical textile, identify the applications CO2: Implement the chemicalcomposition of fibers CO3: Differentiate various finishes intechnical textiles CO4: Examine the fabrics suitable for protective and survival textiles CO5: Develop the knowledge of smart and intelligent textiles

IBFDA43	Fabric Structure & Design [TheoryCum Practicals]	CO1: Understand the fabric structureand classifying the weaving, knitting processes CO2: Illustrate the design, draft, pegplan 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
IBFDS44	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
IBFDX4P/ IBFDX4O	Internship in Textile Processing-Manufacturing Unit/*Online Course(Basic of Pattern Making and Sewing - Swayam) Total	CO1: Understand the structure oftextile industry, identifythe process unit CO2: Analyze the methods adopted inthe 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 ofthetextile processing internship
IBFDC51P	Computer Aided Design (CAD) Practicals-I	CO1: Understand thedesigning software, identifying the menus and tools CO2: Develop elements and principles of design using software CO3: Create motif design for embroidery CO4: Illustratea garment designing children, women’s and men’s garment CO5: Createdigital logo, label for branded garments
IBFDC52	# Internship- 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 elementsof costing, sourcing and pricing CO5: Develop the production systems and implement quality control

IBFDC53	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
IBFDC54P	Home Furnishing Practicals	CO1: Understand the home furnishing, classifying materials and process. CO2: Implement skills in creating their own home furnishing items CO3: Experiment wall and floor covering materials CO4: Chooseagood fabrics for home furnishing CO5: Manageaneffective home furnishing freelance designer
IBFDE5A/	a. Apparel Quality Control/	CO1: Understand the importance of quality control, identifying the apparelquality 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 qualityand standards
IBFDE5B	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 locationand balance the garment industry CO4: Evaluate the work measurement of apparel production management CO5: Develop the present merchandise lines for identified market segments

IBFDE5C/	a.Home Furnishing	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
IBFDE5D	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
IBFDS55P	Textile Printing Practicals	CO1: Identify the wet processing, understanding the various textile printing and dyeing processes CO2: Prepare preliminary process of printing and dyeing methods CO3: Experiment the printing and dyeing methods used in a variety of fabrics CO4: Apply the printing and dyeing to the fabric CO5: Create Printing and dyeing structures on fabric
IBFDC61	· Integrated Course – 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 ofDSLR 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
IBFDC62	Fashion Retailing & Research	CO1: Identify fashion product retailing; understand a theoretical and technological knowledge of current business CO2: Determine the retail business and retail stores, professionalpractices leading to marketing and merchandising fashion products both locallyand 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

IBFDC63P	Fashion Portfolio Presentation Practicals	CO1: Understand the development of portfolio presentation techniques, identifying researchand forecasting of recent themes CO2: Apply the inspiration to thetheme portfolio CO3: Create portfolio board according to an individual theme CO4: Researchand relate fashion design to a broader socio economic, historical, and environmental context CO5: Create a collection of portfolio garments in various season
IBFDC64	Event design and Management	CO1: Understand theprinciples 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: Illustratedifferent styles and layout for furnitureand flower arrangement CO5: Organizethe event skillfully
IBFDC65P	# Internship- Computer Aided Design (CAD) Practicals-II	CO1: Identifythe variety ofdigital image making techniques, understanding the technical illustration, pattern manipulation and design layout CO2: Applythe 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
IBFDE6A/	a. Fashion Communication	CO1: Identify the clothing and fashion classify the fashion communication CO2: Applythe fashion design workofothers and providing constructive criticism forongoing work CO3: Justifying ideas suitable for photography and fashionpublication CO4: Compose fashionarticles and future for digital media CO5: Create knowledge of fashion magazines and brochures for advertisement

IBFDE6B	b. Textile Testing	CO1: Understand the testing terminologyand identifying the statisticaltools 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 oftextile testing methods
IBFDS66P	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
IBFDX6PW / IBFDX6O	Mini Project / *Online Course (Textile & Quality Analysis-Swayam)	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
CERTIFICATE PROGRAMME IN APPAREL DESIGNING & CONSTRUCTION		
FCAD1P	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
CERTIFICATE PROGRAMME IN FOOD PROCESSING AND PRESERVATION		
HCFP1	Food Processing and Preservation	CO1: Define food preservation and understand the basic knowledge of microbial application infood 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 qualityof foods CO5: To make the students understand the basic principles underlying food Preservation

HCFP2P	Food Processing and PreservationPracticals	CO1: Define food preservation and understand the basic knowledge of microbial application infood 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 basicconcept ofdiet 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 nutritionalrequirement 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
DIPLOMA IN BAKERY AND CONFECTIONERY		
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 ofdough 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	CO1: Defineand explain different pastries andderivatives CO2: Make plan & identify the different ingredients to preparedifferent icing CO3: Prepare and Present international cakesand puddings CO4: Prepare and Store Ice Creams, Toffees and Indian Sweets CO5: Abilityto work with chocolate and sugar to create design, plates and show pieces

IDBC15	Entrepreneurial Skills and Productivity	CO1: Acquire the knowledge to create a new business plans CO2: Understand the functions ofentrepreneur CO3: Improve theentrepreneurship skills CO4: Risk assessment of entrepreneur CO5: Explore the financial management in an enterprise
IDBC21	BakeryTheory II	CO1: Highlight the processing methods used in baking and confectionery industries CO2: Know about the various types of food products made using baking technology CO3: Have a basic idea about baking and confectionery manufacture and qualitycontrol CO4: Know about the importance of each ingredient in the bakery and how it affects the overallproduct and its sensory and quality parameters. CO5: Able to start a small scale bakery and confectionery unit.
IDBC22	ConfectioneryTheory II	CO1: Understand the importance and role ofvarious ingredients used in bakery and confectionary CO2:Explain the importance offood costing and costing techniques. CO3: Understand the different types ofbiscuits, cookies and their methods ofmanufacturing CO4: Develop standard recipes and adjust the quantities using adjustment factor CO5: Understand the different typesofsugar confectionaryproducts and their process products.
IDBC23P	BakeryPracticals II	CO1: Explore the concepts and processes required to produce a selection of specialty breads to include yeast/gluten breads and enriched dough CO2: Demonstrate the ingredients of different 3 cakes and baking procedure CO3: Design preparation methods to finishing techniques CO4: Acquire skills in the preparation of food CO5: Demonstrate mastery of all basic baking formulas necessary to manage a pastry operation or department.

IDBC24P	ConfectioneryPracticals II	CO1: Explore with innovation the concepts of composition, taste, design, texture and current trends for pastry through practical skills and related theory. CO2: Develop techniques to adapt classical dishes and confectionery products to a contemporary style. CO3: Evaluate and apply the techniques necessary to create a comprehensive range of chocolate work. CO4: Creative modern plated desserts, and individual pastry products. CO5: Abilityto work with chocolate and sugar to create design, plates and showpieces
Certificate course in Food Preservation Technology		
GCFP1	Food Preservation Technology	CO1.After successful completion of this course, student will be able to: CO2.Define food preservation and understand the basic knowledge of microbial application in food preservation CO3.Apply the knowledge in preserving foods by laboratory and house hold measures CO4.Demonstrate on different methods of food preservation techniques CO5.Evaluate the microbial quality of foods

B. SC NUTRITION AND DIETETICS

(Three year Regular Programme)
For those who joined since 2021-22

s.no	**Subject Code**	Subject Title	Course Outcome
1	**HBNDC11**	Food Science	CO1: Gain basic knowledgeofthefood groups,food compositions and theirsignificance. CO2: Learn different methods of cooking foods and gain experience in foodpreparations. CO3: Acquire knowledge about the changes occurring in various foodstuffs as aresult of processing and cooking. CO4: Gain knowledge about principles of food preservation and its application infood processing industry. CO5: Improve knowledge about the nutrients and their importance. CO6: Understand and improve their skills in different food groups.
2	**HBNDC12P**	Food Science Practical	CO1: Acquire skills in food preparation techniques. CO2: Learn microscopic examination in starch foods. CO3: Understand and improve their skills in food handling techniques. CO4: Learn changes during cooking in different foods.
3	**HBNDC21**	Human Nutrition	CO1: Understand nutritional management in special conditions. CO2: Appreciate implications of poor dietary and lifestyle practices. CO3: Describe the metabolic role of nutrients and their complex interrelationships. CO4: Critically evaluate the methodology and derivation ofrequirements for micronutrients and macronutrient.
4	**HBNDC22P**	Human Physiology	CO1: understand of Respiratory, Cardiovascular, Digestive, Excretory, Neurophysiology, and Reproductive System. CO2: Identify how changes in normal physiology lead to disease. CO3: Explain how the activities of organs are integrated for maximum efficiency. CO4: Aware about the common diseases / disorders affecting each system. CO5: Demonstrate an understanding of physiological terminology. CO6: Gain an understanding of the causes and diagnosis of disease.
5	**HBNDA23**	Human Physiology Practicals	CO1: Learn and Improve basic knowledge on blood analysis and urine analysis CO2: Understand the basic concepts, processes,and factual information in the areasOf human physiology CO3: Gain knowledge and develop skills in handling Sphygmomanometer,Sahli's Apparatus. CO4: Get training on first aid for common emergency procedures.

6	**HBNDX2**	Food Hygiene and Sanitation	CO1: The principles and practices of hygiene and sanitation applied to the food industry. CO2: Training of supervisory personnel in sanitation procedures. CO3: Identification and prevention of potential sources of food contamination. CO4: Proper standards and procedures for keeping the facilities and equipment sanitary.
	Semester III		
7	**HBNDC31**	Nutritional Biochemistry	CO1: Develop a clear knowledge of the principles of bio chemistry (asapplicable to humannutrition) CO2: Clear experience into the chemistry of major nutrients andphysiologically importantcompounds CO3: Have an experience on metabolic pathways. CO4: Have knowledge about the basis of reactivity of biologically relevantmolecules andtheir interactions.
9	**HBNDC32P**	Nutritional Biochemistry Practicals	CO1: Have a clear knowledge on pH and Buffer CO2: Be familiar withqualitative tests CO3: Have a clear idea on quantitative determinations CO4: Perform analysis and evaluate theoretical data in the lab.
10	**HBNDA33**	Food Microbiology	CO1: Know the different types and morphology of microorganisms. CO2: Understand the factors affecting the growth in controlling thegrowth curve of microorganisms. CO3: Able to preserve the perishable and non-perishable foods frommicrobial contamination and microbial spoilage. CO4: Comprehend principles of various preservation and controltechniques. CO5: Have an experience on Microbial Growth in Food CO6: Understand the nature of microorganisms involved in foodinfections and intoxications.
11	**HBNDX3**	Marine Food Processing	CO1: To learn general about marine. CO2: To understand the technologies involved in marine food processing CO3: To get knowledge on food safety and Quality attributes of marine food.CO4: To learn the nutritional benefits of marine foods CO5: To learn about food preservation techniques CO6: To know about the different food packaging methods used in Marine Food Industry
	Semester IV		

12	**HBNDC41**	Nutrition for Life Span	CO 1: To understand the concept of an adequate diet and the importanceof meal planning CO 2: To know the factors affecting the nutrient needs during the lifecycle and the RDA forvarious groups. CO 3: To impart knowledge on the importance of nutrition during life spanCO 4: Explain how dietary needs may change during the lifespan.
13	**HBNDC42P**	Nutrition for Life Span Practicals	CO 1: Explain nutritional requirements at different stages of the lifespan. CO 2: Evaluate factors that may affect nutritional status throughout the life cycle. CO 3: Apply practical guidelines for menu planning and food preparation provision relevant to different stages of the lifespan CO 4: Know about nutritive value of Indian foods
14	**HBNDC43**	Food Toxicology	CO1: A graduate student has knowledge about principles of food toxicology and natural constituents that are toxicants and natural contaminants that act as toxicants and substance toxicity evaluation in particular. CO2: Be able to demonstrate sufficient knowledge about the occurrence and significance of major food-borne toxicants. CO3: Be aware of the Allergens, toxic constituents and anti-nutritional factors of plant foods CO4: Be able to demonstrate a fundamental knowledge of risk assessment and food safety as it is applied to toxic agents in the human food chain.
15	**HBNDA44**	Human Development and Family Relationships	CO1: Learn about the concept of growth and development CO2: Understand development aspects (both normal and exceptional) from conception to oldage. CO3: Learn about the concept of prenatal development and post-natal care CO4: To impart knowledge on the importance of children with special needs CO5: Acquire complete knowledge about the behavior pattern of the individual andvariousfactors influencing them. CO6: Understand the biological, psychological, social and cultural influences oflifespanhuman development
16	**HBNDX4**	Waste Management in Food Industries	CO1: Importance of waste management in food industries CO2: Knowledge on waste treatment and safe disposal methodsCO3: Byproduct utilization of wastes CO4: Unit operations in waste treatment
	Semester V		
17	**HBNDC51**	Diet Therapy – I	CO 1: Apply nutritional knowledge to analyze personal dietary intakes, to plan nutritiousmeals using nationally established criteria to meet recommended goals. CO 2: Understand and calculate body mass index (BMI), and use such calculations to predict desirable weight ranges for individuals. CO 3: Explain the relationship between nutrition and health, and nutrition anddevelopment. CO4: Understand the significant of nutrition in the management of diseases

			affectinggastro intestinal tract
18	**HBNDC52P**	Diet Therapy – I Practicals	CO1: Obtain an accurate knowledge on dietary assessment, calculation of the nutritional requirements, planning of appropriate nutritional care and the process nutritional care plan fora client. CO2: To acquire skill development in planning therapeutic diets using food exchange listsCO3: To have greater exposure to dietetic practices followed in Indian hospital CO4: know about nutritive value of Indian foods
19	**HBNDC53**	Community Nutrition	CO1: Gain insight into the concepts of health and epidemiology of communicable diseasesCO2: Understand the nutritional problems in India and gain knowledge on measures to overcome malnutrition. CO3: Have greater exposure to assessment of nutritional status CO4: Acquire knowledge about nutrition education CO5: Become aware of National and International organizationsCO6: Acquire knowledge about Nutrition intervention programs
20	**HBWS5**	Women Studies	CO1: Know the concept, need and scope of women's studiesCO2: Become aware of the details of feminist theories CO3: Acquire knowledge about women's educationCO4: understandhealth status of women in India
21	**HBNDX5**	Information, Education and Communicatio n Materials for Development	CO1: Content analysis of various IEC materials for development messages. CO2: Designing layouts for various IEC materials and Writing scripts on selecteddevelopmental issues for radio, and T.V programmes CO3: Viewing and recording various types of television and radio programmes CO4: Preparation of various graphic (IEC) materials
	Semester VI		
22	**HBNDC61**	Diet Therapy-II	CO1: Develop and demonstrate a culturally-competent care in nursing as it relates toawareness of and sensitivity to patient dietary restrictions and preferences for cultural and religious reasons. CO2: Apply knowledge of specific disease pathologies that require diet modification inorder to restore homeostasis in patients. CO3: Understand the modifications in nutrients and dietary requirements for therapeutic condition. CO4: Learn recent concepts in dietary management of different diseases and preparation of therapeutic diets for various disease

23	**HBNDC62P**	Diet Therapy-II Practicals	CO1: Obtain an accurate dietary assessment, calculate the nutritional requirements, plan appropriate nutritional care, and explain the process of objective setting in the delivery of anutritional care plan for a client. CO2: To emphasis skill development in planning therapeutic diets using food exchangelists CO3: To provide greater exposure to dietetic practices followed in Indian hospital CO4: know about nutritive value of Indian foods
24	**HBNDC63**	Food Standard and Quality Control	CO1: Critically evaluate the recent developments in the control of food safety. CO2: Conduct risk assessments of food safety problems. CO3: Knowledge on the requirements for compliance with national and Internationalfoodstandards. CO4: Demonstrate knowledge of quality management systems, their implementationand the practical steps needed for implementation.
25	**HBNDC64P**	Dietetic Internship	CO1: Identify nutrition-related problems and determine and evaluate nutrition interventions. CO2: Identify and describe the work of interprofessional teams and the roles of others with whom the registered dietician nutritionist collaborates in the delivery of food and nutritionservices. CO3: Graduates will be prepared to pass the national registration examination for dietician. CO4: Discuss the impact of health care policy and different health care delivery systems onfood and nutrition services to the consultant.
26	**Elective**		
27	**HBNDE5B**	Family Resource Management	CO1: Learn various processes in manpower planning, organizational and welfare measures. CO2: Know about various laws related to welfare measuresCO3: Learn about leadership quality CO4: Understand the Human Relations and Organisational BehaviourCO5: Know about Employee Welfare Measure CO6: Learn about Computer Applications in Human Resources Management
28	**HBNDE5C**	Food Service Management	CO1: To understand the basic principles of management in food services units. CO2: Develop skills in setting up food service units. CO3: To gain knowledge and develop skills in handling equipment and maintenance.CO4: To gain about food production in food Service industry CO5: To develop a knowledge base in key areas of institutional food administration. CO6: To understand the Buying and accounting procedures in food service institution.

29	**HBNDE5D**	Women Entrepreneurship Development	CO 1: understand an insight and establishes the link between Women, technology andentrepreneurship from the perspective of gender. CO 2: understand the administrative functions and operation mechanisms involved insensitizing women development programs. CO 3: analyze women's participation in politics from a feminist perspective CO 4: understand about usefulness of Technology Concepts and women entrepreneurship fortheir empowerment. CO5: learn about Growth of Women entrepreneurship in India CO6: understand about Entrepreneurial development programmes in India
30	**HBNDE6A**	Food Adulteration	CO1: To familiarize about the testing methods for adulteration.CO2: To test adulteration in food samples. CO3: To know the foods adulterated in our day-to-day life.CO4: To know the consequences of adulteration CO5: To know the permissive level of food additives to be used. CO6: To understand the quality of food available at our door step.
31	**HBNDE6B**	Sports Nutrition	CO 1: To develop the student's knowledge on sports nutrition CO 2: Improve the knowledge on common weight management in Sportspeople. CO 3: Understand the concept of fluid maintained in sports person CO4: Gain more knowledge on different types of micronutrients need for their fitness CO5: To understand the principles of sports nutrition and its practical application to bothelite and recreational athletes. CO6: Acquire knowledge on Sport injury and rehabilitation.
32	**HBNDE14P**	Bakery and Confectionery Practicals	CO 1: Various methods of dough mixing and factors involving during mixing CO 2: Raw materials used in bakery & confectionery and its role. CO 3: Scaling of ingredients for commercial baking. CO 4: Faults and remedies of bakery products.
33	**HBNDE24P**	– Home Furnishing Practicals	CO1: Know about different types of home textiles CO2: Understanding the production method of different types of home textile products CO3: Know about living room furnishing CO4: Gain the knowledge about bed, kitchen and table linen
34	**HBNDE34P**	Kitchen Garden Practicals	CO1: Know the different types of the kitchen garden. CO2: Learn the various types of soil and fertilizers understand importance and cultivationof fruits and plants. CO3: Acquire skills in the irrigation method in kitchen garden. CO4: To gain the knowledge to cultivate the vegetables
35	**HBNDE45P**	Food Product Development Practicals	CO1. Acquire skills to know the need and stages of food product development. CO2. Find out the shelf life, select appropriate packing and labelling for developed food Product. CO3. Compute pricing of product and provide appropriate marketing strategy.

			CO4: Gain the knowledge about food storage and transportation
36	**HBNDE54P**	Food Preservation Practicals	CO 1: perform food preservation techniques using various preservation methods CO2: choose the right method and equipment for the preservation and processing of thevariousfoods with the highest sensory and nutritional quality for the enhanced shelf life CO3: acquire the skill for producing and preserving some common foods, and identify the mostimportant aspects of their processing and preservation. CO4: apply principles of food preservation to pilot scale production of processed food andevaluatevariation in processing parameters or product formulation on product properties
37	**HBNDE65P**	Food Adulteration Practicals	CO1: Educate about common food adulterants and their detection. CO2: impart knowledge in the legislator aspects of adulteration. CO3: educate about standards and composition of foodsCO4: learn about the role of consumer.
	NON MAJOR ELECTIVE		
38	**HBNM3HS**	Food Preservation	CO1: Understand the principles of food preservation.CO2: Acquire skills in methods of food preservation CO3: Able to preserve the perishable and non-perishable foods from microbial contamination and microbial spoilage. CO4: Comprehend principles of various preservation and control techniques.
39	**HBNM4HS**	Basics of Interior Design	CO1: To enable the students to learn the basic concepts of interior design.CO2: Understand the concepts of various elements CO3: Acquire skills in interior designing CO4: To develop the skill of applying the principles of design in decorating the interiors.
40		Allied I Bio Chemistry –I	CO1: Gain basic knowledge of the structure and functions of the major biomolecules. CO2: Understand the concepts on amino acid and protein CO3: Gain knowledge about vitamins and minerals CO4: Aware about the importance of vitamins in human development.CO5: Gain knowledge about bio-chemical importance of minerals CO6: Achieve the basics of genetic material and their metabolism
41		Allied II - Bio Chemistry –II	CO1: Enzyme and its application CO2: Understand the concepts metabolism CO3: The major metabolic pathways in human metabolismCO4: Aware about the

			importance of metabolism CO5: The transmission of genetic information from DNA to DNA.CO6: The transmission of DNA to RNA.

