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Sarat Centenary College

Dhaniakhali, Hooghly

Founded: 1976
Re-Accredited by NAAC (CGPA: 2.33)
Recognised Under UGC 2F&12B
WB Govt. Aided
Affiliated to The University of Burdwan

This is to certify that the attached Programme Outcome, Programme Specific Outcome and Course Outcome was followed in the Session 2018-2019 at Sarat Centenary College, Dhaniakhali, Hooghly, West Bengal.

SARAT CENTENARY COLLEGE * Estd. 1976 HOOGHLY * DHANIAKHALI *

[DR SANDIP KUMAR BASAK]
Principal, Sarat Centenary College
Principal & Secretary,
Sarat Centenary College
P.O.- Dhaniakhali, Dist.- Hooghly

SARAT CENTENARY COLLEEGE

The College is affiliated to the University of Burdwan, West Bengal. Thus, the College follows the guidelines and syllabus prescribed by the Affiliating University.

B.A. PROGRAMME: PROGRAMME OUTCOME

PO1) An effective mix of courses gives students a broad understanding of language, literature, and social sciences, leading to a deeper comprehension of the human and cultural context through sociological, historical, geographical, and environmental perspectives. Having a grasp of oneself in relation to the broader community can be beneficial when considering the bigger picture of humanity.

PO2) The enduring aim or target might be seen as a more mature capacity for learning and understanding that is anticipated from a student post Higher Secondary Level, which results in accumulating knowledge. Applying this knowledge can also help enhance analytical skills and use them effectively in relevant situations. Using this application in the typical manner would result in advancing to a higher level of learning focused on synthesis. Collectively, these factors could potentially lead to a more mature cognitive and emotional reaction when assessing situations and human circumstances.

PO3) In addition to studying science and commerce, a bachelor student of arts can bring a unique perspective that enhances the practical application of technical knowledge for the benefit of a specific community.

PO4) Having a deeper grasp of culture within society can be beneficial for a student pursuing a Bachelor of Arts in fields related to civil services or Human Resource Development.

PO5) A high level of language proficiency, accompanied by literary knowledge and a broad cultural understanding, can result in effective communication skills required for interviews and group discussions.

PO6) By combining linguistic skills and cultural understanding with software development, students can find opportunities in job sectors related to web design, digital editing, creating digital books, and maintaining digital archives.

PO7) Typically, a student in the BA Programme is expected to excel in journalism, publishing, editing, news analysis, and acting as a human bridge.

Program Specific Outcomes

B.A. (Honours) Degree Programme Specific Outcomes:

PSO1) In-depth knowledge: Graduates will gain a thorough understanding of their chosen Honours discipline. This includes knowledge of the core concepts, theories, methodologies, and historical developments within the field.

PSO2) Critical thinking: The program hones students' critical thinking skills, enabling them to analyze information and arguments objectively. Graduates will be able to evaluate evidence, identify biases, and construct sound arguments.

PSO3) Problem-solving: The curriculum equips students with the ability to solve complex problems creatively and independently. Graduates will be able to apply their knowledge and analytical skills to tackle new challenges and develop innovative solutions.

PSO4) Effective communication: The program emphasizes effective communication skills, both written and oral. Graduates will be able to articulate complex ideas clearly and concisely, tailoring their communication to different audiences.

PSO5) Lifelong learning: The program fosters a spirit of lifelong learning and intellectual inquiry. Graduates will be equipped with the tools and motivation to continue learning and expanding their knowledge base throughout their lives.

PSO6) Subject-specific skills: In addition to the general skills mentioned above, B.A. (Honours) programs develop proficiency in research methodologies and other key skills relevant to the chosen discipline. For instance, a History Honours program might focus on developing research skills in archival work and historical analysis, while an English Honours program might emphasize literary criticism and close reading techniques.

B.A. General Degree Programme Specific Outcomes:

PSO1) Broad-based knowledge: The B.A. General program provides students with a broad foundation in various disciplines within the Humanities and Social Sciences. Graduates will gain exposure to a range of subjects, fostering a well-rounded understanding of the social world and human experience.

PSO2) Analytical skills: The program cultivates critical thinking and analytical skills. Graduates will be able to approach information critically, identify assumptions, and evaluate arguments effectively.

PSO3) Communication skills: The curriculum emphasizes developing strong communication skills, both written and oral. Graduates will be able to express themselves clearly and persuasively, adapting their communication style to different contexts.

PSO4) Lifelong learning skills: The program instills a love of learning and a desire for continuous intellectual development. Graduates will be equipped with the tools and motivation to pursue lifelong learning opportunities.

PSO5) Employability skills: The B.A. General program equips students with a range of transferable skills that are valuable in the job market. These skills include critical thinking, problem-solving, communication, research, and information literacy. Graduates will be well-positioned to pursue careers in various fields, including education, government, non-profit organizations, and the private sector.

Program Outcome for B.Sc. Degree Courses

The curriculum for the B.Sc. discipline in CBCS Course is thoughtfully planned and shows great potential. The main course would enhance students' understanding of the subject and boost their confidence in both academic and industry settings. Generic electives facilitate the integration of different interdisciplinary courses to achieve the goal of designing the curriculum. The implementation of Skill Enhancement Courses (SEC) would allow students to acquire more advanced knowledge, not only in their main subjects but also in related interdisciplinary subjects, both in theory and practice. The addition of Discipline Specific Courses (DSE) has provided students with the chance to learn about a variety of important natural and industrial materials, as well as develop expertise in using different software through appropriate training. In short, the students who complete this curriculum will have the ability to share their knowledge and skills for academic, entrepreneurial, and industrial success.

PO-1: Expertise in a specific field: Graduate students should be able to show extensive knowledge. Students have the ability to systematically address their subjective issues, work autonomously, and ultimately arrive at a rational conclusion.

PO-2: Proficient in communication: The course includes both fundamental and advanced instruction to equip graduate students with the skills needed to articulate the subject matter using technical writing and oral presentations.

PO-3: Being a critical thinker and problem solver is emphasized in the course curriculum, which offers elements to assist graduate students in enhancing their critical thinking skills.

PO-4: Promotion of curiosity: The course curriculum aims to cultivate a sense of inquisitiveness in students by encouraging them to ask relevant questions, plan, and report experimental research.

PO-5: Working well with others: The course structure allows for students to participate as team members in laboratory and field settings, promoting teamwork skills.

PO-6: The course structure aims to help graduate students become skilled project managers by providing education on project management, writing, planning, ethical standards, and regulations for scientific project operation.

PO-7: Proficient in digital skills: The course is structured to provide a solid understanding and practical experience in data analysis, utilizing library search tools, software usage, and related computational
tasks.

PO-8: Awareness of ethical considerations is necessary for graduate students, and they can gain this through the course by understanding and developing ethical reasoning.
course of study. Students have the ability to raise awareness about the environment, society, and promote growth beyond the scientific field as well. Degree holders should have a deep understanding of environmental issues and concerns. Graduate students are expected to fulfill various social obligations. The curriculum of the course aims to help graduate students discover alternative environmentally friendly pathways for sustainable development. The course also teaches them about the reasons behind environmental pollution and helps them implement eco-friendly policies in all areas instead of harmful ones.

PO-9: Continuous learner: The program layout aims to instill a practice of ongoing learning by incorporating advanced ICT methods and other electronic tools such as e-books and e-journals for personal academic development.

PO-10: Enhancing analytical skills and job prospects: The curriculum is structured to equip B.Sc. graduates with the ability to work with various software, quality instruments, and cutting-edge technologies. Engaging in this beneficial practice at the graduate level will provide students with promising job opportunities in industries, in addition to academic and administrative roles.

Program Specific Outcomes of B.Sc. (Honours) and General Degree Courses

B.Sc. (Honours) Degree Programme Specific Outcomes:

PSO1: Deep Subject Knowledge: Graduates will emerge with a profound understanding of the scientific principles, theories, and experimental techniques fundamental to their chosen Honours discipline (e.g., Chemistry, Physics, Zoology). This empowers them to delve deeply into specialized areas within the field and make significant contributions to the field's advancement.

PSO2: Analytical Prowess: The program hones students' analytical skills, transforming them into adept problem-solvers. Graduates will be able to dissect complex scientific problems, break them down into manageable parts, and apply their knowledge to devise effective solutions. Imagine a B.Sc. (Honours) Chemistry graduate analyzing intricate chemical reactions and proposing innovative catalysts.

PSO3: Laboratory Expertise: The curriculum emphasizes hands-on laboratory experience, equipping students with the practical skills required to conduct scientific experiments meticulously. Graduates will be proficient in using sophisticated scientific equipment, collecting and interpreting data, and drawing sound scientific conclusions. Picture a B.Sc. (Honours) Zoology graduate confidently performing dissections, analyzing microscopic organisms, or extracting DNA with precision.

PSO4: Scientific Communication: The program cultivates clear and concise scientific communication skills, both written and oral. Graduates will be able to present complex scientific findings effectively, using appropriate terminology and tailoring their communication to diverse audiences (scientific peers, policymakers, or the general public). Imagine a B.Sc. (Honours) Physics graduate presenting research findings on renewable energy at a conference, explaining technical concepts in a way everyone can understand.

PSO5: Critical Thinking and Research: The program fosters a spirit of critical thinking and inquiry. Graduates will be able to critically evaluate scientific literature, identify biases, and formulate well-defined research questions. They will possess the skills needed to design and conduct independent research projects, contributing new knowledge to their chosen field. Think of a B.Sc. (Honours)

Botany graduate critically analyzing research papers on plant adaptations and proposing new research avenues in this area.

PSO6: Discipline-Specific Applications: In addition to the general skills mentioned above, B.Sc. (Honours) programs equip students with specialized skills relevant to their chosen field. For instance, a B.Sc. (Honours) Mathematics Honours program might delve into advanced computational techniques, while a B.Sc. (Honours) Geology program might focus on field mapping and resource exploration.

B.Sc. General Degree Programme Specific Outcomes:

PSO1: Scientific Literacy: The B.Sc. General program equips students with a solid foundation in scientific concepts and principles across various scientific disciplines. Graduates will understand the scientific method, acquire basic laboratory skills, and gain exposure to diverse scientific fields, fostering a well-rounded scientific literacy.

PSO2: Problem-Solving Skills: The program fosters a problem-solving approach by introducing students to real-world scientific challenges. Graduates will be able to apply their scientific knowledge to analyze problems logically and develop innovative solutions. Imagine a B.Sc. General graduate proposing an environment-friendly solution to a local water pollution issue.

PSO3: Quantitative Reasoning: The curriculum emphasizes developing quantitative reasoning skills. Graduates will be able to interpret and analyze scientific data effectively, draw logical conclusions, and apply mathematical tools to solve scientific problems. Picture a B.Sc. General graduate confidently working with complex datasets, calculating statistics, and presenting their findings in a clear and concise manner.

PSO4: Communication and Scientific Writing: The program aims to equip students with effective communication skills, both written and oral. Graduates will be able to explain scientific concepts clearly to a diverse audience, write scientific reports effectively, and follow scientific writing conventions. Think of a B.Sc.

General graduate explaining the importance of scientific research to a group of school children, using engaging language and relatable examples.

PSO5: Scientific Awareness and Lifelong Learning: The B.Sc. General program fosters scientific awareness and a love for lifelong learning. Graduates will possess the skills and motivation to stay updated on scientific advancements and continue their intellectual development throughout their lives. Imagine a B.Sc. General graduate actively reading science magazines, attending science talks, and participating in citizen science projects.

Program Outcome for B.Com Degree Courses

Programme Outcomes [POs]

PO1: Enables learners to urge theoretical and down to earth presentation within the commerce segment which incorporates Monetary Accounts, Taken a toll Bookkeeping, Administration Bookkeeping, Coordinate Tax collection, Backhanded Tax assessment, Commerce, Showcasing Administration, Trade Law, Financial matters, Commerce Morals, Natural ponders etc.

PO2: Develops communication aptitudes and construct certainty to confront the challenges of the corporate world.

PO3: Enhances the capability of choice making at individual and proficient levels.

PO4: Makes understudies industry prepared and creates different administrative and bookkeeping aptitudes for way better proficient openings.

PO5: Develops entrepreneurial aptitudes among learners.

PO6: Strengthens their capacities in changed regions of commerce and industry pointing towards all-encompassing advancement of learners.

PO7: Thus, after completing graduation the learners create a intensive understanding of the basics in Commerce and Back.

Program Specific Outcomes [PSOs] in general

PSO1: Learner's wander into Administrative positions, bookkeeping regions,

keeping money Divisions, Reviewing, Company Secretarial capacities, instructing, Experts Stock Specialists, Protections specialists, Government Employment etc.

PSO2: Enables learners to demonstrate themselves totally different Proficient examinations like CA, CMA, CS, WBA&A, CAT, GRE, MPSC, UPSC etc.

PSO3: Learners encourage move towards investigate within the field of Commerce.

PSO4: Enables understudies to illustrate Dynamic learning of different charge issues and assess shapes related to people and businessmen and setting up their possess commerce startup.

PSO5: The tremendous syllabi covers different areas of commerce and bookkeeping which makes a difference understudies get a handle on viable and hypothetical information.

B.Com. (Honours) Degree Programme Specific Outcomes:

PSO1: Financial Expertise: Graduates will emerge with a comprehensive understanding of financial principles, accounting practices, and analytical techniques. They will be adept at analyzing financial statements, making informed investment decisions, and navigating the complexities of the financial world. Imagine a B.Com. (Honours) graduate confidently conducting financial audits for corporations, developing financial models for startups, or recommending investment strategies to clients.

PSO2: Accounting Proficiency: The program equips students with the skills to perform accounting tasks meticulously, ensuring accuracy and adherence to established financial regulations. Graduates will be proficient in using accounting software, preparing financial statements, and maintaining robust accounting records. Picture a B.Com. (Honours) graduate meticulously recording financial transactions, preparing tax returns flawlessly, and ensuring compliance with accounting standards.

PSO3: Business Acumen: The curriculum cultivates a keen understanding of business processes, decision-making strategies, and the dynamics of the contemporary business environment. Graduates will be able to critically analyze market trends, identify business opportunities, and formulate effective business

plans. Think of a B.Com. (Honours) graduate devising a strategic marketing campaign for a new product launch, negotiating lucrative business deals, or proposing innovative solutions to operational challenges within a company.

PSO4: Quantitative and Analytical Skills: The program emphasizes developing strong quantitative and analytical skills. Graduates will be proficient in using statistical and mathematical tools to analyze financial data, assess business risks, and make data-driven decisions. Imagine a B.Com. (Honours) graduate performing complex financial calculations, interpreting market research data, and constructing insightful charts and graphs to present their findings.

PSO5: Research and Communication: The program cultivates research skills and the ability to communicate effectively. Graduates will be able to conduct independent research in specific areas of commerce and finance, presenting their findings through written reports and oral presentations. Think of a B.Com. (Honours) graduate researching the impact of government policies on the stock market, presenting their findings at a conference, and engaging in discussions with experts in the field.

PSO6: Specialization and Career Focus: In addition to the general skills mentioned above, B.Com. (Honours) programs may offer specialized tracks in areas like Accounting & Finance, Management, or Banking & Insurance. These tracks equip students with advanced knowledge and skills relevant to their chosen career path.

B.Com. General Degree Programme Specific Outcomes:

PSO1: Commercial Knowledge: The B.Com. General program provides students with a solid foundation in core business and commercial subjects. Graduates will gain exposure to accounting principles, marketing strategies, financial management practices, and economic theories, fostering a well-rounded understanding of the commercial landscape.

PSO2: Business Literacy: Graduates will develop essential business literacy skills, enabling them to navigate the complexities of the commercial world. They will understand fundamental business concepts, interpret financial information, and possess a working knowledge of legal and ethical considerations in business practices. Imagine a B.Com. General graduate confidently explaining basic accounting principles to a small business owner, helping them with financial planning, and advising them on essential business regulations.

PSO3: Employability Skills: The curriculum equips students with a range of transferable skills highly sought after by employers. These skills include critical thinking, problem-solving, communication, teamwork, and data analysis. Graduates will be well-positioned to pursue diverse career paths in various sectors, including banking, finance, insurance, retail, marketing, and government services. Picture a B.Com. General graduate confidently participating in team meetings, analyzing sales data to identify customer trends, and proposing effective marketing strategies.

PSO4: Adaptability and Lifelong Learning: The B.Com. General program fosters an adaptable and lifelong learning mindset. Graduates will possess the skills and motivation to stay updated on evolving business trends, adapt to new technologies, and continuously improve their knowledge and skillset throughout their careers. Imagine a B.Com. General graduate actively attending workshops on digital marketing, mastering new accounting software, and remaining abreast of changing business regulations.

Accounting, Taxation and Finance areas:

PSO1: The course makes a difference competitors to procure information within the field of bookkeeping, tax collection, inspecting, hazard administration, budgetary bookkeeping, administrative financial matters, commerce law and trade communications.

PSO2: Learners can seek after careers as budgetary experts additionally create distant better;a much better;a higher;a stronger;an improved">a much better understanding of the markets as this course gives an in-depth understanding of the fundamental qualities and regions of ability required for such occupations.

PSO3: Understudies get openings to investigate numerous career ways like speculation and portfolio administration, stock advertise, security examination, shared finance and capital advertise investigation, bookkeeping field, budgetary field etc.

PSO4: The program aims to develop proficient abilities among understudies and construct a solid establishment in accounts, Finance and Morals which is able advantage themselves as well as the society.

Banking, Insurance, Risk management areas:

PSO1: B.Com in Managing an account and Protections is created as per the necessities of the Keeping money and Finance Industry where understudies learn keeping money operations, controls, financial examining, offering of money related items and administrations.

PSO2: The uncommonly planned syllabus makes prepared experts who can handle different money related exercises related with managing an account and protections segments.

PSO3: Specialization in Banking and Protections makes a difference understudies to function proficiently within the Managing an account and Protections environment within the financial service segment and handle various advances utilized within the field of Managing an account and Protections.

PSO4: It gives understudies hypothetical and application-based information within the keeping money and monetary division and explanatory abilities to work with different monetary apparatuses, such as administrative organizations and worldwide markets.

SARAT CENTENARY COLLEGE
DEPARTMENT OF BENGALI

Under-Graduate Study in Bengali (Honours)

Programme Outcomes

PO 1. The CBCS program gives students the opportunity to read their own subjects as well as other subjects.
PO 2. The depth of their study has increased as a result of more frequent assessments than in previous programs.
PO 3. As the questions are short, there increased the tendency of deep reading.
PO 4. This program has the opportunity to increase their credit score.
PO 5. They are staying ahead to the way of post-graduate.
PO 6. Later in this course they will be able to suitable for different fields of employment.
PO 7. As the syllabus covers the whole subject, their knowledge about the subject matter is increasing.
PO 8. Increased their writing skills, reading skills and also answer writing skills in their examination.

Programme Specific Outcomes

PSO 1. The syllabus focuses on the ancient, medieval and modern history of Bengali literature.
PSO 2. Students are getting to know about the heritage of Bengali literature and its culture.
PSO 3. Their knowledge of other subjects besides Bengali has also increased.
PSO 4. Their knowledge is increased to learn about Bengali language, linguistics and grammar.
PSO 5. As they had the opportunity to study English, they gained knowledge about this language.
PSO 6. The opportunity has been created to enter the world of work after completing the course.
PSO 7. Getting a chance to read about every field of literature.
PSO 8. He also learned to compare literature with other languages.
PSO 9. The field for taking critical lessons in literature has been prepared.
PSO 10. They are prepared for Post-Graduation and research work from this course.

Course Outcomes

Semester	I
Course-Code	CC-1/CC-2/GE-1/AECC-1
Credit Value	22

CC-1

Course-Title: Bangla Sahityer Itihas (Prachin & Madhyayug)

CO 1. Special ideas are being made about the history of ancient and medieval Bengali literature.

CO 2. Knowledge of ancient and medieval society and religious history is being created.

CC-2

Course-Title: Chhando, Alankar

CO 1. They learn about rhythm and rhetoric.

CO 2. Realizing the importance of rhythm and rhetoric in Bengali literature.

GE-1

Course-Title: Any discipline other than Bengali

CO 1. Students of subjects other than Bengali are studying Bengali literature.

CO 2. Their knowledge of Bengali literature and language is being created.

AECC-1

Course-Title: ENVS

CO 1. Environmental awareness is being created among them through reading environmental science.

Semester	II
Course-Code	CC-3/CC-4/GE-2/AECC-2
Credit Value	20

CC-3

Course-Title: Baishnab Padabali, Sakto Padabali

CO 1. A large part of Bengali literature is 'Vaishnava Padabali' and Vaishnava religion. They also known about this 'Vaishnava Padabali' and Vaishnava religion in medieval period.

CO 2. They have learned to determine the relationship between history of Eighteenth-century society and 'Shakta Padabali'.

CC-4

Course-Title: Ramayana, Annadamangal

CO 1. They have gained knowledge about Bengali and Indian traditions by reading Krittibas's 'Ramayana' which is the wealth of Bengali literature

CO 2. There is an opportunity to determine the importance of 'Annadamangal' poetry in aspect of social history in eighteenth century.

CO 3. They also learn about the history of medieval society.

GE-2

Course-Title: Any discipline other than Bengali

CO 1. Gradually, depth is being created about Bengali literature among students of other subjects.

AECC-2

Course-Title: Communicative English/MIL

CO 1. The knowledge of students of Bengali literature about English language and literature is increasing.

CO 2. They are learning about English literature and Western literary theory.

Semester	III
Course-Code	CC-5/CC-6/CC-7/GE-3/SEC-1
Credit Value	26

CC-5

Course-Title: Bangla Sahityer Itihas (1801-1950)

CO 1. They are taking lessons about history of Nineteenth and twentieth century's literature and society.

CO 2. Learning to understand about the development of Bengali literature.

CC-6

Course-Title: Bhasatattwa

CO 1. Basic knowledge about linguistics is being created.

CO 2. Learning about different aspects of modern linguistics.

CC-7

Course-Title: Unishataker Kabya

CO 1. They have taken a lesson about history of Bengali poetry in nineteenth century.

CO 2. They learned to read the history of Bengali poetry.

CO 3. They have learned to understand the nineteenth century renaissance by taking the initial lessons of 'MeghnadhaBadh Kabya'.

GE-3

Course-Title: Any discipline other than Bengali

CO 1. Their knowledge about the history of Bengali literature is being formed.

SEC-1

Course-Title: Bangla Byakaran

CO 1. Reading different aspects of Bengali grammar has increased their idea about the structure of Bengali language.

Semester	IV
Course-Code	CC-8/CC-9/CC-10/GE-4/SEC-2
Credit Value	26

CC-8

Course-Title: Kabita

CO 1. Their ideas about Rabindranath's poetry are being formed.

CO 2. They have learned to analyze to Modern poetry.

CC-9

Course-Title: Upanyas

CO 1. Learned to take lessons in Bengali novels.

CO 2. Learned to critical lessons in the novel.

CC-10

Course-Title: Natak

CO 1. Students have learned to discuss the structure of Bengali drama.

CO 2. They have learned to relate the society with the subject of drama.

GE-4

Course-Title: Any discipline other than Bengali

CO 1. Students of other subjects are getting to know about Bengali linguistics.

CO 2. They have learned the formation of Bengali language.

SEC-2

Course-Title: Rachanashaktir Naipunya

CO 1. Writing skills have increased.

CO 2. Learned how to write letters, reports and essays.

Semester	V
Course-Code	CC-11/CC-12/DSE-1/DSE-2
Credit Value	24

CC-11

Course-Title: Galpo

CO 1. They have created an idea about short stories by reading Rabindranath's short story.

CO 2. They gained knowledge about Rabindranath's literature and philosophy.

CO 3. By reading modern short stories, students have learned to know the interrelationship of contemporary society and literature.

CC-12

Course-Title: Prabandha O Prachya Kabyatattwa

CO 1. They have been introduced with the essay literature.

CO 2. Gained knowledge about ancient poetry theory in India.

DSE-1

Course-Title: Unish Sataker Bangla Kabya O Prabandha

CO 1. Gained knowledge of the history of nineteenth-century poetry.

CO 2. They have come to know the dynamics of essays literature in Nineteenth-century.

DSE-2

Course-Title: Unish Sataker Bangla Natak O Kathasahitya

CO 1. They have known about the history of the origin and development of Bengali drama in nineteenth century.

CO 2. Gained knowledge of the development of novels and short stories in nineteenth century.

Semester	VI
Course-Code	CC-13/CC-14/DES-3/DSE-4
Credit Value	24

CC-13

Course-Title: Sanskrita O Ingreji Sahityer Itihas

CO 1. Students learn about the history of Sanskrit literature.

CO 2. They are able to realize the great tradition of Sanskrit literature.

CO 3. They knew about the history of English literature.

CC-14

Course-Title: Sahityer Rup-Riti O Sangrup

CO 1. Their knowledge has been created about various forms of modern literature.

CO 2. Early knowledge about modern literary theory has been created.

CO 3. Gained knowledge about the structure of different forms of literature.

DSE-3

Course-Title: Bishsataker Swadhinata-Purbabarti Bangla Kathasahitya

CO 1. They got a chance to know about the development of Bengali novels in twentieth century.

CO 2. Knowledge has been created about the history of short stories of this period.

DSE-4

Course-Title: Sahitya Bisayak Prabandha O Lakasahitya

CO 1. They have learned about Twentieth century essay literature.

CO 2. Preliminary ideas about folklore and folk culture have been formed.

SARAT CENTENARY COLLEGE
DEPARTMENT OF BENGALI

Under-Graduate Study in Bengali (General)

Course Outcomes

Semester	I
Course-Code	CC-1A/CC-2A/CC-(L_1-1)/AECC-1
Credit Value	22

CO 1. They gained the ideas about the essay of Bankimchandra and Rabindranath.