FOOD PROCESSING MANAGEMENT (Three Year Regular Programme) For those who joined since 2021-22		
Subject Code	Subject	Course Outcome
HBFPC11/ HBNDC11	**Food Science**	**CO 1:** Gain basic knowledge of the food groups, food compositions and their significance. **CO2**: Learn different methods of cooking foods and gain experience in food preparations. **CO3:** Acquire knowledge about the changes occurring in various foodstuffs as a result of processing and cooking. **CO4:** Gain knowledge about principles of food preservation and its application in food processing industry. **CO5:** Improve knowledge about the nutrients and their importance. **CO 6:** Understand and improve their skills in different food groups.
HBFPC12P/ HBNDC12P	**Food Science Practicals**	**CO1:** Acquire skills in food preparation techniques. **CO2:** Learn microscopic examination in starch foods. **CO3:** Understand and improve their skills in food handling techniques. **CO4:** Learn changes during cooking in different foods. **CO5:** Improve their skills in different types of cookery
: HBFPA13	**First Allied I Principles of Food Processing**	**CO 1:** An overview of food processing, preservation and associated food processing unit operation. **CO 2:** Understanding the principles of food processing and the choice of food preservation in relation to food composition. **CO 3:** Relation between food processing and food preservation. **CO 4:** Conversion of raw commodities into a value added product. **CO 5:** Emerging technologies in food processing. **CO 6:** Importance of value addition of foods.
HBFPC21	**Food Chemistry**	**CO 1:** Understanding the food components and its role. **CO 2:** Biochemical reactions that influence food quality. **CO 3:** Identifying the nature of food components, its properties to assess the changes in the final products. **CO 4:** Processing conditions that change the reactivity of food components.
HBFPC22P	**Food Chemistry Practicals**	**CO 1:** Laboratory techniques common to basic and applied food chemistry. **CO 2:** Principles behind analytical techniques associated with food. **CO 3:** Food chemistry to control reactions in foods. **CO 4:** Physical, Chemical and Biological changes of food ingredients. **CO 5:** Chemistry underlying the properties and reactions of various food components.

		CO 6: Understanding the reactions of food components during processing: Browning, Maillard reaction, Denaturation etc.
HBFPA23	**First Allied II Basic Horticulture**	**CO 1**: To acquaint with importance, division and classification of horticultural crops. **CO 2**: To understand the basic principles and types of plant propagation. **CO 3**: To improve the knowledge about post harvesting techniques of horticultural crops. **CO 4**: To Study the importance olericulture, and pomology science
HBFPX2/ HBFPX20	**Extra Credit Food Hygiene and Sanitation/ Online Certificate Course**	**CO 1:** The principles and practices of hygiene and sanitation applied to the food industry. **CO 2:** Training of supervisory personnel in sanitation procedures. **CO 3:** Identification and prevention of potential sources of food contamination. **CO 4:** Proper standards and procedures for keeping the facilities and equipment sanitary.
HBFPC31	**Technology of Milk and Milk Products**	**CO 1:** Importance and Nutritional value of milk and its products **CO 2:** Preservation methods for dairy products **CO 3:** Unit operations in milk processing **CO 4:** Processing of various by products **CO 5:** Safety and Quality of dairy products **CO 6:** Transport and Storage of milk
HBFPC32P	**Technology of Milk and Milk Products Practicals**	**CO 1**: Preparation of various milk products. **CO 2:** Quality assessment of milk products. **CO 3:** Microbial analysis of milk. **CO 4:** Value addition of milk. **CO 5:** Role of properties of milk. **CO 6:** Knowledge on processing of milk at industrial level.
HBFPA33	**Second Allied I Food Microbiology**	**CO 1:** Need and Importance of food microbiology. **CO 2:** Identify genera of microorganisms associated with food and their characteristics. **CO 3:** Role of microbes in food processing -fermentation, spoilage and food borne diseases. **CO 4:** Factors affecting the growth of microorganisms. **CO 5:** New techniques of food preservations such as bio preservatives, hurdle technology, active packaging. **CO 6:** Knowledge on food borne pathogens and its preventive measures.
HBFPX3/ HBFPX30	**Extra Credit Food Adulteration/ Online Certificate Course**	**CO 1:** Testing methods for adulteration **CO 2:** Identification of adulteration in food samples **CO 3:** Comparison of food adulterated in our day-to-day life **CO 4:** Consequences of adulteration. **CO 5:** Permissive level of food additives to be used

HBFPC41	**Food Quality and Safety Management**	**CO1:** Importance of quality assurance in food industry. **CO2:** Analysis of hazards associated with food **CO3:** Safety and quality assessment of food. **CO4:** Hazard analysis and preventive measures **CO5:** Sampling techniques for food analysis. **CO6:** Food laws and regulations to be followed in food industries. **CO7:** To understand the relationship between sensory and instrumental methods for the evaluation of food quality. **CO8**: To acquire knowledge on statistical methods for sensory evaluation
HBFPC42	**Food Fermentation Technology**	**CO1:** Knowledge on Principles and mechanism of fermentation **CO2:** Importance of fermented foods **CO3:** Food preservation by fermentation **CO4:** Beneficial microbes for fermentation **CO5:** Processing of various fermented foods **CO6:** Chances of spoilage of fermented foods
HBFPC43P	**Food Fermentation Technology Practicals**	**CO1:** Technologies and equipment used for the production of various fermented food products. **CO2:** Processing of various fermented foods. **CO3:** Processing of traditional fermented foods **CO4:** Preservation of foods by fermentation **CO5:** Comparison of different types of fermentation **CO6:** Shelf life assessment of fermented foods
HBFPA44	**Second Allied II Technology of Fruits and Vegetable Processing**	**CO1:** Importance of fruits and vegetable processing. **CO2:** Value addition of fruits and vegetable **CO3:** Preservation methods of fruit and vegetable processing **CO4:** Specifications of fruit and vegetable products **CO5:** Processing of various fruit and vegetable products **CO6:** Comparison of traditional and conventional method of processing
HBFPX4/ HBFPX40	**Extra Credit Waste Management in Food Industries**	**CO1:** Importance of waste management in food industries **CO2:** Knowledge on waste treatment and safe disposal methods **CO3:** By product utilization of wastes **CO4:** Unit operations in waste treatment
HBFPC51	**Grain Science Technology**	**CO1:** Technology involved in of cereal processing. **CO2:** Value addition of cereals and pulses **CO3:** Knowledge on properties of cereals **CO4:** Processing of products from different cereal grains **CO5:** Nutritive importance of pulses **CO6:** Byproduct utilization of cereals and pulses

HBFPC52	**Theory of Packaging and Packaging Materials**	**CO1:** Importance and role of packaging in food **CO2:** Different types of packaging materials **CO3:** Shelf life extension of foods by different methods of packaging **CO4:** Knowledge on properties of different packaging materials **CO5:** Factors affecting the spoilage of foods **CO6:** Labeling and printing techniques
HBFPC53P	**Cereal Processing Practicals**	**CO1:** Technology of milling of various cereals. **CO2:** Various processing of cereal products. **CO3:** The aspect of cooking quality of rice. **CO4:** Types of extrusion technology prevailing in our county. **CO5:** The concept of gluten estimation. **CO6:** The toxin content of legumes and its reduction techniques.
HBFPX5PW	**Extra Credit-Mini Project / Online certificate course**	**CO1:** Importance of food industries. **CO2:** Knowledge on product development. **CO3:** By product utilization. **CO4:** Unit operations for making industries.
HBFPC61	**Core XIII Food Trade and Business Management**	**CO1:** Basic principles and practices of Food Trade **CO2:** Concept of trade under national level and international level **CO3:** Knowledge on governing bodies to support trade globally **CO4:** Consumer preference, sales and marketing promoting factors **CO5:** Export opportunities in Food processing **CO6:** Marketing Techniques
HBFPC62	**Core XIV Technology of Spices and Plantation Crops**	**CO1:** Production and processing scenario of spices and plantation crops and its scope **CO2:** Value addition of spices and spice products with different processing methods **CO3:** Standards and specifications of spices, packaging of spices and spice products, market value of spices in India **CO4:** Marketing of spices, adulteration, specifications for marketed products, packaging and different grades. **CO5:** Harvesting post-harvest technology and treatments, processing and extraction, adulteration, specifications for marketed products, packaging. **CO6:** Opportunities to overcome the demerits in processing of spices and plantation crops.
HBFPC63	**Core XV Technology of Meat, Poultry, Sea Food and Egg**	**CO1:** Importance of livestock and poultry industry **CO2:** Nutritional importance of animal products **CO3:** Processing and preservation of meat products **CO4:** Spoilage of meat products and its prevention

		CO5: Byproduct utilization of meat products **CO6:** Processing of seafood and its importance
Project	**Project**	**CO1:** Importance of food industries. **CO2:** Knowledge on product development. **CO3:** By product utilization. **CO4:** Unit operations for making industries
HBFPE5A	**Elective I a] Post-Harvest Technology**	**CO1:** The principle underlying Post-Harvest Technology. **CO2:** The importance and methods of post-harvest conservation of foods. **CO3:** Post-Harvest losses happening in India. **CO4:** Post-harvest processing of various food products. **CO5:** The shelf stability of product during storage. **CO6:** The quality parameters of products during Post-harvest operations.
HBFPE5B	**Elective I b] Processing of Traditional and Convenient Food**	**CO1:** Scope, processing and production of various traditional food products. **CO2:** Processing methods for value addition of different regional commodities. **CO3:** Unit operations in traditional processing **CO4:** Value addition of food commodities **CO5:** Preservation techniques of foods **CO6:** Processing of snack foods
HBFPE5C	**Food Additives**	**CO1:** Permitted food additives & non-permitted additives **CO2:** Food safety aspects & regulations **CO3:** Recommended application of additives **CO4:** Identification, determination of additives by qualitative & quantitative methods **CO5:** Standards for permissible limits of food additives **CO6:** Consequences of food additives and its toxicity level.
HBFPE5D	**Food Product Development and Management Techniques**	**CO1:** Food product development procedure and feasibility **CO2:** Selection of demand based product **CO3:** Concept of new product development. **CO4:** Exploring the marketing strategy of various food products. **CO5:** Cost analysis of food product **CO6:** Focus on factors to Scale up the production
HBFPE6A	**Elective III a. Food Analysis and Instrumentation**	**CO1:** Instrumentation for food analysis **CO2:** Analysis of food products **CO3:** Analytical Instruments for assessing the food quality **CO4:** Principle and Procedure for instrument analysis of food **CO5:** Quality parameters of food

		CO6: Identification of food adulterants
HBFPE6B	**Elective III b. Emerging Technologies in Food Industry**	**CO1:** To understand about new developments in the food industry and to impart knowledge about the importance and applications of the technology. **CO2**: To enable the student to understand: Emerging / alternative technologies applied to food processing. **CO3**: Relative advantages / disadvantages over existing technologies. **CO4**: Economics and commercialization of newer technologies. Syllabus Content
HBFPE14P/ HBNDE14P	**Skill Based Elective I Bakery and Confectionery Practicals**	**CO 1:** Various methods of dough mixing and factors involving during mixing **CO 2:** Raw materials used in bakery & confectionery and its role. **CO 3:** Scaling of ingredients for commercial baking. **CO 4:** Faults and remedies of bakery products. **CO 5:** Glazing cakes and pastries.
HBFPE24P	**Skill Based Elective II Basic Food Processing Practicals**	**CO 1:** Showing the methods to extend the shelf life of the food. **CO 2:** Defining the technology and theories for all unit operations that used food industries. **CO 3:** Value addition of foods. **CO 4:** Natural and chemical preservation of foods.
HBFPE34P	**Skill Based Elective IV Food Microbiology Practicals**	**CO 1:** Knowledge on microbial analysis and its procedure. **CO 2:** Handling of microbiology equipments **CO 3:** Identification of food pathogens **CO 4:** Methods for microbial analysis of food products **CO 5:** Identify the morphology of bacteria using different staining techniques. **CO 6:** Microbial examination of various food samples
HBFPE45P	**Skill Based Elective IV Analysis of Fruits and Vegetables Practicals**	**CO1:** Procedure for analysis the important properties of fruit and vegetable **CO2:** Processing of fruit and vegetable products **CO3:** Determination of shelf life of fruit and vegetable products **CO4:** Preservation of fruit and vegetable products
HBFPE54	**Skill Based Elective V Entrepreneurial Development**	**CO1:** Importance of entrepreneurship skills. **CO2:** Functions of entrepreneur. **CO3:** Risk assessment of entrepreneur. **CO4:** Creation of new business plans. **CO5:** Creation of employment opportunity. **CO6:** Management of all levels workers from managerial level to casual labor level

HBFPE65	**Skill Based Elective VI Unit Operations in Food Industry**	**CO1:** To provide in-depth knowledge in basic concepts of various unit operations in a food industry. **CO2:** To understand the different operations performed in food industry **CO3:** To know details of working of different equipments

DEPARTMENT OF MICROBIOLOGY AND BIOTECHNOLOGY

Academic year 2021-2022

COURSE OUTCOMES

Class: I BSc Microbiology (odd semester)

S.NO	COURSE CODE	COURSE NAME	COURSE OUTCOMES
1	HBMBC11	Core I - Fundamentals of Microbiology	Course Outcomes: Upon completion of the course, students will be able to CO 1: Discuss the history and basic concepts of Microbiology. CO 2: Identify the economically important microbes (Bacteria& Fungus) CO 3: Elaborate the structure and functions of Prokaryotes CO 4: Design the cultivation methods of pigments producing marine algae CO 5: Interpret the economically value fresh water and marine microbiology
2	HBMBC12P	Core II (Practical) - Lab Course in Fundamentals of Microbiology	Course Outcomes: Upon completion of the course, students will be able to CO 1: Explains the fundamental procedures & techniques of Microbiology CO 2: Demonstrates the types of culture media & sterilization technique CO 3: Establish to gain aseptic and pure culture techniques, preparation and viewing of sample under the microscope CO 4: Discover methods to identify the microorganisms CO 5: Determine the structural characteristics of algae and fungi
3	HBMBE14	SKILL BASED COURSE I – INTRODUCTORY VIROLOGY	Course Outcomes: Upon completion of the course, students will be able to, CO 1: Identify the concepts of structure and classification of virus CO 2: Categorise their knowledge on viral quantification methods CO 3: Dissect the various plant and animal infections – its pathogenesis and treatment. CO 4: Discuss insight the facts of replication of virus CO 5: Deduct the Human viral infections - its pathogenesis and treatment.

Class: I BSc Microbiology (EVEN semester)

S.NO	COURSE CODE	COURSE NAME	COURSE OUTCOMES
1	HBMBC21	CORE III – MICROBIAL PHYSIOLOGY	Course Outcomes: Upon completion of the course, students will be able to, CO 1: Observe bacterial growth curve and its effect on environmental factors CO 2: Associate cyanobacteria to facilitate their application CO 3:Classify the photosynthetic pathways CO 4: Improve knowledge on biosynthesis of fatty acids and their different pathways CO 5: Explain the transport mechanisms in microbes
2	HBMBC22P	CORE IV – LAB COURSE IN MICROBIAL PHYSIOLOGY	Course Outcomes: On successful completion of this course, the students will be able to identify the genus of the bacteria through various biochemical tests: CO 1: Indentify the bacteria from different sources. CO 2: Illustrate Micrometry, Haemocytometer and Turbidity method CO 3: Comparing different biochemical test for microbial identification. CO 4: Predict the bacterial physiological changes using biochemical methods CO 5: Conclude the characters of various microorganisms
3	HBMBE24P	SKILL BASED COURSE II – LAB COURSE IN AQUACULTURE	Course Outcomes: CO 1: Provide a basic understanding of aquarium setting CO 2: Preparation of fish feeds CO 3: Maintenance of aquarium for breeding CO 4: Enlighten the entrepreneurial skill

Class: II BSc Microbiology (odd semester)

S.NO	COURSE CODE	COURSE NAME	COURSE OUTCOMES
1	**GBMBC31**	**CORE V – MOLECULAR BIOLOGY**	**Course Outcomes:** Upon completion of the course, students will be able to **CO 1:** Describe about genome organization and structure of Nucleic acid **CO 2:** Obtain clear knowledge about DNA replication, transcription & translation **CO 3:** Know about post transcription & post translational modification **CO 4:** Understand operons and how gene regulation occur in both prokaryotes and eukaryotes **CO 5:** Reflect critically about gene regulation in both

			prokaryotes and eukaryotes
2	**GBMBC32P**	**CORE VI - LAB COURSE IN MOLECULAR BIOLOGY**	**Course Outcomes:** Upon completion of the course, students will be able to, **CO 1:** Explain various techniques involved in molecular biology **CO 2:** Elucidate and perform the isolation of Chromosomal DNA from *E. coli* and yeast **CO 3:** Understand the preparation of solutions and buffers **CO 4:** Explain the isolation and separation of Plasmid DNA **CO 5:** Understand the separation of protein
3	**GBMBA33**	**SECOND ALLIED I – BIO INSTRUMENTATION**	**Course Outcomes:** Upon completion of the course, students will be able to **CO 1**: A theoretical base is given that covers a wide range of instruments **CO 2**: Describes the working mechanism of microscopy **CO 3**: Conceptualize the principles and working techniques of chromatography and about its types **CO 4:** Explains about spectrophotometer, Atomic Absorption Spectroscopy **CO 5:** Illustrate the centrifugation and the basic principles involved in the sedimentation. **CO 6:** Elucidate the electrophoretic technique, AGE, PAGE.
4	**GBMBE34P**	**SKILL BASED ELECTIVE III – LAB COURSE IN MEDICAL LAB TECHNOLOGY**	**Course Outcomes:** Upon completion of the course, students will be able to, **CO 1**: Get hands on training on various techniques used in clinical laboratory. **CO 2**: Describes various sample collection methods **CO 3**: Explains different diagnostic methods **CO 4**: Gain ideas about the various microbial tests through hospital visit.

Class: II BSc Microbiology (EVEN semester)

S.NO	COURSE CODE	COURSE NAME	COURSE OUTCOMES

1	**GBMBC41**	**CORE VII – MICROBIAL GENETICS**	Upon completion of the course, students will be able to **CO 1:** Grasp knowledge about gene organization in prokaryotes as well as eukaryotes **CO 2:** Establish why mutation and recombination is important to the genetic diversity **CO 3:** Reflect how bacteria exchange or obtain new gene from other livings **CO 4:** Describe about transposable elements both in prokaryotes and eukaryotes **CO 5:** Portray life cycle of phage and its advantage and disadvantage
2	**GBMBC42P**	**CORE VIII: LAB COURSE IN MICROBIAL GENETICS**	**Course Outcomes:** Upon completion of the course, students will be able to, **CO 1:** Explains the process behind the mutation **CO 2:** Elaborates the basic and common methods in Microbial Genetics **CO 3:** Clarifies the relationship between Phenotype and Genotype **CO 4:** Distinguish the genetic regulatory mechanisms at different levels
3	**GBMBC43**	**CORE IX – MEDICAL MICROBIOLOGY**	**Course Outcomes:** Upon completion of the course, students will be able to, **CO 1**: Conceit the difference between normal flora and pathogenic microorganism **CO 2**: Cognizant knowledge on bacterial pathogenicity. **CO 3**: Attain knowledge on viral infection and its retrieval **CO 4**: Interpret the fungal and protozoan infections. **CO 5**: Sympathize the contagious infection and antibiotics and its use.
4	**GBMBA44**	**SECOND ALLIED II – IMMUNOLOGY**	**Course Outcomes:** Upon completion of the course, students will be able to **CO 1:** An overview of the immune system including Primary & Secondary lymphoid organs. **CO 2:** Describes the role of Immunoglobulins **CO 3:** Explains the complement activation after the entry of antigen. **CO 4:** Describes the molecular basis of antigen **CO 5:** Immune response to viral and bacterial infections **CO 6:** Elaborates monoclonal antibodies and their applications **CO 7:** Introduction to vaccination
5	**GBMBE45P**	**SKILL BASED ELECTIVE IV – LAB COURSE IN**	**Course Outcomes:** Mushroom cultivation lab facets the hands-on training for students to

		MUSHROOM CULTIVATION	**CO 1:** Describe the basic types of mushroom and its economic importance **CO 2: E**xpertise in various mushroom cultivation techniques **CO 3:** Setup an own unit of mushroom cultivation firm **CO 4:** Intend the candidates to go for self–employment.