CO 2. Among other subjects, there is an opportunity to increase knowledge about Bengali language and literature.

CO 3. There are opportunities to learn about English language and literature.

CO 4. Increases awareness about the environment

Semester	II
Course-Code	CC-1B/CC-2B/CC-(L_2-1)/AECC-2
Credit Value	20

CO 1. There is an opportunity to form ideas about Bengali short stories.

CO 2. Gradually getting acquainted with Bengali literature.

CO 3. There was an opportunity for critical discussion on Bengali short stories.

CO 4. Further knowledge of English language and literature is increased.

Semester	III
Course-Code	CC-1C/CC-2C/CC-(L_1-2)/SEC-1
Credit Value	20

CO 1. Preliminary ideas about the history of Bengali literature are being formed.

CO 2. Knowledge of English language and its structure is increasing.

CO 3. There is an opportunity to increase knowledge about the structure of Bengali language by reading Bengali grammar.

Semester	IV
Course-Code	CC-1D/CC-2D/CC-(L_2-2)/SEC-2
Credit Value	20

CO 1. Knowledge about Bengali linguistics is developing.

CO 2. They are learning to take analytical lessons of Bengali poetry.

CO 3. There are opportunities to improve their writing skills.

Semester	V
Course-Code	DSE-1A/DSE-2A/GE-1/SEC-3
Credit Value	20

CO 1. The idea of critical lessons of Bengali novels has been formed.

CO 2. There is scope for analytical discussion of short stories.

CO 3. Knowledge about Bengali essay literature has increased.

CO 4. There are opportunities to increase report, essay writing skills.

Semester	VI
Course-Code	DSE1B/DSE-2B/GE-2/SEC-4
Credit Value	20

CO 1. They knew about the history of Bengali drama.

CO 2. An opportunity has been created to know about the history of Bengali essays.

CO 3. They Learn about Bengali travel literature.

CO 4. Knowledge about translation is increasing.

Department of
ENGLISH

Course Outcome and Program Outcomefor BA three-year Hons. Program (CBCS)

Course Outcome of the Curriculum: CO

On completion of the courses the students will be able to:

		Course Outcome
1	**CC-1**	**Semester 1: Course title: Indian Classical Literature**
	CO1	Acquire comprehensive idea about the unique conceptual/theoretical foundation of classical Indian aesthetic tradition,
	CO2	Appreciate and critically distinguish the classical Indian Literary tradition from its Western counterpart
	CO3	Learn to identify the relevance and scope of different thematic concerns of Indian classical texts in contemporary everyday life stretching beyond the world of texts.
2	**CC-II**	**Semester 1: Course title: European Classical Literature**
	CO1	Peruse the rich classical texts from the Greco-Roman literatures, and learn the conceptual nuancesthe European Classical Literature of and discover points of relevance in contemporary literature and social life.
	CO2	Learn the major genres- epic, tragedy and comedy, the structure and the themes of the classical literary traditions.
	CO3	Correlate and synthesize the ideas developed in these classical literary traditions and locate points of relevance in contemporary literature and social life.
3	**CC-III**	**Semester 2: Course title: Indian Writing in English**
	CO 1	Understand how and why Indian English literature emerged as a distinct field of study.
	CO 2	Tracethe development of Indian English literature from pre-independence to post-independence era
	CO 3	Criticallyanalyze different social and cultural issues presented in the works of great writers in this field.

4	**CC-IV**	**Semester 2: Course title: British Poetry, Drama (16-17thCenturies) & Rhetoric and Prosody**
	CO1	Understand the basic tenets of the Renaissance both as a social discourse and a literary foundation.
	CO2	Be aware of the salient features of different dramatic forms such as tragedy, comedy and historical plays and be acquainted with the works of two prominent dramatists of the period.
	CO3	Learn the salient features of major Rhetorical figures of speech and also the major elements of prosody in poetry.
5	**CC-V**	**Semester 3: Course title: American Literature**
	CO1	Understand the distinct traits of American Literature and its social mooring
	CO2	Learn about different social and cultural issues in major literary works by American writers
	CO3	Have a comprehensive idea of American literature from representative texts in the field of poetry, drama, short story and novel.
6	**CC-VI**	**Semester 3: Course title: Popular Literature**
	CO1	Discernthe growing importance of popular literature and its dominant forms (e.g. graphic novel),
	CO2	Understandthe dialectics between the canonical and the popular
	CO3	Understand the cultural significance of popular literature.
7	**CC-VII**	**Semester 3: Course title: British Poetry and Drama (17th -18th Centuries)**
	CO 1	Be acquainted with major political, religious and social movements from the 17th to the18th century
	CO2	Be acquainted with the influence of the socio-political and religious movements on literature
	CO 3	Be acquainted with major literary works of contemporary British poets and dramatists of repute.

8	**CC-VIII**	**Semester 4: Course title: British Literature (18th Century)**
	CO 1	Understand the basic principles of Enlightenment discourse of rationality and its continuing relevance
	CO2	Gaininsight into the features of pre-romantic poetry
	CO3	Analyzethe form, structure and theme of Restoration Comedy of manners and 18th century novel.
9	**CC-IX**	**Semester 4: Course title: British Romantic Literature**
	CO1	Understandbasic tenets and key figures of the Romantic movement,
	CO2	Elaborate on the conceptualization of nature in Romantic Literature
	CO3	Critically analyze the form and structure of Romantic lyric and novel.
	CC-X	**Semester 4: Course title: British Literature (19th Century)**
	CO9	Understand the dominant traits of Victorian social and literary consciousness
	CO10	Criticallyanalyze the structure and theme of Victorian novel
	CO11	Criticallyanalyze the structure and theme of Victorian poetry (especially dramatic monologue).
11	**CC-XI**	**Semester 5: Course title: Women' Writing**
	CO 1	Critically assess the importance and evolution of women's writing as a distinct domain
	CO 2	Understandthe issues of race, caste and gender in women's writing across cultures
	CO3	Generate a comprehensive idea of women's writing especially Euro-American and Indian.
12	**CC-XII**	**Semester 5: Course title: British Literature (Early 20th Century)**
	CO1	Understand the dominant principles of Modernism and Postmodernism as an epochal paradigm shift in society and culture.

	CO2	Criticallyinterpret the representative writings of the early 20th century across different genres (i.e. poetry, drama, novel)
	CO3	Assessthe importance of psychoanalysis, stream of consciousness and myth as tropes of understanding the condition of Modernity.
13	**DSE 1**	**Semester 5: Course title: Modern Indian writing in English Translation**
	CO 1	Analyze the importance of translation of literary works in a cross-cultural country like India
	CO 2	Familiarizethemselves with the form, the style and thematic concern of 20th Century Indian Literature, and assessthe emergence of modernity in Indian Literature
	CO3	Identify the relevance of modernity in Indian social fabric and the approach to class and genderin Modern Indian Writing
14	**DSE 2**	**Semester 5: Course title: Partition Literature**
	CO1	Criticallyanalyze the partition of India as a major socio-historical phenomenon and assess its reflection in Literature,
	CO 2	Elaborate on communalism and violence, its impact on partition and its treatment in literature
	CO 3	Criticallyassess the issues of colonialism, nationalism, homelessness, exile and women in the representative writings of Partition literature.
15	**CC XIII**	**Semester 6: Course title: Modern European Drama**
	CO1	Critically assess the social changes in 20th Century Europe and its impact on drama.
	CO 2	Understandthe principal features of realism, naturalism and existentialism
	CO 3	Appreciate the role of realism, naturalism and existentialism in shaping Modern European Drama.
16	**CC XIV**	**Semester 6: Course title: Postcolonial Literatures**
	CO I	Familiarize themselves with the broad principles of post-colonialism and its correlation with postcolonial elements in literature across culture.
	CO 2	Learn how a text reveals the politics and/ or psychology of anti-colonial resistance,

	CO 3	Identifythe distinct features of postcolonial writing from various parts of the post-colonies like Africa and India and read Indian Postcolonial literature as a representation of the voice of the marginal section of society
17	**DSE 3**	**Semester 6: Course title: Literary Theory**
	CO1	Form a foundational knowledge about literary theory in general
	CO 2	Form an idea about the relevance of literary theory in understanding society and literature
	CO 3	Think about the non-fixity of meaning in a literary text and apply various theories while interpreting a specific text.
18	**DSE 4**	**Semester 6: Course title: Literary Criticism and History of the English Language**
	CO 1	Form an idea about the growth of literary criticism from the classical ages to the modern from ancient Greece and Rome to modern England and Europe.
	CO 2	Attempt an application of the theories to assist the understanding of literature
	CO 3	Havean elaborate idea of the history and evolution of the English Language.
19	**AECC2**	**Semester 2: Course title: Communicative English**
	CO 1	Tolearnthe theory, fundamentals and tools of communication todevelop vital skills of communication, both verbal and non-verbal
	CO 2	Attain confidence and competence in personal, social and professional interactions.
	CO 3	Attain confidence in the self
20	**AECC 1**	**Semester1: Course title: Environmental Studies**
	CO 1	Be aware of the essential necessity of a healthy environment
		Be aware of the grave threat to world health today because of man's ill-treatment of environment.

Program Outcome of the Curriculum: (PO)

		Program Outcome
1	**PO1**	Develop an insight into the scope and purpose of literature within the broader perspective of Humanities
2	**PO2**	Develop an understanding of the fundamental concepts, generic structures, and thematic tropes in literature both translated as well as written in English and locate the distinctive social and cultural paradigms across ages and cultures.
3	**PO3**	Critically understand a wide array of texts - British, American and Indian among others and analyze them against their social and historical context.
4	**PO4**	Apply critical theoretical apparatus related to class, gender, and race to assess individual literary works and their social context.
5	**PO5**	Develop critical writing skills suited for a profession in print and electronic media, content writing and translation.
6	**PO6**	Communicate effectively in real life after learning various language patterns, sentence structures and dialogue forms.

Course Outcome and Program Outcomefor three-year B. A. General Program (CBCS) –(General and Generic)

Course Outcome of the Curriculum (CO)

On the completion of the courses the students will be able:

		Course Outcome
1	**CC – IA/ GE1**	**Semester I : Course title : Poetry & Short Story**
	CO1	To acquaint themselves with some of the major writers of different periods and different genres of English literature.
	CO 2	To be acquainted with the poems of the Elizabethan, Romantic and Modernist masters like Shakespeare, Wordsworth, Keats and Owen
	CO 3	To be acquainted with the prose works of Charles lamb and H E Bates
2	**CC – 5**	**Semester I : Course title : (L1-1)Language, Variety and Stylistics**
	CO 1	To understand the distinctness of human language and its importance,
	CO2	Applythe conventions of standard and non-standard, formal and informal language
	CO3	Identifyfeatures of collocation and style.
3	**CC–2A/ GE2**	**Semester II : Course title : Essay, Drama & Novel**
	CO1	To acquaint themselves with some of the major essayists, dramatists, and novelists of English Literature across ages
	CO 2	To read some of the major essays, dramas, and novels of English Literature written by Indian, British and American writers from different ages
	CO 3	To observe how these writers with diverse socio-cultural backgrounds address potent social and ethical concerns.

4	**CC3/GE 3**	**Semester III : Course Title : Contemporary India: Women And Empowerment**
	CO1	Tounderstandthe conceptual notion of Gender and inequality in India,
	CO 2	To have an idea about the history of women's movement in India and learn about the safeguards offered to women in the Indian Constitution to empower them.
	CO 3	To discern how these issues are reflected in writings of different women writers from India.
5	**CC 6**	**Semester III : Course title : (L1-2) Language, Imagination & Creativity**
	CO 1	To have a reasonable command over plain language and figurative language
	CO 2	To learn the use of language to express emotion by using figures of speech. And to learn the use of foregrounding devices like parallelism and deviation to avoid banality.
	CO 3	To have an idea about the right use of ambiguity to cultivate or to avoid it as needed
4	**CC –1D/GE 4**	**Semester 4 :Course title: Academic Writing and Composition**
	CO 1	To learn and practice the basic conventions of academic writing,
	CO 2	To understand and identify the methods of summation and paraphrasing
	CO 3	To do basic editing, proofreading, and referencing.
5	**DSE 1**	**Semester V: Discipline Specific Course (DSE 1): Course title: British Literature**
	CO 1	To make a critical study of the renowned novel *The Strange Case of Dr. Jekyll and Mr. Hyde*to understand the theme and structure
	CO 2	To make a critical study of a Shakespeare master-piece *As You Like It* and be familiar with the excellence of the playwright
	CO 3	To study in details a poem by Thomas Hardy and an essay by Robert Lynd and analyze the theme and structure of both

6	**DSE 2**	**Semester VI: Discipline Specific Course (DSE-2): Course Title: Indian Literature in Translation**
	CO 1	To assess the importance of translation in a multicultural society like India, gain insight into 'Indianness' through representative works and identify the relationship between Indian Writing in English and its social context
	CO2	To critically study Rabindranath Tagore through translation and appreciate the relevance of it even today and hence the greatness of the author.
	CO3	To be familiar with the post-Independence generation of writers and realize how the social problems mainly the problems faced by the women are dealt with in different mediums.
7	**AECC -2**	**Semester II: Course title: Communicative English**
	CO1	Tolearnthe theory, fundamentals and tools of communication todevelop vital skills of communication, both verbal and non-verbal
	CO 2	Attain competence in personal, social and professional interactions.
	CO3	Develop self-confidence.
9	**SEC I**	**Semester III: Course Title: Translation Studies**
	CO1	To realise the importance of translation in a multi-lingual and multi-cultural country like India
	CO 2	To acquaint themselves with the brief history of translation in India
	CO3	To learn the different problems of translation and also the tools of translation used in print and electronic media
10	**SEC 2**	**Semester IV: Course Title: English Language Teaching**
	CO1	Tounderstandthe structures of the English language
	CO2	To enhance their English language proficiency in reading, writing, listening and speaking.
	CO3	To have an idea about their condition so far as English language is concerned.
11	**SEC 3**	**Semester V: Course Title: Technical Writing**
	CO1	To understand the difference between speech and writing
	CO 2	To have an idea about the distinct features of speech and distinct features of writing, formal and informal writing.

	CO 3	To be trained in the proper ways of writing required to meet the demands of scientific and technical subjects avoiding common errors.
12	**SEC 4**	**Semester VI : Course title: Soft Skills**
	CO1	To be conscious about the soft skills essential to cope with the demands of the professional world.
	CO 2	To appreciate the importance of skills like teamwork, emotional intelligence at any workplace
	CO 3	To learn adaptability, leadership and problem solving skills
13	**AECC 1**	**Semester 1: Course Title: Environmental Studies**
	CO 1	To be aware of the necessity of a healthy environment
	CO2	To be aware of the grave threat to world health today because of man's ill-treatment of environment.

Program Outcome of the Curriculum(PO)

		Program Outcome
1	**PO1**	Develop a conceptual understanding of the important generic forms in literature and realize their importance by reading representative poems, dramas and novels.
2	**PO2**	Understand the various components of the linguistic structures of the language.
3	**PO3**	Gain an insight into the trajectory of Indian literature from across the country and describe with clarity how literary writings from across India reflect the voice of the marginalized and the unrepresented.
4	**PO4**	Learn to adapt the conventions of academic writing and be professionally equipped to perform content writing and editing in various professional sectors including electronic and print media.
5	**PO5**	Get some relief from English phobia and gain confidence.

Department of Sanskrit

Programme Outcome and Course Outcome

As a Language the Sanskrit is very rich among all other languages. Sanskrit is the mother of all languages.It is the root of all subjects. The language helps us to know the ancient history of India. Such as Culture Religion, literature, Social life,Philosophy, Environment, Ecology etc. The academic programme of both (Honours +General) degree course are designed not only professional skill but also develop a deep understanding of rich heritage and dynamic prevalent Scenario of India through various Sanskrit text. We have privileged through various Sanskrit Subjects.

Programme Outcomes (Honours)

		PROGRAMME OUTCOMES
1	**PO 1**	To develop the strong knowledge in connection with ancient Indian literature, Tradition.
2	**PO 2**	Students will able to compare the Modern literature and ancient literature.
3	**PO 3**	Enhance communication skills listening, speaking, Reading and Writing.
4	**PO 4**	Increase in depth knowledge of the core areas of the subjects.
5	**PO 5**	To know the modern medical science through the ancient ayurveda.
6	**PO 6**	Students will able to write Debnagari ,Bramhi ,Khorosthi scripts which provide them the Paleographical knowledge to read out the script of modern languages.
7	**PO 7**	To make them eligible for higher Education.
8	**PO 8**	To develop a strong research aptitude and free thinking.
9	**PO 9**	They can apply in the various field of SSC. WBCS Competitive exam, etc. after graduation, and they can apply against teaching posts in schools, colleges, and many educational institutions.

Course Outcomes (Honours)

Semester I

After becoming successful completion of all undergraduate Course students will have following opportunities and skills.

🕮 Course Title:
Classical Sanskrit Literature(Poetry)

CO-1. To make the knowledge of depth to difference in between ancient literature and modern literature.

CO-2 This course aims to get students acquainted with Classical Sanskrit Poetry.
CO-3 This course provides the students the information of History of Sanskrit literature, especially the development of Sanskrit literature.
CO-4 The course also seeks to help students to negotiate texts independently.

🕮 Course Title:
Critical Survey of Sanskrit Literature

CO-1This course aims to get acquaint the students with the journey of Sanskrit literature from Vedic literature to Purāṇa.
CO-2 It also intends to give an outline of different Śāstric traditions, through which the students will be able to know the different genres of Sanskrit Literature and Śāstras.

Semester II

🕮 Course Title:
Classical Sanskrit Literature(Prose)

CO-1 This course aims to acquaint students with comprehensive information of Classical Sanskrit Prose literature. Origin and development of prose, Important prose romances and fables Sanskrit, etc., have also been included here to acquaint the students with the history of Sanskrit Prose literature.
CO-2 Besides the information of history this course also seeks to help students to select the Sanskrit texts for independent literary study.

🕮 Course Title:

Self Management in the Gītā

CO-1.Through the study of Gita the students have to know Spiritual Power ,the power of Knowledge, The study of work-culture etc.
CO-2 The objective of this course is to study the philosophy of self-management in the Śrīmadbhagavadgītā.
CO-3. This course helps the students for creative writing and analytical study.
CO-4 This also guides the students to find out the relevance of Śrīmadbhagavadgītā in present context.
CO-5 It helps the students to understand the broader perceptive of life.
CO-6 It helps the students to know various ways of maintaining balance between thought and action.

Semester III

🕮 Course Title:
Classical Sanskrit Literature (Drāmā)

CO-1 Life values and personality development.
CO-2 Study on a poet's Poetic approach of Sanskrit drama "Abhijananashakuntalam".
CO-3Study on ancient Story and brief history.
CO-4 The way of Sanskrit theatre has grown and development and their contribution.
CO-5 Analytical study On Dushant and Sahkuntala and their characters.

🕮 Course Title:
Poetics and Literary Criticism

CO-1 The study of Sāhityadarpana (Sanskrit Poetics) embraces all poetic arts and includes concepts like alaṁkāra, rasa, rīti, vakrokti, dhvani, aucitya etc. The entire domain of Sanskrit poetic has flourished with the topics such as definition of poetry and divisions, functions of word and meaning, theory of rasa and alaṁkāra (figures of speech) and chandas (metre), etc.All these familiarize the students with the fundamental technical structures of Sanskrit literature.
CO-2 This develops capacity for creative writing and literary appreciation.
CO-3 Students can gain knowledge about the basic concept of kavya's and their parts.

🕮 Course Title:
Indian Social Institution and Polity

CO-1 Social institutions and Indian Polity have been highlighted in Dharma-śāstra literature.
CO-2 The aim of this course is to make the students acquainted with various aspects of social institutions and Indian polity as propounded in the ancient Sanskrit texts such as Saṁhitās, Mahābhārata, Purāṇa, Kauṭilya'sArthaśāstra and other works known as Nītiśāstra.

🕮 Course Title:
Basic Sanskrit

CO-1 Students can learn the script like bramhi ,pali , prakrit and also Devnagari.
CO-2 Students can learn the moral value of human life from fable Brahmadatta-karkaṭa-kathā-(Aparīkṣitakāraka)

Semester IV

🕮 Course Title:
Indian Epigraphy and Chronology

CO-1 This course aims to acquaint the students with the epigraphical journey in Sanskrit, the only source which directly reflects the society, politics, geography and economy of the time.
CO-2 The course also seeks to help students to know the different styles of Sanskrit writing.

🕮 Course Title:
Modern Sanskrit Literature

CO-1 The purpose of this course is to expose students to the rich & profound tradition of modern creative writing in Sanskrit, enriched by new genres of writing.
CO-2 Students will be able to know not only ancient literature and their classification but also modern Sanskrit literature

🕮 Course Title:
Sanskrit and World Literature

CO-1 This course is aimed to provide information to students about the spread & influence of Sanskrit literature and culture through the ages in various parts of the world in medieval & modern times.
CO-2 Study on a poet and poetry and existence of Sanskrit literature.
CO-3 Study on ancient Story and brief history.
CO-4 The way of Sanskrit theatre has grown and development and their contribution.

Semester V

🕮 Course Title
Vedic Literature

CO-1 This course on Vedic literature aims to introduce various types of Vedic texts. Students will also be able to read one Upaniṣad namely Isopanisad, where primary Vedānta-view is propounded.
CO-2 mastery over some of the exemplary portions of the Vedic literature.
CO-3 A thorough acquaintance of the methodology employed by Sayanacharya in interpreting the Vedas.
CO-4 the comprehension of the selected portions of Yaska'sNirukta.
CO-5 the understanding of the basics of Vedic etymology.

🕮 Course Title
Sanskrit Grammar

CO-1 To acquaint the students with general Sanskrit Grammar
CO-2 acquaintanceship with the basic structure of Sanskrit Compounds.
CO-3 training in the theories of Compound formation.
CO-4 the ability to understand the syntax and semantics of Sanskrit compounds.
CO-5 the ability to apply grammatical rules in examples.

🕮 Course Title
Dramaturgy -- Sāhityadarpaṇa

CO-1 The theories of Sanskrit Aesthetics and Literary Criticism as embodied in the selected portions of Sahityadarpana.
CO-2 The basic doctrines of different schools of aesthetics and literary criticism in Sanskrit.

🕮 Course Title
Elements of Linguistics –

CO-1 The basics of Linguistics.
CO-2 The possibilities of extending and applying the Sanskrit grammatical rules to other arenas.
CO-3 How to utilize online resources to develop knowledge in a field of one's own choice.

Semester VI

🕮 Course Title
Indian Ontology and Epistemology

CO-1 This course aims to get the students acquainted with the cardinal principles of the Nyāya-Vaiśeṣika philosophy through the Tarkasaṁgraha and to enable students to handle philosophical texts in Sanskrit.
CO-2 It also intends to give them an understanding of essential aspects of Indian Philosophy.
CO-3 The basics of Advaita Vedanta.
CO-4 A popular form of Vedantic methodology which in turn will enable the learner to have further pursuits into the higher realms of Indian Philosophy.

🕮 Course Title

Sanskrit Composition and Communication

CO-1 Acquaintanceship with the basic structure of Sanskrit Sentences.
CO-2 Training in the theories of karaka.
CO-3 The ability to understand the syntax and semantics of Sanskrit.
CO-4 The ability to apply grammatical rules in examples.
CO-5 This paper aims at teaching composition and other related information based on LaghusiddhāntakaumudīVibhaktyarthaPrakarana.

🕮 Course Title

Fundamentals of Āyurveda

CO-1 Students can get the treatment purpose knowledge.
CO-2 Besic knowledge of Ayurveda and there angas.

🕮 Course Title

Art of Balanced Living

CO-1 Comprehension of the selected portion of Yoga Sutras of Patanjali.
CO-2 Understanding of the interrelation existing between the Sankhya and Yoga systems of philosophy.
CO-3 An acumen to discern the theme and the import of the often confusing terminology of Bhagavad Gita.
CO-4 Mastery over the opening chapters of the most popular scripture of the Vedantins.

Programme Outcomes (General)

		PROGRAMME OUTCOMES
1	**PO 1**	To develop the strong knowledge in connection with ancient Indian literature, Tradition
2	**PO 2**	Enhance communication skills listening, speaking, Reading and Writing
3	**PO 3**	To know the modern medical science through the ancient ayurveda.
4	**PO 4**	Students will able to write Debnagari scripts which provide them the Paleographical knowledge to read out the script of modern languages.
5	**PO 5**	Students will gain knowledge of the major traditions of literatures written in Sanskrit.
6	**PO 6**	scripts which provide them the Paleographical knowledge to read out the script of modern languages.
7	**PO 7**	Prepare students for the profession of teacher, WBCS, UPSC etc

Course Outcomes (General)

After becoming successful completion of all undergraduate general students should be able to achieve the following objectives:

Semester I

📖 Course Title:
Sanskrit Poetry

CO-1. To make the knowledge of depth to difference in between ancient literature and modern Literature.
CO-2 This course aims to get students acquainted with Classical Sanskrit Poetry.
CO-3 This course provides the students the information of History of Sanskrit literature, especially the development of Sanskrit literature.
CO-4 The course also seeks to help students to negotiate texts independently.

Semester II

📖 Course Title:
Sanskrit Prose

CO-1 This course aims to acquaint students with comprehensive information of Classical Sanskrit Prose literature. Origin and development of prose, Important prose romances and fables Sanskrit, etc., have also been included here to acquaint the students with the history of Sanskrit Prose literature.
CO-2 Besides the information of history this course also seeks to help students to select the Sanskrit texts for independent literary study.