Class: III BSc Microbiology (odd semester)

S.NO	COURSE CODE	COURSE NAME	COURSE OUTCOMES
1	**GBMBC51**	**CORE X – ENVIRONMENTAL AND AGRICULTURAL MICROBIOLOGY**	**Course Outcomes:** Upon completion of the course, students will be able to **CO1:** Describe the distribution of microorganism and its role in environment **CO 2**: Reflect critically about the biogeochemical cycles **CO 3**: Conceive knowledge about waste water treatment **CO 4**: Critically clarify the application of microbes in agriculture like biofertilizers
2	**GBMBC52P**	**CORE XI – LAB COURSE IN MEDICAL MICROBIOLOGY**	**Course Outcomes:** Upon completion of the course, students will be able to **CO 1**: Empathize the collection and processing of various medical samples. **CO 2**: Get hands on training on the various techniques **CO 3**: Describes the isolation and identification of microorganisms from human samples **CO 4:** Find out the efficiency and MIC of antibiotics.
3	**GBMBC53P**	**CORE XII – LAB COURSE IN ENVIRONMENTAL AND AGRICULTURAL MICROBIOLOGY AND BIOSTATISTICS**	**Course Outcomes:** Upon completion of the course, students will be able to **CO 1**: Explain the procedure to isolate *Azotobacter*, *Cyanobacteria*, *Rhizobium* **CO 2**: Explores the bacterial examination of water **CO 3**: Determines the BOD and COD of water sample **CO 4**: Elucidate the microbes present in air **CO 5:** Illustrate the collection of data, sampling design and tabulation **CO 6:** Explore the mean, median, mode and standard deviation

4	**GBMBE5A**	**ELECTIVE I – BIOSTATISTICS**	**Course Outcomes:** On successful completion of this course, the students will be able to, **CO 1:** Discuss the functions & limitations on biostatistics. **CO 2:** Appreciate key concepts about the Data collection and presentation of data. **CO 3:** Measure the general tendency from a group of observations using central tendency. **CO 4:** Evaluate the variation among the observations using measures of dispersion. **CO 5:** Emphasize the basics of biostatistical inference using the science of Probability. **CO 6:** To apply the statistical analysis for their research.
5	**GBMBE5B**	**ELECTIVE I – COMPUTER APPLICATIONS IN BIOLOGY**	**Course Outcomes:** On successful completion of this course, the students will be able to, **CO 1:** Illustrate the key concepts on the generations & components of Computer. **CO 2:** Reveal about the Internet and its applications. **CO 3:** Emphasize the basic knowledge about the Programming in C. **CO 4:** Explain the basic knowledge about Web designing. **CO 5:** Discuss about the applications of computer in Microbiology.
6	**GBMBE5C**	**ELECTIVE II – BIOTECHNOLOGY**	**Course Outcomes:** Upon completion of the course, students will be able to: **CO 1**: Explain the applications of DNA modifying enzymes **CO 2**: Demonstrate the Identification of DNA, RNA and protein **CO 3**: Write down the application of genetic engineering in animals, plants and human **CO 4**: Elucidate the fundamental principles of nanotechnology and their application **CO 5**: Discuss knowledge on the biosafety regulations and ethical concepts in biotechnology
7	**GBMBE5D**	**ELECTIVE II – BIONANOTECHNOLOGY**	**Course Outcomes:** Upon completion of the course, students will be able to: **CO 1:** Explain the history and classification of nanostructures **CO 2:** Demonstrate functional principles of Bionanotechnology **CO 3:** Describe the synthesis of biomolecules based Nano structures

			CO 4: Elucidate the analytical techniques involved in characterization of nanoparticles. **CO 5:** Discuss the applications of nanoparticles as drugs in therapeutics and diagnosis.
8	**GBMBE54**	**SKILL BASED ELECTIVE V – BIOINFORMATICS**	**Course Outcomes:** Upon completion of the course, students will be able to, **CO 1:** Define bio informatics, its scope and application **CO 2:** Discuss the databases related to genome and proteome **CO 3:** Explain software to extract information from database and sequencing tools **CO 4:** describes the development of phylogenetic trees

Class: III BSc Microbiology (EVEN semester)

S.NO	COURSE CODE	COURSE NAME	COURSE OUTCOMES
1	**GBMBC61**	**CORE XIII – FOOD MICROBIOLOGY**	**Course Outcomes:** Upon completion of the course, student will be able to **CO 1:** Comprehend the general principles of food Microbiology. **CO 2:** Covers the pathogenic organisms involved in the spoilage & normal flora of the food **CO 3:** Describes the economically important Bacteria, Yeasts and Molds. **CO 4:** Explains the fermentation technology behind the fermented food **CO 5:** Clarifies the examination of food and microbiological quality control.
2	**GBMBC62**	**CORE XIV – INDUSTRIAL MICROBIOLOGY**	**Course Outcomes:** Upon completion of the course, students will be able to **CO 1:** Improve the skills in screening of industrially important microbes **CO 2:** Design the type of fermenter needed for large scale production. **CO 3:** Describes the concepts of upstream and downstream processing of fermentation technology **CO 4:** Expertise on the production of economical important microbial products. **CO 5:** Discuss about the bioreactors and

			controlling parameters **CO 6:** Explains the role of microorganism in bioprocess technology
3	**GBMBC63P**	**CORE XV – LAB COURSE IN FOOD AND INDUSTRIAL MICROBIOLOGY**	**Course Outcomes:** Upon completion of the course, students will be able to, **CO 1:** Describe isolation of microorganism from spoiled food products **CO 2:** Check the quality of food product and adultery **CO 3:** to get knowledge on the industrially important techniques **CO 4**: Acquire knowledge about spoilage mechanisms in foods **CO 5**: Discuss the basis of food safety regulations **CO 6**: Conceive knowledge about role of microorganism in fermentation
4	**GBMBC64PW**	**CORE – XVI PROJECT**	Upon completion of the course, students will be able to **CO 1**: Implement the innovative ideas in research **CO 2**: Experience the research in the field of microbiology **CO 3**: Designing the project to overcome the environmental problems.
5	**GBMBE6A**	**ELECTIVE III – MARINE MICROBIOLOGY**	**Course Outcomes:** Upon completion of the course, students will be able to: **CO 1:** Explain on major forms of life in the marine environment, **CO 2:** Identify and classify the marine Microbes **CO 3:** Describe the preservation methods of marine microbes **CO4:** Elucidate the microbial resources and its role in different biogeochemical cycles. **CO 5:** Discuss the economic importance of Seaweeds and mangroves **CO 6:** Clarify the microbial interaction associated with fish (food) and its prevention.
6	**GBMBE6B**	**ELECTIVE III – PUBLIC HEALTH AND HYGIENE**	**Course Outcomes:** Upon completion of the course, students will be able to, **CO 1**: Attain knowledge in personal care health **CO 2**: Reveal the environmental condition in human health **CO 3**: Impact of public hygiene in environmental pollution **CO 4**: Sympathize the public action against healthy environment. **CO 5**: Acquainted with health service policies for

			public health **CO 6**: Interpret the issues related to environment affecting health and sustainable development
7	**GBMBC65P**	**SKILL BASED ELECTIVE VI – LAB COURSE IN AQUACULTURE**	**Course Outcomes:** **CO 1**: Provide a basic understanding of aquarium setting **CO 2**: Preparation of fish feeds **CO 3**: Maintenance of aquarium for breeding **CO 4**: Enlighten the entrepreneurial skills

Class: I MSc Microbiology (ODD semester)

S.NO	COURSE CODE	COURSE NAME	COURSE OUTCOMES
1	**GMMBC11**	**CORE I - GENERAL MICROBIOLOGY**	**Course Outcomes:** Upon completion of this course, the students will able to **CO1:** Review the history and classification of microorganisms **CO2:** Distinguish the basic groups of microbes - Archaea, Bacteria and Viruses and Eukaryotic microbes. **CO3:** Describe the detailed structure and function of prokaryotic cell organelles. **CO4:** Acquire basic knowledge on virus appearance and how to cultivate, isolate and identify viruses **CO5:** Explore the fungal structure, classification and economical value of fungi **CO6:** Improve the knowledge on algal characteristics, importance and its impact on society
2	**GMMBC12**	**CORE II – BIOMOLECULES AND MICROBIAL PHYSIOLOGY**	**Course Outcomes:** Upon completion of the course, the students will be able to, **CO 1:** Reveal about the metabolism and regulations of carbohydrates and lipids **CO 2:** Accentuate the metabolism, regulations and to classify the cell organelle. **CO 3:** Explore concepts on biochemical components & growth factors of microbial cell **CO 4:** Emphasize the nutritional requirements, environmental adaptations and transport mechanisms of microbes **CO 5:** Summarize the photosynthetic process carried out during the microbial growth. **CO 6:** Illustrate the overall biosynthetic and regulatory metabolism of microorganisms

3	**GMMBC13**	**CORE III - MOLECULAR BIOLOGY AND MICROBIAL GENETICS**	**Course Outcomes:** Upon completion of the course, the students will be able to **CO 1:** Describe the molecular genetics and the genome organizations in organisms. **CO 2:** Understand the mutation and the DNA repair mechanism **CO 3:** Describe about the transposons and its molecular mechanism **CO 4:** Explain the concept of recombination **CO 5:** Critically discuss about the life cycle of phage and its genetics **CO 6:** Depict the gene transfer techniques
4	**GMMBC14P**	**CORE IV – LAB COURSE IN GENERAL MICROBIOLOGY BIOMOLECULES AND MICROBIAL PHYSIOLOGY, MOLECULAR BIOLOGY AND MICROBIAL GENETICS**	**Course Outcomes:** Upon completion of the course, students will be able to **CO 1:** Describe the preparation of buffers and molar solution **CO 2:** Quantify the amount of biomolecules like carbohydrates, amino acids, lipids, DNA and RNA **CO 3:** Estimate the proteins, lipids, DNA and RNA by chemical methods **CO 4:** Able to isolate and separate DNA and protein **CO 5:** Test antibiotic sensitivity **CO 6:** Isolate mutants
5	**GMMBE1A**	**ELECTIVE I: a. ALGAL TECHNOLOGY**	**Course Outcomes:** Upon completion of the course the students will be able to **CO 1:** Describe the basic characteristics and classification of algae **CO 2:** Emphasize the detailed structure and function of cell organelles **CO 3:** Expertise in the discrete cultivation methods of algae **CO 4:** Understand the concepts of algal processing **CO 5:** Enlighten the impact of algae on society **CO 6:** Depicts the economic importance of algae
6	**GMMBE1B**	**ELECTIVE I: b. ENZYMOLOGY**	**Course Outcomes:** Upon completion of the course, students will be able to **CO 1**: Outcast the basics of enzymes, properties, types and characteristics **CO 2**: Describe various methods to isolate and purify enzymes **CO 3**: Expertise on enzyme kinetics and mechanism of enzyme action **CO 4**: Grasp the concepts of specificity of enzymes and inhibition properties **CO 5**: Explore the assorted techniques of

			immobilization and its applications. **CO 6**: Be familiarized on enzymes in drug designing and their future potential.

Class: I MSc Microbiology (EVEN semester)

S.NO	COURSE CODE	COURSE NAME	COURSE OUTCOMES
1	**GMMBC21**	**CORE V: FOOD AND DAIRY MICROBIOLOGY**	**Course Outcomes:** Upon completion of the course, students will be able to **CO 1**: Enlighten the factors essential for the growth of microorganisms **CO 2**: Exploit discrete types of food preservation techniques **CO 3**: Explore the kinds of microbes involved in various fermented foods **CO 4**: Describes the principles of food spoilage microorganisms **CO 5**: Identify the types of illness associated with food poisoning and **CO 6**: Retrieve the extra knowledge on food safety and quality
2	**GMMBC22**	**CORE VI - ENVIRONMENTAL AND AGRICULTURAL MICROBIOLOGY**	**Course Outcomes:** Upon completion of the course, students will be able to **CO 1**: Portray influencing factors on environmental microbes **CO 2:** Illustrate assessment of air and water quality **CO 3:** Conceive knowledge about marine habitats and coral reefs **CO 4:** Describe biogeochemical cycles and microbes involves in each cycles **CO 5:** Critically discuss on an Agro Ecosystem **CO 6:** Describe how bio pesticides & herbicides are produced by using microbes
3	**GMMBC23**	**CORE VII - RECOMBINANT DNA TECHNOLOGY**	**Course Outcomes:** Upon completion of the course, students will be able to, **CO 1:** Comprehend the role of various DNA modifying enzymes and its uses in Molecular Biology **CO 2:** Discuss various types of host cells and vectors in gene cloning. **CO 3:** Describe the strategies of cloning, extraction and construction of genomic DNA and cDNA libraries

			CO 4: Elucidate on the analytical techniques employed in DNA sequencing **CO 5:** Demonstrate the Applications of rDNA technology in medicine
4	**GMMBC24P**	**CORE VIII - LAB COURSE IN ENVIRONMENTAL AGRICULTURAL MICROBIOLOGY AND FOOD MICROBIOLOGY**	**Course Outcomes:** Upon completion of the course, students will be able to **CO 1:** Check the water quality by MPN technique **CO 2:** Enumerate the microorganisms from various sources **CO 3:** Estimate the BOD and COD **CO 4:** Isolate various nitrogen fixing bacteria from various sources **CO 5:** Isolate Cyanobacteria and Drug resistance mutants **CO 6:** Examine the various plant diseases & Mycorrhizae **CO 7:** Determine the milk quality by various tests **CO 8:** Illustrate the methods in the production of Sauerkraut, SCP, amylase & protease **CO 9:** Explore the process in the fermentative production of Citric acid and wine **CO10:** Attain knowledge about Cell immobilization **CO11:** Perform the microbiological analysis of food products and mushroom cultivation
5	**GMMBE2A**	**ELECTIVE II - GENOMICS AND PROTEOMICS**	**Course Outcomes:** Upon completion of the course, students will be able to **CO 1:** Explain the structure and organisation of prokaryotic genome **CO 2:** Classify the structural and functional genomics **CO 3:** Demonstrate the basic principles and approaches in structural genomics **CO 4:** Describes the tools for the separation and identification of protein **CO 5:** Understand the concepts and methods in metabolomics **CO 6:** Discover about the pharmocogenomics
6	**GMMBE2B**	**ELECTIVE II – NANOBIOTECHNOLOGY**	**Course Outcomes:** Upon completion of the course, students will be able to **CO 1:** Demonstrate the biosynthesis and green synthesis of nanomaterials **CO 2:** Elucidate the factors involved in the manufacturing process of nanomaterials **CO 3:** Explain the process of fabrication, properties

			and application of Nucleic acid based artificial nanomaterials **CO 4:** Discuss the application of Nano drug in medicine **CO 5:** Clarify the status of nanotechnology in India and its impacts.

Class: II MSc Microbiology (ODD semester)

S.NO	COURSE CODE	COURSE NAME	COURSE OUTCOMES
1	**GMMBC31**	**CORE IX - MEDICAL MICROBIOLOGY**	**Course outcome:** Upon completion of the course, students will be able to **CO 1:** Reveal the basic concept and maintenance of medical laboratory **CO 2:** Grasp the different types of diseases, pathogenicity, treatment and laboratory management **CO 3:** Learn the bacterial pathogenicity and its retrieval **CO 4:** Illustrate the concept of viral infection **CO 5:** Elaborate fungal and protozoan infections **CO 6:** Interpret the antibiotics and its applications
2	**GMMBC32**	**CORE X – IMMUNOLOGY AND IMMUNODIAGNOSTICS**	**Course outcome:** Upon completion of the course, students will be able to **CO 1**: Describes about the immune cells and lymphoid organs **CO 2**: Gain knowledge on tumor cells, transplantation immunology **CO 3**: Reflect critically about the immunodeficiency disorders **CO 4**: Obtain knowledge on autoimmunity and autoimmune diseases **CO 5**: Recollect the advanced knowledge on immunodiagnostic methods **CO 6**: Obtain knowledge on hybridoma technology
3	**GMMBC33**	**CORE XI: BASICS OF RESEARCH METHODOLOGY**	**COURSE OUTCOMES:** Upon completion of the course, students will be able to **CO 1:** Interpret the relationships among living things and solve biological problems among them **CO 2:** Research and inquiry **CO3:** Existing software to extract information from large database and use the information as computer modelling

			CO 4: Ability to develop new algorithms and analysis methods **CO 5:** Explains the gene expression **CO 6:** Describes the analysis of human genome
4	**GMMBC34P**	**CORE XII - LAB COURSE IN MEDICAL MICROBIOLOGY, IMMUNOLOGY AND IMMUNODIAGNOSTICS**	**Course Outcomes:** Upon completion of the subject, students will be able to **CO 1**: Learn to collect the blood sample from various parts **CO 2:** Get the thorough knowledge on separation of different types of blood cells **CO 3:** Acquire knowledge on the antigen-antibody interaction **CO 4:** Isolate antibody from blood serum **CO 5:** Attain knowledge on the types of blood cells **CO 6:** Perform various immunodiagnostic methods
5	**GMMBE3A**	**ELECTIVE III - BIOETHICS, BIOSAFETY & IPR**	**Course Outcome:** Upon completion of the course, students will be able to **CO1:** Describes overall concepts of Bioethics **CO2:** Promote ethical concerns regarding human cloning **CO3:** Apply gene therapy for research **CO4:** Defend from risky hazards **CO5:** Implement biosafety for drug products **CO6:** Explain in detail about IPR
6	**GMMBE3B**	**ELECTIVE III: BIOINFORMATICS**	**Course Outcomes:** Upon completion of the course, students will be able to **CO 1:** Understands the general definition of Bioinformatics and Networks **CO 2:** Identify the biological databases **CO 3:** Familiar with gene and protein prediction tools **CO 4:** Explains about the structure prediction tools **CO 5:** Discuss about the molecular interaction **CO 6:** Explains DNA sequencing software and proteomics tools

Class: II MSc Microbiology (EVEN semester)

S.NO	COURSE CODE	COURSE NAME	COURSE OUTCOMES
1	**GMMBC41PW**	**CORE IX - Project**	**Course outcome:** Upon completion of the course, students will be

			able to, **CO1:** Describe the methodological information on the area of research **CO2:** Apply microbiological concepts **CO3:** Improve the abilities in interpretation for their findings **CO4:** Develop the skills in publications

COURSE OUTCOME

I BSC PSYCHOLOGY

GENERAL PSYCHOLOGY

CO 1: Enable the student to understand the basic concepts in Psychology

CO 2: Make them understand the recent advancements in the General Psychology

CO 3: Understand the sensory processes

CO 4: Sensitize the student on motivational, emotional and other aspects of behaviour

CO 5: Know the scopes of Psychology

CO 6: Know about the higher order thinking processes called intelligence and creativity

Core II - Life Span Psychology- I

CO 1: Introduce students to the Basic Concepts of Developmental Psychology

CO 2: Familiarize students with the Physical and Psychological development of early lifespan development

CO 3: Able to assess early developmental history to determine impact on child and adolescent functioning

CO 4: Demonstrate knowledge of the significant factors which affect individuals throughout the lifespan: socioeconomic, ethnic, cultural, family, gender, marital status, and sexual orientation

Allied I - Physiological Psychology

CO 1: Gain knowledge towards the concept of physiological Psychology

CO 2: Help the student acquire the basic knowledge relating to neuron, hormones and brain

CO 3: Understand the importance of physiology in the field of Psychology

CO 4: Understand the structure and functions of human Physiology

Skilled Based Elective I - Personality Development

Skilled Based Elective I - Personality Development

CO 1: Provide Knowledge to empower one self.

CO 2: Understand the enriching factors of personality

CO 3: Provide Knowledge on the importance of positive relationships

CO 4: Develop interpersonal skills to the students

Core III - Life Span Psychology – II

CO 1: Impart knowledge on physical and cognitive development from adolescence to adulthood and old age

CO 2: Provide an understanding of psychosocial development from adolescence to adulthood and old age

CO 3: Introduce students to the psychological issues involved in death and bereavement

CO 4: Able to apply developmental concepts and theories to everyday relationships and Situations

Core IV - Experimental Psychology-I (Lab)

CO 1: Learn the principles of sensory process

CO 2: Understand the various senses and its perceptions

CO 3: Provide practical exposure to assess, diagnose and interpret various psychological concepts

CO 4: Gain the knowledge of using psychometric tools

Allied II - Media Psychology

CO 1: Understanding the benefit of applying media Psychology

CO 2: Understand the importance of Psychology in media field

CO 3: Understand the impact of media on behaviour

CO 4: Define media, media literacy and their psychological implication

Skilled Based Elective II - Psychology of Personal Happiness

CO 1: To bring an experience marked by predominance of positive emotions and informing them about emerging paradigm of psychology.