Semester III

📖 Course Title:
Sanskrit Drama

CO-1 Life values and personality development.
CO-2 Study on a poet's Poetic approach of Sanskrit drama "Abhijananashakuntalam".
CO-3Study on ancient Story and brief history.
CO-4 The way of Sanskrit theatre has grown and development and their contribution.
CO-5 Analytical study On Dushant and Sahkuntala and their characters.

📖 Course Title:
Skill Based Papers 1

CO-1 comprehension of the selected portion of Yoga Sutras of Patanjali.
CO-2 understanding of the interrelation existing between the Sankhya and Yoga systems of philosophy.

Semester IV

📖 Course Title:
Sanskrit Grammar

CO-1 To acquaint the students with general Sanskrit Grammar
CO-2 Acquaintanceship with the basic structure of Sanskrit Compounds.
CO-3 Training in the theories of Compound formation.
CO-4 The ability to understand the syntax and semantics of Sanskrit compounds.
CO-5 The ability to apply grammatical rules in examples

🕮 Course Title
Skill Based Papers 2
Basic Sanskrit – Part-I

CO-1. Grammar is very important part of this language for the making word ,sentence, to know appropriate meaning of text, oral communication and perfection.
CO-2Students can learn the moral value of human life from fable Brahmadatta-karkaṭa-kathā-(Aparīkṣitakāraka)

Semester V

🕮 Course Title
Philosophy, Religion and Culture in Sanskrit Tradition

CO-1 This course aims to get acquaint the students with the journey of Sanskrit literature from Vedic literature to Purāṇa.
CO-2 It also intends to give an outline of different Śāstric traditions, through which the students will be able to know the different genres of Sanskrit Literature and Śāstras

🕮 Course Title
Literary Criticism

CO-1 The study of Sāhityadarpana (Sanskrit Poetics) embraces all poetic arts and includes concepts like alaṁkāra, rasa, rīti, vakrokti, dhvani, aucitya etc. The entire domain of Sanskrit poetic has flourished with the topics such as definition of poetry and divisions, functions of word and meaning, theory of rasa andalaṁkāra (figures of speech) and chandas (metre), etc. All these familiarize the students with the fundamental technical structures of Sanskrit literature.
CO-2 This develops capacity for creative writing and literary appreciation.
CO-3 Students can gain knowledge about the basic concept of kavya's and their parts.

🕮 Course Title
Indian Social Institution and Polity

CO-1 Social institutions and Indian Polity have been highlighted in Dharma-śāstra literature.
CO-2 The aim of this course is to make the students acquainted with various aspects of social institutions and Indian polity as propounded in the ancient Sanskrit texts such as Saṁhitās, Mahābhārata, Purāṇa, Kauṭilya'sArthaśāstra and other works known as Nītiśāstra.

🕮 Course Title
Skill Based Papers 3
Basic Sanskrit

CO-1 Grammar is very important part of this language for the making word ,sentence, to know appropriate meaning of text, oral communication and perfection.
CO-2 Students can learn the moral value of human life from fable Lokavyavahārajñānaśunya-mūrkhapaṇḍitacatuṣṭaya-kathā"-(Aparīkṣitakāraka)

Semester VI

🕮 Course Title
Epigraphy

CO-1. This course aims to acquaint the students with the epigraphical journey in Sanskrit, the only source which directly reflects the society, politics, geography and economy of the time.
CO-2. The course also seeks to help students to know the different styles of Sanskrit writing

🕮 Course Title
Maxims In Sanskrit Language

CO-1.Life values and personality development.
CO-2. Study on ancient Story and brief history.

🕮 Course Title
Sanskrit Metre and Composition

CO-1 The study of Sāhityadarpana (Sanskrit Poetics) embraces all poetic arts and includes concepts like alaṁkāra, rasa, rīti, vakrokti, dhvani, aucitya etc. The entire domain of Sanskrit poetic has flourished with the topics such as definition of poetry and divisions, functions of word and meaning, theory of rasa andalaṁkāra (figures of speech) and chandas (metre), etc. All these familiarize the students with the fundamental technical structures of Sanskrit literature.
CO-2. The course also seeks to help students to know the different styles of Sanskrit writing.
CO-3. Students can speak Sanskrit fluently.

🕮 Course Title
Skill Based Papers 3
Vedic Literature

CO-1. This course on Vedic literature aims to introduce various types of Vedic texts. Students will also be able to read one Upaniṣad, namely, Muṇḍaka, where primary Vedānta-view is propounded.
CO-2.Early Vedic Period .General introduction to Vedic Literature, four Vedas, Brahmanas and Aranyakas. Study of Vedic Hymns of Agni and Indra etc.

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Department of Santali

Programme Specific and Course Outcomes

Programme Specific Outcomes

PSO 1. Understanding the relation between society, language and literature and analyze the role played by Santali literature in past and present.

PSO 2. Literary works written in different genres by Santali writers such as poems, plays, short stories, novels, essays, etc., developed the power of aesthetic interest.

PSO 3. Understanding about the worship of Santal society.

PSO 4. Along with Santali, ideas about other Munda languages can also be gained.

PSO 5. Concepts can be formed about various indigenous society and their languages and literature.

PSO 6. Santali literature helps to understand the customs and traditions of Santal society.

PSO 7. Santali curriculum can give a clear idea about the origin of Santal tribe, history of culture, geography, mentality. Character is formed and also forms the basis of personality building.

Course Outcomes

Semester- I

CO 1. The origin and development of this literature can be known through the history of Santali literature.

CO 2. Discuss about the life of important authors.

CO 3. Discuss about the origin and development of Santali language.

CO 4. Explain the Characteristic and Peculiarity of this language.

CO 5. Discuss the impact of neighboring languages on Santali language.

CO 6. Learn about the Austric language family.

Semester- II

CO 1. A description of the early history of written literature through the study of the Medieval period in Santali literature.

CO 2. Detailed discussion on the sections of Santali folk literature.

CO 3. The culture and customs of this society are known through the practice of Santali folk literature.

CO 4. To discuss the role of missions and missionaries in the development of Santali language and literature.

CO 5. Discuss about the Santali magazines.

CO 6. Santali modern poetries and folk songs reflect the culture and condition of this society.

Semester- III

CO 1. Brief discussion the functional grammar of Santali language.

CO 2. Discuss about culture, tradition and institution of Santals and connected with Santali folksong, ritual connected with agriculture.

CO 3. Discuss about Santali magazines and journals, life of important authors and various important books.

CO 4. Discuss about the selected important dramas and one act plays.

Semester- IV

CO 1. Brief discussion of Santali linguistics.

CO 2. Discuss about various tribal society, language and literature and comparative study with Santali.

CO 3. Detailed discussion on the theory of literature.

CO 4. Discuss about the selected important Novels and Short Stories.

Semester- V

CO 1. Discuss about the selected important Novels and Short Stories and knowing the position of Santal society.

CO 2. To know the appeal, dedication and condition of the Santals through the study of some important selected poetry books.

Semester- VI

CO 1. Discussion about the various modern Drama and Essays.

CO 2. Discussion of relevant magazines and journals as published from time to time.

CO 3. Some selected novels and plays in Bengali literature have reflected the Santal Rebellion and their status in society.

DEPARTMENT OF HISTORY

HISTORY HONOURS

🕮 Course Outcome of the Curriculum 🕮

The students would be able to understand the following on the completion of the courses

CC Paper-I History of India I (From Earliest Times to 600 AD)

CO1: Reconstructing Ancient Indian History Early Indian notions of History.

CO2: Sources and tools of historical reconstruction.

CO3: Historical interpretations with special reference to gender, environment, technology and regions.

CO4: Phases of Pre-historic Cultures.

CO5: The Harappan civilization Origins; basic feature, decline and the late/post-Harappan traditions. Development and cultures in post Harappan period.

CO6: Changing political formations (circa 300 BCE to circa CE 300): . Society Economy and Culture in Early India

CC Paper-II Social Formations & the Cultural Pattern of the Ancient World

CO1: Understanding how the human society had transformed from Nomadic to civilized society in ancient history of the World.

CO2: Students can acquire knowledge about the origin, features, nature and class composition of ancient Greek and Polis society.

CO3: Greek Culture and Religion: Sophists, Socrates, Games, Drama, Art and Architecture, Greek Gods.

CC Paper-III History of India II (600 - 1206 AD)

CO1: Understanding Early Medieval India Historical Geography – Sources: texts, epigraphic and numismatic data Debates on Indian feudalism, rise of the Rajputs and the nature of the state .

CO2: Acquire knowledge about the evolution of political structures: North India- Harsha, Sasanka, Pala, Sena and Pratiharas, Rise of Rajputs and: South India –Chalukyas of Badami, Rashtrakutas, Cholas. Legitimization of kingship; brahmanas and temples; royal genealogies and rituals .

CO3: Arrival of Islam in India Arab conquest of Sindh: nature and impact of the new set-up; Causes and consequences of early Turkish invasions: Mahmud of Ghazni; Shahab-ud-Din of Ghur.

CO4: Agrarian Structure and Social Change Land grants; Agricultural expansion; the feudal debate Proliferation of castes; status of untouchables

CO5: Understanding Inter-regional trade Maritime trade Forms of exchange Process of urbanization and de urbanization Merchant guilds of South India .

CO6: Religious and Cultural Developments in ancient India.

CC Paper-IV Social Formation and Cultural Pattern of the Medieval World

CO1: Understanding the Roman Republic Its Significance, Constitution, Law, &Society, Agrarian economy, urbanization & trade ,Economy Growth of Slavery & slave society in ancient Rome .

CO2: Religion, culture, literature and Philosophy in ancient Rome.

CO3: Crises of the Roman Empire & transition to Principate .

CO4: Economic developments in Europe (7th to 14th centuries) Feudalism, Organization of production, towns and trade, technological developments. Crisis of feudalism.

CO5: Religion and culture in medieval Europe .

CO6: Learn about the Societies in Central Islamic Lands, the tribal background, ummah, Caliphate state; rise of Sultanates and Religious developments: the origins of shariah, Mihna, Sufism Urbanization and trade.

CC Paper-V History of India III (1206 - 1525 AD)

CO1: Sources for studying/Interpreting the Delhi Sultanate Survey of sources: Persian tarikh tradition; vernacular histories; epigraphy .

CO2: Acquire knowledge about the Sultanate Political Structures Foundation, expansion and consolidation of the Sultanate of Delhi; The Khaljis and the Tughluqs; Mongol threat and Timur's invasion; The Lodis: Conquest of Bahlul and Sikandar; Ibrahim Lodi and the battle of Panipat. Theories of kingship; Ruling elites; Sufis, ulama and the political authority; imperial monuments and coinage

CO3: Understanding Regional Political structures Emergence of provincial dynasties: Bahamanis, Vijayanagar and Bengal Consolidation of regional identities; regional art, architecture and literature.

CO4: Sultanate Society and Economy-1 Iqta and the revenue-free grants Agricultural production;

CO5: Sultanate Society and Economy-2 Changes in rural society; revenue systems Monetization; market regulations; growth of urban centers; trade and commerce; Indian Ocean trade .

CO6:. Religion and Culture ; Sufi silsilas: Chishtis and Suhrawardis; doctrines and practices; social roles Bhakti movements and monotheistic traditions in South and North India; Women Bhaktas; Nathpanthis; Kabir, Nanak and the Sant tradition

CC Paper-VI Rise of Modern West – I (15th& 16th Centuries)

CO1: Understanding Transition from feudalism to capitalism: problems and theories.

CO2: Early colonial expansion: motives, voyages and explorations ;the conquests of the Americas: beginning of the era of colonization; mining and plantation; the African slaves.

CO3: Renaissance: its social roots, city-states of Italy; spread of humanism in Europe; Art.

CO4: Origins, course and results of the European Reformation in the 16th century.

CO5: Economic developments of the sixteenth century: Shift of economic balance from the Mediterranean to the Atlantic; Commercial Revolution; Influx of American silver and the Price Revolution.

CO6: Emergence of European state system: Spain; France; England

CC Paper-VII History of India III (1526 - 1757 AD)

CO1: Sources and Historiography Persian literary culture; translations Literature in regional languages.

CO2: Establishment of Mughal rule Babur's invasion of India - Struggle for Empire in North India –significance of Babar and Humayun's reign - Significance of Afghan despotism and rise of Sher Shah to power, His administrative and revenue reforms`

CO3: Acquire knowledge about the Akbar &Consolodation of Mughal Empire Akbar's Conquests - his Rajput Policy & administrative and religious reforms, Reign of Jahangir, Nurjahan- her role in imperial politics; The Mughals and the North Western frontier and central Asia.Making of a new imperial system and administration, the Mughal nobility, Mansab and Jagir.

CO4: Understanding the Mughal Empire Under Aurangazeb and the Mughal Art, Architecture & Painting

CO5: Patterns of Regional Politics -Rajput political culture and state formation -Rise of Maratha power under Shivaji, &expansion under the Peshwas - emergence of regional powers – case studies of Maharashtra, Awadh and Bengal; Bengal Nawabs and the rise of the English East India Company in Bengal.Debate of the 18th Century on the decline of the Mughal Empire;

SEC Paper-I Archives & Museums in India

CO1: Understanding the Definition and history of development (with special reference to India)

CO2: Understanding the traditions of preservation in India Collection policies, ethics and procedures Collection: field exploration, excavation, purchase, gift and bequests, loans and deposits, exchanges, treasure trove confiscation and others Documentation: accessioning, indexing, cataloguing, digital documentation and de-accessioning Preservation: curatorial care, preventive conservation, chemical preservation and restoration

CO3: Museum Presentation and Exhibition.

CO4: Museums, Archives and Society: (Education and communication Outreach activities.

CC Paper-VIII Rise of Modern West – II (17th & 18th Centuries)

CO1: Understanding 17th century European crisis: economic, social and political dimensions.

CO2: The English Revolution: major issues; political and intellectual currents

CO3: Understanding about the Rise of modern science in relation to European society from the Renaissance to the 17th century

CO4:. Mercantilism and European economics; 17th and 18thcenturies

CO5; European politics in the 18th century: parliamentarymonarchy; patterns of Absolutism in Europe and Prelude to the Industrial Revolution.

CC Paper-IX History of India (1758 -1857)

CO1: Understanding the Foundations of Company'sRule; Early contestations between the Dutch, French and the British East India Company Bengal Nawabs and the battle of Plassey, Buxar and the grant of Dewani, Anglo Mysore; Anglo Maratha and Anglo Sikh relations.The Subsidiary alliance and the Doctrine of Lapse.

CO2: Legitimization of Company's rule in India - Regulating Act; Pitt's India Act; Charter Acts of 1813, 1833 and 1853 Administrative , Military, Police and Educational Reforms.

CO3: Rural Economy and Society Land revenue systems. Permanent settlement, Rayatwari and Mahalwari, Commercialization of agriculture and indebtedness. Rural society: change and continuity, Famines.

CO4: Understanding the De industrialization ,Trade and fiscal policy, Drain of Wealth Growth of modern industry.

CO5: Renaissance and Reforms Bengal Renaissance and Socio-religious Reforms:Rammohan Roy (Brahma Samaj), Young Bengal, Vidyasagar and Others Educational Reforms initiated by the Company

CO6: Popular Resistance Santhal uprising (1856-7); Sanyasi Uprising, Kol Bhumij uprisisng, Wahabi Faraizi and Santhal Uprising Revolt of 1857: causes and nature.

CC Paper-X History of India III (1858 - 1964)

CO1: Understanding the aftermath of 1857 Queen's Proclamation; The Indigo rebellion, The Deccan Riots, The growth of the new middle class; the age of associations, The Aligarh movement, The Arya and the Prarthana Samaj .

CO2: The early phase of Indian Freedom Movement Historiography of Indian Nationalism; Birth of Indian National Congress, The Moderates and the Extremists, Partition of Bengal, the Swadeshi movement, Muslim League, Morle Minto Reforns; Revolutionaries in India and abroad, the Lucknow pact.

CO3: Acquire knowledge about the Gandhian era Gandhi's rise to power, Rowlatt Satyagraha, Montagu Chelmsford reforms; Khilafat and Non-co-operation movement, The Swarajya party, Poona Pact, Civil Disobedience Movement, Quit India Movement.

CO4: Towards freedom Government of India Act 1935, The rise of the leftist movements, The Peasant and Working class movements, Cripps Mission, Subhas Bose and INA, RIN mutiny; Wavell Plan, Cabinet Mission; Tebhaga and Telengana movements;

CO5: Communal Politics Demand for Pakistan; Lahore session of the Muslim League, rise of Hindu Mahasabha and the RSS; Akali Dal, Partition and its consequences.

CO6: The Nehru era Internal policy between 1947 to 1964- movements for social justice, the new constitution, integration of the princely states, growth of parliamentary democracy, five years plan; India's foreign policy – Non alignment, India's relation with her neighbours.

.SEC Paper-II Understanding Popular Culture

CO1: Introduction a. Defining elite and popular culture b. Differences in their forms, contents and patterns of presentations c. Changing traditions of Folk songs, music, literature and dances.

CO2: Understanding the Visual Expressions a. Folk Art, Calendar Art, Photography b. Audio-visual mode of presentation cinema & television c. Expressions of popular culture in dance , drama, films and painting.

CO3: Performance and Participations a. Theatre, music, folk songs and jatra: b. Identifying themes, functionality, anxieties. c. Fairs, Festivals and Rituals, Disentangling mythological stories, patronage, regional variations.

CO4:. Popular Culture in a globalized worldThe impact of the internet and audio-visual media on popular culture

CC Paper-XI History of Modern Europe I (1789 - 1870)

CO1: The French Revolution and its European repercussions Crisis of Ancien regime ----- Political, social, economic and intellectual background (role of Philosophers) of the French Revolution The revolution in the making – the Aristocratic Revolt and the consolidation of the Third Estate. The Constituent Assembly; Radicalization of the Revolution; the reign of Terror and the Thermedorian reaction; social base of the Revolution- Sans culottes, peasants and women; the directory and its achievements and failures.

CO2: Understanding the French Revolution, Rise of Napoleon; Napoleonic reforms, Napoleonic Empire and Europe Fall of Napoleon: The Continental System; The Spanish Ulcer; The Moscow campaign. Assessment of Napoleon: Character of the French Revolution; Impact of French Revolution on Europe and abroad.

CO3: Restoration and Revolution (1815-1848) Vienna Congress; Concert of Europe; Metternich system Greek War of Independence, Revolution of 1830 &1848, & their Impact.

CO4: Industrialization and socio economic transformation Industrial Revolution; Definition and characteristics; Pre Industrial society; Industrial Revolution in Britain; Impact on society, economy and polities . Industrialization in the continents, case study of France, Germany and Russia. Emergence of working class and its movements; early Utopian socialist thoughts.

CO5: Age of Nationalism Unification of Italy and Germany Specificities of economic development, political and administrative re organization – Italy and Germany The second Empire in France and Louis Napoleon

CO6: The Eastern Question The Crimean War; Treaty of Paris, Balkan Nationalism

CC Paper-XII Studying History Writing: Indian & Western

CO1: Understanding about the Time, Space & Human Agency Notion of Time and Space in History

CO2: Importance of sources in History Written, Oral, Visual and Archaeological Sources - Classification of Primary and Secondary sources – Source criticism and authentication .

CO3: Philosophy and Theory of History Facts and Interpretation - Philosophy of History – Hypothesis, argumentation and Problematique - Objectivity/Subjectivity in History – Historical Narrative and Generalization

CO4: Indian & Western Historiography Pre-colonial forms of writing Indian History - Different schools of Indian historiography (Cambridge, Nationalists, Marxists, Subaltern) - Different schools of Western historiography (Rationalist, Romantist, Positivist, Marxist and Annales

CO5: History and other disciplines Relationship between History and Science - History and Anthropology - History and Literature etc.,

CO6: Research Process in History Different stages and steps involved in the process of doing research in History

Paper –I (OR) History of the United State of USA (1776-1864)

CO1: Learn about the land and aborigines of USA and early colonial society and politics.

CO2: Indentured labour, like White and Black. They will gather knowledge how the Europeans were made settlement and started colonization. They will learn how the evolution of American Democracy had formed after colonization of USA.

CO3: They will acquire knowledge how the USA had been developed from slavery to super power of the World.

5 DSE Paper-I Life & Culture in Pre-Colonial Bengal: Prehistoric times to mid 18th century

CO1: Understanding about the Historical Geography- ancient and medieval divisions

CO2: Demography and ethnology – earliest inhabitants; Aryanization of Bengal; Life of the peopleposition of women, dress, foods, games and leisure, conveyance.

CO3: Political development of Bengal-an overview.

CO4: Economic life , Religions and art in Bengal and Bengali literature and traits of regional culture.

HISH DSE-II LIFE AND CULTURE IN COLONIAL BENGAL

CO1: Evaluate the impact of Western education in Bengal

CO2: Rejection and internalization of western ideas in context of colonialism and nationalism

CO3: To understand the plebeian and popular/ bhadralok-itarlok dichotomy in social and economic life

CO4: Identify the sites of power loci-its change as power loci shifted-major sites of popular revolt-urbanization of sites of colonialism especially rise of Calcutta as a metropolis- major centres of women education and medical education- sites of deindustrialization- major areas of swadeshi movement and Gandhian movement- identifying partition as a lived memory and as a hereditary memory in Bengal

HISHCC-XIII HISTORY OF MODERN EUROPE II (1871-1945)

CO1: Constant shift of power loci and identifying it as a primary factor that went into the making of the modern world

CO2: Evaluating the trajectory of ideological and diplomatic shifts leading to warfare

CO3: Identifying imperialist tendencies alongside democratic overtures

CO4: Identifying the changing pattern of European map- sites of conflict- rise of new powerful states like Germany and Italy- sites of the two great wars.

HISHCC-XIV MAKING OF THE CONTEMPORARY WORLD (1946-2000)

CO1: Contextualizing world politics and relations within the ambit of Cold War

CO2: Identifying the two poles and the others leading to recasting of the decolonized world

CO3: Evaluating the local within the global- the benefits and the discrepancies

CO4: Identifying the maps of contested sites- map of polarization- decolonization and the new mapping of identity and cartography- major associations of defense-timeline of cold war and its proxy wars

HISHDSE-III HISTORY OF MODERN EAST ASIA-1 (1840-1919)

CO1: Analyzing the pre-colonial world of China and Japan

CO2: Identifying the conflict between pre-modern and modern notions

CO3: Contextualizing it within the ambit of Mercantilism and western modernity

CO4: Evaluating the trajectory of colonization of the far eastern lands

HISHDSE-IV HISTORY OF CHINA AND JAPAN (1919-1939)

CO1: Understanding about the Nationalism versus colonialism

CO2: Experimental and alternative leadership in China

CO3: Japanese experiment with Asianism and Western Modernism

CO4: Identifying the trajectory and mapping the rise of Communist China and Democratic Japan.

DEPARTMENT OF HISTORY

HISTORY GENERAL

🕮 Programme Outcome of the Curriculum 🕮

The students would be able to understand the following on the completion of the courses

Paper – I A : History of India (From Earliest Times up to 300 CE)

CO1: Understanding about the historical Sources; Prehistory and Proto-historic cultures Sources & Interpretation - A broad survey of Palaeolithic, Mesolithic and Neolithic Cultures, Bronze age civilization - Harappan Civilization -Origin, Extent, dominant features & decline.

CO2. The Vedic Period Polity, Society, Economy and Religion, Iron age with reference to PGW &Megaliths.

CO3. Jainism and Buddhism Causes, Doctrines, Spread, Decline and Contributions

CO4. Understanding about the Rise of Magadha Emergence and growth of the Magadhan Empire Conditions for the rise of Mahajanpadas and the Causes of Magadha's success; The Iranian and Macedonian Invasion

CO5: The Mauryan Empire State and Administration of the Mauryas, Economy, Ashoka's Dhamma, Art & Architecture.

CO6. Understanding about the Post Mauryan Period The Satvahana Phase: Aspects of Political History, Material Culture, and Administration & Religion The Sangam Age: Samgam Literature, The three Early Kingdoms, Society & the Tamil language The age of Sakas and Kushanas: Parthians & Kushanas, Aspects of Polity, Society, Religion, Arts &Crafts, Coins,

B : History of India (300 to 1206 CE)

CO1:. Understanding about the Rise & Growth of the Guptas Administration, Society,Economy, Religion, Art, Literature, and Science &Technology.

CO2:. Harsha & His Times Harsha's Kingdom, Sasanka, Administration,Buddhism&Nalanda

CO3. Understanding towards Early Medieval: North India - Palas, Senas, Pratiharas and the rise of Rajputs .

CO4. Towards Early Medieval: South India Chalukyas, Pallavas, Rashtrakutas, and the Cholas

CO5. Society, Economy and Culture in Early Medieval: The Feudalism debate Changes in Society, Economy and Culture

CO6. Understanding about arrival of Islam in India Arab conquest of Sindh Struggle for power in Northern India & establishment of Sultanate.

Paper – IC : HISTORY OF INDIA FROM 1206-1707

CO1: Understanding about the Political History of the Delhi Sultanate Foundation, Expansion and Consolidation of the Delhi Sultanate—Ilbari Turks, Khaljis and the Tughlaqs Nature of the State, nobility and the Ulema, Economic reforms

CO2: Regional Political Formations Bengal Vijaynagar and the Bahamani Kingdoms

CO3. Mughal ascendency till the time of Akbar (1605 CE) Babar; Mughal- Afgan conflict, Akbar

CO4. Mughal Power in the post Akbar Era (1606-1707 CE) Mughal empire from Jahangir to Aurangzeb

CO5. Economy and Society revenue administration from iqta, jagi and mansabdari. inland and oceanic trade

CO6. Understanding about the Religion, Art and Architecture Religion;-Sufism, and Bhakti movement Art---painting, sculpture and architecture literature—Persian and regional.