CO 2: Build relevant competencies for experiencing and sharing happiness as lived experience and its implications.

CO 3: Focuses on the psychological aspects of a fulfilling and flourishing life.

Extra Credit - Islamic Psychology

CO 1: Students will be familiar with the field of Psychology and the various sub-disciplines as well as related fields

CO 2: Students will be able to understand the difference between the secular and Islamic approaches to the study of human nature and personality

CO 3: Students will be able to understand the complex relationship between Psychology and religion

CO 4: Students will be able to comprehend Psychology, the nature of humans and purpose in life from an Islamic perspective, utilizing wisdom from sacred sources

Core V - Social Psychology – I

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

Core VI - Cognitive Psychology

CO1: Understanding the methods to study cognitive concepts

CO2: Knowing various perceptual processes

CO3: Demonstrate knowledge and understanding of well-established theories in cognitive Psychology

CO4: understanding problem solving and creative aspects of cognition

Allied III - Psychological Statistics

CO 1: Understand the basic concepts in psychological statistics

CO 2: Able to plot graphs for various data

CO 3: Able to understand the nature of data

CO 4: gain the knowledge of analyzing the data

CO 5: Know about the applications of statistical test

CO 6: able to apply this knowledge in the field of research

Skilled Based Elective III - Health Psychology

CO 1: Students will be able to learn the basic concepts of health Psychology.

CO 2: Students will be able to learn the health related behaviours.

CO 3: Students will be able to learn the concept of stress and its managing strategies.

CO 4: Students will be able to relate health Psychology with other field of science.

Extra Credit - Training Programme

CO 1: Understand the actual ground reality of the profession

CO 2: Make them capable to face the challenges in the field

CO 3: Mold the pupil empathetically towards specially challenged people of our society

CO 4: Improve their professional skills

Core VII - Social Psychology –II

CO 1: Help the students outline the key factors in social Psychology and to perceive and understand individuals

CO 2: Analyze how to perceive and understand one‘s self

CO 3: Evaluate the social world and apply Psychology in life

CO 4: Compare and contrast the research methodologies used in the scientific study of human Social Behaviour

Core VIII - Psychopathology-I

CO 1: Introduce students to historical conceptions and perspectives of psychopathology

CO 2: Impart knowledge and skills required for diagnosis of psychological conditions

CO 3: Orient students on different psychological disorders, its causes and treatment

CO 4: Consider the impact of these psychological problems on the individual and the wider social context

Core IX - Experimental Psychology-II

CO 1: Learn the principles of learning process

CO 2: Understand the various learning techniques

CO 3: Gain the knowledge of using psychometric tools

CO 4: Provide practical exposure to assess, diagnose and interpret various psychological Concepts

Allied IV - Sports Psychology

CO 1: Introduce students to the Basic Concepts of Sports Psychology

CO 2: Familiarize students with the importance of Psychology in sports

CO 3: Understand the importance of motivation in sports

CO 4: Know the role of anxiety in performances

CO 5: Familiarize with various skills based training programmes in the field

CO 6: Know the importance of exercise

Skill Based Elective –IV - Life Skills Education

CO1: Define and Identify different life skills required in personal and professional life

CO2: To increase one‘s knowledge and awareness of emotional competency and emotional intelligence at place of study/work.

CO3: To provide opportunity for realising one‘s potential through practical experience.

CO4: To develop interpersonal skills and adopt good leadership behaviour for empowerment of self and others.

CO5: To set appropriate goals, manage stress and time effectively.

CO6: Understand the basics of teamwork and leadership

Extra Credit - Internship

CO 1: Gain practical knowledge

CO 2: Understand the ground reality of profession

CO 3: Acquire practical skills

CO 4: Learn to write clinical case studies

Core X - Psychopathology- II

CO 1: Familiarize students with different psychological disorders

CO 2: Orient students on causes, symptoms and treatment of different psychological disorders

CO 3: Familiarize with the DSM-IV multi-axial classification of mental disorders and the criteria for diagnosing these disorders

CO 4: Able to apply these theoretical perspectives in reviewing each of the psychopathological conditions

Core XI - Educational Psychology

CO 1: Develop an understanding of the nature, concept and factors affecting learning

CO 2: Develop an awareness of the influence of intelligence, creativity and personality on learning

CO 3: Understand various approaches of learning

CO 4: Gain the social and moral development among the students

Core XII - Basic Research Methodology

CO 1: Learn the principles of research design

CO 2: Identify the research problems

CO 3: Get basic knowledge on data collection

CO 4: Enable the students in report writing

Elective I - Human Resource Management

CO 1: To orient students towards the concept of HRM

CO 2: To include skill involved job analysis, recruitment, and training and performance appraisal

CO 3: To Provide innovative solutions to problems in the fields of HRM

CO 4: To be able to identify and appreciate the significance of the ethical issues in HR

CO 5: To Explain the importance of human resources and their effective management in organization

CO 6: To develop, implement, and evaluate organizational development strategies aimed at promoting organizational effectiveness

Elective I - Organizational Behaviour

CO 1: Familiarize students about the factors that contribute to achieving organizational Effectiveness , at the individual, group and structural level

CO 2: Expose them to organizational system, change and its management

CO 3: Orient them to the concept of work stress and its management

CO 4: Provide basic knowledge of key approaches and Models relating to Organizational Behaviour

CO 5: Identify specific steps mangers can take to motivate the employees

CO 6: Apply different concepts relating to managing of conflicts, change, time and stress

Elective II - Interpersonal Conflict Management

CO1: To expose students to understand the term conflict and its classification

CO2: To gain in-depth knowledge in interpersonal conflict

CO3: To provide them a basic knowledge of conflict management design

CO4: To acquire skills in old and new paradigm in conflict management

CO5: To make them understand ethics and morality of conflict management.

Elective II - Criminal Psychology

CO 1: This advanced course will focus on the attempt, and the need, to understand the behaviours, actions, and patterns of criminals.

CO 2: Antisocial personality disorder and its impact on the criminal mind.

CO 3: Comprehending the students about different approaches in understanding criminal behaviour.

CO 4: The course will also look at methods by which experts attempt to identify and capture repeat (serial) criminals

CO 5: Designed to help learners understand the principles within criminal Psychology, discussing importance related to the mind of criminals, explained through psychological theories.

CO 6: Understand the legal issues in the profession of Criminal Psychology.

Skill Based Elective V - Counselling Psychology

CO 1: Orient students about the importance of Guidance and Counselling.

CO 2: Understand the nature of counseling situation.

CO 3: Understand the various areas of Counselling.

CO 4: Become aware of Ethical and Legal issues in Counselling.

Extra Credit - Internship

CO 1: Gain practical knowledge

CO 2: Understand the ground reality of profession

CO 3: Acquire practical skills

CO 4: Learn to write clinical case studies

Core XIII – Introduction to Psychotherapies

CO 1: Understand the meaning of therapy and faced by beginning therapists.

CO 2: Gain insight into the theoretical approaches of psychopathology.

CO 3: Understand the application of those theoretical principles in treating.

CO 4: Improve aesthetic professional skills of the students

Core XIV - Neuropsychology

CO 1: 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

CO 2: Facilitate a dynamic understanding of the field by discussing neuroimaging techniques, case examples, and current researches

CO 3: Challenging the students to examine the field of neuropsychology as a framework for understanding behaviour and mental processes

CO 4: Able to understand the link between neurological disorders and therapeutic practice

Core XV - School Counselling

CO 1: Orient students about the importance of School Counselling.

CO 2: Make them understand the Models of School Counselling.

CO 3: Make them understand the various areas of School Counselling.

CO 4: Make them aware of deal with Suicidal thoughts, Depression, and Life Meaning.

Core XVI – Project

CO 1: Create thrust towards research.

CO 2: Develop research aptitude among students.

CO 3: Understand the concepts in psychological research.

CO 4: Develop ability to apply various tools and techniques to solve day–to-day life problems.

Elective III - Consumer Psychology

CO1: Help the students to get basic knowledge relating to the impact of information technology on consumption patterns.

CO2: Describe the steps and techniques of consumer behaviour research including a discussion of qualitative and quantitative research models.

CO3: Orient students about market segmentation, targeting and positioning.

CO4: Understand consumer behaviour in an informed systematic way.

CO5: Understand the processes used when individuals, group or organizations make consumption decisions.

CO6: Understand how the selection, use and disposal of consumer goods affect almost every aspect of our daily lives.

Elective III - Psychology of Women

CO 1: Provide awareness on the basic nature of women

CO 2: Explain and be able to identify gender bias in research.

CO 3: Understand Cognitive ability and personality characteristics of women

CO 4: Understand the role of women

CO 5: Know about Gender discrimination in Society

CO 6: Understand Gender comparison in Cognitive Abilities and Attitudes about Achievement

Skill Based Elective VI – Resilience Building

CO 1: Wellbeing and resilience are vital to developing efficient problem solving skills, building & maintaining interpersonal relationships

CO 2: Realistic goal setting, all of which greatly enhance an individual‘s ability to perform and contribute meaningfully in daily life.

CO 3: The objective of this course is to develop an awareness

CO 4: learn about Signs of resilience wellbeing

Non Major Elective I - Stress Management

CO 1: Understand the influencing factors of stress tolerance .

CO 2: Understand the impact of social support in moderating stress.

CO 3: Understand the concept of coping.

CO 4: Make the students capable to apply these knowledge to reduce their stress in day to day life .

Msc psychology

Core I-Advanced General Psychology

CO 1: Enable the student to understand the basic concepts in Psychology

CO 2: Make them understand the recent advancements in General Psychology

CO3: To acquire basic knowledge about sensory processes in connection with psychological context

CO 4: Sensitize the student on motivational, emotional and other aspects of behaviour

CO 5: Understand in depth theories in forgetting

CO 6: To know about the mechanism of higher order thinking processes called intelligence and creativity.

Core II-- Life Span Psychology

CO1: Introduce students to the Basic Concepts of Developmental Psychology.

CO2: Familiarize students with the Physical and Psychological development of early lifespan development.

CO3: Able to assess early developmental history to determine impact on child and adolescent functioning.

CO4: Demonstrate knowledge of the significant factors which affect individuals throughout the lifespan: socioeconomic, ethnic, cultural, family, gender, marital status, and sexual orientation.

CO5: Impart knowledge on physical and cognitive development from babyhood to childhood

CO6: Provide an understanding of psychosocial development from babyhood to Childhood

Core III-- Psychopathology

CO1: Create awareness about historical concepts of psychopathology

CO2: Impart knowledge and skills required for diagnosis of psychological conditions

CO3: Orient students about different psychological disorders, its causes and treatments

CO4: Understanding the impact of psychological problems on the individual and in society.

CO5: Familiar with and able to discuss the DSM-IV multiracial classification of mental disorders and the criteria for diagnosing these disorders.

CO6: Able to apply these theoretical perspectives in reviewing each of the psychopathological conditions

Core IV-Experimental Psychology-I (Lab)

CO1: Learn the principles of sensory process

CO2: Understand the various senses and its perceptions

CO3: Provide practical exposure to assess, diagnose and interpret various

psychological Concepts

CO4: Gain the knowledge of using psychometric tools.

CO5: Learn the influence of various illusions in day to day life.

CO6: Importance of psychological experiments for understanding the human behaviour.

Elective I - Advanced Social Psychology

CO1: Help the students outline the key factors in social Psychology and to perceive and understand individuals

CO2: Analyse how to perceive and understand one‘s self

CO3: Evaluate the social world and apply Psychology in life

CO4: Able to analyse major psychosocial issues.

CO5: To analyse how to perceive and understand one‘s self

CO6: Compare and contrast the research methodologies used in the scientific study

Elective I--Indian Psychology

CO1: Understand the meaning and importance of Indian Psychology in the present context.

CO2: Preconceived notion about various social and health issues and its impact.

CO3: Create awareness about basics of Psychology in Indian perspective

CO4: Understand various theories of Indian Psychology

CO5: understand various doctrines of Indian Psychology.

CO6: Importance of Indian perspective in the field of Psychology.

Core V - Applied Counselling Psychology

CO1: Orient students about the importance of Guidance and Counselling

CO2: Understand the nature of counselling situation

CO3: Understand the various areas of Counselling

CO4: Become aware of Ethical and Legal issues in Counselling

CO5: Enable the students to understand the meaning, basic concepts, purpose and importance of counselling in everyday life and skills required for counselling.

CO6: Understand various appraisal techniques, reporting of the findings and effectiveness of counselling

Core VI- Applied Cognitive Psychology

CO1: Understanding the methods to study cognitive concepts.

CO2: In-depth understanding of brain and its function.

CO3: Demonstrate knowledge and understanding of well-established theories in cognitive Psychology.

CO4: understanding problem solving and creative aspects of cognition

CO5: In-depth understanding of human cognitions

CO6: Insight about behaviour and mental process.

Core VII- Research Methodology and Statistics

CO1: Orient students to the different stages of research

CO2: Give insight into the various research methods

CO3: Identify and apply appropriate research tools

CO4: Get basic knowledge on data collection

CO5: Acquire the skill of reporting the research

CO6: Employ various statistical techniques for psychological research

Core VIII -Experimental Psychology-II (Lab)

CO1: Learn the principles of learning process

CO2: Understand the various learning techniques.

CO3: Gain the knowledge of using psychometric tools.

CO4: Provide practical exposure to assess, diagnose and interpret various psychological Concepts

CO5: Impart the importance of mental health

CO6: Make the students capable to diagnose.

Elective II - International Classification of Diseases

CO1: Understand the concept of abnormal behaviour, classification and methods of assessment.

CO2: Understand various pathological disorders & ICD-10 criteria of diagnosis. Introduce students to historical conceptions and perspectives of psychopathology

CO3: Impart knowledge and skills required for diagnosis of psychological conditions

CO4: Orient students on different psychological disorders, its causes and treatment

CO5: Consider the impact of these psychological problems on the individual and the wider social context.

CO6: Able to apply these theoretical perspectives in reviewing each of the psychopathological conditions

Elective II - Special Education

CO1: Familiarize students with different psychological disorders related with children‘s.

CO2: Orient students on causes, symptoms and treatment of different psychological disorders.

CO3: Introduce students to historical conceptions and perspectives of psychopathology

CO4: Impart knowledge and skills required for diagnosis of psychological conditions

CO5: Orient students on different psychological disorders, its causes and treatment

CO6: Creating awareness about need of special education

Core IX--Neuropsychology

CO1: Provide knowledge and understanding of brain and behavior relationship with the help of current development in the field of neuroscience.

CO2: Facilitate a dynamic understanding of the field by discussing case examples and current researches.

CO3: Challenging the students to examine the field of neuropsychology as a framework for understanding behavior and mental processes.

CO4: Able to understand the link between neurological disorders and therapeutic

practice.

CO5: Understand the structure of the nervous system, brain and functions of different lobes

CO6: Understand the evaluation and interventions of brain pathology

Core: X--Psychotherapeutics

CO1: Understand the meaning of therapy

CO2: Gain insight into the theoretical approaches of psychotherapy

CO3: Understand the application of theoretical principles in treating

CO4: Improve aesthetic professional skills of the students.

CO5: Orient towards the nature, goals and prerequisites of psychotherapy

CO6: Understand about the different schools and techniques in psychotherapy

Core: XI-- Rehabilitation Psychology

CO1: Understand the nature and extent of problems faced by specific categories of people who badly require safe shelter and rehabilitation.

CO2: Understand The Government response toward rescue, intervention and rehabilitation for people who require immediate attention.

CO3: 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.

CO4: Familiarize students with different psychological disorders.

CO5: Orient students on causes, symptoms and treatment of different psychological disorders.

CO6: Increase the helping tendency of the student towards specially challenged people

Core: XII—Experimental Psychology- III (Lab)

CO1: Gain practical knowledge.

CO2: Understand the ground reality of profession

CO3: Learn to write clinical case studies.

Elective: III--Human Resource Management

CO1: Familiarize students about the factors that contribute to achieving organizational

effectiveness, at the individual, group and structural level

CO2: Expose them to organizational system, change and its management.

CO3: Orient them to the concept of work stress and its management

CO4: Provide basic knowledge of key approaches and Models relating to Organizational Behavior.

CO5: Identify specific steps mangers can take to motivate the employees.

CO6: Apply different concepts relating to managing of conflicts, change, time and stress.

Elective: III--Training & Development in Organisation

CO1: Understand various concepts in Training and Development.

CO2: Gain an in-depth understanding of various Training Methods

CO3: Understand the principles of Organization Development and its Techniques

CO4: Provide basic knowledge of key approaches and Models relating to Organizational Behavior.

CO5: Identify specific steps mangers can take to motivate the employees.

CO6: Apply different concepts relating to managing of conflicts, change, time and stress.

Core: XIII-- Project- Work Report

Course outcomes (90 Hours)

CO1: Create thrust towards research.

CO2: Develop research aptitude among students.

CO3: Develop ability to apply various tools and techniques to solve day–to-day life problems.

B SC HOME SCIENCE - FASHION DESIGNING
[Three Years Regular Programme]
(For those who joined since 2021-22)

S.No	Semester/ Subject Code	Subject Name	Course Outcomes
1.	**I** **HBFDC11P**	**CORE I – Fundamentals of Apparel Designing [Theory cum Practicals]**	**CO 1:** Differentiate the types of sewing machines. **CO 2:** Understanding the basic tools. **CO 3:** Design parts of a garment. **CO 4:** Construct various parts of a garment. **CO 5:** Awareness of various finishes and its applications. **CO 6:** To avail good control over sewing machine
2.	**I** **HBFDC12**	**CORE II – Principles of Pattern Making**	**CO 1:** Understanding the term of pattern making. **CO 2:** Knowledge with tools and methodologies of pattern making **CO 3:** Develop the creative designs through draping, drafting, flat pattern method. **CO 4:** Analyse the designs and selection of pattern making principles. **CO 5:** Variations of basic pattern set using pattern making techniques. **CO 6:** Understanding the garment fitting, alteration, assembling techniques.
3.	**I** **HBFDA13P**	**FIRST ALLIED I – Fashion Illustration I – Practicals**	**CO 1:** Gain fashion illustration technique **CO 2:** Gain knowledge of illustration from different artists **CO 3:** Gain colouring techniques- pencil drawing, posters, water colours **CO 4:** Development of own individual styles
4.	**II** **HBFDC21P**	**CORE III – Fashion Illustration II Practicals**	**CO 1:** Capable to create their own style of illustration **CO 2:** Drawing shilloutes **CO 3:** Sketching human body, **CO 4:** Sketching various parts of body **CO 5:** To explore basics medium of art **CO 6:** Gained knowledge about the figure and different figure shapes
5.	**II** **HBFDC22**	**CORE IV – Indian Historic Costumes & Traditional Design**	**CO 1:** Familiarize the Indian traditional costumes **CO 2:** Various traditional of textile in India and to give an understand of their contemporary Status **CO 3:** Awareness about the cultural traditional costumes in various occasions **CO 4:** Understanding the various designs, motifs, colours used in different states **CO 5:** Gain and explore the various traditional methods used for decorative designing **CO 6:** Create various dying and printing and their terminologies
6.	**II** **HBFDA23P**	**FIRST ALLIED II-Construction for Children's Apparel Practicals**	**CO1:** Designing, drafting and constructing the following garments for the features Prescribed **CO2:** List the measurements required and materials suitable. Calculate the cost of the garment. **CO3:** Calculate the material required-Layout method and direct measurement Method
7.	**II** **HBFDX2**	**EXTRA CREDIT I – Clothing Care and Maintenance**	**CO 1:** Successfully perform laundering tasks using safety and sanitation procedures **CO 2:** Determine producers to receive, mark, and identify laundry **CO 3:** Demonstrate safety and sanitary procedures while laundering **CO 4:** Develop the employability characteristics **CO 5:** Apply their professional communication strategies
8.	**III** **HBFDC31**	**CORE V-Fashion Studies**	**CO1:** Recognize the meaning of fashion **CO2:** Discover the current trends in fashion **CO3:** Identify the trends in fashion industry