I D : HISTORY OF INDIA FROM 1707 - 1950

CO1:. Understanding about the Regional States and rise of the Company's rule Bengal – Battle of Plassey, Buxar and Dewani Marathas and Anglo Maratha relation Mysore and Anglo Mysore relation Anglo Sikh relations.

CO2: Land Settlements, peasant and Tribal revolts upto 1857 Permanent settlement and Rayatwari Tribal and Peasant revolts- Wahabi, Fairazi and Santal

CO3. Understanding about the Socio- Religious Reform Movements in the 19th Century Rammohan Roy, Young Bengal, Vidyasagar, AryaSamaj, Growth of a new middle class

CO4. Understanding about the 1857 and its aftermath Causes and nature of the 1857 Age of associations and the birth of INC .

CO5. Indian National Movement Moderates and Extremists Partition of Bengal and the Swadeshi movement Rise of Gandhi in Indian politics and Gandhian movements. Leftist movements Subhash Chandra Bose and the INA

CO6. Partition Of India and the establishment of Indian Republic Government Of India Act 1935 Cripps Mission, Wavell Plan, Cabinet Mission Communal Politics Partition of India Constituent Assembly and the birth of the Republic

Paper –I A : SOME ASPECTS OF SOCIETY & ECONOMY OF MODERN EUROPE: 15-18 CENTURY

CO1: Understanding about the Political and Economic Structure of the Feudal Era a. Origins of Feudalism b. Nature of Feudal Society; Regional Variation c. Crisis in Feudalism ; Transition debate

CO2. Renaissance& the Rise of Modern Europe a. Origins; Reason b. Renaissance humanism; rediscovery of Classics c. Italian Renaissance and its Impact

CO3. Understanding about the European Reformation a. Background, nature and impact b. Martin Luther & Protestant Reformation c. Reformation Movements and European States

CO4. European Economy in the 16th Century a. Economic expansion of Europe in the 16th Century b. The rise of new marchants c. Price revolution & Agriculture Revolution

CO5. Understanding about the Science & Technology a. Origins of the Modern science b. Scientific Revolution c. Origins of Enlightenmen

CO6. Transition from Feudalism to Capitalism a. Transition to Capitalism and its debates. b. Nature of the Capitalism c. Industrial Revolution in England.

Paper –I A (OR) : POLITICAL HISTORY OF MODERN EUROPE: 15th to 18th Century

CO1: Understanding about the Europe in the 15th Century Nature of Feudal Society and its regional variations Political dimensions of feudal crisis Economic crisis.

CO2. From City States to Emergence of absolutist States The formation of modern State New Monarchy in England The empire of Charles V of Spain

CO3: Constitutional conflicts in 17th Century England The English Civil War of the 17th Century Glorious Revolution of 1688 Impact.

CO4. Understanding about the Thirty Years War Causes Nature Results.

CO5. Understanding about the Absolutist State in 18th Century Prussia Russia England.

CO6. Crisis of the Absolutist state in Franch.

II A (No option offered): SOME ASPECTS OF EUROPEAN HISTORY

CO 1. Understanding about the French Revolution a) France before 1789; Socio- Economic and Political background; Birth of new ideas Philosophers and Physiocrats . b) Progress of the Revolution; The Constituent Assembly; The reign of Terror c) Impact of French Revolution on Europe

CO 2: Understanding about the Rise of Napoleon b) Napoleonic reforms; Napoleon and Europe; Fall of Napoleon, c) Vienna Congress; The concert of Europe; Metternich system.

CO3. Understanding about the revolutions of 1830 and 1848 a) The Democratic and Nationalist Aspirations of Europe b) Causes, and Impact of July Revolution of 1830 c) The February revolution of 1848-50.

CO4. Age of Nationalism a) The Cremean War; The Eastern Question; Turkey; Russia's ambition in the Balkans b) The second Empire in France and Louis Napoleon c. Unification of Italy & Germany

CO5. Europe between 1914-1939 a) Origin of the First World War; Role of different European Powers; Peace of Settlement of 1919; The League of Nations b)Political and Economic Disorder & Depression, Policy of Appeasement, Spanish Civil War; Munich Pact' Russo-German Non-Aggression Pact c) Rise of Fascism in Italy and Nazism in Germany

CO6. Understanding about the Second world war a) Origins b)Failure of disarmament and the League of Nations c) Responsibility of Hitler.

Paper – IV (Option offered) : Art Appreciation: An Understanding to Indian Art

The purpose of this course is to introduce students to Indian art, from ancient to contemporary times, in order to understand and appreciate its diversity and its aesthetic richness. The course will equip students with the abilities to understand art as a medium of

cultural expression. It will give students direct exposure to Indian art through visuals, and visits to sites and museums.

CO1;. Prehistoric and protohistoric art: _Rock art; Harappan arts and crafts.

CO2: Indian art (c. 600 BCE – 600 CE): World Heritage Site Managers, UNESCO World Heritage Manuals [can be downloaded/ accessed at www.unesco.org] Notions of art and craft_Canons of Indian paintings_Major developments in stupa, cave, and temple art and architecture Early Indian sculpture: style and iconography_Numismatic art.

CO3: Indian Art (c. 600 CE – 1200 CE) :_Temple forms and their architectural features_Early illustrated manuscripts and mural painting traditions Early medieval sculpture: style and iconography_Indian bronzes or metal icons

CO4. Indian art and architecture (c. 1200 CE – 1800 CE) : _Sultanate and Mughal architecture_Miniature painting traditions: Mughal, Rajasthani,Pahari Introduction to fort, palace and haveli Architecture

CO5:. Modern and Contemporary Indian art and Architecture: The Colonial Period_Art movements: Bengal School of Art, Progressive Artists Group, etc. Major artists and their artworks_Popular art forms (folk art traditions)

Paper – IV (OR) : Orality and Oral Culture in India

CO1: Understanding about the Defining orality.

CO2. History &Historiography of Orality

CO3:.Life Histories: Sociological Aspects

CO4. Research Methodologies

CO5. Documentation: Written &Visua

DEPARTMENT OF PHILOSOPHY

BA PHILOSOPHY HONOURS

PROGRAMME SPECIFIC OUTCOMES

After completion of the programme, the graduates will be capable of-

PSO1: Understanding the nature and basic concepts of Indian philosophy and as well as Western philosophy related to the area of Metaphysics, Epistemology. They also will be able to assess arguments and philosophical perspectives using critical reasoning and can also express complex thoughts logically & coherently.

POS2: The students will be able to demonstrate understanding of major ethical theories and problems in the Western as well as Indian traditions. They also will be able to apply knowledge of ethical perspectives, theories & critical reasoning in practical life.

POS3: This course helps students to understand the distinct features of Indian Epistemology and concept of Indian logic.

POS4: This course provides the logical principles to make proper arguments. There different scientific methods are procedures are includesin this course. In another paper the students understand the nature of the psychology and all about our mind. And also discuss about the philosophy of religion.

POS5: This course develops in students a sense of the values and a reflective attitude and sensitivity towards the sub-ethics and complexities of philosophical judgement and a life-long commitment to learning & enquiry. The students also make a concept of human rights.

POS6: The students will be able to get a broader concept on modern Indian and western thinkers to the development of philosophical ideas in the twentieth century and also get a concept of two special books that is ‘Sadhana’ written by Rabindranath Tagore, and ‘An Enquiry Concerning Human Understanding’ written by David Hume.

COURSE OUTCOME

SL NO	Name of the Course	Semester	Course Code	Course Outcome
1	Indian Philosophy – I	1	CC-1	CO1: Knowledge about the definition and division of Orthodox school and Heterodox Schools of Indian Philosophy. CO2: Description of Carvaka Philosophy and gain knowledge about the Epistemology, Metaphysics, Ethics and Materialism of Carvaka view. CO3: Description of the different concepts of Jaina Philosophy as well as the theory of reality and seven forms of judgements. CO4: Knowledge about the life and four noble truths as well as the various theories associated with Boudha Philosophy. CO5: Description, analysis of various concepts of Nyaya school, know the instruments, methodology and classification of perception.
2	History of Western Philosophy – I	1	CC-2	CO1: Difference between various kinds of matter which are qualitative. CO2: Air, which is constantly in motion, bring about the development of the universe. CO3: All things are exchanged for fire and fire for all, according to HIraclitus. CO4: The universe is a naturalistic and scientific principles, without the aid of myths and anthropomorphic God. CO5. Identify and explain the key philosophical concepts as theory arise in the different historical periods, including knowledge, reality, reason, substance, identity, experience, etc.

3	Indian Philosophy – II	2	CC-3	CO1: Description of Samkhya theory of cause and explanation of the dualistic view of Prakriti and Purusa. CO2: Knowledge about the different Samadhi or meditation, as well as the eightfold path of discipline, Astanga Yoga which generates certain supra-normal power. CO3: Able to know through explanation of the Prabhakara and Bhatta school and the theories associated with this school. CO4: Description of Samkara's Vedanta school and the analysis of the concept of Brahma as the ultimate reality and the knowledge of Satta. CO5: Knowledge about the Ramanujacharya's attempt to harmonize the absolute and the personal theism and also the detail view of Brahman which is Jiva and Jagat.
4	History of Western Philosophy – I	2	CC-4	CO1:LOCKE : Ideas will be increased i,e. innate ideas, the origin and formation of ideas, simple and complex ideas, substance, modes and relations, knowledge and its degrees, limits of knowledge, primary and secondary qualities, representative realism etc. CO2: BERKELEY: Concept of abstract ideas. Criticism of Locke's distinction between primary and secondary qualities, Immaterialism, esse-est-percipi, role of God and also Differential thoughts between two philosophers. CO3: HUME: Concept of ideas, causality and Scepticism. Impression and ideas, association of ideas, distinction between judgements concerning relations of ideas and judgements concerning matters of fact, and personal identity. CO4: KANT: Know the cohesion of rationalism and empiricism, Conception of critical Philosophy, distinction between a priori and a posteriorijudgements, distinction between analytic and

				synthetic judgements. Synthetic a priori judgements, General problem of the Critique, Copernican Revolution in Philosophy, Transcendental Aesthetic: Space & time - Metaphysical & Transcendental expositions of the ideas of space & time.
5	Indian Ethics	3	CC-5	CO1: Gain acknowledgement power, Presuppositions, Concept of Sthitaprañjna, C02: Karmayoga: Aware their root duty, (Gīta) Puruṣārthas and their interrelations. CO3: Buddhist Ethics: Able to realize Buddhist Ethics i,e.Pancaśīla, Brahmavihārabhāvanā (Bauddha) Anubrata, Mahābrata, Ahimsā. CO4: Jaina Ethics: After knowing Jaina Ethics, they can relate it in day to day life. Also the concepts of anubrata, mahābrata. CO5: Mimāṁsa Ethics: Know the different type of karma. nityanaimittika karma and kāmya karma, the imperative in kāmya karmas and in kāmya karmas involving hiṁsā.
6	Western Ethics	3	CC-6	CO1: Has a bearing on moral life, able to know the exact nature of the subject, its range subject matter for discussion as well as its classification. CO2: Gain knowledge about moral and non-moral actions. Can know the object of moral in judgements. CO3: Description of the moral theories of eminent philosophers like Plato and Aristotle which explain the moral relation between individual and Society and also the science of morality. CO4: Understands the different theories regarding the ultimate moral standard. Moral theories are different in nature, know the true nature and types of various theory. CO5: Able to know the concept and Justification of the very idea of ‘punishment ‘we know that

				punishment shrinks the personality of the wrong Doer. It makes a wrong doer conscious of the social ideal. It brings consciousness in the mind of a wrong doer about the necessity of punishment into our society.
7	Indian Logic	3	CC-7	CO1: Students will get knowledge about ultimate reality. CO2: Students will get a clear picture Nyaya-Vaisesika philosophy. CO3: Students will understand the similarities and dissimilarities between Nyaya and Vaisesika philosophy. CO4: Students can understand in detailsabout the four 'Pramana's in Nyaya philosophy.
8	Western Logic-I	4	CC-8	CO1: Symbolic Logic: value of symbols, Truth-Functions, Dagger and stroke functions; inter-definability of truth functions. Tautologous, Contradictory and Contingent Statement-Forms; The Paradoxes of Material Implication; The three Laws of Thought. CO2. Testing Argument Form and Argument for validity by the Method of Truth table. And the Method of Resolution. CO3. The Method of Deduction: How to prove the formal proof of validity and invalidity. CO4. Formal Proof of Validity: Difference between Implicational Rules and the Rules of Replacement; Construction of Formal Proof of Validity by using nineteen rules; Proof of invalidity by assignment of truth-values. CO5. Quantification Theory: Concept of Quantifications and its need.

9	Psychology	4	CC-9	C01: This course help students to understand themselves and others better and to solve, to a great extent, their own problems. C02: Mutual understanding and respect will produce a society where peace and harmony will prevail. C03: deferent types of learning method as Classical Conditioning Theory, Instrumental Conditioning Theory, Trial and Error Theory, Insight Theory. C04: deference between Insight and Intelligence, and also measurement of Intelligence.
10	Philosophyof Religion	4	CC-10	CO1: Description about the nature as well as scope of Philosophy of Religion. CO2: Enable them to analyze different doctrine of karma, rebirth or Janmantarabada and the theory of liberation. CO3: Understand the meaning and concept of the Philosophical teachings of the Holy 'Quran'. CO4: Knowledge about the different features of religion and can know the basic tenets of Christianity. CO5: Gather knowledge about the concept of religious pluralism and the concept of universal religion.
11	Socio-Political Philosophy	5	CC-11	CO1: Acquaintance with the true nature of society also the relation between social and political philosophy. CO2: Knowledge about the primary concepts like society, community, social group, various customs and laws of society, distinction between Institution, Association and habits.

				CO3: Knowledge about the concept of social gradation, social class and cast system of ancient varnashrama Dharma, the social status as well as the inequalities in our society. CO4: Acquaintance with the description of the manifold diversities in race, religion, language as well as the unity and the knowledge about the Political Philosophy, the meaning and nature of Secularism as well as the nature of Secularism in India.
12	Western Logic-I I	5	CC-12	CO1: Identify arguments in ordinary language, distinguish premises from conclusion, differentiate deductive arguments from inductive arguments and construct arguments of their own. CO2: Detect mistake in reason, including both formal and informal fallacies. CO3: Translate sentence from ordinary language into standard form of categorical proposition. CO4: Translate ordinary language arguments into standard form categorical syllogism ,evaluate immediate inference and syllogism using the traditional square of opposition and Venn diagrams.
13	Philosophy in the Twentieth Century: Indian	6	CC-13	CO1: The students will be able to get a broader concept on Rabindranath Tagore and also Nature of Religion, Problem of Evil, Surplus in man. Fecundity. CO2: Swami Vivekananda Practical Vedānta, Universal Religion, Yoga. CO3: Sri Aurobindo Nature of Reality, Human Evolution– its different stages, Integral Yoga. CO4: S. Radhakrishnan nature of Man, Nature of Religious Experience, Nature of Intuitive Apprehension. CO5: Mahatma Gandhi's view of God and Truth , Ahimsa, Trusteeship. CO6: Md. Iqbal's view of Nature of the Self, Nature of the World, Nature of God.

14	Philosophy in the Twentieth Century: Western	6	CC-14	CO1:This course help students tounderstand how the crucial events of twentieth century philosophy shaped the work of a particular thinker. CO2: Present traditional philosophical ideas and values in the mask of modernity and merge the forces of tradition with those of modernity CO3: Russel's view about knowledge by acquaintance and knowledge by description. CO4: a defence of common sense according to Moore. CO5: some theory of Ayer, Heidegger and Sartre about the Existentialism.
15	Philosophy in Practice	3	SEC-1	CO1: This course help students to know the difference between 'philosophy' and 'darsana'. CO2: both epistemological and metaphysical inquiry in philosophy and darsan. CO3: A few model world-views and corresponding paths leading to Perfection; Plato, Kant Samkhya and Advaita Vedanta point of view. CO4: Some methods of philosophical discourse as vāda, jalpa, vitaṇḍā, chhala, jātiand nigrahasthāna.
16	Philosophy of Human Rights	4	SEC-2	CO1: Identify and evaluate the historical, philosophical, political and cultural developments establishing human rights as a set of global norms, agreement and procedures. CO2: Understand the importance of the Human Rights Act1998. CO3: Explore global human rights institution, law, and processes and assess the impact of their interaction with national and local cultural, practices and norms.

				CO4: Critically examine the impact of diverse Geographic, cultural and theoretical contexts on the social acceptance and practical application of human rights norms. CO5: Reflectively evaluate the effectiveness of human rights practice on local, national or international humanitarian efforts.
17	Kaṭhopaniṣad	5	DSE1	CO1: In this course students can realise the subject of Self-knowledge, the bearer of spiritual reality, that which is all-pervading, inside every being, which unifies all human beings as well as all creatures, the concealed, eternal, immortal, pure bliss. CO2: the story of Nachiketa and his thinking. CO3: Pleasures seemingly good, capable of causing addiction. CO4:weakens will power, causes sorrow.
18	The Problems of Philosophy	5	DSE-2	CO1: Apart from its utility in showing unsuspected possibilities, philosophy has a value—perhaps its chief value—through the greatness of the objects which it contemplates, and the freedom from narrow and personal aims resulting from this contemplation. CO2: some questions about appearance and reality. CO3: Problem about the existence of matter. CO4: Two sorts of knowledge: knowledge of things, and knowledge of truths.
19	Rabindranath Tagore: Sadhana	6	DSE-3	CO1: Tagore stresses the idea that ‘activity is the play of joy’ for just as the Brahma finds joy in creation so does man need to realize Brahma through his everyday action – a twoway process. ... In quoting the Upanishad,

				CO2: Tagore emphasizes that God's nature itself lies in knowledge, power and action. CO3: the relation of the individual to the universe. CO4: The problem of evil, Is this imperfection the final truth, is evil absolute and ultimate?
20	An Enquiry Concerning Human Understanding	6	DSE-4	CO1: The mind is a kind of theatre several perceptions successive make their appearance. CO2: All the objects of human reason or enquiry may naturally be relation of ideas and matters of fact. CO3: There is properly no simplicity in it at one time, nor identity in difference. Whatever natural propension we may have to imagine that is simplicity and identity. CO4: According to Hume, a substance means a collection of simple ideas and these collections are united by imagination only.

PROGRAMME SPECIFIC OUTCOMES

DEPARTMENT OF PHILOSOPHY

BA PHILOSOPHY GENERAL

After completion of the programme, the graduates will be capable of-

POS 1: Develop a comprehensive understanding about the different schools of Indian Philosophy.

POS2: Understand the historical process of development of Western philosophical thoughts and ideas.

POS3: Understand the nuances of Logic and learn to analyse and use the power of reasoning to systematically support established premises.

POS4: Appreciate the contribution of eminent Indian and western philosophers to the development of philosophical ideas in the twentieth century.

POS5: Develop the capability of applying knowledge and skills within philosophy to areas that require an ability to analyse complex problems and develop possible solutions from a philosophical perspective.

POS6: explain epistemological concepts such as the nature of knowledge, justification, evidence and scepticism, and to summarize and evaluate major philosophical positions in relation to each.

COURSE OUTCOME

SL NO	Name of the Course	Semester	Course Code	Course Outcome
1	Indian Philosophy	1	CC-1A	CO1. Students can get the fundamental historical introduction outlying the sources of philosophical thought and gain the common characteristic of Indian philosophy CO.2 Knowledge about the Materialism in Indian thought, which has never been a force, know the origin of carvaka school and theory of Pratyaksa or perception as the only source of knowledge. Know the fact of how to refute Anumana and sabda as well as the Dehatmavada Vada. CO3. Understand the Jaina theory of Reality which is realistic and relativistic pluralism, theory of sevenfold judgementthat distinguishes seven forms of judgements. CO4. Able to know the Buddha's life and philosophy, which comprises of four Noble Truths and the different theories i.e. theory of Impermanence, Nairatmavada as well as the theory of Dependent Origination which is the foundation of all the teaching of Buddha. CO.5 Description of Nyaya school which is allied to the Vaisesika system. Know the concepts of perception, inference, comparison or analogy and Get the idea of Saptapadartha or seven categories. CO6. Understand the concept of cause in Samkhya philosophy, which is dualistic in nature, able to know the theory of Casualty and theory of evolution associated with the idea of cause. CO7. Gain knowledge about the Yoga School of Indian thought which is allied to Samkhya, the

				concept of Chittavrittis and Astanga Yoga. CO8. Description of the two concepts of Mimamsa school, i.e. Arthapatti and Anupalabdhi or non-apprehension as a source of knowledge. CO9. Able to know the Advaita Vedanta concepts of Brahman, Jiva and Jagat.
2	Western Philosophy	2	CC-1B	CO1: the concept of Metaphysis, which is the knowledge of things as they are in themselves. Gather knowledge about the impossibility of Metaphysics and the nature of metaphysics. CO2: Description of the concept of realism which explain the fact that there is a world of real thought and persons, with qualities and relations which are as real as the things. CO3: Knowledge about Idealism which is the doctrine of epistemological dualism as it believes in two world's – the World of mind, the world of external substance. CO4: Description of the very idea of Kant's critical theory. We know that Kant's theory is an attempt at avoiding the Solipsism of Hume. Kant accepts an independent external reality as the ground. CO5:a critical understanding of various key concepts in philosophy such as reality, mind,causal theory,evolution theory, and different views on metaphysical thought of the philosophers.
3	Logic	3	CC- 1C	CO1. Identify arguments in ordinary language, distinguish premises from conclusion, differentiate deductive arguments from inductive arguments and construct arguments of their own. CO2. Detect mistake in reason, including both formal and informal fallacies. CO3. Translate sentence from ordinary language into standard form of categorical

				proposition. CO4. Translate ordinary language arguments into standard form categorical syllogism,evaluate immediate inference and syllogism using the traditional square of opposition and Venn diagrams.
4	Contemporary Indian Philosophy	4	CC- 1D	CO1: The students will be able to get a broader concept on Rabindranath Tagore and also Nature of Religion, Problem of Evil, Surplus in man. Fecundity. CO2: Swami Vivekananda Practical Vedānta, Universal Religion, Yoga. CO3: Sri Aurobindo Nature of Reality, Human Evolution– its different stages, Integral Yoga. CO4: S. Radhakrishnan nature of Man, Nature of Religious Experience, Nature of Intuitive Apprehension. CO5: Mahatma Gandhi's view of God and Truth , Ahimsa, Trusteeship. CO6: Md. Iqbal's view of Nature of the Self, Nature of the World, Nature of God.
5	Philosophy of Religion	5	DSE- 1A	CO1: Description about the nature as well as scope of Philosophy of Religion. CO2: Enable them to analyse different doctrine of karma, rebirth or Janmantarabada and the theory of liberation. CO3: Understand the meaning and concept of the Philosophical teachings of the Holy 'Quran'. CO4: Knowledge about the different features of religion and can know the basic tenets of Christianity. CO5: Gather knowledge about the concept of religious pluralism and the concept of universal

				religion.
6	Tarkasaṁgraha (saptapadārtha)	6	DSE- 1B	CO1: Students will get knowledge about ultimate reality. CO2: Students will get a clear picture Nyaya-Vaisesika philosophy. CO3: Students will understand the similarities and dissimilarities between Nyaya and Vaisesika philosophy. CO4: Students can understand in details about the four 'Pramana's in Nyaya philosophy.
7	Philosophy in Practice	3	SEC- 1	CO1: This course help students to know the difference between 'philosophy' and 'darsana'. CO2: both epistemological and metaphysical inquiry in philosophy and darsana. CO3: A few model world-views and corresponding paths leading to Perfection; Plato, Kant Samkhya and Advaita Vedanta point of view. CO4: Some methods of philosophical discourse as vāda, jalpa, vitaṇḍā, chhala, jātiand nigrahasthāna.
8	Philosophy of Human Rights	4	SEC- 2	CO1: Identify and evaluate the historical, philosophical, political and cultural developments establishing human rights as a set of global norms, agreement and procedures. CO2: Understand the importance of the Human Rights Act1998. CO3: Explore global human rights institution, law, and processes and assess the impact of their interaction with national and local cultural, practices and norms.

				CO4: Critically examine the impact of diverse Geographic, cultural and theoretical contexts on the social acceptance and practical application of human rights norms. CO5: Reflectively evaluate the effectiveness of human rights practice on local, national or international humanitarian efforts.
9	Philosophical Analysis	5	SEC- 3	C1: Students can learn the concept of word-meaning and sentence-meaning. CO2: difference between testability and meaning. CO3: the concept of truth, the three most widely accepted contemporary theories of truth. CO4: the philosophical analysis of the nature. and source of knowledge.
10	Ethics in Practice	6	SEC-4	CO1: Students can assess arguments and philosophical perspectives using critical reasoning. CO2: They can write clear and concise explanations and arguments about basis ethical problems. CO3: difference between motive and intention, moral and moral judgement. CO4: Some normative theories with Kant's moral theories. CO5: concept of Ahimsa, Niskamakarma, Pancasila, Panchabrata.