9.	**III** **HBFDC32**	**CORE VI – Wet Processing [Theory cum Practicals]**	**CO1:** Understand the wet processing sequence **CO2:** Understand the different preparatory processes required for dyeing **CO3:** Understand the various dying machineries
10.	**III** **HBFDA33P**	**SECOND ALLIED I- Construction for Women's Apparel Practicals**	**CO1:** Understand the wet processing sequence **CO2:** Understand the different preparatory processes required for dyeing **CO3:** Understand the various dying machineries
11.	**III** **HBFDX3P**	**EXTRA CREDIT – Boutique Internship**	**CO1:** Understanding the structure and functions of various departments in the organization **CO2:** Understanding the short term and long terms targets of an organization and its planning and execution methods **CO3:** Analysing the impact of organization on Society
12.	**IV** **HBFDC41**	**CORE VII– Fashion Communication**	**CO1:** Knowledge of opportunities and problems as regards the communication of clothing and fashion. **CO2:** Being able to critically evaluate the fashion design work of others and provide constructive criticism for ongoing work. **CO3:** Being able to deconstruct and reconstruct alternative collection developments from existing work
13.	**IV** **HBFDC42P**	**CORE VIII– Construction of Men's Apparel Practicals**	**CO1:** Constructs different garments of gents. **CO2:** Designing, drafting and constructing the following garments for the features prescribed **CO3:** List the measurements required and materials suitable. Calculate the cost of the garment
14.	**IV** **HBFDC43**	**CORE IX – Fashion Merchandising and Marketing**	**CO1:** Concept of marketing and merchandizing in the apparel industry in India. **CO2:** Procedure involved in the export of apparel. **CO3:** Understand the purpose of marketing strategies in the industries
15.	**IV** **HBFDA44**	**SECOND ALLIED II- Fabric Structure and Design [Theory cum Practicals]**	CO1: Identify the basics of fabric formation. CO2: Understand functioning of different looms and their functions. CO3: Compare the different types of knit structure and textile design.
16.	**IV** **HBFDX4P**	**EXTRA CREDIT –Textile Processing Internship**	Co1: To impart knowledge on working of apparel industry Co2: To gain practicals knowledge on different departments of apparel industry
17.	**V** **HBFDC51P**	**CORE X– Computer Aided Design CAD Practicals I**	Co1: Design and produce basic visual communication material Co2: Develop a logical system for managing digital files Co3: Illustrate accurate representations of garment technical information for communication purposes

18.	**V HBFDC52**	**CORE XI --Event Design and Management**	CO1: explain the types and principles of event management CO2: construct a suitable background effect using different fabrics CO3: compose and plan for various events CO4: apply different styles and layout for furniture and flower arrangement CO4: organize the event skilfully
19.	**V HBFDC53**	**CORE XII– Fashion Portfolio Preparation**	CO1: To gain knowledge about the design studio and fashion presentation. CO2:Construct professional trend presentation boards for a potential client's needs CO3:Identify and analyse new forecasting trends from publications and cultural events
20.	**V HBFDX5PW**	**MINI PROJECT**	CO1: Gain work experience in design development process through work experience within the industries
21.	**VI HBFDC61**	**CORE XIII – Fashion Photography and Modelling [Theory cum Practicals]**	CO1: Prepares students with the technical skills and hands on experience to thrive in the field. CO2: Understanding of both photographic techniques and fashion to create visuals which represent ideas and innovation.
22.	**VI HBFDC62**	**CORE XIV- Fashion Retailing & Research**	CO1: A broad theoretical and technological knowledge of current business and professional practices leading to marketing and merchandising fashion products both locally and globally CO2: Investigate, analyses and interpret trends on design, materials and trims in fashion and related industry either locally or globally CO3: Apply initiative and judgment in planning, problem solving and decision making in your study to demonstrate personal and professional attributes to be work ready
23.	**VI HBFDC63P**	**CORE XV– Fashion Portfolio Presentation Practicals**	CO1: Adapt their artistic abilities to support their future design careers. CO2: Assess, propose, and apply various techniques related to drafting, draping, and constructing of garments. CO3: Research and relate fashion design to a broader socio economic, historical, and environmental context,
24.	**VI HBFDC62**	**CORE XVI - Computer Aided Design CAD Practicals II**	CO1: Learn a variety of digital image making techniques applicable to the fashion industry from design conception through to manufacturing and sales CO2: Areas covered include technical illustration, image manipulation, document design, layout and digital formatting for varied outputs and end uses.
25.	**V HBFDE5A**	**ELECTIVE I a. - Apparel Quality Control**	CO1: Understand the relationship of forecasting to product development and the need for forecasting knowledge for all aspects of apparel and textile businesses. CO2: Integrate consumer, aesthetic and quantitative trend information into the product development process. CO3: Engineer new value into an existing product or line while holding costs.
26.	**V HBFDE5B**	**ELECTIVE I. b - Apparel Production Management**	CO1: Understand the organization and structure of the global textile/apparel complex. CO2: Develop textile/apparel products for specific target markets to meet expectations for cost and quality (materials, performance, and aesthetics). CO3: Demonstrate effective leadership, teamwork, and communication skills. CO4: Plan, develop, and present merchandise lines for identified market segments
27.	**V HBFDE5C**	**ELECTIVE II a. World Textiles and Costume**	CO1: Obtain basic knowledge on World Textiles CO2: Understand the techniques used for different World Textiles CO3: Understanding the regional variation on Costumes in Africa, America, Europe and Far eastern countries CO4: Recreating knowledge gained by developing period costumes using drapes

28.	**V HBFDE5D**	**ELECTIVE II b. Entrepreneur Development**	CO1: Develop entrepreneurship skills among the students in textile field. CO2: Familiarize the students with the process and procedure of setting up, new enterprises.
29.	**VI HBFDE6A**	**ELECTIVE III. a– Home Furnishing**	CO1: Know about different types of home textiles CO2: Understand the production method of different types of home textile products
30.	**VI HBFDE6B**	**ELECTIVE III b– Textile Testing**	Co1: Able to apply the statistical tools in textile testing Co2: Know the test of significance in textile testing Co3: Able to perform the measurement and evaluation of basic fibre properties
31.	**I HBFDE14**	**SKILL BASED ELECTIVE- Fibre to Yarn**	**CO 1:** Familiarize about natural and mam-made fibres **CO 2:** Awareness about its classification and its uses **CO 3:** Understanding the manufacturing process **CO 4:** To analyse the yarn classification and its types
32.	**II HBFDE24P**	**SKILL BASED ELECTIVE – Surface Embellishment Practicals**	CO1: Outline the basic embroidery stitches CO2: analyse the different methods of surface ornamentation techniques CO3: identify and represent traditional embroideries of India using basic stiches 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
33.	**III HBFDE34P**	**SKILL BASED ELECTIVE - Draping Techniques Practicals**	CO1: To acquire the skill of draping on dress form by introduction to terminology, fundamentals and Advanced techniques of draping CO2: Introduction about custom fitted, basic pattern to prepare many different styles CO3: To develop the structure of a garment design using draping techniques
34.	**IV HBFDE45P**	**SKILL BASED ELECTIVE- Fashion Accessory Designing Practicals**	CO1: To foster personal inspiration to design apparels with basic silhouettes CO2: Provides a brief analysis of how trends influence a contemporary collection
35.	**V HBFDE54P**	**SKILL BASED ELECTIVE – Textile Dyeing and Printing Practicals**	CO1: Understand the various textile printing processes CO2: Designing of fabric used in clothing, house hold textiles, decorative textiles and others. CO3: To create innovative surfaces and structures on fabric.
36.	**VI HBFDE65P**	**SKILL BASED ELECTIVE – Fashion Styling Practicals**	CO1: Acquire the skills to develop design capability in lifestyle products and objects CO2: Understand user behavior and identify trends CO3: Cultivate aesthetic sensibilities and build on craftsmanship skill.

THASSIM BEEVI ABDUL KADER COLLEGE FOR WOMEN

Department of Chemistry

I M.Sc. Chemistry

Subject list (Odd & Even)

Subject list - Odd semester

S. NO	Subject code	Subject Name	Course Outcome
1.	GMCHC111	Core-I-Organic Chemistry-I	**CO1**: To enable the students to learn the principles of reaction mechanism and modern reagents used for various reactions **CO2:** Mechanistic aspects in nucleophilic and electrophilic substitution **CO3**: Understood the principles and reaction mechanism involving aliphatic and aromatic nucleophilic substitution reactions **CO4**: To acquire basic knowledge about the aliphatic and aromatic electrophilic substitution reactions **CO5:** Mechanisms of addition reactions of C=C and C=O bonds and elimination reactions **CO6**: Learnt about the oxidation and reduction reaction
2.	GMCHC121	Core II-Inorganic Chemistry – I	**CO1**: To understand the role of various elements in the periodic properties **CO2**: To acquire basic knowledge about the acid-base systems and non-aqueous solvents **CO3**: To get an insight on the use of several inorganic rings, cages and clusters **CO4:** Learnt about the various methods involved in nuclear and radiation chemistry **CO5:** To understand the basic concepts of solid-state chemistry
3.	GMCHC131	Core –III Physical Chemistry-I	**CO1:** To enable the learners to understand the significance of classical thermodynamics **CO2**: To know the details of statistical thermodynamics **CO3**: To enable the leaners to understand the principles of chemical kinetics **CO4**: To understand the principles of surface chemistry **CO6:** The students will acquire the knowledge of chromatography and their applications

4.	**GMCHC14P**	**Core-IV Organic Chemistry Practical**	**CO1**: The students to understand the basic principles of lab techniques adopted in organic laboratories **CO2**: Learnt about the quantitative and qualitative analyses **CO3**: Learnt the preparation of organic compounds **CO4**: Preparation and purification of different organic compounds

Subject list - Even semester

S. NO	Subject code	Subject Name	Course Outcome
1.	**GMCHC211**	**Core-V-Organic Chemistry-II**	**CO1:** Mechanistic pathway of organic reactions **CO2:** Stereochemistry approach to planning organic syntheses **CO3**: Conversion of different functional group via rearrangement reaction **CO4**: To enable the students to learn the synthesis and the isolation of amino acids, proteins, enzymes and nucleic acids **CO5**: Learnt the knowledge of pericyclic reactions **CO6**: To impart the knowledge on photochemistry reactions
2.	**GMCHC221**	**Core –VI-Inorganic Chemistry – II**	**CO1:** Learnt the detailed study of synthetic inorganic complexes owing to the preparation as well as their reactivity and application which is very useful in the modern era **CO2**: To make the students to understand different reactions leads to the formation of various inorganic complexes and the mechanism involved **CO3:** To enable the student to understand about coordination chemistry **CO4**: To know the details of bioinorganic chemistry and inorganic photochemistry

3.	**GMCHC231**	**Core –VII Physical Chemistry-II**	**CO1**: Learnt about the various principles involved in group theory. **CO2**: Learnt the principles involved in molecular spectroscopy. **CO3**: Characterization by physical and spectroscopic techniques. **CO4**: To teach the students to understand the basic principles group theory and molecular spectroscopy **CO5**: Learnt the knowledge of electrochemistry. **CO6:** Versatile knowledge about the photochemistry, nuclear quadruple resonance and electron spin resonance spectroscopy
4.	**GMCHC24P**	**Core-VIII Inorganic Chemistry Practical**	**CO1**: The students to understand the basic principles of lab techniques adopted in inorganic laboratories **CO2:** Learnt about the quantitative and qualitative analyses **CO3**: To enable the learners to apply the principle in the semi-micro analysis of an inorganic salt mixture **CO4:** Preparation and purification of different inorganic complexes

II M.Sc. Chemistry

Subject list (Odd & Even)

Subject list - Odd semester

S. NO	Subject code	Subject Name	Course Outcome
1.	**GMCHC311**	**Core-IX-Organic Chemistry-III**	**CO1**: To study the detailed aspects of analytical techniques like Infrared, Ultravioletand Visible, Nuclear Magnetic Resonance and Mass Spectrometry **CO2**: Learnt the principles involved in small ring heterocycles **CO3**: Learnt about the various principles involved in terepenoids, alkaloids, flavonoids, steroids, porphyrins and prostaglandins
2.	**GMCHC321**	**Core X-Inorganic Chemistry – II**	**CO1**: To enable the student to learn the organometallic chemistry- I and II

			CO2: To enable the student in-depth study of spectral applications to the structural elucidation of inorganic compounds **CO3**: Detailed knowledge about the supramolecular chemistry **CO4**: Learnt the principles involved in medicinal bioinorganic chemistry
3.	**GMCHC331**	**Core –XI Physical Chemistry-III**	**CO1**: To understand the principles of quantum chemistry **CO2**: To enable the learners to acquire knowledge in corrosion chemistry **CO3**: Concept of computer applications in chemistry and their stability for many practical uses **CO4**: To understand the basic concept of group theory
4.	**GMCHC341P**	**Core-XII Physical Chemistry Practical**	**CO1**: The students to understand the basic principles of lab techniques adopted in physical laboratories **CO2**: To know about the practical applications of conductometry, potentiometry and pH metry **CO3**: Measurement of various physical and chemical properties **CO4**: Applying related experiments for their research work **CO5**: To get in-depth knowledge in adsorption, thermochemistry, chemical kinetics surface tension and distribution law experiments

Subject list - Even semester

S. NO	Subject code	Subject Name	Course Outcome
1.	**GMCHC41P**	**Core-XIII-Project**	**CO1**: To enable students to understand the basic concepts in chemistry project **CO2**: Experimental techniques for controlling the chemical reactions **CO3**: Measurement of various physical and chemical properties **CO4:** Applying related experiments for their research work

			CO5: To gain the hands-on experience of different instruments and will give the exposure of research potential **CO6**: To learn principles and procedures employed in thesis writing of chemistry and develop practical

DEPARTMENT OF MATHEMATICS [2020-21]

MSc MATHEMATICS

ODD Semester

S. No	Subject Code	Subject Name	Course Outcomes
1	GMMXC11	Algebra-I	**CO 1:**Abstract theconcepts of GroupsandRingstheoryandfield. **CO 2:**Understand the concepts ofGroups Homomorphisms andIsomomorphisms. **CO3:**Usetheconcepts ofSylow'sTheorem. **CO 4:**Analyze anddemonstrateexamples of ideals and quotientrings. **CO 5:**Usevarious canonical types of rings includingEuclidean Rings and PolynomialRings. **CO 6:**Explain the notions of an extension of aField.
2	GMMXC12	Analysis-I	**CO 1:**Abstract theconcepts of GroupsandRingstheoryandfield. **CO 2:**Understand the concepts ofGroups Homomorphisms andIsomomorphisms. **CO3:**Usetheconcepts ofSylow'sTheorem. **CO 4:**Analyze anddemonstrateexamples of ideals and quotientrings. **CO 5:**Usevarious canonical types of rings includingEuclidean Rings and PolynomialRings. **CO 6:**Explain the notions of an extension of aField.
3	GMMXC13	Ordinary and Partial Differential Equations	**CO 1:**Abstract theconcepts of GroupsandRingstheoryandfield. **CO 2:**Understand the concepts ofGroups Homomorphisms andIsomomorphisms. **CO3:**Usetheconcepts ofSylow'sTheorem. **CO 4:**Analyze anddemonstrateexamples of ideals and quotientrings. **CO 5:**Usevarious canonical types of rings includingEuclidean Rings and PolynomialRings. **CO 6:**Explain the notions of an extension of aField.
4	GMMXC14	Measure and Integration	**CO 1:** Understand how Lebesgue measure is defined on R. **CO 2:** Know the basic convergence theorem for Lebesgue Integrals.

			CO 3: Understand how measure may be used to construct integrals **CO 4:** Understand the shortcomings of the Classical Integration Theory due to Riemann. **CO 5:** Understand the relation between Riemann and Lebesgue integrals. **CO6:** The material covered in this course lays foundations for courses in Functional Analysis, Harmonic Analysis and ProbabilityTheory.
5	GMMXE1A	Numerical Analysis	**CO 1:** Solve an algebraic or transcendental equation using an appropriate numerical method. **CO 2:** Understand the difference operator and the use of interpolation. **CO 3:** Solving a differential equation using an Appropriate numerical methods. **CO 4:** Finite difference operators are also introduced to understand a different approach in Interpolation. **CO 5:** Understand numerical technique to find the roots of non- linear equation. **CO 6:** Understanding the concepts of Picard's methods.
6	GMMXE1B	Stochastic Process	**CO 1:** Apply the concepts of the Laplace transform of the ProbabilityDistribution. **CO 2:** Adaption capability of Stochastic Process and Markov Chains. **CO 3:** Understand the concepts of the Stability of Markov System. **CO 4:** Understand the concepts of Poison Process. **CO 5:** Understand the concepts of Queueing System and Model. **CO 6:** Gain knowledge of Poisson Process and Related Distribution.
7	GMMXX1	Fuzzy Analysis	**CO 1:** Gain knowledge of crisp sets and fuzzy sets. **CO 2:** Apply the rules of fuzzy logic in research and political science. **CO 3:** Understand the concepts of fuzzy logiccontrol. **CO 4:** Gain knowledge of solving similarityrelations.
8	GMMXC31	Functional Analysis	**CO 1:** Solve the approximation of continuous functions and linear maps. **CO 2:** Understand the statements and proof of important theorems. **CO 3:** Know the application of Open Mapping and Closed graph theorem. **CO 4:** Understand concept of Dual and Transposes with

			l^2 and l^p spaces as examples. **CO 5:** Acquired the knowledge of Inner product spaces and Riesz Representation theorems. **CO 6:** Know a basic idea of Functional Analysis underpins Modern Analysis
9	GMMXC32	Topology-II	**CO 1:** Know the Urysohn lemma is the existence of real valued continuous function on a Normed space. **CO 2:** Understand the Tychonoff theorem is of great usefulness to analysis **CO 3:** Understand the paracompactness & Metrization theorems **CO 4:** Understand the Function spaces and compact convergence **CO 5:** Gain the knowledge of nowhere differentiable function from analysis **CO 6:** Understand and apply the analysis concept in topology
10	GMMXC33	Classical Mechanics	**CO 1:**Enable thestudents to understand the basicconcepts of Mechanics **CO 2:**Preparethe students to understand basic concepts of lagrangianandHamilton's Approaches **CO 3:**Learnabout central force problem **CO 4:**Know the basicconcepts of Kepler Problem and its applications **CO5:**ProficientinVariationalPrinciple,Hamiltonprinciple andHamilton'sEquations **CO 6:**Familiarwith themain mathematical methods used in physics.
11	GMMXC34	Probability and Statistics	**CO 1:** Determine probabilities of events in Statistical Method. **CO 2:** Know about various type of Distribution. **CO 3:** Apply sampling theories and concepts as well as change of variable. **CO 4:** Use method of Moment and Moment GeneratingFunction. **CO 5:** Apply the Central Limit Theorem to Problem Involving Sums. **CO 6:** Provide essential tools in Theory of Statistics and its application.
12	GMMXE3B	Operations Research	**CO 1:**Understandthe concept of Applicationsof BranchandBound Algorithm. **CO 2:**Understand the concepts ofBackwardandForward Recursion in Dynamic Problems. **CO 3:**Gain knowledgeofDecisionMaking.

			CO 4: Understand the Elements of QueuingModel andPure BirthandDeath Model**.** **CO 5:**Understand the Concepts ofthe General Poisson QueuingModel. **CO 6:**Understand the Concepts of theInventoryModel andDynamic EOQ Model.

MSc MATHEMATICS

Even Semester

S. No	Subject Code	Subject Name	Course Outcomes
1	GMMXC21	Algebra-II	**CO 1:**Abstract theConcepts of Vector Spaces and Modules **CO 2:**Usethedefinition andproperties ofLinearTransformationsandMatrices ofLinearTransformations. **CO 3:**Understand the significance ofCanonicalForms and Nilpotent Transformations. **CO 4:**Analyze Jordan form and RationalCanonicalForms **CO 5:**Analyze the concept of Determinants andHermitians. **CO 6**: Understand the Traceand Transpose.
2	GMMXC22	Analysis-II	**CO1:** Introduce the motion of Reimann-stieltjes integral. **CO2:** Explore new theoretical dimensions in uniform convergence of Sequences and Series of Functions. **CO3:** Demonstrate the ability to manipulate and use power series. **CO4:** Demonstrate the ability to manipulate gamma functions, linear transformations and differentiation. **CO5:** Recognize the functions of several variables. **CO6:** Develop the ability to reflect on problems that are quite significant in the field of real analysis.
3	GMMXC23	Topology-I	**CO 1:** Understand the Topological Spaces. **CO 2**: Understand Continuous Functions and Metric Topology**.** **CO 3:** Illustrate the Concept of Connected and Components**.** **CO 4:** Gain the knowledge of Compact spaces in

			Topology**.** **CO 5:** Understand the Separation Axioms**.** **CO 6:** Understand the standard terms in Topology**.**
4	GMMXC24	Differential Geometry	**CO 1:** Gain knowledge of space curves. **CO 2:** Understand the concept of intrinsic equations**.** **CO 3:** Gain knowledge of metric. **CO 4:** Understand the basic knowledge of Geodesic curvature. **CO 5:** Understand and apply the fundamental concepts in Normal property of geodesic. **CO 6:** Compute Involutes and Evolutes**.**
5	GMMXE2A	Graph Theory	**CO 1:** Ability to develop Trees, Connectivity and Blocks. **CO 2:** Demonstrate the concept of Euler Tour. **CO 3:** Understand the concept of Edge Colouring. **CO 4:** Discuss the IndependentSet. **CO 5:** Analyze the concept of Vertex Colouring. **CO 6:** Translate real life situations to diagrammatic representations
6	GMMXC41	Complex Analysis	**CO 1:**Applytheorems related to the algebraandgeometryof thecomplexplane. **CO 2:**Applyresults of thetheoryofanalytic andholomorphicfunctions ofcomplexvariable. **CO3:**Identifythelocationandnatureofasingularityofafunctionandcalculatetheorderand the residue. **CO 4:**Applybasic results in Cauchyintegral theoryand its consequences,Residue Calculus. **CO 5:**Write solutions toproblemsand extend theoreticalproofs toexamples. CO 6:Apply techniques fromComplexAnalysisto deduceresultsin other areasofMathematics
7	GMMXC42	Advanced Statistics	**CO 1:** knowledge intesting the hypothesis for large and small samples. **CO 2:** Demonstrate understanding of the sufficient statistics. **CO 3:** Explain the comprehensive idea about the Bayesian Estimations. **CO 4:** Know the knowledge about statistical tests and estimations. **CO 5:** Students shall be able to effectively communicate results of Statistical Analysis. **CO 6:** Identify the features that describe a data distribution.
8	GMMXC43W	Project	**CO 1:**Developa criticalawareness ofatopicof currentresearch. **CO 2:**Acquire a deeperandsystematic understandingof

			selectedareas ofpuremathematics. **CO 3:**Cultivatea mathematical attitude and nurturethe interests.