Department of Political Science

PROGRAMME OUTCOME AND COURSE OUTCOME

All of we know that Political Science is a social science dealing with the political activities of man. The subject not only studies state, government, administration, but also applies scientific method and empirical analysis to analyze political matters. This subject is concerned to our day to day lives. It seeks to analyze some critical issues that affect our daily lives, including civil rights, diplomacy, globalization and terrorism etc. It is a subject of systematic study of government and politics. Not only that, the subject also deals with governance, power relation, political behavior etc and tries to describe how these are shaped by the ideas of political actors. Therefore, a degree in political science not only helps students to enhance their knowledge about political matters, state affairs, government, but also prepares them to take part in the political life and civil matters. So, after the completion of graduation, the student will be able to –

Programme Outcomes (Honours)

		PROGRAMME OUTCOMES
1	**PO 1**	Understand the basic concept of political science discipline.
2	**PO 2**	Understand the contribution of several political thinkers of Western Political Thought and Indian Political Thought
3	**PO 3**	Acquaint with the Indian Government and Politics.
4	**PO 4**	Acquaint with the problems and prospects of rural local government of India.
5	**PO 5**	Familiarize with the key concept, principles and theories of public administration.
6	**PO 6**	Knowledge of basic concepts, important issues, organizations and dynamics of international relations.
7	**PO 7**	Acquaint with the diverse political systems especially UK, USA, China and France.
8	**PO 8**	Understand the issues concerning human rights and challanges.
9	**PO 9**	Synthesize, analyze political problems in the Political Science discipline and express coherent arguments.

Course Outcomes (Honours)

Semester I

🕮 Course Title: Western Political Thought

CO 1 : To help the students to gather knowledge about Western Political Thought, especially to the ideas from Plato to Marx.

CO 2 : Helping the students to understand the importance of Western Political thought in Political Science discipline.

CO 3 : To understand the ideas of Medieval political thinkers like St. Augustine and Machiavelli.

CO 4 : To introduce the concept of Social Contract Theory and the ides of its exponents - Hobbes, Locke and Rousseau.

CO 5 : To acquaint the students with the Marxian Political Thought.

🕮 Course Title: Political Theory

CO 1 : Familiarize with the ideological orientation of the political theory.

CO 2 : Understand the different approaches of political thought: Traditional, Behavioural and Post-Behavioural, Marxist.

CO 3 : Explaining the concept of Sovereignty: Monistic, Pluralist, Popular.

CO 4 : To know about Rawl's theory of justice.

CO 5 : To acquaint the students with the theories of origin of the State: Idealist theory, Liberal theory, Marxist theory, Gandhian theory.

Semester II

🕮 Course Title: Indian Political Thought

CO 1 : Understanding the contribution of Kautilya to the Indian Political Thought.

CO 2 : To understand the features of Medieval political thought.

CO 3 : Familiarize students with the ideas of Mahatma Gandhi, Rabindranath Tagore, B R Ambedkar.

CO 4 : To understand the nationalist view of Bankim Chandra Chattopadhyay and Vivekananda.

CO 5 : To know the view of Raja Rammohan Roy about British Colonial Rule.

🕮 Course Title: Indian Government and Politics

CO 1 : Helping students in gaining knowledge about biggest Democracy of the World.

CO 2 : To acquaint the philosophy of Indian constitutions.

CO 3 : To know the Fundamental Rights and Duties of Indian citizens.

CO 4 : Evaluating the nature of Indian Federalism with highlights on Union- State Relations.

CO 5 : Studying the power and functions of President, Vice President, Prime Minister, Governor, Chief Minister, Rajya Sabha, Lok Sabha, Speaker, State Legislature, Supreme Court and High Court etc.

CO 6 : Explaining the Party system in India.

Semester III

🕮 Course Title: Comparative Politics

CO 1 : To understand the difference between Comparative Politics and Comparative Government.

CO 2 : To familiarize the students with the constitution of USA and UK.

CO 3 : To know the Conventions and the Rule of Law in United Kingdom.

CO 4 : To make a comparative study of the Judiciary system in United Kingdom, USA and France.

CO 5 : To acquaint the Party System in UK and USA and France, Nigeria, Mexico.

🕮 Course Title: Public Administration

CO 1 : Helping students to understand the key concepts of Public Administration.

CO 2 : Tracing the evolution of Public Administration as an autonomous academic discipline.

CO 3 : Studying the Classical and Neo- Classical Theories of Administration.

CO 4 : To know the contribution of Elton Mayo to the Human Relation Approach.

CO 5 : To introduce the Contemporary theories of Public Administration like Ecological Approach.

CO 6 : To acquaint the students with the major approaches of Public Administration - New Public Administration, New Public Management, New Public Service Approach.

CO 7 : Studying the Feminist approach of Public Administration.

🕮 Course Title: Local Government in India

CO 1 : Understanding the evolution and institutions of Local Self Government in India.

CO 2 : To introduce 73rd and 74th Constitutional Amendment Act and its implications for local-self Government in India.

CO 3 : To explain the role of Panchayati Raj Institution in shaping Rural administration in West Bengal.

CO 4 : To familiarize the students with the role of DM, SP & SDO in District Administration.

CO 5 : Studying the Administrative Reforms in India.

CO 6 : To acquaint the students with some institutions for the redressal of public grievances - Lokpal, Lokayukta etc.

🕮 Course Title: Legislative Support

CO 1 : This paper shall help the students to understand the Powers and functions of Parliament; State Legislative Assemblies.

CO 2 : To know about the Law-making procedure in Parliament.

CO 3 : To explain the budget process in India.

CO 4 : To evaluate the role of Parliament in reviewing the Union Budget.

Semester IV

🕮 Course Title: International Relations

CO 1 : To introduce students with the nature and scope of International Relations.

CO 2 : Tracing the evolution of International Relations as an autonomous academic discipline.

CO 3 : To introduce the different approaches of International Relations: Idealist, Realist, and Neo-Realist approach.

CO 4 : Studying the concept of Balance of Power and Collective Security.

CO 5 : To analyze several major global issues after post-cold war period like Globalization, Human Rights, and Terrorism etc.

CO 6 : To evaluate the role of Globalization in the present context.

CO 7 : Studying major disarmament treaties like NPT, CTBT etc.

CO 8 : The students will learn about Concepts, Determinants and Objectives of Foreign Policy and Diplomacy.

CO 9 : To examine the basic Tenets of Indian Foreign Policy.

🕮 Course Title: Sociology and Politics

CO 1 : To understand the concept of Political Sociology.

CO 2 : To acquaint the difference between Political Sociology and Sociology of Politics.

CO 3 : To familiarize with the concept of Political Culture, Political Socialization, Political Participation.

CO 4 : Studying the Environment Movements in India.

CO 5 : To elaborate the types of Authority – Traditional, Charismatic and Legal Rational.

CO 6 : To familiarize with the different schools of Feminism.

🕮 Course Title: International Organization

CO 1 : This paper shall help the students to understand the evolution of international organizations.

CO 2 : To develop a deeper understanding about the United Nations and its organs.

CO 3 : To know about Regional Economic Organizations like APEC & OPEC

CO 4 : To acquaint the Regional security organizations- NATO & ARF

CO 5 : To analyze the role of Regional Organizations for making cooperation between states like SAARC and ASEAN, BRICS.

🕮 Course Title: Public Opinion and Survey Research

CO 1 : To understand the definition and characteristics of Public Opinion

CO 2 : To acquaint the students with the methods of sampling for measuring public opinion and data collection.

CO 3 : To introduce the types of Interview method - structured, unstructured, focused.

CO 4 : To introduce the Questionnaire method for data collection.

🕮 Course Title: Democratic Awareness through Legal Literacy

CO 1 : To know the Fundamental Rights and Duties and other constitutional rights of Indian citizens.

CO 2 : To introduce several laws relating to consumer rights and cyber crimes.

CO 3 : To introduce several laws relating to dowry, sexual harassment and violence against women.

CO 4 : To familiarize with system of courts or tribunals and their jurisdiction in India – criminal and civil courts.

Semester V

🕮 Course Title: Social Movements in India

CO 1 : The students will get an overview about the concepts of Social Movements.

CO 2 : Understanding difference between 'New' and 'Old' social movements.

CO 3 : Examining the Telengana and Tebhaga Peasant Movement.

CO 4 : Analyzing the key issues of Women's movements in India.

CO 5 : Studying Environmental Movements in India: Chipko, Narmada Bachao Andolan.

🕮 Course Title: Elementary Research Methods in Political Science

CO 1 : The paper will introduce the students to the meaning and objective of social science research.

CO 2 : It will help the students to develop an insight understanding of theoretical foundations of research.

CO 3 : Understanding the concepts of Qualitative and Quantitative research.

CO 4 : To introduce the major methods and techniques of data Collection in research.

🕮 Course Title: Select Comparative Political Thought

CO 1 : Understanding the contribution of Kautilya to the Indian Political Thought.

CO 2 : Familiarize students with the ideas of Mahatma Gandhi, Bal Gangadhar Tilak, B R Ambedkar.

CO 3 : To understand the democratic view of Nehru and Jayaprakash Narayan.

CO 4 : To understand some ideas of western political thinkers like Aristotle on Citizenship, Locke on Rights, and Rousseau on inequality.

CO 5 : To introduce the ideas of J. S. Mill on liberty and democracy.

🕮 Course Title: Democracy and Decentralized Governance

CO 1 : Helping the students to elaborate the evolution of state system and the concept of Sovereignty.

CO 2 : To acquaint the students with the various dynamics of Civil Society like New Social Movements, NGOs, Mass media.

CO 3 : Analyzing the role of Multi National Corporations in Global Economy.

CO 4 : To understand the global economic system including some institutions like World Bank, IMF and WTO.

Semester VI

🕮 Course Title: Indian Foreign Policy

CO 1 : The main objective of this paper is to help the students to develop an insight understanding about Indian Foreign Policy and its key determinants.

CO 2 : To evaluate the India's bilateral relation with Pakistan, Bangladesh and Nepal, Bhutan.

CO 3 : To evaluate the India's bilateral relation with the major powers like USA, China, and Russia.

CO 4 : To examine the recent trends in India's Foreign Policy.

🕮 Course Title: Contemporary Issues in India

CO 1 : This paper shall introduce the students to several contemporary issues in India, like Caste system, where student will get an overview about the nature and dynamics of caste system in India.

CO 2 : Familiarize with the concept of Secularism and Communalism.

CO 3 : It also helps the students to understand how women are violated or discriminated in society, their constitutional and legal provisions etc.

CO 4 : To acquaint the students with several rights for persons with disabilities (PWDs) in India.

🕮 Course Title: Local Government in West Bengal

CO 1 : Helping the students to understand the evolution of rural and urban local government in West Bengal since independence.

CO 2 : Familiarize with the West Bengal Panchayat Act,1973.

CO 3 : Familiarize with the West Bengal Municipal Act, 1993.

CO 4 : Studying how state can control financially over the local governments in West Bengal.

🕮 Course Title: Understanding Globalization

CO 1 : Accruing knowledge about meaning and debates of Globalization.

CO 2 : Evaluating the impact of Globalization on Indian Economy

CO 3 : Understanding globalization in connection with terrorism.

CO 4 : To acquaint the students with New International Order.

PROGRAMME OUTCOME AND COURSE OUTCOME

All of we know that Political Science is a social science dealing with the political activities of man. The subject not only studies state, government, administration, but also applies scientific method and empirical analysis to analyze political matters. This subject is concerned to our day to day lives. It seeks to analyze some critical issues that affect our daily lives, including civil rights, diplomacy, globalization and terrorism etc. It is a subject of systematic study of government and politics. Not only that, the subject also deals with governance, power relation, political behavior etc and tries to describe how these are shaped by the ideas of political actors. Therefore, a degree in political science not only helps students to enhance their knowledge about political matters, state affairs, government, but also prepares them to take part in the political life and civil matters. So, after the completion of graduation, the student will be able to –

Programme Outcomes (General)

		PROGRAMME OUTCOMES
1	**PO 1**	A degree of Bachelor of Arts in Political Science prepares students to understand the basic fundamental concepts in the Political Science discipline.
2	**PO 2**	Understand the political system of India.
3	**PO 3**	Understand the diverse political system of some developed countries.
4	**PO 4**	Understand Local, National and International political matters.
5	**PO 5**	After completing graduation, students can have many opportunities for careers in civil service, Academician, Political Writer, Advocate, Psephology.

Course Outcomes (General)

Semester I

🕮 Course Title: Western Political Thought

CO 1 : To help the students to gather knowledge about Western Political Thought, especially to the ideas from Plato to Marx.

CO 2 : To introduce Machiavelli's ideas of statecraft and power politics.

CO 3 : To understand the ideas of Hobbes, Locke and Rousseau on Sovereignty.

CO 4 : To acquaint the students with the Marxian Political Thought.

CO 5 : To introduce the ideas of John Stuart Mill on Liberty

Semester II

🕮 Course Title: Political Theory

CO 1 : Understanding the basic concept of Political Theory and difference between Political Theory and Political Thought.

CO 2 : Studying the different approaches of political thought: Traditional, Behavioural and Post-Behavioural, Marxist.

CO 3 : Understanding the concept of Sovereignty

CO 4 : To acquaint the students with the theories of origin of the State: Idealist theory, Liberal theory, Marxist theory, Gandhian theory.

CO 5 : Accruing knowledge about the Liberalism and Neo-liberalism.

Semester III

🕮 Course Title: Indian Political Thought

CO 1 : Understanding the contribution of political thinkers to the Indian Political Thought.

CO 2 : Getting enlightened with key features of Medieval Muslim Political Thought.

CO 3 : Highlights the nationalist thinking of Bankim Chandra Chattopadhyay and Vivekananda.

CO 4 : To understand the view of Raja Rammohan Roy about British Colonial Rule.

CO 5 : Explaining the political thinking of backward class movements with reference to BR Ambedkar and his idea of social justice.

🕮 Course Title: Electoral Practices and Procedures

CO 1 : This paper helps students to gaining knowledge about electoral process in India.

CO 2 : Understanding the Election Commission in India – its composition and functions.

CO 3 : To acquaint the students with role of Chief Election Commissioner and State Election Commission.

CO 4 : Studying the Electoral Process with focus on the Election Commission in India

Semester IV

🕮 Course Title: Indian Government and Politics

CO 1 : Accruing knowledge about the background of the Indian constitutions.

CO 2 : Students will be familiarized with the Fundamental Rights and Duties of Indian citizens.

CO 3 : Studying the power and functions of President, Vice President, Prime Minister, Governor, Chief Minister, Rajya Sabha, Lok Sabha, Speaker, State Legislature, Supreme Court and High Court etc.

CO 4 : Evaluating the nature of Indian Federalism with highlights on Union- State Relations.

CO 5 : Studying the Election Commission in India – its composition and functions.

CO 6 : To explain Electoral Reforms in India.

🕮 Course Title: Environmental Awareness

CO 1 : This paper helps students to develop awareness about environmental issues, problems.

CO 2 : An understanding the meaning and significance of Environmentalism.

CO 3 : Studying the major Environmental Movements in India: Chipko, Narmada Banchao.

CO 4 : To acquaint the students with Green Governance.

Semester V

🕮 Course Title: Select Comparative Political Theories

CO 1 : Having a comparative study of Indian and Western political thought

CO 2 : Familiarize students with the ideas of Mahatma Gandhi, Bal Gangadhar Tilak, B R Ambedkar.

CO 3 : To understand some ideas of western political thinkers like Aristotle on Citizenship, Locke on Rights, and Rousseau on inequality.

CO 4 : Helps in understanding the ideas of J. S. Mill on liberty and democracy.

🕮 Course Title: Democratic Awareness through Legal Literacy

CO 1 : To understand the Fundamental Rights and Duties and other constitutional rights of Indian citizens.

CO 2 : To introduce several laws relating to consumer rights and cyber crimes.

CO 3 : To familiarize with some laws relating to dowry, sexual harassment and violence against women.

CO 4 : Understand the system of courts or tribunals and their jurisdiction in India

Semester VI

🕮 Course Title: Understanding Globalization

CO 1 : Accruing knowledge about meaning and debates of Globalization.

CO 2 : Evaluating the impact of Globalization on Indian Economy

CO 3 : Understanding globalization in connection with terrorism.

CO 4 : To acquaint the students with New International Order.

🕮 Course Title: Human Rights Education

CO 1 : An understanding the meaning of Human Rights.

CO 2 : Studying the several provisions for protection of human rights in India.

CO 3 : Evaluating Human Rights in connection with terrorism.

CO 4 : To acquaint the students with the composition and functions of National Human Rights Commission.

CO 5 : Getting enlightened with the evolution of Human Rights Movements in India.

Name of the Department: Education
System: CBCS

Programme Specific Outcome:

At the end of this programme learners should be able to demonstrate following things:

1. Meaning, Nature and Scope, Functions, Factors of Education and Educational Psychology,
2. Western Schools of Philosophy, Philosopher and their Educational Implication, Introduction to Intelligence, Personality, Memory.
3. Concept, Nature and Scope of Educational Sociology, Education in Ancient &Medieval India and Education in British India, Value Education.
4. Concept of Educational Sociology, Development of Education in Post-Independence Period, Educational Management and Administration, Great Indian Educators.
5. Educational Guidance and Counselling, Introduction to Educational Technology, Current Issues in Indian Education, Concept of Teacher Education.
6. Concept of Measurement and Evaluation in Education, Basics Concept of Comparative Education, Basics of Educational Research and Statistics.

Course Outcome:

Semester /Part	Course Type	Paper Description	Course Outcome
1	CC-1	Educational Philosophy-I	Students will learn about basic concepts of Education. Introduction to Philosophy of Education. Students will know about Introduction of Child Centric and life Centric Education and their function in society. Students will acquire vast knowledge about Great idea about the Indian Educators.
1	CC-2	Educational Psychology-I	It will help to know about Introduction to Psychology for Students personal Life. Students will collect basics knowledge about Growth and Development in Human life. Basics Concepts about learning among students.
1	GE-1	Principles of Education	Students will learn basic knowledge about Education and their importance in Society. It will help to learn about Introduction of Child Centric and life Centric Education and their function in society. Student will know about concepts of Freedom and Discipline and application of Discipline in Educational Institution. Concepts about Curriculum and application in Society.
2	CC-3	Educational Philosophy- II	Students will learn about Western Schools of Philosophy and their Educational Implication. Students will know about contribution of Western Great Educators to Education. It will help to know about introduction of current issues in Education

2	CC-4	Educational Psychology-II	Students will learn about various concepts of Intelligence. Introduction to Psychology for students personal Life. It will help to know what is Process of Memorization.
2	GE-2	Educational Psychology	Basic knowledge about Psychology and their importance in Society. Various concepts of Intelligence. Basics knowledge about Growth and Development in Human life. Students will gain more knowledge about concepts and types of Individual Differences.
3	CC-5	Educational Sociology-I	Students will learn about concept, nature and scope of Educational Sociology. Students will learn what is the Components of Education and community. It will help to know about concept and nature, Factors and problems of social change in India, Introduction to Social equity and equality of educational opportunities.
3	CC-6	Education in Ancient &Medieval India	Students will learn about concepts, Aims, Curriculum, Method of teaching, Role of Teachers and Salient features for Vedic period in Education. Students will collect more knowledge about concepts, Aims, Curriculum, Method of teaching, Role of Teachers and Salient features for Bramanic period in Education. Students will be aware of concepts, Aims, Curriculum, Method of teaching, Role of Teachers and Salient features for Buddhistic period in Education. It will help to know what is concepts, Aims, Curriculum, Method of teaching, Role of Teachers and Salient features for Medieval India in Education.
3	CC-7	Education in British India	It will help to know what is Indian Education during early British Period, Introduction to Western Education Recommendations of Indian Education Commission (1882), students will learn what is educational reforms of Lord Curzon, National Education Movement, Gokhale's compulsory primary education bill.
3	GE – 3	Educational Sociology	Concept, Nature and Scope of Educational Sociology. Concept and nature, Factors and problems of social change in

			India, Introduction to Meaning, process and factors of socialization. Social Agencies of Education and their educative role.
3	SEC 1	Value Education	Introduction to Meaning and Concept, Needs of Value Education. Concepts of Values in a Pluralist Society. Concept, Needs of Morality, Role of Parents to Facilitate Children's Moral Development. Importance of Values in the Classroom, Inculcation of Values among the students. Role of the teachers to facilitate moral development among the pupils.
4	CC 8	Educational Sociology-II	Introduction to meaning, process and factors of socialization. Role of the Patents and the Teachers in the process of socialization. Students will learn meaning and types of social control, Agencies of Social Control. Introduction to meaning, types, causes and factors of Social Mobility and Mobility in Indian Society.
4	CC9	: Development of Education in Post-Independence Period	Introduction to Aims, Curricula, Rural University and Other Recommendations of University Education Commission (1948-49) Students will learn about aims, Structure, Curricula and Other Recommendations of Mudaliar Commission (1952-53). Introduction to Objectives, Structure, Curricula, Technical and Professional Education, Recommendations on different areas of education of Kothari Commission (1964-66).
4	CC10	Educational Management and Administration	Introduction to Meaning, nature and scope, Need of Educational Management in Modern Education, Process of Educational Management and Administration, Role of Educational Manager. Students will know what is meaning and principles, School Organization and its Principle. Students will learn about meaning, need and functions, Factors influencing Educational supervision, Difference between inspection and supervision, Styles of leadership.
4	SEC 2	Educational Thoughts and Ideas of Great Indian Educators	Introduction to Philosophy of life, Activities, Ideas on Education and Women Education of Raja Rammohan Roy (1772-1883). It will help to know about Educational Philosophy, Aims of Education, Method of Instruction, Activities & Ideas on Women Education of Iswar Chandra Vidyasagar (1820-1891). It helps to introduce among students Educational Philosophy, Aims of Education, Method of Instruction, Curriculum of Education, Women Education & Concept of Teacher of Swami Vivekananda (1863-1902).
5	CC 11	Educational	Students will learn about Meaning, Definition Concept, Scope,

		Guidance and Counselling	Needs and Importance of Educational Guidance. Students will know what is Essentials of good Guidance programme. Students will learn about meaning, Nature, & Scope, Types of counselling, Tools and techniques of Counselling. It is help to understand about Difference between Guidance and Counselling, Counselling process-relationships & its characteristics, role of parent, teacher & counselor in guidance programme.
5	CC 12	Educational Technology	It will help to know about concept and meaning, nature, scope, needs and limitations of Educational Technology, Components of Educational Technology-Hardware & Software. Students will know about concept and characteristics, Components of instructional system, Uses and limitation of system approach. It will help to understand among students about concept, nature and scope of programmed learning, Principles of programming. It helps to understand about meaning, nature, types and process, Barriers and Significance of Communication. Students can learn Components of communication process, Communication in teaching-learning situation.
5	DSE 1	Current Issues in Indian Education	Students will acquire knowledge what is Equal opportunity in Education. Students will know what is significance Education for all and Sarva Siksha Mission. Students helps to understand what is Functions of Educational Organizations like as UGC, NAAC, NCERT, NUEPA, NCTE, DIET, SCERT
5	DSE 2	Teacher Education	Learn Meaning and Scope, Need, Aims and Objectives of Teacher Education. Students can understand to historical background Development of Teacher Education in India before and after independence. It helps to know what is various Agencies of Teacher Education like as NCTE, NCERT, SCERT, DIET.
6	CC 13	Measurement and Evaluation in Education	Students will know about Measurement and Evaluation, Difference between Measurement and Evaluation, Types of Evaluation. It will help to know among students about different Tools and Techniques of Assessment in education. Students will acquire knowledge about types of Educational data; Collection and processing of data, Tabulation of data, Graphical representation of data that is Frequency Polygon, Histogram, Bar Diagram, Pie chart, Ogive, Computation of diagrams and Uses

			Students will know and collect vast knowledge about Measures of Central tendency and its uses, Measures of Variability and its uses, Computation of Correlation Co-efficient by Product moment and Rank difference Methods and interpretation of results.
6	CC 14	Comparative Education	Students will learn about Meaning and Concept, Scope and Objectives, Factors of Comparative Education like as Geographical, Economic, Cultural, Philosophical, Sociological, Linguistic. It will help to know about Study in Comparative Education like as Descriptive, Historical, Sociological, Analytical and Synthetic. Understand Basic structure of the Formal Education System of U.S.A, U.K and India. It will help to know what is Educational Objectives and curriculum of Primary & Secondary Education of U.S.A, UK and India.
6	DSE 3	Basics of Educational Research and Statistics	Students will understand about meaning, nature and scope of Educational Research, Types of Research like as Fundamental, Applied and Action research, Qualitative and Quantitative Research, Research Problems, Objectives and Hypotheses Students will gather vast knowledge about Major Approaches of Research like as Historical; Descriptive; Experimental; Survey. It will help to know about basic Statistics and their uses, Central tendency and Dispersion, Graphical representation of data, Correlation and its uses, Co-efficient of Correlation Computation by Product moment and Rank Difference
6	DSE 4	Special Education	Students will gather knowledge about Education of Children with Visual Impairment and Hearing Impairment (with special reference to prevalence, etiology, identification, intervention, education and prevention of each category) It will help to understand about Education of Children with Speech and Language Disorders and Learning Disabilities (with special reference to prevalence, etiology, identification, intervention, education and prevention of each category) Students will learn more about Education of Children with Multiple Disabilities (with special reference to prevalence, etiology, identification, intervention, education and prevention of each category)

Department of Geography

Honours Course

Geography is the study of places and the relationships between people and their environments. Geographers explore both the physical properties of Earth's surface and the human societies spread across it. They also examine how human culture interacts with the natural environment and the way those locations and places can have an impact on people. Geography seeks to understand where things are found, why they are there, and how they develop and change over time. The study of the diverse environments, places, and spaces of Earth's surface and their interactions. It seeks to answer the questions of why things are as they are where they are. The modern academic discipline of geography is rooted in ancient practice, concerned with the characteristics of places, in particular their natural environments and peoples, as well as the relations between the two. So, after the completion of graduation, the students will be able to:

Programme Outcomes:

PO 1- To understand the scope and evolution of the diverse discipline of Geography.

PO 2- Recognize, synthesize and evaluate diverse sources of knowledge, arguments and approaches pertinent to exploring human-environment problems. Explain societal relevance of geographical knowledge and apply it to real world human- environment issues.

PO 3- Appreciate and reflect critically on the importance of holistic and interpretative human-environment perspectives.

PO 4- An understanding and acknowledgment of the threats that endanger the earth's natural systems. This helps in further realization of the significance of anthropogenic causes of many of the disasters and threats that puts life on this planet on the edge.

PO 5- Development of knowledge, skills and holistic understanding of the discipline among students. Encouragement of scientific mode of thinking and scientific method of enquiry in students. This goal is achieved through the regular field excursions conducted by the Department to various parts of India extensively and the writing of a report on it.

PO 6- Students become equipped with the ability to respond to both natural and man-made disasters and acquire management skills. This is attained through the curriculum by studying and analyzing hazards, disasters, their impact and management.

PO7- Ability to undertake research in interdisciplinary studies and problems or issues beyond the realm of what strictly comes under the purview of geography.

Programme Specific Outcomes:

PSO 1- Student will gain the knowledge of physical geography. Student will have a general understanding about the geomorphological and geotechnical process and formation. They will be able to correlate the knowledge of physical geography with the human geography.

PSO2- Associating landforms with structure and process; establishing man-environment relationships; and exploring the place and role of Geography among other social and earth sciences.

PSE3- Developing a sustainable approach towards the ecosystem and the biosphere with a view to conserve natural systems and maintain ecological balance.

PSE4- Student will be able to analyze the problems of physical as well as cultural environments of both rural and urban areas. Moreover they will try to find out the possible measures to solve those problems.

PSE5- Inculcating a tolerant mindset and attitude towards the vast socio-cultural diversity of India by studying and discussing contemporary concepts of social and cultural geography. Explaining and analyzing the regional diversity of India through interpretation of natural and planning regions.

PSE 6- Analyzing the differential patterns of the human habitation of the Earth, through studies of human settlements and population dynamics. Understanding and accounting for regional disparities, poverty, unemployment and the impacts of globalization

PSE7- Understanding the history of the subject; over viewing ancient and contemporary geographical thought and its relationship with modern concepts of determinism, possibilism, systematic and regional approaches in geography.

PSE8- Sensitization and awareness about the hazards and disasters to which the subcontinent is vulnerable; and their management.

PSE9- As a student of the Course they will enrich their observation power through field experience and in future this will be helpful for identifying the socio- environmental problems of their community.

PSE 10- Training in practical techniques of mapping, cartography, software, interpretation of maps, photographs and images etc.; so as to understand the spatial variation of phenomena on the Earth's surface. They will learn how to prepare map based on GIS by using the modern geographical map making techniques.

Course Outcomes:

Semester-I

CC1- Geotectonics and Geomorphology

CO 1- Understand earth's tectonic and structural evolution through geological time scale.

CO 2- Gain knowledge about earth's interior with the help of seismology.

CO 3- Acquire knowledge about the concept of isostasy.

CO 4- Develop an idea about concept of plate tectonics, and resultant landforms.

CO 5- Explain different types of geomorphic processes like weathering and mass wasting.

CO 6- Overview and critical appraisal of models of landscape evolution and slope development.

CO 7- Understand the relationship between geological structure and river network and landforms.

CO 8- Gain knowledge about different rocks.

CO 9- Acquire knowledge about different geomorphological processes and resultant landforms.

CC2 (Theory)-Cartographic Techniques and Geological map study

CO 1- Develop an idea of different types of maps.

CO 2- Acquire knowledge about different scales.

CO 3- Understand the different principles of map projection.

CO 4- Gain knowledge about the Survey of India Topographical Maps

CO 5- Identification of rocks and minerals.

CC 6- Understand the different concepts of Geological Map.

CC2 (Practical)-Cartographic Techniques and Geological map study

CO 1- Learn to construct different types of scale like linear, diagonal and vernier.

CO 2- Drawing of maps with the help of map projection.

CO 3- Interpreting, reading, analyzing and identifying features from geological and topographical maps.

Semester-II

CC3- Human Geography

CO 1- Gain knowledge about major themes of human geography.

CO 2- Acquire knowledge on the evolution of humans, race and ethnicity.

CO 3- Develop an idea about space, society and cultural regions.

CO 4- Explore different aspects of culture.

CO 5- Understand the approaches and processes of human geography as well as the diverse patterns of habitat and adaptations.

CO 6- Gain knowledge about different aspects of population study.

CO 7- Analyze the morphology of rural settlements.

CO 8- Gain knowledge about functional classification of urban settlements.

CC4 (Theory)-Cartograms, Survey and Thematic Mapping

CO1- Develop an idea about cartograms and different types of thematic mapping techniques.

CO2- Gain knowledge about basic concepts of surveying and survey equipments like Abneys Level, Clinometer, Prismatic Compass, Dumpy Level, Transit theodolite.

CO3- Interpretation of land use and land cover maps.

CC4 (Practical)-Cartograms, Survey and Thematic Mapping

CO1- Learn about diagrammatic representation of data like Age-sex pyramid, Pie-diagram, dots and spheres, isopleth and choropleth.

CO2- Brings direct interaction of different types of surveying instruments like Prismatic Compass, Dumpy level and Theodolite with environment.

Semester-III

CC5- Climatology

CO1- Understanding the nature, composition and layering of the atmosphere.

CO2- Develop an idea about insolation and heat budget of the atmosphere.

CO3- Gain knowledge about different atmospheric phenomena like temperature distribution, greenhouse effect, condensation, air mass, fronts, stability and instability, wind circulation and climate change.

CO4- Acquire knowledge about cyclones.

CO5- Approaches to climatic classification.

CC6 (Theory)-Statistical Methods in Geography

CO1- Learn the significance of statistics in geography.

CO2- Understand the importance of use of data in geography.

CO3- Gain knowledge about different scales of measurement.

CO4- Know about different types of sampling.

CO5- Develop an idea about theoretical distribution.

CO6- Acquire knowledge about central tendency, dispersion, correlation, linear regression and time series analysis.

CC6 (Practical)-Statistical Methods in Geography

CO1- Ability to construct data matrix.

CO2- Using statistical techniques in order to summarize, represent, analyze and interpret the data matrix.

CC7- Geography of India

CO1- Understanding of geology, physiography, climate, soil and vegetation of India.

CO2- Gain knowledge about demographic and social distribution of population of India.

CO3- Develop an idea about the economic resources of India.

CO 4- Learn about the regionalization of India.

CO5- Acquire knowledge about the various perspectives of geography of West Bengal.

SEC1- Computer Basics and Computer Applications

CO1- Understanding of Numbering Systems.

CO2- Acquiring practical skills of application of different statistical techniques and preparation of annoted diagrams with the help of computer.

CO3- Develop an idea about internet surfing.

Semester-IV

CC8- Regional Planning and Development

CO1- Understand and identify regions as an integral part of geographical study.

CO2- Gain knowledge about types of planning, principles and techniques of regional planning and multilevel planning.

CO3- Appreciate the varied aspects of development and regional disparity, in order to formulate measures of balanced development.

CO4- Build an idea about the models and strategies for regional development.

CO5- Know about measuring development indicators.

CO6- Understanding of NITI Aayog and its functions.

CC9- Economic Geography

CO1- Gain knowledge about basic concepts and approaches to economic geography.

CO2- Understand the factors influencing location of economic activity and transport cost.

CO3- Acquire knowledge about various types of economic activities.

CO4- Learn about the different types of primary, secondary and tertiary activities.

CO5- Build an idea about the agricultural and industrial location theories.

CO6- Assess the role of highways and international trade blocks in economic development.

CC10 (Theory)-Environmental Geography

CO1- Learn about geographers' approach to environmental studies.

CC2- Develop an idea about human-environment relationships.

CC3- Build an idea about structure and functions of ecosystem.

CO4- Assess the significance of environmental degradation and pollution.

CO5- Understanding of environmental issues related to agriculture, waste management and bio-diversity.

CO6- Know about environmental programmes and policies.

CC10 (Practical)-Environmental Geography

CO1- Develop skills regarding preparation of questionnaire for perception survey on environmental problems.

CO2- Assess environmental impact through Leopold Matrix.

CO3- Acquire practical knowledge regarding quality assessment of soil using field kit.

CO4- Understanding of interpretation of air quality using central and state pollution control board data.

SE2 (Practical)-Advanced Spatial Statistical Techniques

CO1- Gain knowledge about concept of probability and its geographical application.

CO2- Acquire practical knowledge about different statistical techniques like correlation, regression analysis, time series, t-test and nearest neighbor analysis.

Semester-V

CC11 (Theory)-Research Methodology and Field Work

CO1- Learn the significance of research in geography.

CO2- Have expertise in the identification of the area of study, defining research problem, objectives and hypothesis, methodology, quantitative and qualitative analysis and conclusions to be drawn about the area- fundamental to geographical research.

CO3- Understand different types of field techniques and tools.

CC11 (Practical)-Research Methodology and Field Work

CO1- Conducting field excursion and preparation of field report based on primary and secondary data.

CC12 (Theory)-Remote Sensing and GIS

CO1- Know about concepts, components, development, platforms and types of remote sensing and GIS.

CO2- Understand about Aerial photography and Satellite Remote Sensing.

CO3- Know about GIS data structures.

CO4- Develop an idea about interpretation and application of remote sensing and GIS.

CO5- Acquire knowledge about principles of GNSS Positioning.

CC12 (Practical)-Remote Sensing and GIS

CO1- Training in the use of GIS software for contemporary mapping skills.

CO2- Develop practical skills regarding georeferencing, image processing, classification, digitization and preparation of thematic maps.

DSE1-Cultural and Settlement Geography

CO1- Understand the scope, content and development of cultural geography.

CO2- Gain knowledge about the concept of cultural hearth and realm, cultural landscape, cultural innovation and diffusion, cultural segregation, cultural diversity and acculturation.

CO3- Learn about the various racial groups of the world.

CO4- Understand the scope and content of settlement geography.

CO5- Acquire knowledge about rural settlements-definition and characteristics, role of site and situation.

CO 6- Learn the census definition and categories of urban settlement.

CO7- Analyze the classical models of urban morphology.

CO8- Develop knowledge about functional classification of cities.

DSE2- Population Geography

CO1- Understand the development of population geography and the relationship between population geography and demography.

CO2- Analyze the determinants of population dynamics.

CO3- Evaluate the theories of population growth and demographic transition model.

CO4- Trace the trend and pattern of population growth of India since independence.

CO5- Understand the population composition of India.

CO6- Learn about the causes and types of migration and analyze its theories.

CO7- Know about measuring human development indicators.

CO8- Explore the population policies of Sweden and China.

CO9- Studying health and unemployment as contemporary issue in population geography.

Semester-VI

CC13- Evolution of Geographical Thought

CO1- Understand the scope and content of geography and analyze geography as a spatial science.

CO2- Explore the evolution of geographical thought from ancient to modern times.

CO3- Appreciate the contribution of the thinkers in geography.

CO4- Know about different schools of geographical thought.

CO5-Analyzing modern and contemporary principles of determinism, possibilism, neo-determinism, systematic and regional approaches in geography.

CC14 (Theory)-Disaster Management

CO1- Understand the nature and classification of hazards and disasters.

CO2- Assess risk, perception and vulnerability with respect to hazards.

CO3- Develop an idea about preparedness, trauma, resilience and capacity building as response to hazards.

CO4- Learn about the data and techniques of hazard mapping.

CO5- Acquire knowledge about factors, vulnerability, consequences and management of earthquake, landslide, cyclone and fire.

CC14 (Practical)-Disaster Management

CO1- Preparation of an individual project report based on any one field based case study on earthquake, landslide, cyclone, flood, drought, river bank erosion, mining area subsidence or tsunami.

DSE3- Resource Geography

CO1- Understand the importance of resource geography and its relation with other sub disciplines.

CO2- Develop knowledge about concept and classification of resources.

CO3- Evaluate the functional theory of resource.

CO4- Analyze the problems of resource depletion and acquire knowledge about resource conservation.

CO5- Understand the concept of 'Limits to Growth'.

CO6- Gain knowledge about the distribution, utilization, problems and management of mineral and energy resources in Indian context.

CO7- Analyze the contemporary energy crisis and assess the future scenario.

CO8- Critical appraisal of sustainable resource development.

DSE4- Soil and Bio Geography

CO1- Learn definition and factors of soil formation.

CO2- Gain knowledge about physical and chemical properties of soil.

CO3- Explore types of soil, principles of soil classification, soil degradation and management.

CO4- Assess the scope of bio geography.

CO5- Introducing ecosystem and biosphere concepts.

CO6- Analyzing the role and importance of bio-geo chemical cycles.

CO7- Understand the factors of plant growth.

CO8- Develop idea about biomes and comprehend the causes and consequences of biodiversity loss.

Department of Geography

General Course

Geography is the study of places and the relationships between people and their environments. Geographers explore both the physical properties of Earth's surface and the human societies spread across it. They also examine how human culture interacts with the natural environment and the way those locations and places can have an impact on people. Geography seeks to understand where things are found, why they are there, and how they develop and change over time. It is the study of the diverse environments, places, and spaces of Earth's surface and their interactions. It seeks to answer the questions of why things are as they are where they are. The modern academic discipline of geography is rooted in ancient practice, concerned with the characteristics of places, in particular their natural environments and peoples, as well as the relations between the two. So, after the completion of graduation, the students will be able to:

Programme Outcomes:

PO1-To understand the scope and evolution of the diverse discipline of Geography.

PO2- Student will be able to analyze the problems of physical as well as cultural environments of both rural and urban areas. Moreover they will try to find out the possible measures to solve those problems.

PO3- Inculcating a tolerant mindset and attitude towards the vast socio-cultural diversity of India by studying and discussing contemporary concepts of social and cultural geography.

PO4- Sensitization and awareness about the hazards and disasters to which the subcontinent is vulnerable; and their management.

PO5- Training in practical techniques of mapping, cartography, software, interpretation of maps etc.; so as to understand the spatial variation of phenomena on the earth's surface and encouragement of scientific mode of thinking through field works.

PO 6- Students can have many opportunities for career in academics, civil service etc.

Programme Specific Outcomes:

PSO 1-Student will gain the knowledge of physical geography. Student will have a general understanding about the geomorphological and geotechnical process and formation. They will be able to correlate the knowledge of physical geography with the human geography.

PSO 2- Associating landforms with structure and process; establishing man-environment relationships; and exploring the place and role of Geography among other social and earth sciences.

PSE 3- Developing a sustainable approach towards the ecosystem and the biosphere with a view to conserve natural systems and maintain ecological balance.

PSE 4- Understand the adjustment of humans to the environment and trace the recent development.

PSE 5- Explore the principles of practical geography and apply those in the construction and interpretation of maps.

PSE 6-Learn about the different hazard management strategies.

Course Outcomes:

Semester-I

CC1A- Geomorphology and Cartography

Unit I- Geotectonics and Geomorphology (Theory)

CO1- Learn about types of weathering and related landforms.

CO2- Gain knowledge about internal structure of the earth on the basis of seismic evidences.

CO3- Develop an idea about concept of plate tectonics, and resultant landforms.

CO4- Acquire knowledge about different geomorphological processes and resultant landforms.

CO5- Evaluate the role of the global hydrological cycle and ground water.

Unit II- Scale and Cartography (Practical)

CO1- Develop practical skill of drawing linear and comparative scale.

CO2- Acquire knowledge and skills about cartographic representation of data.

Semester-II

CC1B- Physical Environment and Surveying

Unit-I-Climatology, Soil and Biogeography

CO1- Understand the elements of weather and climate and composition and layering of the atmosphere.

CO2- Gain knowledge about different atmospheric phenomena like temperature distribution, precipitation.

CO3- Acquire knowledge about cyclones and climatic classification.

CO4- Gain knowledge about physical and chemical properties of soil and factors of soil formation.

CO5- Introducing ecosystem and biosphere concepts.

Unit II- Surveying and Levelling (Practical)

CO1- Understand definition and classification of surveying.

CO2- Brings direct interaction of different types of surveying instruments like Plane Table, Prismatic Compass and Dumpy level.

Semester-III

CC1C- Human Geography and Map Study

Unit I- Human Geography (Theory)

CO1- Understand the nature and contemporary relevance of human geography.

CO2- Develop an idea about space, society, cultural regions and explore different aspects of culture.

CO3- Trace the trend and pattern of population growth and evaluate demographic transition theory.

CO4- Acquire knowledge about types and patterns of rural settlements and classification of urban settlements.

CO5- Develop knowledge about functional classification of towns.

Unit II- Map Projection and Map Interpretation (Theory)

CO1- Drawing of maps with the help of map projection.

CO3- Interpreting, reading, analyzing and identifying features from topographical and weather maps.

SEC1- Computer Basics and Computer Applications

CO1- Understanding of Numbering Systems.

CO2- Acquiring practical skills of application of different statistical techniques and preparation of annoted diagrams with the help of computer.

CO3- Develop an idea about internet surfing.

Semester-IV

CC1D- Environmental Geography

Unit I- Theoretical

CO1- Learn about geographers' approach to environmental studies.

CC2- Develop an idea about human-environment relationships.

CC3- Build an idea about structure and functions of ecosystem.

CC4- Assess the significance of environmental problems and management.

CC5- Know about environmental programmes and policies.

Unit II- Practical

CO1- Develop skills regarding preparation of questionnaire for air pollution and health perception survey.

CO2- Acquire practical knowledge regarding quality assessment of soil using field kit.

CO3- Learn about mapping of wetlands and forest from topographical sheet.

SEC2- GIS Based Project Report

CO1- Preparation of a GIS based project report on the basis of a field work, taking into account different cartographic and statistical techniques.

Semester-V

DSE1A- Geography of India

Unit I- Geography of India

CO1- Understanding of landforms, drainage and climate of India.

CO2- Trace the trend and pattern of population growth of India since independence.

CO3- Develop an idea about the economic resources of India.

CO4- Understand the regional entities of Sundarban and Marusthali.

Unit II- Field Work

CO1- Conducting field excursion and preparation of field report based on primary and secondary data for either a rural area or an urban area.

SEC3- Field Techniques and Survey Based Project Report

CO1- Learn the significance of field work in geography.

CO2- Have expertise in the identification of the area of study, aims and objectives, methodology, quantitative and qualitative analysis and conclusions to be drawn about the area- fundamental to geographical field work

CO3- Understand different types of field techniques and tools.

CO4- Ability to design the field report

CO5- Conducting field work and preparation of field report based on primary and secondary data.

Semester-VI

DSE1B- Disaster Management

Unit I- Disaster Management

CO1- Understand the nature and classification of hazards and disasters.

CO2- Assess risk, perception and vulnerability with respect to hazards.

CO3- Develop an idea about preparedness, trauma, resilience and capacity building as response to hazards.

CO4- Learn about the data and techniques of hazard mapping.

CO5- Acquire knowledge about causes, consequences and management of earthquake, landslide, cyclone and flood.

Unit II- Disaster Management Project Work

CO1- Preparation of an individual project report based on any one field based case study on landslide, cyclone, flood or drought.

SEC4- Collection, Mapping and Interpretation of Pedological Data.

CO1- Acquire knowledge about the soil sampling techniques.

CO2- Gain practical knowledge regarding estimation of soil nitrogen, soil p^H and organic carbon using soil kit.

CO3- Develop idea about analysis and mapping of soil p^H and organic carbon.

DEPARTMENT OF PHYSICAL EDUCATION

🕮 Programme Specific and Course Outcomes 🕮

PHYSICAL EDUCATION GENERAL

Programme Specific Outcome (PSO):

Physical Education (PE) is a course that keeps concentrate on the physical fitness of the students. The benefits of introducing physical education as a subject in college levels are that it makes students physically fit with the interest in various sports activities.

PSO1: Understanding the meaning of physical education for an individual development and improving general health for professional activity.

PSO2: Fostering motivational attitude to the physical education, healthy lifestyle and regular exercising.

PSO3: Learning special knowledge, practical skills, which provide health protection, form compensatory process, correct present health abnormalities, provide mental prosperity, development and improvement of psychophysical skills, form professional qualities of an individual.

PSO4: Body's adaptation for physical and mental workload and also at the increasing of the capability of physiological systems as well as raising of the resistance of immune defenses.

PSO5: Learning the methodology of formation and taking health exercises independently, the methods of self-control while exercising, hygiene rules and sound schedule for work and rest.

PSO6: Learning how to resist unfavorable factors and working conditions, decreasing fatigue during professional activities and raising the quality of results.

Course Outcomes (CO):

After completion of this course students will have following opportunities and skills.

CC 1

CO1. Get Preliminary idea and History of Physical Education and Yoga.

CO2. Get knowledge of Biological and Sociological foundation of Physical education.

CO3. Study the behaviors of India and World Physical Education.

CC 2

CO1. Learn how to organize the standard tournaments or competitions.

CO2. Learn about Leadership.

CC 3

CO1. Get knowledge of Anatomy and Physiology of human body. Learn different body parts, its mechanism and its developing exercises.

SEC 1

CO1. Achieve the proper Rules, Judgment and Skills of Track and Field events.

CC 4

CO1. Learn how to maintain proper Health and active life style. Know about Health problems in India.

CO2. Learn the different therapy process and use.

CO3. Get knowledge of First Aid management.

SEC 2

CO1. Achieve the techniques and benefits of Gymnastics and Yoga.

DSE 1

CO1. Learn the uses the Test, Measurement and Evaluation in Physical Education and sports.

CO2. Learn various techniques to make a good athlete. Understand the process, principles, importance of Sports Training.

GE-1

CO1. Get Preliminary idea and History of Physical Education.

CO2. Get knowledge of Biological and Sociological foundation of Physical education.

CO3. Know about Olympics and Asian games.

CO4. Get knowledge to developing exercise of human's Organic system.

SEC 3

CO1. Achieve the proper Rules and Skills of Indian games and Racket games.

DSE 2

CO1. Learn how to understand the player's Psychology.

GE-2

CO1. Learn how to maintain proper Health and active life style. Know about Hypo-kinetic Diseases, Postural deformities and Physical activities.

CO2. Get knowledge of First Aid management.

CO3. Get knowledge of Measurement of Body composition and Somatotype assessment.

CO4. Learn about the Fitness testes.

SEC 4

CO1. Achieve the proper Rules and Skills of various Ball Games.

B.COM (HONS) Programme

Department of Commerce

Course outcome-Programme Outcome(COPO)

COURSE OUTCOME(CO)

PAPER CC-1 (FINANCIAL ACCOUNTING-I)

CO:1: The outcome of this course is to help the students acquire conceptual knowledge of the financial accountingand to impart skills for recording various kinds of Business transactions .

CO:2: The learners will come to know the nature of financial accounting principles- concept and conventions, financial accounting standard.

CO:3: This course enables the students to prepare accounts from incomplete records, preparation of adjustment accounts and consignment accounting.

CO:4: This course enables the students to learn accounting for sale on approval.

CO:5: The outcome of this course is the students will be able to prepare insurance claim for loss of stock and for loss of profit

CO:6:. This course enables the students to learn about partnership accounts (basic parts).

PAPER CC-2 :(BUSINESS MANAGEMENT)

CO:1 The course provides the student with an understanding of basic management concepts, principles and practices.

CO:2: Through this course students will gather knowledge about evolution of management thought, Classical approach ,Neo Classical approach, Human Relation approach, System approach, Contingency approach, etc.

CO:3: This course provides knowledge regarding environmental analysis and diagnosis.

CO:4: This course provides concept and process of organising.

CO:5: This enables the students to know control process and major techniques of control.

PAPER GE-1:(BUSINESS MATHEMATICS)

CO:1: This course familiarize the students with the basic mathematical tools and with an emphasis on applications to business and economic situations .

CO:2: This course provides Knowledge regarding matrix algebra and determinants.

CO:3: Students will be able acquiring knowledge on calculus both differential and integral.

CO:4: Students will be able to solve linear programming problems

PAPER CC-3(COST ACCOUNTING-I)

CO:1: This Course acquaints the students with basic concepts used in cost accounting , various methods involved in cost ascertainment and cost accounting book keeping system.

CO:2: This course provides basic concepts and processes used to determine product costs and able to interpret cost accounting statements.

CO:3: Through this course Students will be able to analyse and evaluate information for cost ascertainment, cost planning, control and decision making.

PAPER CC-4: (BUSINESS LAW)

CO:1: Thiscourse imparts basic knowledge of the important business legislation along with relevant case law

CO:2: This course provides knowledge regarding the Indian Contract Act ,1872, general principal of law of contract and specific contract

CO:3: The course enables the students to know the Sales Of Goods Act, 1930.

CO:4: This course provides the knowledge regarding Partnership Laws and also The Negotiable Instruments Act , 1881.

PAPER GE-2(BUSINESS STATISTICS)

CO:1: This course familiarize the students with the basicstatistical tools with an emphasis on applications to business and economic situations .

CO:2: This paper imparts knowledge on Measures of Central Tendency,Measures of Dispersion and Shape, Corelation and Regression Analysis.

CO:3: Through this paper Students will get a clear concept and idea on Index Numbers and Time Series Analysis.

PAPER CC-5(COMPUTER APPLICATIONS IN BUSINESS)

CO:1: The course provide computer skills and knowledge for commerce students and to enhance the student understands of usefulness of information technology tools for business operations

CO:2: This course help students learn the concepts, vocabulary and procedures associated with E-Commerce and the Internet .

CO:3: This course provides knowledge to the students on Computer Basics , Number System and Binary Arithmetic and Logic Gates.