BSc MATHEMATICS

ODD Semester

S. No	Subject Code	Subject Name	Course Outcomes
1	HBMX C11	Calculus	**CO 1:** Develop the problem solving skills. **CO 2:** Familiarize with the applications of differential calculus. **CO 3:** Understand the concept of multiple integral techniques **CO 4:** Ability to evaluate integrals by a repeated use of integration by parts
2	HBMX C12	TheoryofEquations	**CO 1:** Understand the properties of equations. **CO 2:** Understand the transformation of equations. **CO 3:** Gain knowledge to find the roots for the different types ofequations. **CO 4:** Understand the concept of Algebra
3	HBMX A13	Statistics - I	**CO 1:** Develop skills in basic statistical concepts **CO 2:** Apply the various measures of statistical parameters to real life **CO 3:** Know about correlation and regression **CO 4:** Understand and use the language of probability **CO 5:** Learn about random variables **CO 6:** Students will formulate complete and correct mathematical proofs.
4	HBMX E14	Trigonometry	**CO 1**: Recognize the reciprocal relationship between sine/cosecant, cosine/secant, and tangent. **CO 2:** Identifying the six trigonometric functions and solve their expansions. **CO 3:** Know the definition and details about hyperbolic functions and the inverse hyperbolic fuctions. **CO 4:** To expose trigonometry as a tool in solving problem.
5	HBCPA 14	Numerical Methods	**CO 1:** Analyze errors arising in numerical computation of solutions to mathematical and applied problems **CO 2:** Introduce the basic concepts of solving

			algebraic and transcendental equations **CO 3:** Apply numerical techniques for interpolation, differentiation and quadrature problems and analyze error issues. **CO 4:** Acquaint the knowledge of various techniques and methods of solving ordinary differential equations
6	HBCH A13	AncillaryMathematics-I	**CO 1:**Recognize and usethe binomialseries. **CO 2:**Solve exponential and logarithmic series. **CO 3:**Find thesolutionofroots. **CO 4:**Defineand determinethe rankofmatrix. **CO 5:**Understand the conceptof algebraic operation. **CO 6:**Explain the relationbetween hyperbolicand trigonometricfunction.
7	HBMX C31	Differential Equations	**CO 1**: Recognize the reciprocal relationship between sine/cosecant, cosine/secant, and tangent. **CO 2:** Identifying the six trigonometric functions and solve their expansions. **CO 3:** Know the definition and details about hyperbolic functions and the inverse hyperbolic fuctions. **CO 4:** To expose trigonometry as a tool in solving problem.
8	HBMX C32	GraphTheory – II	**CO 1**: Recognize the reciprocal relationship between sine/cosecant, cosine/secant, and tangent. **CO 2:** Identifying the six trigonometric functions and solve their expansions. **CO 3:** Know the definition and details about hyperbolic functions and the inverse hyperbolic fuctions. **CO 4:** To expose trigonometry as a tool in solving problem.
9	HBMX E34	Applied Statistics	**CO 1:** Analyse the least square method. **CO 2:** Understand the Interpolation concept. **CO 3:** Know the Fundamentals of Index number. **CO 4:** Demonstrate the ability to Analysis of Series.
10	HBITC 31	Mathematics for Computer Science-I	**CO 1:** Learn the concepts of matrices and set theory **CO 2:** Understand the basic principles of relations and its types **CO 3:** Have an understanding in the concepts of logic **CO 4:** Gain knowledge about graphs and trees.

11	HBCSA 33	Mathematical Foundation for Computerscience	**CO 1:** Understand the ideas of statements and notations in logic **CO 2:** Understand how to apply statements to normal forms **CO 3:** Understand the basic proofs involving sets and functions **CO 4:** Understand the concept of Boolean algebra and Boolean function **CO 5:** Understand the use of graphs **CO 6:** Communicate clearly and effectively using the technical language of the field.
12	HBCY A23	Basic Statistics	**CO 1:** Develop skills in basic statistical concepts **CO 2:** Apply the various measures of statistical parameters to real life **CO 3:** Know about correlation and regression **CO 4:** Analyse the least square method. **CO 5:** Understand the Interpolation concept. **CO 6:** Know the Fundamentals of Index number.
13	HBSYA 33	PsychologicalStatistics	**CO 1:**Identifythe Primaryobjectives of Psychologyin Statistical Method. **CO 2:**Capable ofPreparingFrequencytableusingRaw data. **CO 3:**Capable ofdrawingPie diagram, Histogram, FrequencyPolygonand Ogives. **CO4:**AcquaintedwiththeKnowledge ofvariousMeasuresofCentralTendencyandtheirCharesteristics. **CO 5:**CalculateandInterpretCorrelationand Co-efficient ofcorrelation. **CO 6:**Learnhow to useaChi Squaretest to evaluate thefit of Hypothesized Distribution.
14	HBNM 3MX	Quantitative Aptitude for CompetitiveExaminations-I	**CO 1:** Understand the concepts of Time and Work **CO 2**: Developing the Problem Solving Skill based on Profit and Loss **CO 3:** Developing the Problem Solving Skill based on Simple Interest **CO 4:** Developing the Problem Solving Skill based on Compound Interest
15	HBMX X3/ HBMX X30	Logical Reasoning / * Online Certification	**CO 1:** Demonstrate the ability to perform Logical Venn Diagrams and to solve different puzzles. **CO 2:** Use analysis of variance techniques to Alphabet test. **CO 3:** Understand the Alpha Numeric Sequence Puzzle. **CO 4:** Formulate the problem quantitatively and use appropriate inserting the missing character.

16	HBMX C51	Abstract Algebra - II	**CO 1:** Understand the basic concepts of Vector spaces **CO 2:** Use the definition and properties of linear transformations and matrices of LT and change of basis **CO 3:** Compute inner products and determine orthogonality on vector spaces **CO 4:** Compute with the characteristic polynomial, eigenvectors, eigenvalues and apply the basic results
17	HBMX C52	Dynamics	**CO 1:** Understand the concept of Laws. **CO 2:** Understand the Mathematical Ideas. **CO 3:** Gain the knowledge of the Behavior of Object in Motion. **CO 4:** Develop a working knowledge to handle Practical Problems.
18	HBMX C53	Astronomy	**CO 1 :** Gain Knowledge about Spherical Concepts in Space and Plane Trigonometrical Formula. **CO 2 :** Know about Celestial Phenomenon. **CO 3 :** Discuss how light is used by Astronomers to learn about Universe. **CO 4 :** Acquained Knowledge about Lunar Librations in Moon.
19	HBMX E5A	FourierandLaplaceTransforms	**CO 1:**Familiarize the students with the conceptof Fouriertransform. **CO 2:**Understand theFinite Fourier Transforms. **CO 3:**Gain knowledgeofsolvinglinearitypropertiesof laplaceand inverselaplaceTransforms. **CO 4:**Understanddifferential and integral problems. **CO 5:**Knowthe initial and final value theoremsof laplace transform. **CO 6:**Knowthe relationbetweenFourier Transform andLaplace transform .
20	HBMX E5B	Combinatorics	**CO 1:**Familiarize the students with the conceptof Fouriertransform. **CO 2:**Understand theFinite Fourier Transforms. **CO 3:**Gain knowledgeofsolvinglinearitypropertiesof laplaceand inverselaplaceTransforms. **CO 4:**Understanddifferential and integral problems. **CO 5:**Knowthe initial and final value theoremsof laplace transform. **CO 6:**Knowthe relationbetweenFourier Transform

			andLaplace transform .
21	HBMX E5C	FluidDynamics	**CO 1:** Able to find the gradient, divergence and curl of vector expressed in terms of orthogonal curvilinear coordinates. **CO 2:** Identity the fundamental kinematics of fluid elements. **CO3:** Explain how Bernoulli equation is related to conservation of energy. **CO 4:** Develop the knowledge of axi-symmertric flows. **CO 5:** Describe its applicability,potential and limitation. **CO 6:** Familiar with two dimensional flow
22	HBMX E5D	OperationsResearch	**CO 1:** To familiarize the concepts of Linear ProgrammingProblem **CO 2:** Mathematical tools that are needed to solve the Optimization Problem **CO 3:** Gain knowledge of solving the Transportation and Assignment Problem **CO 4:** Understand the Optimization Technique in Games and Strategies Problem **CO 5:** Gain knowledge of NetworkConstruction **CO 6:** Students can solve the Real life problem through OR techniques
23	HBMX E54	Non-Verbal Reasoning	**CO 1:**Understand thebasic conceptsof logicalreasoningskills **CO 2:**Understand thebasic conceptsofquantitative ability **CO3:**Testacandidate‟s overallKnowledgePowerofReasoning **CO 4:**To compete in various competitive exams like CAT, GATE, UPSC, GPSC etc.
24	HBMX X5/ HBMX X50	QuantitativeTechniques / *Online Certification	**CO 1:** Understand the concept of optimal sequence model and Processing through the job and machines. **CO 2:** Know the concept of application of dynamic programming model in industries. **CO 3:** Calculate the probabilities, and derive the marginal and conditional distributions of bivariate random variables. **CO 4:** Understand of the values and use of quantitative methods in administrative and optimal problem solving and decision making.

BSc MATHEMATICS

Even Semester

S. No	Subject Code	Subject Name	Course Outcomes
1	HBMXC21	Analytical Geometry - 3D&VectorCalculus	**CO1:**Improvetheiranalyticalabilityin Plane andStraight line. **CO 2:**Understand the conceptsof Sphere. **CO 3:**Explain the Conceptsof VectorDifferentiation and Divergence. **CO 4:**Understand the conceptsof VectorIntegration
2	HBMXC22	Graph Theory - I	**CO 1:**Ableto applybasicdefinition of GraphTheory. **CO 2:**Understand the conceptof connectedness **CO 3:**Determine the degree sequence ofgraph. **CO 4:**Abilityto provethe Eulerresult in Euleriangraph
3	HBMXA23	Statistics - II	**CO 1:** Understand the various statistical distributions **CO 2:** Know about sampling theory **CO 3:** Classify small samples along with errors **CO 4:** Understand the applications of various statistical tests **CO 5:** Understand different criterions **CO 6:** Apply them to real life problems.
4	HBMXE24	Fourierseries	**CO1:** Understand the basic concepts of Fourier series and Fourier expansion. **CO2:** Understand the half range Fourier cosine and sine series. **CO3 :** Understand the development in cosine and sine series **CO4:** Obtain a solution to the original problem or an approximation to it to a desired accuracy.
5	HBMXX2/ HBMXX20	ArithmeticforCompetitive Examinations / *Online Certification	**CO1:** Understand the Concepts of Mathematics with Emphasis on Analytical Abilities. **CO2:** Know about logical Rules to solve the Problem shortly. **CO3:** Gain Knowledge, Understanding and Attitude. **CO4:** Give Mental Strength.
6	HBCYA13	Discrete Mathematics	**CO1**:Students understand the basic knowledge about the mathematical ability **CO2:** Understand composite functions **CO3:** Improve the skill of matrix algebra **CO4:**Find the shortest path and spanning tree **CO 5:** Have a good foundation in the concept of Boolean Algebra. **CO 6:** Apply knowledge about discrete Mathematics in problem solving

7	HBCHA23	AncillaryMathematics-II	**CO 1:** Understand the various techniques of Operations Research. **CO 2:** Convert real life problems into mathematical models. **CO 3:** Design new simplex model using simplex and Big M **CO 4:** Understand to build and solve assignments models and transportation models. **CO 5:** Understand optimization techniques Business problems. **CO 6:** Gain knowledge to solve real life problems using concept of operations research.
8	HBMXC41	Abstract Algebra - I	**CO 1 :** Assess properties implied by the definitions of groups and rings, **CO 2 :** Analyze and demonstrate examples of normal subgroups, quotient groups **CO 3 :** Use the concepts of isomorphism and homomorphism for groups andrings. **CO 4 :** Produce rigorous proofs of preposition arising in the context of abstract algebra.
9	HBMXC42	Real Analysis - I	**CO 1 :** Lay a good foundation for Classical Analysis. **CO 2 :** Compare the Behaviour of Sequence and Series. **CO 3 :** Understand the techniques to test the Convergent and Divergent. **CO 4 :** Understand the terms Absolute and Conditional Convergence.
10	HBMXC43	Statics	**CO 1 :** Lay a good foundation for Classical Analysis. **CO 2 :** Compare the Behaviour of Sequence and Series. **CO 3 :** Understand the techniques to test the Convergent and Divergent. **CO 4 :** Understand the terms Absolute and Conditional Convergence.
11	HBMXE45	Verbal Reasoning	**CO 1**: Understand the concepts of Blood Relations and Directions Sense. **CO 2:** Gain Knowledge of Arithmetical and logical Reasoning. **CO 3:** Explain the Concepts of Data Sufficiency. **CO 4:** Appear all Competitive Examinations.
12	HBMXX4/ HBMXX40	Applications ofGroupTheory / *Online Certification	**CO 1**: Understand thegroup theoryin matrices. **CO 2:**Gain the knowledgeof rectangular, inverse, rankand nullitymatrices. **CO 3**: Know the group theoryin informationtheory. **CO 4**: Know the algebraicoperations ongroup codes and applicationofgroup theory.

13	HBITC 41	MathematicsforComputerScience-II	**CO 1:** Learn the concepts of matrices and set theory **CO 2:** Understand the basic principles of relations and its types **CO 3:** Have an understanding in the concepts of logic **CO 4:** Gain knowledge about graphs and trees.
14	HBCS A44	OperationsResearch	**CO 1:** Understand the various techniques of Operations Research. **CO 2:** Convert real life problems into mathematical models. **CO 3:** Design new simplex model using simplex and Big M **CO 4:** Understand to build and solve assignments models and transportation models. **CO 5:** Understand optimization techniques Business problems. **CO 6:** Gain knowledge to solve real life problems using concept of operations research.
15	HBNM 4MX	QuantitativeAptitudefor Competitive Examinations-II	**CO 1:** Gain knowledge of Indices and Logarithms. **CO 2:** Understand the concepts of the Permutation and Circular Permutation. **CO 3:** Understand the basic concepts of Arithmetic Progression and Geometric Progression. **CO 4:** Gain the knowledge based on Sets and Operations on Sets.
16	HBM XC61	RealAnalysis - II	**CO 1**: Understand thegroup theoryin matrices. **CO 2:**Gain the knowledgeof rectangular, inverse, rankand nullitymatrices. **CO 3**: Know the group theoryin informationtheory. **CO 4**: Know the algebraicoperations ongroup codes and applicationofgroup theory
17	HBM XC62	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:**UnderstandFermat'slittletheoremtoproverelationsinvolvingprimenumbers. **CO4:**UnderstandtheconceptofEuler'sphitheoremandPhiFunctions
18	HBM XC63	NumericalAnalysis	**CO 1:**Befamiliarwithcalculationand interpretationof errors in numericalcomputations **CO 2:**Befamiliarwithnumericalinterpolation and approximationof functions **CO 3:**Befamiliarwithnumericaldifferentiation and integration **CO 4:**Befamiliarwithnumerical solutionof differentialequations.

19	HBM XC64	Complexanalysis	**CO1:** Understand the significance of differentiability for complex functions and be familiar with the Cauchy Riemann equations**.** **CO2:** Know the Taylor and Laurent expansions of simple functions, determining the Singularities and calculating residues**.** **CO3:** Gain knowledge of Cauchy Residue theorem**.** **CO4:** Apply in almost every branch of Mathematics and is one of the Powerful tools for the Mathematicians.
20	HBMX E6A/ HBMX E6B	DiscreteMathematics / MathematicalModeling	**CO 1:** Gain knowledge in recurrence relations and generating functions **CO 2:** Understand the concept of logic operators. **CO 3:** Understand the techniques for replacement process **CO 4:** Recognize basic properties of lattices. **CO 5:** Have a good foundation in the concept of Boolean Algebra. **CO 6:** Apply knowledge about discrete Mathematics in problem solving./ **CO 1:** Learn techniques of mathematical modeling **CO 2:** Construct appropriate Ordinary differential equations with relevant parameters and conditions. **CO 3:** Ability to determine the basic theory of linear difference equations **CO 4:**Understand the concept of graphs and directed graph. **CO 5:** Gain knowledge about calculus of variations. **CO 6:** Formulate and specify a real life problems
21	HBM XE65	QuantitativeAptitude	**CO 1:**Afterthrough learningofaptitude will be able to criticallyevaluatevarious real lifesituationsbyrestoringtoanalysisofkeyissues and factors. **CO 2:**Able to readbetween the lines and understand variouslanguage structures. **CO 3:**Able to demonstratevariousprinciples involved in solvingmathematical problems andtherebyreducingthe time taken for performingjob functions. **CO 4:**Solve thesums byapplyingshortcut methods with the time management.

Certificate inLATEX

S. No	Subject Code	Subject Name	Course Outcomes
1	GCLT1	Documentation Techniques in LATEX	**CO 1**: Create input file and documents. **CO 2**: Knowschangingthe type style,symbols, multiline Formulas. **CO 3**: Create Bibliographyand table ofcontent using Latexprogramme. **CO 4**:InsertPictureandchange thecolors usingingraphicspackage inLatex. **CO 5**: Create line and pagebreaking and document pagestyleand different types ofBoxesusing Latex. **CO 6**: Knows how to make numbering,definitionand movinginformation around
2	GCLT2P	Pictures and Colors LabPractical	1. Create adocument usinginput files. 2. Create adocument using specialsymbols, dashes. 3. Create adocument usingline breaksandfoot notes. 4. Create adocument using sectioningcommand. 5. Create adocument usingQuotations. 6. Create adocument using type style. 7. Create adocument using commandsandenvironments. 8. Create adocument using mathematical formulas. 9. Create adocument using mathematicalsymbols. 10. Create adocument using arrays. 11. Create adocument usingtable. 12. Create adocument using bibliography. 13. Create adocument using clauses. 14. Create adocument using page style. 15. Create adocument usingpictures. 16. Create adocument usingcolors. 17. Create adocument using basic ofthe math index. 18. Create adocument usingfineprint. 19. Create adocument usingbibliographydatabase. 20. Create adocument usingmath mode environment. 21. Create adocument usingtabbingenvironment. 22. Create adocument usingfiles. 23. Create adocument usingline andpage breaking. 24. Create adocument usingboxes. 25. Create adocument using graphicspackages.