CO:4: Through this course the students get acquainted with Internet and its Applications and also get knowledge on Data Base Management System(DBMS).

CO:5: Through this course the students get knowledge about Word Processing.

PAPER CC-6(COST ACCOUNTING-II)

CO:1: The outcome of the course is that the student will be able to know different methods and techniques involved in cost ascertainment such as Job Costing, Batch Costing, Contract Costing and Process Costing(including joint product and by-product)

CO:2: It enables the students to evaluate information for cost planning, control and decision making by getting knowledge on Standard Costing and Marginal Costing.

PAPER CC-7 (FINANCIAL ACCOUNTING-II)

CO:1: The outcome of this course is to help the students acquire conceptual knowledge of the financial accountingand to impart skills for recording various kinds of Businesstransactions.

CO:2: Through this course the students are able to prepare different kinds of accounts such as Higher purchase and Instalments System, Branches and Departmental Accounts , Royalty accounting , etc.

CO:3: This course provides knowledge to the learnersregardingPartnership Accounts relating to dissolution of firm.

CO:4: This course also provides introductory knowledge about company accounts.

PAPER SEC-1 (E-COMMERCE)

CO:1: This course provides knowledge to the learners regarding E-Commerce, different models of it, forces behind E-commerce-governance and its impact on society.

CO:2: This course acquaints the students with E-CRM and SCM.

CO:3: The student incorporates knowledge about Digital Payment methods.

CO:4: The student gets acquainted with the New Trends in E-Commerce .

PAPER GE-3(PRINCIPLE OF ECONOMICS):

CO:1: This course is to acquaint the students with the basic principles of economics.

CO:2: This course provides knowledge to the students about Demand-supply framework and Equilibrium.

CO:3: Through this course the students will get idea and concept on Production and Cost function as well as market structure.

CO:4: This course is to acquaint the students with the Income Distribution and Factor Pricing and the students learn about Selected Macroeconomic Principles.

PAPER GE-4(INDIAN ECONOMY):

CO:1: This course enables the student to grasp the major economic problems in India and their solution .

CO:2: This course provides knowledge regarding basic issues in Economic Development, Policy Regimes, Growth ,Development and Structural Change.

CO:3: It enables the students to know about Sectoral Trends and Issues such as Agricultural Sector, Industry and Service Sector and also in Financial Sector.

PAPER:CC-8(FINANCIAL ACCOUNTING-III)

CO:1: The outcome of this course is to help the students acquire conceptual knowledge of the corporate accountingand to impart skills for recording various kinds of Corporatetransactions .

CO:2: This paper imparts knowledge about the accounting for share capital and debentures and final account and valuation of shares and good will.

CO:3: This paper enables the students to get an idea about Internal & external reconstruction of companies, accounts of holding companies.

PAPER CC-9 :(MARKETING MANAGEMENT AND HUMAN RESOURCE MANAGEMENT)

CO:1: This courseprovide basic knowledge of concepts, principles, tools and techniques of Marketing and Human Resource management.

CO:2: Through this course learners will be able to know quantitative and qualitative dimensions of human resource planning.

CO:3: This course enables the students to know emerging challenges of Human Resource Management, Work Force Diversity, Empowerment,Downsizing.

CO:4: This paper enables the students to know the consumer behaviour, marketing research

CO:5: Through this course learners will be able to know about managing the product.

PAPER:SEC-2(ENTREPRENEURSHIP)

CO:1: It helps to orient the learner towards entrepreneurship as a career option, creative thinking and behaviour.

CO:2: This course enables the students to get a knowledge about the meaning, scope , elements, role of entrepreneurship

CO:3: It provides knowledge about Dimension of entrepreneurship and also the Role of Government and Institutions in Entrepreneurship Development.

CO:4: Through this paper students get to know about different forms of entrepreneurship-Micro , Small and Medium enterprises, women entrepreneurship

CO:5: This paper enables the students to know Sources of business ideas and test of feasibility and also to mobilise the resources.

PAPER CC-10 (CORPORATE LAWS)

CO:1: This course imparts basic knowledge of the important corporate legislations along with relevant case laws.

CO:2: This course enables the students to get an idea and concept about a Company , Formation of a Company and Company Administration.

CO:3: Through this course students acquire knowledge about Share Capital and Debenture and Corporate Meetings**.**

PAPER:CC-11(TAXATION - I)

CO:1: It provides basic knowledge and equip students with application of principles and provisions of Income-tax Act, 1961.

CO:2: It provides basic knowledge on concepts about Income Tax regarding basic ideas, total income and agricultural income

CO:3: This paper enables the students to compute taxable income under the head "Salary", "House Property" and also "Profits and Gains of Business and Profession".

PAPER:CC-12(AUDITING)

CO:1: It provides knowledge of auditing principles, procedures and techniques in accordance with current legal requirements and professional standards .

CO:2: This paper enables the students to get an idea about basic concepts, classification of audit and also to know the concepts about vouching and Verification of Assets and Liabilities.

CO:3: This course provides knowledge regarding audit of companies under the companies Act 2013, And divisible profit and dividend with special reference to depreciation , provision and reserve.

CO:4: Through this paper the students will come to know the different types of audit report and certificates.

CO:5: This course familiarize the students with various institutional audit and also inculcates the students with special areas of audit.

PAPER:DSE-1A(MANAGEMENT ACCOUNTING)

CO:1: This paper impart the students, knowledge about the use of financial, cost and other data for the purpose of managerial planning, control and decision making.

CO:2: This course provides knowledge regarding definition, objective scope, functions, advantages, limitations, techniques of management accounting.

CO:3: This paper enables the students to get an idea about the role of management accountant.

CO:4: This course familiarize the students with comparative financial statement and common size financial statement.

CO:5: Through this paper the students will come to know about the concept of ratio analysis cash flow statement as per Indian Accounting Standard(Ind-AS):7,Budget and Budgetary Control.

PAPER:DSE-1B(FUNDAMENTALS OF BANKING AND INSURANCE)

CO:1: It imparts knowledge about the basic principles of banking and insurance.

CO:2: The students get to know about Banking, Banker Customer Relationship, Types of Deposits, Structure of Indian Banking at present.

CO:3: This course provides knowledge regarding Cheques and Paying Banker, Banking Lending and Internet Banking.

CO:4: Through this paper the students will come to know about basic concepts of risk : Types of Business Risks, Basic principles of utmost good faith, Indemnity, and Types of Insurance.

CO:5: This course familiarize the students withPower , function and Role of IRDA, Online Insurance and Recent Reforms in Insurance Sectors in India.

PAPER:DSE-2A(INDIAN FINANCIAL SYSTEM)

CO:1: This course provides the student about a basic knowledge of financial markets and Institution

CO:2: This course familiarize the students with major financial services in India

CO:3: Through this paper the students will come to know about Leasing and Hire Purchase

PAPER:DSE-2B(ADVERTISING)

CO:1: It familiarize the students with the basic concepts, tools and techniques of advertising used in marketing.

CO:2: This course provides knowledge regarding Communication process , Types of Advertising, Setting of Advertising Budget, Determinants and Major Methods.

CO:3: Through this paper the students will come to know about Media Decisions, Message Development, Measuring Advertising Effectiveness and also about Advertising Agency.

PAPER:CC-13(FUNDAMENTALS OF FINANCIAL MANAGEMENT)

CO:1: This course familiarizes the student with the principles and practices of financial management.

CO:2: This course provides knowledge regarding meaning core elements, Objectives, and Scopes of financial Management

CO:3: Through this paper the students will come to know the role of financial manager , Concept of Time Value of Money, and also Techniques for dealing with Time Value of Money.

CO:4: The Course Enable the students to know about Sources of Finance, Cost of Capital and Capital Structure Analysis.

CO:5: This Course acquaints the student with knowledge of Capital Budgeting Decision, Working Capital Management and Dividend Decisions.

PAPER:CC-14(TAXATION -II)

CO:1: It provides basic knowledge and equip students with application of principles and provisions of Income-tax Act, 1961and GST.

CO:2: This course provides knowledge regarding income of other Persons included in Assessee's , Set off and Carry forward of Losses u/s 71B,72,73,74,74A.

CO:3: This Course acquaints the student with knowledge about Deduction from Gross Total Income u/s 80C,80CCC,80CCD,80CCE,80DD,80D,80DDB,80E,80G,80GGC,80TTA,80U and Rebate u/s 87A

CO:4: This impart knowledge to compute total income and tax payable.

CO:5: This course enable the students to know about GST, its Basic Concepts and Procedure.

PAPER:DSE-3A(FUNDUMENTALS OF INVESTMENT)

CO:1: This course familiarizes the student with the different investment alternatives, introduce them to the framework of their analysis and valuation and highlight the role of investor protection.

CO:2: This course provides knowledge regarding Fixed Income Securities: Concept and features of bond, Types of Bond , estimating Bond yields, Bond Risks

CO:3: This course enable the students to know about Portfolio Analysis and Financial Derivatives.

CO:4: This impart knowledge to the learners regarding Equity Analysis and Investor Protection.

PAPER:DSE-3B(TAX PROCEDURES AND MANAGEMENT)

CO:1: It provides basic knowledgeabout business tax procedures and management under different provisions of the Income tax.

CO:2: This course enable the students to know about Tax Planning , Tax Evasion and Tax Avoidance.

CO:3: This impart knowledge to the learners regarding Tax Management – PAN and TAN, various types of Income Tax Returns, Advance Payments of Tax; Tax Deduction/ Collection at Source.

PAPER:DSE-4A(INTERNATIONAL BUSINESS)

CO:1: It enable the students to acquire the concept, importance and dynamics of international business and India's involvement with global business.

CO:2: The course also seeks to provide theoretical foundations of international business to the extent these are relevant to the global business operations and developments.

CO:3: This course impart knowledge to the learners regarding International organisation and Arrangement such as WTO,UNCTAD,OPEC,IMF and World Bank & ASEAN and SAARC.

CO:4: The outcome of this course is to help the students acquireknowledge about Export Promotion Measure including Special Economic Zones (SEZs) and Export Oriented Units(EOUs)

PAPER:DSE-4B(PROJECT WORK)

CO:1: Through this paper the Students get acquainted with Practical Knowledge about collection of Data : Primary (collected from Field Survey) and Secondary (available from published sources).

CO:2: This course helps the students acquire practical and theatrical knowledge about creation, designing and formation of project.

PROGRAMME OUTCOME(PO)

PO:1

The students can get the knowledge, skills and attitudes during the end of the B.com degree course.

PO:2

By goodness of the preparation, they can turn into a Manager, Accountant, Management Accountant, Cost Accountant, Bank Manager, Auditor, Company Secretary, Teacher, Professor, Stock Agents, Government employments and so on.,

PO:3

Students will prove themselves in different professional exams like C.A. , C S, CMA, MPSC, UPSC. As well as other courses.

PO:4

The students will acquire the knowledge, skill in different areas of communication, decision making, innovations and problem solving in day to day business activities.

PO5

Students will gain thorough systematic and subject skills within various disciplines of finance, auditing and taxation, accounting, management, communication, computer.

PO6

Students can also get the practical skills to work as accountant, audit assistant, tax consultant, and computer operator. As well as other financial supporting services.

PO7

Students will learn relevant Advanced accounting career skills, applying both quantitative and qualitative knowledge to their future careers in business.

B.COM (GENERAL) Programme

Department of Commerce

Course outcome-Programme Outcome(COPO)

COURSE OUTCOME(CO)

PAPER CC-1 (FINANCIAL ACCOUNTING-I)

CO:1: The outcome of this course is to help the students acquire conceptual knowledge of the financial accountingand to impart skills for recording various kinds of Business transactions .

CO:2: The learners will come to know the nature of financial accounting principles- concept and conventions, financial accounting standard.

CO:3: This course enables the students to prepare accounts from incomplete records, preparation of adjustment accounts and consignment accounting.

CO:4: This course enables the students to learn accounting for sale on approval.

CO:5: The outcome of this course is the students will be able to prepare insurance claim for loss of stock and for loss of profit

CO:6:. This course enables the students to learn about partnership accounts (basic parts).

PAPER CC-2 :(BUSINESS MANAGEMENT)

CO:1 The course provides the student with an understanding of basic management concepts, principles and practices.

CO:2: Through this course students will gather knowledge about evolution of management thought, Classical approach ,Neo Classical approach, Human Relation approach, System approach, Contingency approach, etc.

CO:3: This course provides knowledge regarding environmental analysis and diagnosis.

CO:4: This course provides concept and process of organising.

CO:5: This enables the students to know control process and major techniques of control.

PAPER GE-1(PRINCIPLE OF ECONOMICS):

CO:1: This course is to acquaint the students with the basic principles of economics.

CO:2: This course provides knowledge to the students about Demand-supply framework and Equilibrium.

CO:3: Through this course the students will get idea and concept on Production and Cost function as well as market structure.

CO:4: This course is to acquaint the students with the Income Distribution and Factor Pricing and the students learn about Selected Macroeconomic Principles.

PAPER CC-3: (BUSINESS LAW)

CO:1: Thiscourse imparts basic knowledge of the important business legislation along with relevant case law

CO:2: This course provides knowledge regarding the Indian Contract Act ,1872, general principal of law of contract and specific contract

CO:3: The course enables the students to know the Sales Of Goods Act, 1930.

CO:4: This course provides the knowledge regarding Partnership Laws and also The Negotiable Instruments Act , 1881.

PAPER CC-4(COST ACCOUNTING-I)

CO:1: This Course acquaints the students with basic concepts used in cost accounting , various methods involved in cost ascertainment and cost accounting book keeping system.

CO:2: This course provides basic concepts and processes used to determine product costs and able to interpret cost accounting statements.

CO:3: Through this course Students will be able to analyse and evaluate information for cost ascertainment, cost planning, control and decision making.

PAPER CC-5(COST ACCOUNTING-II)

CO:1: The outcome of the course is that the student will be able to know different methods and techniques involved in cost ascertainment such as Job Costing, Batch Costing, Contract Costing and Process Costing(including joint product and by-product)

CO:2: It enables the students to evaluate information for cost planning, control and decision making by getting knowledge on Standard Costing and Marginal Costing.

PAPER CC-6(FINANCIAL ACCOUNTING-II)

CO:1: The outcome of this course is to help the students acquire conceptual knowledge of the financial accountingand to impart skills for recording various kinds of Business transactions.

CO:2: Through this course the students are able to prepare different kinds of accounts such as Higher purchase and Instalments System, Branches and Departmental Accounts , Royalty accounting , etc.

CO:3: This course provides knowledge to the learnersregardingPartnership Accounts relating to dissolution of firm.

CO:4: This course also provides introductory knowledge about company accounts.

PAPER SEC-1 (E-COMMERCE)

CO:1: This course provides knowledge to the learners regarding E-Commerce, different models of it, forces behind E-commerce-governance and its impact on society.

CO:2: This course acquaints the students with E-CRM and SCM.

CO:3: The student incorporates knowledge about Digital Payment methods.

CO:4: The student gets acquainted with the New Trends in E-Commerce .

PAPER:CC-7(FINANCIAL ACCOUNTING-III)

CO:1: The outcome of this course is to help the students acquire conceptual knowledge of the corporate accountingand to impart skills for recording various kinds of Corporatetransactions .

CO:2: This paper imparts knowledge about the accounting for share capital and debentures and final account and valuation of shares and good will.

CO:3: This paper enables the students to get an idea about Internal & external reconstruction of companies, accounts of holding companies.

PAPER CC-8 (CORPORATE LAWS)

CO:1: This course imparts basic knowledge of the important corporate legislations along with relevant case laws.

CO:2: This course enables the students to get an idea and concept about a Company , Formation of a Company and Company Administration.

CO:3: Through this course students acquire knowledge about Share Capital and Debenture and Corporate Meetings**.**

PAPER SEC-2(COMPUTER APPLICATIONS IN BUSINESS)

CO:1: The course provide computer skills and knowledge for commerce students and to enhance the student understands of usefulness of information technology tools for business operations

CO:2: This course help students learn the concepts, vocabulary and procedures associated with E-Commerce and the Internet .

CO:3: This course provides knowledge to the students on Computer Basics , Number System and Binary Arithmetic and Logic Gates.

CO:4: Through this course the students get acquainted with Internet and its Applications and also get knowledge on Data Base Management System(DBMS).

CO:5: Through this course the students get knowledge about Word Processing.

PAPER:SEC-3(ENTREPRENEURSHIP)

CO:1: It helps to orient the learner towards entrepreneurship as a career option, creative thinking and behaviour.

CO:2: This course enables the students to get a knowledge about the meaning, scope , elements, role of entrepreneurship

CO:3: It provides knowledge about Dimension of entrepreneurship and also the Role of Government and Institutions in Entrepreneurship Development.

CO:4: Through this paper students get to know about different forms of entrepreneurship- Micro , Small and Medium enterprises, women entrepreneurship

CO:5: This paper enables the students to know Sources of business ideas and test of feasibility and also to mobilise the resources.

PAPER:CC-9(TAXATION - I)

CO:1: It provides basic knowledge and equip students with application of principles and provisions of Income-tax Act, 1961.

CO:2: It provides basic knowledge on concepts about Income Tax regarding basic ideas, total income and agricultural income

CO:3: This paper enables the students to compute taxable income under the head “Salary”, “House Property” and also “Profits and Gains of Business and Profession”.

PAPER:CC-10(AUDITING)

CO:1: It provides knowledge of auditing principles, procedures and techniques in accordance with current legal requirements and professional standards .

CO:2: This paper enables the students to get an idea about basic concepts, classification of audit and also to know the concepts about vouching and Verification of Assets and Liabilities.

CO:3: This course provides knowledge regarding audit of companies under the companies Act 2013, And divisible profit and dividend with special reference to depreciation , provision and reserve.

CO:4: Through this paper the students will come to know the different types of audit report and certificates.

CO:5: This course familiarize the students with various institutional audit and also inculcates the students with special areas of audit.

PAPER: DSE-1A (MANAGEMENT ACCOUNTING)

CO:1: This paper impart the students, knowledge about the use of financial, cost and other data for the purpose of managerial planning, control and decision making.

CO:2: This course provides knowledge regarding definition, objective scope, functions, advantages, limitations, techniques of management accounting.

CO:3: This paper enables the students to get an idea about the role of management accounting.

CO:4: This course familiarize the students with comparative financial statement and common size financial statement.

CO:5: Through this paper the students will come to know about the concept of ratio analysis cash flow statement as per Indian Accounting Standard(Ind-AS):7,Budget and Budgetary Control.

PAPER DSE-1B :(FUNDAMENTALS OF MARKETING MANAGEMENT)

CO:1: This courseprovide basic knowledge of concepts, principles, tools and techniques of Marketing management.

CO:2: This paper enables the students to know the consumer behaviour, marketing research.

CO:3: Through this course learners will be able to know about managing the product.

CO:4: This course provides the student about a basic knowledge ofPricing , Policies and Strategies, Distribution Channels and Physical Distribution.

PAPER: DSE-2A(INDIAN FINANCIAL SYSTEM)

CO:1: This course provides the student about a basic knowledge of financial markets and Institution

CO:2: This course familiarize the students with major financial services in India

CO:3: Through this paper the students will come to know about Leasing and Hire Purchase

PAPER DSE-2B :(FUNDAMENTALS OFHUMAN RESOURCE MANAGEMENT)

CO:1: This courseprovides basic knowledge of concepts, principles, tools and techniques of HumanResource management.

CO:2: Through this course learners will be able to know quantitative and qualitative dimensions; Job Analysis, Job Description, Job specification, Recruitment , placement and Promotion of human resource planning.

CO:3: This course enables the students to know about Performance appraisal and Performance Compensation.

CO:4: Through this paper Students will get a clear concept and idea on Employee Health and Safety, Grievance-Handling and Redressal, Industrial Disputes Causes and Settlement Machinery.

PAPER SEC-4(PERSONAL SELLING AND SALESMANSHIP)

CO:1: Through this paper Students will get a clear concept and idea on fundamentals om personal selling and the selling process.

CO:2: This course helps students understand selling as a career and what it takes to be a successful salesman.

CO:3: This course familiarizes the students with the idea about buying motives; their uses in personal selling.

CO:4: The students through this paper get to know about sales report; Tour Diary, Daily and Periodical Reports, Ethical Aspects of Selling.

PAPER GE-2(BUSINESS MATHEMATICS& STATISTICS)

CO:1: This course familiarizes the students with the basic mathematical tools and Statistical Tools with an emphasis on applications to business and economic situations.

CO:2: This course provides Knowledge regarding matrix algebra.

CO:3: Students will be able acquiring knowledge on differential calculus.

CO:4: This paper imparts knowledge on Measures of Central Tendency, Measures of Dispersion and Shape, Corelation and Regression Analysis**.**

PAPER:DSE-3A(FUNDUMENTALS OF INVESTMENT)

CO:1: This course familiarizes the student with the different investment alternatives, introduce them to the framework of their analysis and valuation and highlight the role of investor protection.

CO:2: This course provides knowledge regarding Fixed Income Securities: Concept and features of bond, Types of Bond, estimating Bond yields, Bond Risks

CO:3: This course enables the students to know about Portfolio Analysis and Financial Derivatives.

CO:4: This imparts knowledge to the learners regarding Equity Analysis and Investor Protection.

PAPER:DSE-3B (TAXATION -II)

CO:1: It provides basic knowledge and equip students with application of principles and provisions of Income-tax Act, 1961and GST.

CO:2: This course provides knowledge regarding income of other Persons included in Assessee's, set off and Carry forward of Losses u/s 71B,72,73,74,74A.

CO:3: This Course acquaints the student with knowledge about Deduction from Gross Total Income u/s 80C,80CCC,80CCD,80CCE,80DD,80D,80DDB,80E,80G,80GGC,80TTA,80U and Rebate u/s 87A

CO:4: This impart knowledge to compute total income and tax payable.

CO:5: This course enable the students to know about GST, its Basic Concepts and Procedure.

PAPER:DSE-4A(INTERNATIONAL BUSINESS)

CO:1: It enable the students to acquire the concept, importance and dynamics of international business and India's involvement with global business.

CO:2: The course also seeks to provide theoretical foundations of international business to the extent these are relevant to the global business operations and developments.

CO:3: This course impart knowledge to the learners regarding International organisation and Arrangement such as WTO,UNCTAD,OPEC,IMF and World Bank & ASEAN and SAARC.

CO:4: The outcome of this course is to help the students acquireknowledge about Export Promotion Measure including Special Economic Zones (SEZs) and Export Oriented Units(EOUs)

PAPER:DSE-4B(FUNDAMENTALS OF FINANCIAL MANAGEMENT)

CO:1: This course familiarizes the student with the principles and practices of financial management.

CO:2: This course provides knowledge regarding meaning core elements, Objectives, and Scopes of financial Management

CO:3: Through this paper the students will come to know the role of financial manager, Concept of Time Value of Money, and also Techniques for dealing with Time Value of Money.

CO:4: The Course Enable the students to know about Sources of Finance, Cost of Capital and Capital Structure Analysis.

CO:5: This Course acquaints the student with knowledge of Capital Budgeting Decision, Working Capital Management and Dividend Decisions.

PROGRAMME OUTCOME(PO)

PO:1

The students can get the knowledge, skills and attitudes during the end of the B.com degree course.

PO:2

By goodness of the preparation they can turn into a Manager, Accountant , Management Accountant, Cost Accountant, Bank Manager, Auditor, Teacher, Stock Agents, Government employments and so on.,

PO:3

Students will prove themselves in different professional exams like C.A. , C S, CMA, UPSC. As well as other courses.

PO:4

The students will acquire the knowledge, skill in different areas of communication, decision making, innovations and problem solving in day to day business activities.

PO5

Students will gain thorough systematic and subject skills within various disciplines of finance, auditing and taxation, accounting, management, communication, computer.

PO6

Students can also get the practical skills to work as accountant, audit assistant, tax consultant, and computer operator. As well as other financial supporting services.

Program outcomes

Name of the program: B.Sc. (Hons.)

Upon successful completion of the B.Sc. (Hons) program, students will be able to –

PO1:	Gain a thorough and in-depth knowledge in the discipline of science by enhancing problem-solving skills to resolve day to day problems.
PO2	Acquire through understanding about scientific methods and apply these in solving scientific problems by analysing practical data using qualitative and quantitative methods
PO3	Can develop scientific models to solve problems in different fields like health, industry etc. and can carry out research projects independently or in collaboration with other institutions or industries.
PO4	Develop scientific, communicative, and numerical skills and make rewarding careers in science and education by facing challenging competitive exam.
PO5	Acquire innovative ideas through practical experiments and illustrate a commitment to inter-disciplinary thinking

Program specific outcomes

Name of the program: Mathematics Hons

PSO1	Gain a strong knowledge in different areas of mathematics and solve real life problems by constructing and solving mathematical models.
PSO2	Acquire numerical skill and logical thinking and apply these in facing competitive examinations, internships with confidence.
PSO3	Gain scientific knowledge and skills which enables them to undertake further studies in Mathematics, Statistics or its allied areas.
PSO4	Pursue research in the field of Mathematics, Engineering, Information Technology, Computer Science and Social Science
PSO5	Apply knowledge of principles, concepts, and results in specific subject area to analyse their impact both locally and globally.
PSO6	Enhance problem-solving skills to resolve day to day problems.