PG&RESEARCH DEPARTMENT OF COMMERCE
ACADEMIC YEAR 2021-2022

COURSE OUTCOME

Class: I BBA/B.COM (Odd Semester)

S.NO	COURSE CODE	COURSE NAME	COURSE OUTCOME
1.	HBBAC11/ HBCOC11	CORE I - Principles Of Management	CO 1: Gain valuable insights into the working of business organizations. CO 2: To understand the evolution of management thinking CO 3: To have self-assessment for developing managerial skills CO 4: To acquire adequate knowledge of the global environment in which business operate CO 5: To gain knowledge about critical thinking and problem solving skills of business
2.	HBBAC12	CORE II - Financial Accounting	CO 1: To recognize and understand ethical issues related to accounting profession CO 2: To deploy critical thinking skills for analysing financial data as well as the significance of differing financial accounting methods CO 3: To understand the current auditing standards and acceptable practices CO 4: To apply cost accounting methods to evaluate and project performance CO 5: To understand the significance of taxation of individual income
CLASS: IBBA/IB.COM			
3.	HBBAA13/H BCOA13	FIRST ALLIED I– Business Economics	CO 1: To understand the significance of the basic concepts of Business Economics CO 2: To understand the significance of demand, supply, equilibrium and their determinants CO 3: To analyse the production function CO 4: To understand the structure of market CO 5: To develop knowledge on policies and business cycle
Class : I BBA (Even Semester)			
1.	HBBAC22	CORE III – Marketing Management	CO 1: To familiarize the students with the marketing management concepts, principles and practices. CO 2: To understand the significance of marketing function in the overall managerial context CO3: To develop strategic thinking of students for effective marketing planning and decision making CO4: To analyze the reasons for the rapid growth of sales promotion C05: To gain knowledge on different channels of distribution

CLASS: I BBA /I B.COM			
2.	HBBAE24/ HBCOE24	SKILL BASED ELECTIVE- Customer Relationship Management	CO 1: To understand CRM concepts and the role of CRM in managing customers. CO 2: To understand customer life cycle, key concepts and various stages of the sales cycle. CO 3: To understand the use of technology including internet to support corporate CRM strategy. CO 4: To understand customer 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.
3.	HBBAX2	EXTRA CREDIT– Event Management	CO 1: To understand the specific objectives for the host/client. CO 2: To design a planning process that incorporates budgeting, project management, communication and evaluation tools. CO 3: To understand the various event elements (food and beverage, design, entertainment, site selection, etc.) and how to cost-effectively employ them. CO 4: To understand the role of the planner on site at the event, and the mind-set necessary to oversee successful event coordination. CO 5: To prepare budget for an event
Class : II BBA (Odd Semester)			
1.	HBBAC32P	CORE V – Accounting Package Lab	CO 1: To understand the Basic Accounting Concepts CO 2: To understand the power and potential of Tally Accounting Software from the business perspective CO 3: To understand the company setup & configurations CO 4: To record financial transactions CO 5: To prepare inventory report
2.	HBBAA33	SECOND ALLIED I – Production & Operations Management	CO1:To apply knowledge of fundamental concept of Production & Operations Management CO 2: To gain Knowledge in operation and production process CO 3: To know the measures for Sourcing & Supply Chain Management CO 4: To find out alternative production planning CO 5: To know the requirements for an effective control system
CLASS:II BBA/II B.COM/ II B.COM CA			
9.	HBBAE34 /HBCOE34/ HBCCE34	SKILL BASED ELECTIVE – Executive Development	CO 1: To construct a career development plan (roadmap) that outlines a path for a chosen career by delineating the skills required for the type of job CO 2: To improve presentation and delivery skills CO 3: To recognize individual skills strengths and gaps, and identify activities that can be used to acquire the skills associated with the gaps CO 4: To understand basic personality traits

10.	HBBAX3	EXTRA CREDIT - Principles And Practice Of Insurance	CO 1: To know the historical evolution of the general insurance markets in India CO 2: To understand the role of all players in the insurance markets CO 3: To understand the working of the Tariff Advisory Committee CO 4: To evaluate the implications of De- tariff regulations of IRDA CO 5: To examine the services rendered by the Loss Prevention Association of India
CLASS : III BBA(EVEN SEMESTER)			
1.	HBBAA44	SECOND ALLIED II – Strategic Management	CO 1: To acquire the basic knowledge of Strategic Management CO 2: To understand the concept of Strategic Analysis CO 3: To understand Portfolio and Analytical Models CO 4: To gain knowledge on issues of Management Information System CO 5: To identify the resource allocation for Strategic Control
2.	HBBAX4	EXTRA CREDIT -Industrial Relations	CO 1: To understand the basic concept of Industrial Relations CO 2: To gain knowledge on origin and growth of trade union CO3: To acquire knowledge on the status of collective bargaining in India CO 4: To study the field of labour relation with an interdisciplinary perspective CO5: To understand the procedure concerning worker participation
CLASS : III BBA (Odd Semester)			
1.	HBBAC51	CORE X– Organizational Behaviour	CO 1: To understand the evolution and growth of Organisational Behavior CO 2: To understand the challenges and opportunities of Organisational Behavior CO 3: To understand the ingredients of individual behaviour CO 4: To gain knowledge on classical theories and their limitations CO 5: To understand groups and teams
2.	HBBAC52	CORE XI - Business Environment	CO 1: To gain knowledge on the effects of government policy on the economic environment CO 2: To analyse the challenges of globalisation to Indian industries CO 3: To understand the legal framework of multinational corporations in India CO 4: To understand the human relationships involved in an organisation

3.	HBBAC53	CORE XII - Investment Management	CO 1: To understand the different investment avenues/ alternatives CO 2: To understand the characteristics of different financial assets CO 3: To gain knowledge of the various strategies followed by investment practitioners CO 4: To measure risk and return and understand their trade-off
4.	HBBAE5A	CORE ELECTIVE I - International Marketing	CO1: To understand the nuances and challenges of doing business in different cultural environment CO 2: To evaluate and design sustainable pricing strategies CO 3: To apply relevant distribution logistics CO 4: To gain knowledge in terms of international payment CO 5: To understand India‘s recent export import policies
5.	HBBAE5D	CORE ELECTIVE II - Financial Management	CO 1: To understand both the theoretical and practical aspects of Financial Management in business organization CO 2: To access financial information from a wide variety of sources and use this information to research and assess corporations CO 3: To analyze the finances of individual corporations both in terms of their performance and capital requirements CO 4: To compute cost of capital for various sources CO 5: To determine the capital structure of a firm
6.	HBBAX5	EXTRA CREDIT PAPER - Total Quality Management	CO 1: To understand the quality norms of organisation CO 2: To know the importance of quality management CO 3: To be conversant with SWOT analysis CO 4: To understand the benchmark for quality management CO 5: To understand the ISO certification process
CLASS : III BBA (Even Semester)			
1.	HBBAC62	CORE XIV- Management Information System	CO 1: To know the ingredients of Management Information System CO 2: To appreciate the application of MIS in promoting managerial effectiveness CO 3: To understand the dimension of information system CO 4: To understand the recruitment and analysis CO 5: Ability to know the product based information system

CLASS : III BBA/IIIB.COM			
2.	HBBAC63/ HBCCC63	CORE XV - Human Resource Management	CO 1: To understand the evolution of HRM CO 2: To understand the role of human resources policies and practices CO 3: To understand the various operative functions of HRM CO 4: To study the challenges of Human Resource Management CO 5: To understand e-HRM practices
3.	HBBAC64PW	CORE XVI Project	CO1: To plan, implement and control activities related to the project CO2: To demonstrate specialized knowledge and competencies in areas of concentration CO3: To demonstrate effective analytical and critical thinking skills in an organizational context CO4: To equip the students to face the challenges in the field CO5: To develop a balanced and diverse approach to solve problems on their own
4.	HBBAE6A	CORE ELECTIVE III - Business Law	CO 1: To understand the principles and concepts of Business Law CO 2: To understand the legal performance of contract CO 3: To understand special contracts for bailment and pledge CO 4: To gain knowledge in the methods of creation of agency CO 5: To know about the rights and duties of the seller and buyer
5.	HBBAE65	SKILL BASED ELECTIVE - Entrepreneurial Development	CO 1.To discern distinct entrepreneurial traits CO 2. To know the parameters to assess opportunities and constraints for new business ideas CO 3.To understand the process involved in selecting and screening a business idea CO4: To design strategies for successful implementation of business ideas CO5: To write business plan
6.	HBITE6A	ELECTIVE III – a) Organizational Behaviour	CO 1: To understand the evolution and growth of Organisational Behavior CO 2: To understand the challenges and opportunities of Organisational Behavior CO 3: To understand the ingredients of individual behaviour CO 4: To gain knowledge of classical theories and their limitations CO 5: To understand groups and teams: Functions models, structures & norms

NON MAJORELECTIVE (Odd Semester)

S.NO	COURSE CODE	COURSE NAME	COURSE OUTCOME
1.	HBNM3BA	Advertisement Management	CO1: To understand the concept, need, importance, utility of advertising, sales promotion and sales management CO 2: To understand the role of media in service sector CO 3: To use critical marketing factors that influence advertising decisions CO 4: Develop an advertising campaign plan that reflects an integrated marketing communication (IMC) perspective

NON MAJORELECTIVE (Even Semester)

S.NO	COURSE CODE	COURSE NAME	COURSE OUTCOME
1.	HBNM4BA	Basics Of Investment	CO 1: To understand the different investment avenues/ alternatives CO 2: To understand the characteristics of different financial assets CO 3: To gain knowledge of the various strategies followed by investment practitioners CO 4: To measure risk and return and understand the trade-off between them

CERTIFICATE COURSE (Odd Semester)

S.NO	COURSE CODE	COURSE NAME	COURSE OUTCOME
1.	FCEM1	Event Management – Theory	CO 1: To understand how to create an event generation that achieves specific objectives for the host/client. CO2: To design a planning process that incorporates budgeting ,project management ,communication and evaluation tools CO 3: To understand the various event elements (food and beverage, design, entertainment, site selection, etc.) and how to cost-effectively employ them. CO 4: To understand the role of the planner on site at the event, and the mind-set necessary to oversee successful event coordination. CO 5 : To prepare budget for an event

CERTIFICATE COURSE (Even Semester)

S.NO	COURSE CODE	COURSE NAME	COURSE OUTCOME
1.	FCEM2P	Event Management Activities – Practical	CO 1: To demonstrate knowledge of the issues and impacts of funding mechanisms, financial resources, budgeting and its application to event management CO 2 To apply knowledge of marketing and infrastructural requirements for an event; Resource Guide in Principles and Practices of Event Management CO 3: To reflect upon their ability to operate in an individual and team based environment and evaluate individual and team performance in running the event CO 4: To implement event management principles in a practical scenario and show competence in the techniques employed CO 5: To identify the appropriate legislation and regulations pertaining to the event industry, especially with regard to risk, health & safety, and its impact upon event management ➢ Planning of activities for an event ➢ Budget Preparation ➢ Look for Sponsors ➢ Selection of Event Member Council ➢ Duties allocated to Event Managers ➢ Drafting an Agenda ➢ Invitation ➢ Choosing the right venue, date and time ➢ Inviting the Resource Person

Class:I.B.COM/ I. B.COM CA (ODD SEM)

S.NO	COURSE CODE	COURSE NAME	COURSE OUTCOME
1	HBCOC12 HBCCC12	CORE II – Financial Accounting-I	CO1: Understand accounting principlesand concepts. CO2: Analyse, detect and rectifyaccounting errors. CO3: Deal with insurance claims andbills of exchange. CO4: Knowledge in different methods. CO5: Preparation of final accounts.
CLASS : I B.COM / I BBA / I B.COM CA			
2	HBCOE14P HBBAE14P HBCCE15P	SKILL BASED ELECTIVE – P C Package Lab	CO1: Wide practical knowledge in MS Office. CO2: Understand formatting techniques and presentation styles. CO3: Skills to use computers for personal and business purposes.

Class: I.B.COM(EVEN SEMESTER)

S.NO	COURSE CODE	COURSE NAME	COURSE OUTCOME
1	HBCOC21	CORE III – Financial Accounting-II	CO1. Knowledge in general aspects of accounting. CO2. Prepare financial statements in accordance with generally accepted accounting principles. CO3. Understand the role of accounting information system and its limitations. CO4. Knowledge in business operations and the impacts of alternative accounting methods CO5. Deal and maintain the accounts of consignments, joint ventures, non- trading concerns and single entry system and Royalties.
2	HBCOC22	CORE IV – Marketing	CO1: Knowledge in modern marketing concepts and procedures in business and society. CO2: Carryout different marketing functions. CO3: Knowledge in social, legal, ethical and technological forces in marketing decision CO4: Develop, present and defend an advertising persuasively. CO5: Workout and decide cost and benefit of marketing channels.
CLASS : I B.COM / BBA			
3	HBCOA23/ HBBAA23	FIRST ALLIED II – Business Statistics	CO1: Knowledge in statistical tools and its applications in business to develop statistical thinking. CO2: Computing skills to measure the central values, dispersion and relationships. CO3: Apply appropriate statistical techniques for summarizing and analyzing the data CO4: Draw inferences from business data using appropriate statistical tools. CO5: Use statistical parameters to predict business outcomes. CO6: Apply statistics for business decision making

CLASS; I B.COM / B.COM CA / BBA			
4	HBCOX2 /HBCCX HBBAC21/	EXTRA CREDIT CORE IV – Business Communication	CO1: Develop both written and oral business communication skills. CO2: Maintain healthy business relationship through effective communication skills. CO3: Motivate effective work groups and participation in group projects

Class:II.B.COM/ BBA (ODD SEM)

S.NO	COURSE CODE	COURSE NAME	COURSE OUTCOME
1	HBCOC31/ HBBAC31	CORE V / CORE VI – Cost Accounting	CO1: Understand concepts & techniques of cost accounts CO2: Knowledge in elements of cost and processing of cost accounts.. CO3: Better Management of elements of cost and its records. CO4: Deal independently in contract costing and process costing CO5: Assess business performance through costing accounts and reporting for decision making.
CLASS : II B.COM / II B.COM CA			
2	HBCOC32/ HBCCC32	CORE VI – Partnership Accounting	CO1. Acquire knowledge in Partnership Accounting principles & procedures. CO2.Treatment of goodwill, accumulated profit & losses and reserves. CO3.Independent maintenance of partnership firms accounts. CO4: Deal with reconstruction of partnership firm. CO5: Knowledge in the settlement of life insurance policies of partners.
3	HBCOA33	SECOND ALLIED I – Entrepreneurship Development	CO1 Acquire entrepreneurial skills. CO2 Apply knowledge of business concepts and functions in an integrated manner. CO3 Ability to get guide new entrepreneurs regarding financial assistance CO4 Ability to analyze the factors affecting a business to evaluate business opportunity CO5 Acquire a wide knowledge to start up a new business venture and prepare a project proposal for a new business.
4	HBCOX3	EXTRA CREDIT – International Marketing	CO1: Understand and discuss critically the nature and scope of international marketing. CO2: Skills to become competent global marketers in the fast changing global environment. CO3: Undertake strategic business analysis in order to develop appropriate international marketing objectives and strategies. CO4: Understand the new product development process and strategic features of new product development.

Class: II B.COM/ B.COM CA /BBA (EVEN SEM)

S.NO	COURSE CODE	COURSE NAME	COURSE OUTCOME
1	HBCOC41/ HBCCC41/ HBBAC41	CORE VII – Financial Markets And Services	CO1: Knowledge in financial markets and services. CO2: Understand functions and role of financial system in India CO3: Knowledge in SEBI policies.. CO4: Understand and share knowledge about mutual funds.
CLASS : II B.COM / B.COM CA / BBA			
2	HBCOC42/ HBCCC42/ HBAC42	CORE VIII – Banking Law And Practice	CO1: Knowledge in latest Banking Laws and Regulations. CO2: Analyse the different types of account and their role in Banking System CO3: Analyse the rights and duties of banker and customers. CO4: Understand the characteristics of negotiable instruments and its implications. CO5: Understand the significance of the e-Banking.
CLASS :II B.COM / B.COM CA / BBA			
3	HBCOA44 HBCCC43 HBBAC43	SECOND ALLIED II / CORE IX – Business Mathematics	CO1: Acquire problem solving and decision making skills through mathematical techniques. CO2: Understand mathematical logic and mathematical objects CO3: Compute and compare different ratios & proportions. CO4: Apply mathematics to business situations. CO5: Compute interests in different situations CO6: Solve equations
CLASS : II B.COM / B.COM CA / BBA			
4	HBCOE45 HBCCE46 HBBAE45	SKILL BASED ELECTIVE – Business Research Methods	CO1: Skills to apply different research methods and techniques. CO2: Understand and apply the major types of research design. CO3: Ability to prepare research report.

CLASS : III B.COM / III B.COM CA

S.NO	COURSE CODE	COURSE NAME	COURSE OUTCOME
1	HBCOC51P/ HBCCC51P	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	HBCOC52	CORE XI – Commercial Law	CO1: Understand the general principles of the Law of Contract and equitable and statutory rules relating to enforceable agreements. CO2: The negative impact of the agreements against public policy and its effects. CO3: Knowledge of void agreements and its effect. CO4: Understand the termination of a bailment and its implication. CO5: Understand the rights of a pawnor and a pledgee

CLASS : III B.COM/B.COM CA			
3	HBCOC53/ HBCCC53	CORE XII Corporate Accounting	CO1: Understand corporate sectors accounting activities. CO2: Knowledge in accounting treatment of share and debentures. CO3: Computation of profits and losses prior to incorporation. CO4: Ability to differentiate corporate accounting from public accounting. CO5: Skills to deal with amalgamation and reconstruction.
CLASS :III B.COM /B.COM CA			
4	HBCOE5A /HBCCE5A	COE ELECTIVE I – Income Tax Law And Practice – I	CO1. Knowledge in the provisions of income tax and its applications. CO2. Understand different residential status and tax exemptions. CO3. Income tax computation in a logical and effective way. CO4. Skills to compute tax for income under different heads. CO5. Competency to deal with case law and legislation to given set of tax rules. CO6. Skill to prepare tax forms
CLASS : III B.COM / B.OM CA / BBA			
5	HBCOE5B /HBCCE5B /HBBAE5B	CORE ELECTIVE I – Company Law	CO1: Knowledge in legal business transaction CO2: Skills to deal and negotiate contracts CO3: Ability to distinguish between sale, bailment, lien, pledge and Mortgage CO4: Awareness on agency and its implication CO5: Knowledge in Intellectual Property Rights
6	HBCOE5C/ HBCCE5C /HBBAE5C	CORE ELECTIVE II – Management Accounting	CO1: Clear understanding, analysis and assessment of business performance CO2: Finding balance between inflow and outflow of funds and optimal working capital management CO3: Decision making through marginal costing techniques CO4: Budget preparation keeping in view prospective changes in the business environment
CLASS : III B.COM /BBA			
7	HBCOE54 /HBBAE54	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

Class: III B.COM/ B.COM CA /BBA(Even Semester)

S.NO	COURSE CODE	COURSE NAME	COURSE OUTCOME
1	HBCOC61 /HBCCC61 /HBBAC61	CORE XIII – Practical Auditing	CO1: Knowledge in the basic principles of auditing CO2: Skills of an auditor in the light of his rights, duties and liabilities. CO3: Develop and demonstrate problem solving and critical thinking skills to solve unstructured auditing Problems CO4: Construct an audit programme for different concerns CO5: Ability to prepare audit reports

CLASS : III BCOM / B COM CA			
2	HBCOC62/ HBCCC62	COREXIV 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
CLASS : III BCOM / BCOM CA			
3	HBCOC64/ HBCCX4	CORE XVI / EXTRA CREDIT – Business Environment	CO1: Understand key concepts from economic, political, and social analysis pertaining to t he 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.
CLASS : III B COM / BCOM CA			
4	HBCOE6A/ HBCCE6A	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: Deal with compensation and retirement tax procedures. CO5: Computation of tax under various heads of Income for individual, firm and company CO6: Understand the organizational setup of income tax authorities of India.
CLASS : III BCOM / BCOM CA /BBA			
5	HBCOE6B/ HBCCE6B/ HBBAE6B	CORE ELECTIVE III – Services Marketing	CO1: Understand the theory and concepts pertaining to service marketing. CO2: Knowledge in Indian service sector CO3: Skills in pricing services and service promotion. CO4: Deal with service spots and service intermediaries as successful services marketer. CO5: Specialisation in finance, banking, health, education, telecommunication and consult any services.
6	HBCOE65	SKILL BASED ELECTIVE – Principles And Practices Of Insurance	CO1: Knowledge about insurance and its impact CO2: Deal with different life policies and risks CO3: Knowledge in marine and fire insurance.

CLASS:IB.COM CA(ODD SEMESTER)

S.NO	COURSE CODE	COURSE NAME	COURSE OUTCOME
1	HBITA13	ALLIED – Accounting Principles	CO1 Wide practical knowledge in Advanced Inventory Features in Tally software. CO2 Wide knowledge on Inventory management using Tally software. CO3 Maintain all the Inventory data and able to generate bill wise details for business practices
2	HBITA14P	ALLIED –Accounting Package Lab	Learning Outcome: Upon completion of the course, students will be able to acquire knowledge and skills as independent accountants
IBCOM CA(EVEN SEMESTER}			
1	HBCCC22	CORE IV – Business Statistics	CO1: Knowledge in statistical tools and its applications in business to develop statistical thinking. CO2: Computing skills to measure the central values, dispersion and relationships. CO3: Apply appropriate statistical techniques for summarizing and analyzing the data. CO4: Draw inferences from business data using appropriate statistical tools. CO5: Use statistical paramaters to predict business outcomes.
2	HBITA23	ALLIED – Cost And Management Accounting	CO1 Understand the concepts and techniques of cost and management accounting. CO2 Maintain various accounting and inventory ledgers available in cost accounting department. CO3 Select and differentiate the method of calculating stock consumption. CO4 Wide knowledge in budget preparation for planning and controlling of business operations. CO5 Opportunity to develop the deep knowledge in this discipline, critical thinking and problem solving capacity in business perspective
3	HBITA24P	ALLIED – Inventory Package Lab	CO1: Wide practical knowledge in Advanced Inventory Features in Tally software. CO2: Wide knowledge on Inventory management using Tally software. CO3: Maintain all the Inventory data and able to generate bill wise details for business practices
II BCOM CA (ODD SEMESTER)			
1	HBCCX3	EXTRA CREDIT– Marketing	CO1: Knowledge in modern marketing concepts and procedures in business and society. CO2: Carryout different marketing functions. CO3: Knowledge in social, legal, ethical and technological forces in marketing decision CO3: Develop, present and defend an advertising persuasively. CO5: Workout and decide cost and benefit of marketing channels.
2	HBCPA34	ALLIED – Accounting Principles	CO1: Wide practical knowledge in Advanced Inventory Features in Tally software. CO2: Wide knowledge on Inventory management using Tally software.

			CO3: Maintain all the Inventory data and able to generate bill wise details for business practices
3	HBCPA35P	ALLIED –Accounting Package Lab	Learning Outcome: Upon completion of the course, students will be able to acquire knowledge and skills as independent accountants
4	HBNM3CO	NON MAJOR ELECTIVE – Modern Banking	CO1: Knowledge & skills to apply the modern techniques and concepts of banking in day to day life. CO2:Clarity in different types of accounts CO3: Share the basic practical knowledge about the role of different types of banks CO4: Knowledge about ethical and legal laws of banking System in India. CO5 : Skills in E-banking system like e-Cheque, e-Wallets & e-Cash.
CLASS:IIBCOM CA(EVEN SEMESTER)			
1	HBNM4CO	NON MAJOR ELECTIVE – Salesmanship	CO1: Acquire salesmanship skills CO2: Understand the basic concepts of personal selling. CO3: Knowledge about the types, duties, selection and training of salesman.

CLASS : I B.COM PA (Odd Semester)

1.	HBPAC11	Principles Of Management	CO 1: Gain valuable insights into the working of business organizations. CO 2: To understand the evolution of management thinking CO 3: To have self-assessment for developing managerial skills CO 4: To acquire adequate knowledge of the global environment in which business operate CO 5: To gain knowledge about critical thinking and problem solving skills of business
2.	HBPAC12	Financial Accounting- I	CO1: Understand accounting principles and concepts. CO2: Analyse, detect and rectify accounting errors. CO3: Deal with insurance claims and bills of exchange. CO4: Knowledge in different methods. CO5: Preparation of final accounts.
3.	HBPAA13	FIRST ALLIED I– Business Economics	CO 1: To understand the significance of the basic concepts of Business Economics CO 2: To Understand the significance of Demand, Supply, Equilibrium and their determinants CO 3: To analyse the production function CO 4: To understand the structure of market CO 5: To develop Knowledge on policies and business cycle
4.	HBPAE14P	SKILL BASED ELECTIVE – P C Package Lab	CO1: Wide practical knowledge in MS Office. CO2: Understand formatting techniques and presentation styles. CO3: Skills to use computers for personal and business purposes.
I BCOM PA (EVEN SEMESTER)			
1.	HBPAC21	Financial Accounting- ii	CO1. Knowledge in general aspects of accounting.

			CO2. Prepare financial statements in accordance with generally accepted accounting principles. CO3. Understand the role of accounting information system and its limitations. CO4. Knowledge in business operations and the impacts of alternative accounting methods. CO5. Deal and maintain the accounts of consignments, joint ventures, non- trading concerns and single entry system and Royalties.
2.	HBPAC22	Business Law	CO 1: Understand the principles and concepts of business law. CO 2: Understand the legal performance of contract CO 3: Understand special contracts for bailment and pledge CO 4: To know about the rights and duties of the seller and buyer CO 5: To study the transfer of ownership
3	HBPAA23	First allied II - Business Statistics	CO1: Knowledge in statistical tools and its applications in business to develop statistical thinking. CO2: Computing skills to measure the central values, dispersion and relationships. CO3: Apply appropriate statistical techniques for summarizing and analyzing the data. CO4: Draw inferences from business data using appropriate statistical tools. CO5: Use statistical parameters to predict business outcomes.
4.	HBPAE24	Skill Based Elective Logical Reasoning	CO1: Practice critical thinking in academic and non-academic pursuits. CO2: Distinguish the basic elements of arguments. CO3: Acquire a basic working knowledge of propositional and predicate logic. CO4: Identify logical relations among statements and ar logically complex statements. CO5: Communicate the substance and meaning of mathematical problems and solutions.
5	HBPAX2	Extra credit - Business Communication	CO1: Develop both written and oral business communication skills. CO2: Maintain healthy business relationship through effective communication skills. CO3: Motivate effective work groups and participation in group projects.
II B COM PA(ODD SEMESTER)			
1	HBPAC31	CORE V - Cost Accounting	CO1: Understand concepts & techniques of cost accounts. CO2: Knowledge in elements of cost and processing of cost accounts. CO3: Better Management of elements of cost and its records. CO4: Deal independently in contract costing and process costing CO5: Assess business performance through costing accounts and reporting for decision making.
2	HBPAC32	Core Vi - Partnership Accounting	CO1. Acquire knowledge in Partnership Accounting principles & procedures. CO2.Treatment of goodwill, accumulated profit & losses and reserves.

			CO3.Independent maintenance of partnership firms accounts CO4: Deal with reconstruction of partnership firm. CO5: Knowledge in the settlement of life insurance policies of partners.
3	HBPAA33	SECOND ALIED – I ACCOUNTING STANDARDS	CO1: Know about the standard setting process CO2: Get knowledge about the Accounting Standards 1 - 5 CO3: Get acquainted with the Accounting Standards 7 - 12 CO4: Understand the Accounting Standards 13 - 19 CO5: Gain knowledge of Accounting Standards 20 – 29
4	HBPAE34	SKILL BASED ELECTIVE – EXECUTIVE DEVELOPMENT	CO 1: To communicate effectively and professionally in business situations through writing, speaking, an listening CO 2: To construct a career development plan (roadmap) that outlines a path for a chosen career by delineating the skills required for the type of job CO 3: To improve presentation and delivery skills CO 4: To Recognizing individual skills strengths and gaps, and identify activities that can be used to acquire the skills associated with the gaps CO 5: To understand basic personality traits
5	HBPAX3	EXTRA CREDIT – INTERNATIONAL MARKETING	CO1: Understand and discuss critically the nature and scope of international marketing. CO2: Skills to become competent global marketers in the fast changing global environment. CO3: Undertake strategic business analysis in order to develop appropriate international marketing objectives and strategies. CO4: Understand the new product development process and strategic features of new product development.
II-BCOM PA(EVEN SEMESTER)			
1	HBPAC41	CORE VII- ADVANCED FINANCIAL ACCOUNTING	CO1: Understand the investments accounts and fire insurance claims CO2: Understand the methods of accounting for hire purchase transactions CO3: Understand the instalment payment system and differentiate it from hire purchase transactions CO4: Know the accounting treatment with regard to branches CO5: To deal with the inter-departmental transfers and their accounting treatment
2	HBPAC42	CORE VIII – BANKING LAW AND PRACTICE	CO1: Understand the relationship between banker and customer CO2: Analyse the different types of account and their

			role in Banking System CO3: Analyse the rights and duties of banker and customers CO4: Understand the characteristics of negotiable instruments and its implications CO5: Understand the significance of the e-Banking.
3	HBPAC43	CORE – IX GOODS AND SERVICES TAX	CO1: Understand the direct and indirect taxes CO2:Understand the concept of GST CO:3 Acquainted with the charge of GST and the exemptions from GST CO4: Understand the input tax credit and tax invoice CO5: Knowledge in payment of tax and furnishing of returns
4	HBPAA44	Second Alied Ii - Business Mathematic	CO1: Acquire problem solving and decision making skills through mathematical techniques. CO2: Understand mathematical logic and mathematical objects. CO3: Compute and compare different ratios & proportions. CO4: Apply mathematics to business situations. CO5: Solve equations
5	HBPAE45	Skill Based Elective Business Research Methods	CO1: Understand the types of research. CO2: Understand the steps in research. CO3: Apply the major types of research design. CO4: Understand the sampling and its types. CO5: Ability to prepare and present research report.
III-BCOM PA (ODD SEMESTER)			
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 effects. CO3: Knowledge of void agreements and its effect. 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	CO1: Understand corporate sectors accounting activities. CO2: Knowledge in accounting treatment of share and debentures. CO3: Computation of profits and losses prior to incorporation. CO4: Ability to differentiate corporate accounting from public accounting. CO5: Skills to deal with amalgamation and reconstruction.

4	HBPAE5A	CORE ELECTIVE I – INCOME TAX LAW AND PRACTICE – I	CO1. Knowledge in the provisions of income tax and its applications. CO2. Understand different residential status and tax exemptions. CO3. Income tax computation in a logical and effective way. CO4. Skills to compute tax for income under different heads. CO5. Competency to deal with case law and legislation to given set of tax rules.
5	HBPAE5B	CORE ELECTIVE II – COMPANY LAW	CO1: Understand the characteristics of company and Specialties of Companies Act 2013. CO2: Understand the different kinds of companies. CO3: Understand the Memorandum of Association. CO4: Understand the Articles of Association. CO5: Understand the winding up of company
6	HBPAE5C	Core Elective-I Auditing And Assurance – I	CO1: Understand the basic principles and relationship of auditing. CO2: Understand the concept such as working papers, audit evidence, internal check etc., CO3: Understand the Internal Control and Computerized Information System (CIS) CO4: Understand the vouching of receipt and trading transactions CO5: Understand the audit of payment transactions
7	HBPAE5D	Core Elective Ii - Financial Management	CO 1:To understand both the theoretical and practical aspects of Financial Management in business organization CO2: To access financial information from a wide variety of sources and use this information to research and assess corporations CO3: To analyze the finances of individual corporations both in terms of their performance and capital requirements CO4: To compute cost of capital for various sources CO5: To determine the capital structure of a firm
8	HBPAE54	Skill Based Elective Corporate Compliance Management	CO1: To provide thorough understanding and appreciation of composite legal due diligence in regard to certain corporate activities CO2: To understand the compliance management CO3: To Understand the Secretarial Audit
III-BCOM PA/BCOM			
9	HBPAX5 /HBCOX5	Extra Credit - Total Quality Management	CO 1: To understand the quality norms of organization CO 2: To know the importance of quality management CO 3: To be conversant with SWOT analysis CO 4: To understand the benchmark for quality management CO 5: To understand the ISO certification process
III-BCOM PA(EVEN SEMESTER)			
1	HBPAC61	Core Xiii – Auditing And	CO1: Understand the verification of various kinds of

		Assurance – Ii	assets and liabilities. CO2: Understand the company audit and audit of debentures. CO3: Know the procedure of appointment, reappointment, filling up of casual vacancies and removal of auditor. CO4: Ability to prepare audit reports. CO5: Understand 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	HBPAE6A	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	HBPAE6B	Core Elective Iii – Supply	CO1: Understand the various terms in Supply Chain

		Chain Management	Management CO2: Understand the supply chain integrates CO3:Knowledge about customer value in supply chain management. CO4: Understand the procurement and outsourcing CO5: Understand the Dimension of Customer Value
7	HBPAE65	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
CLASS –MCA/CERTIFICATE AND OTHER COURSE			
1	HMCAE3C	Financial And Management Accounting	CO1. Understand financial, cost and management accounting principles and concepts for cost ascertainment, planning, control and decision making. CO2. Prepare final accounts for external reporting and managerial decision making. CO3. Analyse and assess business performance through accounting ratios. CO4. Optimal use of working capital through efficient management of inflow and outflow of funds. CO5. Project appraisal and evaluation through capital budgeting.
2	HCDM1	Fundamentals Of Digital Marketing	➢ To understand the importance of the digital marketing to success in business ➢ To manage customer relationships across all digital channels and build better customer relationship. ➢ To create a digital marketing plan starting from SWOT analysis to defining a target group. To perceiving ways of their integration taking into consideration available budget
3	HCDM2P	Marketing Automation (Practical)	➢ To acquire knowledge on the application of Digital Marketing for their own business. After completing this course, students will be able to work as digital marketers
4	HBES2	General Interest Course I – Environmental Studies	CO1: Understand key concepts about the renewable and non-renewable resources of the environment. CO2: Appreciate the concept, Structure and ecological pyramids of ecosystem. CO3: Reflect critically about the different Protection Act of Biodiversity and its conservation. CO4: Creates awareness about the environmental pollutions and its management. CO5: Understand the natural resource exhaustion, related health issues in humans ➢

5	: GHBVE4/HBVE4	General Interest Course Ii - Human Rights	CO 1: Understand the concept of the major religions in India CO 2: The Values and Ethics to tackle the fundamental question of human life CO 3: Understand the intension and help one's own self CO 4: Know what is morally right CO 5: The right way to treat fellow human
6	GBWS5/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* women's psychological reactions to** puberty, marriage, motherhood, abortion, birth control, menopause, etc
7	GBSED6/HBSED6	. Extra Credit - Skills For Employability Development For All The Final Year Ug Students (For Those Who Joined Since 2021-22)	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
CLASS: I M.COM.COM(ISEM)			
1	: GMCOC11	Core I - International Business Environment	CO1. Knowledge in globalization and its impact. CO2. Face the global challenges of different business environments. CO3. Evaluate the impact of global business issues. CO4. Awareness on international business opportunities. CO5. Apply market research to support an organization in international business decision making. CO6. Address the impact of cultural differences
2	GMCOC12	Core Ii - Advanced Business Statistics	CO1: Understanding and application of statistical concepts and procedures in business. CO2: Application of measures of relationship in business decision making. CO3: Usage of probability analysis in day to day business management. CO4: Skills to use the right choice of statistical testing mode. CO5: Hypothesis testing through standard error for normally distributed populations.

			CO6: Non-parametric testing for routine decision making.
3	: GMCOC13	Core Iii - Advanced Accountancy	CO1: Conceptual understanding of financial accounting system. CO2: Competency to maintain accounting standards. CO3: Ability to maintain Branch and Departmental accounts. CO4: Deal with Partnership accounts. CO5: Manage the reconstruction of firms. CO6: Skills to manage Insolvency, Voyage, Investments, Insurance, Hire Purchase and Instalment accounts.
4	: GMCOC141	Core Iv - Advanced Cost Accounting	CO1. Understand the basic concepts and techniques of costing. CO2. Better management and control of elements of cost. CO3 Apply costing methods and techniques appropriate to different businessconcerns. CO4. Acquire knowledge in process costing. CO5. Skills to deal with reconciliation of cost and financial accounts and Usage of integral costing, activity based costing
5	: GMCOE1A1	Elective I - Financial Markets And Services	CO1: Understand the role and functions of the financial system in reference to macro economy. CO2: Assess the various theoretical concepts underlying money and capital markets CO3: Understand the functioning of primary and secondary markets CO4: Knowledge in the field of financial markets and of financial instruments. CO5: Knowledge in financial services
6	GMCOE1B1	Elective I - Business Management	CO1: Knowledge in the process of Business Management. CO2: Professional skills as a competent business manager. CO3: Acquire skills for business planning. C04: Decide on direction and flow of authority and responsibility in an organisation. CO5: Competency to motivate and exercise control to achieve the overall objective of an organisation.
7	GMCOX11	Extra Credit- Practical Banking	CO1: Knowledge about banking system in India.

			CO2: Understanding the role of different banks in the economic development. CO3: Knowledge about the role of RBI. CO4: Understand and apply the theory and praxis of modern banking CO5: Skill to use latest applications in banking in day to day life
I MCOM EVEN SEMASTER			
1	GMCOC221	Advanced Management Accounting	CO1: Knowledge in concepts of management accounting and its applications. CO2: Clear understanding, analysis and assessment of business performance. CO3: Finding balance between inflow and outflow of cash and optimal workingcapitalManagement. CO4: Decision making through marginal costing techniques. CO5: Budget preparation and Analysis of variance to overcome deficiencies
2	GMCOC23	Core Vii - Organizational Behaviour	CO1. Understand human behaviour for a healthy working atmosphere. CO2. Analyze individual and group behaviour, that influences organisational climate. CO3. Understand different motivational theories and evaluate motivational strategies in theorganisational set up. CO4. Evaluate the appropriateness of various leadership styles used in organizations. CO5. Assess the elements of group dynamics and evaluate their impact in the organisation. CO6. Understand the effect of organisational change and culture in working relationships withinthe organisation.
3	GMCOC24	Core Viii - Business Research Methods	CO1: Understanding the basic framework of research process and different types of research. CO2: Develop practical skills in collecting and analysing both quantitative and qualitative data. CO3: Knowledge in various methodological tools used for social and scientific research. CO4: Develop research designs using research techniques. CO5: Locate problem areas in organisational settings and plan, organise, design, and conduct research to solve the identified problems. CO6: Skills in designing and drafting research report.
4	GMCOE2A1	Elective Ii - Global Marketing	CO1. Acquire comprehensive, theoretical and practical competencies in strategic marketing management in the global environment. CO2. Understand and assess the challenges of

			turbulent business environment. CO3. Knowledge in ethical consequences of strategic decisions towards all stakeholders. CO4. Gain a market oriented, global, entrepreneurial and sustainable mind set. CO5. Evaluate and design sustainable marketing and business strategies in global environments. CO6. Skills as a competent global marketer.
5	GMCOX21	Extra Credit - Insurance And Risk Management	CO1. Identify the various types of risk and aware about the risk management techniques CO2. Communicate the commercial risk management applications, policies and business liability CO3. Analyse the various risk among different persons. CO4. Apply the risk management techniques in retirement planning and annuities CO5. Analyse the risk management environment in Government and Non-Government
II MCOM ODD SEMESTER			
1	GMCOC311	Core Ix -Corporate Accounting	CO1: Comprehensive understanding of Corporate Accounting for the preparation and presentation of financial statements. CO2: Maintain the final accounts of companies. CO3: Deal with the Internal reconstruction accounting procedures. CO4: Maintain the accounts of Banking, Insurance, Electricity, Holding and Subsidiary companies. CO5: Preparation of Human Resource Accounting and Inflation Accounting.
2	GMCOC321	Core X -Direct Taxes	CO1: Knowledge in basic concepts of direct taxes. CO2: Understand the residential status and tax exemptions. CO3: Knowledge in corporate tax laws and tax planning. CO4: Computation of Taxable income under different heads. CO5: Assessment of tax for HUF, partnership firm and companies
3	GMCOC331	Core Xi -Investment Management	CO1: Clarity of basic concepts of investments and strategies to be followed CO2: Mastery in risk and return analysis of securities CO3: Analyze and evaluate relevance of securities for investment CO4: Skills in Portfolio evaluation of performance CO5: Timely revision and diversification of portfolio
4	GMCOC34	Core Xii -Human Resource Management	CO1. Understand the basic concepts of Human Resource Management. CO2 .Implement the methods and procedures for recruitment ,selection, training & placements. CO3. Ability to motivate and appraise performance. CO4. Skills to solve HR issues. CO5.Effective management of human resources in an organisation
5	GMCOE3B1	Elective Iii - Entrepreneurship	CO1: Understand the creative process of business opportunity identification and screening.

		Development	CO2: Identify capital resources for new ventures. CO3: Knowledge in institutional support to entrepreneurs with a special focus to women. CO4 : Ability to overcome the issues/problems in starting a new venture. CO5: Execution of entrepreneurial skills in business with business ethics, values and integrity.
6	GMCOX31	Extra Credit - Total Quality Management	CO1: Understand the concept of Total Quality Management CO2: Understand the method of inspection and quality appraisal CO3: Acquire knowledge in the theory of sampling CO4: Acquaint with the Quality management system CO5: Acquaint with the implementation of 9000 series.
II MCOM EVEN SEMESTER			
1	GMCOC411	Core Xiii-Financial Management	CO1. Understand the concepts, goal and functions of financial management. CO2 .Compute the cost of capital and construct capital structure of an organisation. CO3. Familiarity in leverages and capital budgeting. CO4. Efficiency in working capital management. CO5 .Execute dividend policies and theories.
2	GMCOC421	Core Xiv-Indirect Taxation	CO1: Knowledge in various provisions of indirect taxes. CO2: Clarity on all aspects of indirect taxes. CO3: Knowledge in GST Act and Levy and collection of CGST CO4: Knowledge in Integrated GST Act CO5 Awareness on legal implications of Central Sales Tax
3	GMCOC43PW	Core –Xv-Project	CO1: Able to 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 and cost the human and physical resources required, and make plans to obtain the necessary resources. C05: Develop stronger inclination towards flexibility and fearlessness in their approach to problem solving. CO6: Demonstrate a strong working knowledge of ethical and professional responsibility