Course outcomes

Semester -I

Course code: BMH1CC01

Course Name: Calculus, Geometry, and differential equations

SL. No	Outcomes	PSO addressed
CO1	Recall the idea of derivative, integration, rules of differentiation and understand the concept of formulating differential equations.	PSO1
CO2	Will be able to solve different kinds of differential equations.	PSO1
CO3	Demonstrate the ability to visualize various forms of straight lines, planes, conic sections and enables them to apply these concepts in explaining mathematical theories geometrically.	PSO4
CO4	Apply the concepts of differentiation to estimate velocity, acceleration, and integration like measuring area of a surface, volume etc.	PSO6
CO5	Know hyperbolic functions and compare these functions with circular functions, trigonometric functions, inverse trigonometric functions and learn their properties.	PSO3

Semester -II

Course code: BMH2CC03

Course Name: Real Analysis

SL.No.	Course outcome	PSO Addressed
CO1	Learn the basic concepts of countable sets, metric space, connectedness, compactness of metric spaces, which are the backbone of real analysis.	PSO5
CO2	Understand the techniques and examples in analysis, which helps them to be well prepared for courses like Topology, Measure theory and Functional analysis.	PSO3
CO3	Using the concept of sequence and series find the sum of infinite terms with different methods.	PSO2

CO4	Differentiate continuous functions and uniform continuous functions	PSO2
CO5	Understand iterative numerical methods to find the roots of an equation, which are based on the concept of sequence.	PSO4
CO6	Explain the applicability of mathematical models using the concepts of real analysis	PSO1

Semester -III

Course code: BMH2CC07

Course Name: Numerical Methods and numerical methods lab

SL.No.	Course outcome	PSO Addressed
CO1	Understand the necessity of using numerical methods apply these to solve various types of problems	PSO1
CO2	Find roots of transcendental and polynomial equations using numerical techniques	PSO2
CO3	Solve mathematical models using appropriate numerical methods and pursue research in the field of mathematics, engineering, computer science.	PSO4
CO4	Constructs polynomials employing different methods and understand numerical differentiation and integration which enables them to undertake further studies in Mathematics, or its allied areas.	PSO3
CO5	Compare the rate of convergence of different numerical formula	PSO2
CO6	Understand C programming language and can solve problems using C-programming software	PSO4

Semester -IV

Course code: BMH4SEC21

Course Name: Graph theory

SL.No.	Course outcome	PSO Addressed

CO1	Understand the concept of Graphs, which is an important tool for Mathematical Modelling	PSO1
CO2	Understand different types of graphs and operations on graphs	PSO2
CO3	Relate real life problems or events with mathematical graphs	PSO6
CO4	Understand the concept of trees and algorithms to find special spanning trees	PSO3
CO5	Understand directed graphs and its applications	PSO2

Semester - V

Course code: BMH5DSE12

Course Name: Number theory

SL.No.	Course outcome	PSO Addressed
CO1	Apply mathematical induction and other types of techniques to prove theorems or mathematical results.	PSO1
CO2	Apply the concepts and results of divisibility of integers effectively	PSO2
CO3	Understand research problems related to number theory	PSO4
CO4	Learn various theorems on primes, congruence and residues which are used in cryptography.	PSO3
CO5	Solve problems related to Chinese remainder theorem, Fermat's Little theorem	PSO2

Semester -VI

Course code: BMH6PW01

Course Name: Project

SL.No.	Course outcome	PSO Addressed
CO1	Choose a topic of their own interest	PSO4
CO2	Formulate, analyse, and interpret mathematical models	PSO1
CO3	Build confidence and develop communication skills through the presentation of their project work	PSO2

CO4	Get preliminary concept of research in mathematics	PSO4
CO5	Gain in-depth knowledge independently in the specific topic	PSO3
CO6	Understand the core findings of their project and their applicability in practice	PSO5

Program outcomes

Name of the program: B.Sc. General

Upon successful completion of the B.Sc. (Hons) program, students will be able to –

PO1	Develop numerical and analytical skills and critical thinking that enable them to solve day to day problems
PO2	Develop scientific, communicative, and numerical skills and make rewarding careers in science and education by facing challenging competitive exam.
PO3	Gain scientific knowledge and skills which enables them to undertake further studies in an inter-disciplinary branch of science
PO4	Apply scientific knowledge of principles, concepts, and results to their day to day life
PO5	Enhance problem solving skills

Program specific outcomes

Name of the program: Mathematics (General)

PSO1	Recall basic facts of mathematics and display knowledge of conventions such as notations, terminology.
PSO2	Equipped with mathematical skills and techniques which can be applied in both academic and non-academic areas of work.
PSO3	Construct mathematical modelling of many physical phenomenon
PSO4	Face competitive examinations confidently using the acquired numerical skills and knowledges
PSO5	Develop interest and a positive attitude towards mathematics as an interesting and valuable subject of study.

Course outcomes

Semester – I

Course code: BMG1CC1a

Course name: Differential Calculus

Sl.No.	Course outcomes	PSO addressed
CO1	Recall the idea of limit, continuity, derivative and apply these in solving mathematical problems	PSO1
CO2	Describe Leibnitz theorem and apply it to solve problems	PSO4
CO3	Trace different types of curves and explain their characteristics	PSO4
CO4	Describe and apply Taylor's, Maclaurin's series for various functions	PSO2

Semester – II

Course code: BMG2CC1B

Course name: Differential Equations

Sl.No.	Course outcomes	PSO addressed
CO1	Formulate mathematical models of real-life scenarios using differential equations and solve it using different methods.	PSO3, PSO5
CO2	Test the existence and uniqueness of a solution of a differential equation.	PSO4
CO3	Classify different types of differential equations.	PSO1
CO4	Solve problems of interdisciplinary branches like, physics, computer science which are based on differential equations	PSO4, PSO5
CO5	Examination the convexity and concavity of a function	PSO2

Semester – III

Course code: BMG3CC1C

Course name: Real Analysis

Sl.No.	Course outcomes	PSO addressed
CO1	Explain the primary concepts of sets, sequences, and series of real numbers	PSO2
CO2	Understand the concepts of convergence of sequences and series	PSO1
CO3	Understand the importance of convergence of sequence and series	PSO1
CO4	Find the sum of infinite terms with different methods using the concepts of sequence and series	PSO4

DEPARTMENT OF PHYSICS
(GEN.)

PROGRAMME OUTCOME AND COURSE OUTCOME

The study of science has always been a demystifying experience. The ability to ask critical questions and follow them up with a systematic plan of inquiry seeking right answers advances scientific thoughts. Physics is a branch of science based on experimental observation. The acquaintance with physics helps to realize the working principles of many of our daily appliances. The beauty of physics lies in the simplicity of the fundamental physical theories.

Physics has a profound effect on all scientific developments. It is the present-day equivalent to "natural philosophy" from which most of our modern sciences arose. Being a description of nature, physics has been our best friend from the very day of human existence. The basic aim of Physics teaching is to let the students know and understand the principles and their applications in real life.

PROGRAMME OUTCOMES

PO1: An ability to apply knowledge of Physics in their specific branches.

PO2: Apply and demonstrate knowledge of concepts of physics, to analyze a variety of physical phenomena

PO3: Demonstrate the learned laboratory skills, enabling them to take measurements in a physics laboratory and analyse the measurements to draw valid conclusions.

PO4: Capable of oral and written scientific communication, and will prove that they can think critically and work independently.

PO5: Use and apply professional software for scientific data analysis and presentation.

PO6: Respond effectively to unfamiliar problems in scientific contexts.

PO7: Plan, execute and report the results of a complex extended experiment or investigation, using appropriate methods to analyze data and to evaluate the level of its uncertainty.

PO8: Integrate and apply these skills to study different branches.

PO9: Willingness to take up responsibility in study and work confidence in his/her capabilities capacity to work effectively in a team motivation for learning and experimentation

PO10: An ability to identify, formulate, and solve problems in physics

COURSE OUTCOMES

SEMESTER-I

🕮 COURSE: MECHANICS

After successfully completing this course, the student will be able to:

CO1: Solve ordinary differential equations of second order and some vector problems that are common in the physical sciences.

CO2: Demonstrate an intermediate knowledge of Newton's Laws and the equations of motion of some systems.

CO3: Understanding with central force and idea about various satellite system in Earth gravitational field.

CO4: Apply the concepts of elasticity to real world problems

CO5: Explain the fundamental principles of the special theory of relativity

CO6: Understand rigorously all theory by all practical.

SEMESTER-II

🕮 COURSE: ELECTRICITY AND MAGNETISM

After successfully completing this course, the student will be able to:

CO1: Define the basic terms such as electric field, electric potential, magnetic intensity, magnetic induction, magnetic susceptibility and electric and magnetic flux.

CO2: Solve numerical problems using Coulombs Law, Gauss's law, Biot-Savart's law, Ampere circuital law and Faraday's law.

CO3: Derive the relation between three magnetic vectors and compare different types of magnetic material.

CO4: Explain the concept of various type of capacitor.

CO5: Understand the Maxwell's equations and electromagnetic waves.

CO6: Understand rigorously all theory by all practical.

SEMESTER-III

🕮 COURSE: THERMAL PHYSICS AND STATISTICAL MECHANICS

After successfully completing this course, the student will be able to:

CO1: Define laws of thermodynamics, entropy, thermodynamic processes etc.

CO2: Describe and derive expression of Heat engine & Carnot engine, entropy, latent heat equation and various thermodynamic potentials.

CO3: Explain the maxwell's distribution law of gas particles, concept of equipartition of energy and transport phenomena of gases.

CO4: Derive the Plank's law, Wine's distribution law, Rayleigh-Jeans Law, Stefan Boltzmann Law and Wien's displacement law for Black body radiation.

CO5: Understand the concept of phase space, macro & micro state and also able to explain & compare all three type of statistics.

CO6: Understand rigorously all theory by all practical.

🕮 COURSE: RENEWABLE ENERGY AND ENERGY HARVESTING

After successfully completing this course, the student will be able to:

CO1: Understand the Fossil fuels and about the alternate sources of energy.

CO2: Explain solar energy, its uses and describe solar cell and photovoltaic cell.

CO3: Explain and application of various type renewable energy sources as wind energy, solar energy, ocean energy, geothermal energy and hydro energy.

CO4: Understand the piezoelectric and electromagnetic energy harvesting.

CO6: Understand rigorously all theory by all demonstration.

SEMESTER-IV

🕮 COURSE: WAVES AND OPTICS

After successfully completing this course, the student will be able to:

CO1: Define periodic and oscillatory motion, setup and solve differential equations of motion for simple harmonic, damped, and forced oscillators, set and solve differential equation for wave motion for longitudinal and transverse waves and also understanding the Sabine's formula of acoustics of buildings.

CO2: Describe the superposition of two collinear and perpendicular harmonic oscillator with graphical and analytical method and also understand the concept of Lissajous figure and its application.

CO3: Define the surface tension and its application to various type of liquid or air drops also about the Poiseuille's formula, define the coefficient of viscosity and types of pump system which creating low pressure and some type of gauge for measuring low pressure.

CO4: Explain the wave front of light and its propagation, also can describe the interference of light by various measurements like Young's Double Slit experiment, Newton's Ring experiment, etc.

CO5: Determine the wavelength, refractive index, etc. by Michelson's Interferometer experiment.

CO6: Understand about the Fraunhofer and Fresnel diffraction of light with some experiment and also explain the plane, circular and elliptical polarization of light.

CO7: Understand rigorously all theory by all practical.

🕮 COURSE: WEATHER FORECASTING

After successfully completing this course, the student will be able to:

CO1: Understand the basic idea about atmosphere and weather.

CO2: Determine how to produce wind also measuring its speed and direction and also understand about the humidity clouds and rainfall.

CO3: Describe the global wind system, thunderstorm and tropical cyclones also define the climate, its change due to global warming and pollution.

CO4: Forecast of weather by various analysis.

CO5: Understand rigorously all theory by all demonstration.

SEMESTER-V

🕮 COURSE: ELEMENTS OF MODERN PHYSICS

After successfully completing this course, the student will be able to:

CO1: Explain the Plank's constant, photo electric effect and Compton scattering and also describe the wave particle duality by Davisson-Germer and double slit experiment.

CO2: Describe the Rutherford and Bohr's atomic model and from it define the energy spectra of hydrogen atom and also describe the uncertainty principle by thought experiment.

CO3: Define the Schrodinger wave equation for non-relativistic particles its application on one dimensional box and understand about the momentum operator, energy operator, eigen value, eigen function and also about the normalization of wavefunction.

CO4: Describe the quantum mechanical scattering and tunnelling across various potential barrier.

CO5: Understanding about the atomic nucleus its relation with atomic weight also describes the nuclear forces and binding energy from semi-empirical mass formula.

CO6: Define the various type of radioactive decay, law of decay, fission and fusion, and about nuclear reactor.

CO7: Understand rigorously all theory by all practical.

🕮 COURSE: NUCLEAR & PARTICLE PHYSICS

After successfully completing this course, the student will be able to:

CO1: Describe the general properties of nuclei

CO2: Understanding about the various existing nuclear models like liquid drop model, Fermi gas model and shell model.

CO3: Define the three type of radioactive decay i.e., alpha, beta and gamma decay and also describe the nuclear reaction.

CO4: Explain the interaction of nuclear radiation with matter and also describe the various type of detector for nuclear radiation i.e., gas detectors, scintillation detectors and semiconductor detectors.

CO5: know the particle accelerator facility available in India and also describe the basic particle physics.

🕮 COURSE: COMPUTATIONAL PHYSICS

After successfully completing this course, the student will be able to:

CO1: Use of computational methods to solve physical problems

CO2: Use of various computer languages like FORTAN, Linux.

CO3: Control of various statements and understand of introductory level of LaTeX and its uses.

CO4: Understand rigorously all theory by all hands-on exercise.

SEMESTER-VI

🕮 COURSE: QUANTUM MECHANICS

After successfully completing this course, the student will be able to:

CO1: Describe time dependent and independent Schrodinger equation for non-relativistic particles and its application and also understand about the momentum operator, energy operator, eigen value, eigen function and also about the normalization of wavefunction.

CO2: Define the bound state in an arbitrary potential like square well potential and simple harmonic oscillator.

CO3: Apply quantum theory to hydrogen like atoms and using the Frobenius method and also understand about orbital angular momentum quantum numbers.

CO4: Understand about electron angular momentum, spin, spin angular momentum and spin magnetic moment and also understand about the Zeeman effect, Gyromagnetic ratio and Bohr Magneton.

CO5: Describe the Pauli's Exclusion principle, total angular momentum and vector model of Spin orbit coupling.

CO6: Understand rigorously all theory by all practical.

🕮 COURSE: DIGITAL AND ANALOG CIRCUITS AND INSTRUMENTATION

After successfully completing this course, the student will be able to:

CO1: Using the logic circuit and Boolean algebra and also understand the Binary numbers.

CO2: Understanding the various type of semiconductor diodes and bipolar junction transistors.

CO3: Understanding about the Operational amplifiers and Sinusoidal oscillators.

CO4: Understand about various measuring instruments like CRO, Power Supply, Rectifiers, capacitor filter, Zener Diode and also about Timer IC.

CO5: Understand rigorously all theory by all practical.

🕮 COURSE: ELECTRICAL CIRCUITS AND NETWORK SKILLS

After successfully completing this course, the student will be able to:

CO1: Understand the basic principles of electricity and electrical circuits.

CO2: Define electrical drawing and symbols and also understanding about electric motors, generators and transformers.

CO3: Describe about various solid-state devices electrical protection and electrical wirings.

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DEPARTMENT OF CHEMISTRY

🕮 Programme Specific and Course Outcomes 🕮

CHEMISTRY GENERAL

Programme Specific Outcome (PSO):

After successful completion of three years degree program in chemistry a student should be able to :

PO1 - Make aware and understand laboratory practices and safety and security

PO2 - Gain the knowledge of chemistry through theory and practical

PO3- Understand the various type of aliphatic, atomatic, nucleophile substitution reaction

PO4- Solve the reaction mechanism and predict the final product

PO5- Know the structure and bonding in molecules or ions

Course Outcomes (CO):

After completion of these courses students should be able to :

CC 1A

CO1. Understand the sterochemistry, configuration, reactivity and mechanism of the chemical reaction.

CO2. Know the Redox reaction and the application of Hard Soft Acid Base concept

CC 1B

CO1. Get knowledge of crystalline Solid, Gas and Liquid molecules.

CO2. Solve the numerical problems based on rate of reaction and rate constant.

CO3. Know about the chemical bonding and structure of molecules from VSEPR.

CC 1C

CO1. Understand the preparation, reactions, properties and identification of various functional groups in organic chemistry.

CO2. Know the Thermodynamics description, chemical and ionic equilibrium

SEC 1

CO1. Understand the biological importance of carbohydrates, proteins, enzymes and Nucleic acids.

CO2. Diagnostic approach by blood and urine and their compositions analysis.

CC 1D

CO1. Know the qualitative properties of solution and meaning of phase, component and degree of Freedom.

CO2. Solve the cell reaction and calculate Transport number, EMF.

CO3. Study the Gravimetric, volumetric analysis of various metal ores and chromatographic technique.

CO4. Study the impact of chemistry on the environment, atmosphere, society and development outside the scientific community.

SEC 2

CO1. Know the various pharmaceutical Drugs, their application and synthesis.

SEC 3

CO1. Know fundamental mathematics, differential calculus, mean, standard deviation, relative error, data numerical curve fitting.

CO2. Understand the BASIC computer programs for curve fitting, finding roots helps to statistical analysis.

DSE 1A

CO1. Study the electronic configuration and properties of d and f-block elements

CO2. Study the coordination chemistry and crystal field theory.

CO3. Understand the accuracy, precision and classification of error.

CO4. Know the manufacturing of various fertilizers, glass, soap, detergents, ceramics, cements by modern method and their compositions.

SEC 4

CO1. Study the different types of polymer, their properties and uses.

DSE 1B

CO1. Study the functional group approach preparation, reactions of organic compounds.

CO2. Understand the function of dyes, paints, pesticides, pigments, food additives.

Name of the Department:ZOOLOGY
System: CBCS

Programme Specific Outcome:

- Apply zoological knowledge in much more broader areas of life.
- Identify and analyze problems by applying the principles of natural science.
- Provide a comprehensive understanding of various animals from their primitive forms to their highly evolved forms.
- Inculcate knowledge and prepare for a successful career in the field of zoology.
- Aims to emphasize the need for biodiversity conservation.

Course Outcome:

Semester	Course Type	Paper Description	Course Outcome
I	CC-1	Non Chordates I	• To understand the basics of animal kingdom. • To understand and recognize the life functions of Cnidaria. • To understand the characteristics, position in animal kingdom. • To gain knowledge about the morphological, physiological and evolutionary aspects of Non chordates. • To understand the life functions of phylum Ctenophora, Platyhelminthes and Nematoda.
	CC-2	Ecology	• Study of organisms in relation to environment. • To understand the living and nonliving component of the environment. • To understand the interaction between living and nonliving parts of the environment. • To understand the aquatic ecosystem components and the aspects of conservation of animals. • To acquire training for powerpoint presentation of relevant work.
	GE-1	Animal Diversity	• To understand the existing diversity of the animal kingdom. • To be able to distinguish different species on the basis of their characteristic features. • To be able to understand the complexity of life forms easily. • To build a clear concept about chordates and non-chordates. • To gain knowledge about the morphological, physiological and evolutionary aspects of different subphyla. • Structural and anatomical peculiarities among different order of vertebrates.
II	CC-3	Non Chordates II	• To build a clear concept about metamerism the structure of coelom. • To be able to identify arthropods and gain knowledge about its diversity. • To understand the social behavior of termites and how they function in a colony. • To be familiar with molluscan diversity. • To be familiar with marine invertebrates and their life functions.

	CC-4	Cell Biology	• To understand the molecular mechanism of mitosis and meiosis. • To build concepts about the signaling events that control various life forms. • To understand the basic structure of cell. • To understand the cytoskeleton of the cell. • To understand the nuclear structure, function of the cell. • To understand the basic principles of inheritance at the molecular, cellular and organism levels.
	GE-2	Comparative Anatomy and Development Biology of Vertebrates	• To gain knowledge about the basic principles and process of early and late development processes of animal. • To understand the working of urinogenital system. • To understand the importance of integumentary system with reference to bodily functions. • To able to provide a comparative account of brain and its functions. • To build a concept about the various events involved in embryonic development.
III	CC-5	Chordates	• To gain knowledge about classification of various chordates and their characteristics. • To identify various chordates through specimen study. • To build a clear concept about the origin of chordates. • To understand the aerodynamics of flight in birds. • To gain knowledge about the structural differences and life functions in terrestrial and aquatic mammals. • To gain knowledge about the zoogeographical realms, plate tectonics and continental drift.
	CC-6	Animal Physiology	• To gain knowledge about the various metabolic and physiological mechanisms of whole human body. • To gain fundamental knowledge about Animal Physiology. • To build clear ideas and concepts about the mechanisms that work to keep the human body alive and functioning. • To understand the important functions of tissues in maintaining overall body health. • To gain knowledge about the different signal transduction pathways of steroidal and non steroidal hormones.
	CC-7	Fundamentals of Biochemistry	• To understand glucose metabolism in human body. • To understand structural and biological importance of carbohydrates. • To understand the physiological importance of essential and non essential amino acids. • To build basic concepts about nucleotide metabolism. • To understand the mechanism of enzyme action. • To understand the basic structure, function and importance and metabolic pathways of Lipid and Protein.
	SEC-1	Sericulture	• To understand the history, types, races and present status of sericulture. • To understand the prospect and employment potential of sericulture. • To gain knowledge about the detailed steps of mulberry cultivation i,e. Moriculture which is a integral part of Sericulture. • To gain knowledge about the various sericulture centers in India. • To have a basic concept about the various techniques involved in the rearing of silkworm.

	GE-3	Physiology and Biochemistry	• To gain knowledge about the various metabolic and physiological mechanisms of whole human body. • To gain fundamental knowledge about Animal Physiology. • To build clear ideas and concepts about the mechanisms that work to keep the human body alive and functioning. • To understand the mechanism of enzyme action. • To understand the biochemical activity of medicine.
IV	CC-8	Comparative Anatomy of Vertebrates	• To understand the anatomical peculiarities of different organs in vertebrates. • To understand functional activity of different organs. • To compare the structural and physiological differences between different vertebrates. • To build basic concepts about the importance of sense organs and the various receptors associated with it. • To gain knowledge about the different organ functions in reptiles, amphibians, mammals and birds.
	CC-9	Animal Physiology	• To understand the structure and physiology of heart. • To understand the structure and function of kidney. • To build a concept about the various physiological processes that are important for normal body functioning. • To gain knowledge about the functioning of heart and apply this knowledge to prevent heart diseases. • To understand the components of blood and how haemoglobin level impacts our overall health.
	CC-10	Immunology	• To gain knowledge about the migration of immune cells through the body and the anatomy of lymphoid organs. • To gain knowledge about the migration of immune cells through the body and the anatomy of lymphoid organs. • To gain knowledge about the therapeutic strategies to treat immunological diseases. • To be able to give an account on causes and consequences of deregulated immune response. • To build a basic concept about MHC molecules and its function.
	SEC-2	Aquarium Fish Keeping	• To gain knowledge about the morphology, behaviour and importance of different ornamental fishes. • To identify and characterize the fishes important in aquarium fish keeping industry. • To gain knowledge about how fish keeping can be use to earn livelihood and open more employment opportunities. • To learn about the endemic and exotic fish species. • To gain knowledge about the maintenance of aquarium.
	GE-4	Genetics and Evolutionary Biology	• To understand the process of evolution. • To understand the formation of ew species. • To gain knowledge about the genetic overview of evolution. • To understand the world at different age levels. • To build concept about the diversification of different species.
V	CC-11	Molecular	• To build a clear concept about the genetic material DNA and RNA. • To understand the mechanism of DNA replication.

		Biology	• To gain knowledge about the mechanism of transcription in prokaryotes and eukaryotes. • To understand the process of DNA repair mechanism. • To know the different molecular techniques and its applications.
	CC-12	Genetics	• To build a clear concept about the principles of Mendelian genetics. • To understand the process of linkage, crossing over. • To understand chromosome mapping, recombination frequency, interference, coincidence and to be able to solve problem sums related to it. • To understand how genetic concepts affect health and disease. • To understand the role of genetic mechanisms in evolution.
	DSE-1	Animal Biotechnology	• To understand the principle and procedure of various modern molecular techniques that are used to analyze cell functioning. • To build concept and idea about genome and its regulation. • To know how cloned and transgenic animals are produced. • To gain knowledge about DNA sequencing, PCR, DNA fingerprinting etc. • To learn about the molecular diagnosis of genetic diseases.
	DSE-2	Parasitology	• To gain knowledge about the morphology, life history, Pathogenecity and control measures of different protozoan and platyhelminthes parasites. • To identify and characterize different parasitic arthropods. • To understand host-parasite relationship. • To be able to know about the prophylaxis and treatment of platyhelminth parasitic infection. • To gain knowledge about different mechanical and biological vectors.
	DSE-1 (Gen)	Applied Zoology	• To gain basic knowledge about poultry farming. • To gain basic knowledge about animal husbandry. • To gain knowledge about the economically important and medically important insect pests with their prime role. • To be able to understand the epidemiology of disease like tuberculosis and typhoid. • To be able to learn how poultry farming and fish technology can be use to earn livelihood.
	SEC-3	Sericulture	• To understand the history, types, races and present status of sericulture. • To understand the prospect and employment potential of sericulture. • To gain knowledge about the detailed steps of mulberry cultivation i,e. Moriculture which is a integral part of Sericulture. • To gain knowledge about the various sericulture centers in India. • To have a basic concept about the various techniques involved in the rearing of silkworm.
VI	CC-13	Developmental Biology	• To gain knowledge about the late developmental processes of animal. • To gain knowledge about the implementation of human embryo in uterus.

Name of the Department: **UG Department of Botany**
Institution: **Sarat Centenary College, Hooghly**
Programme: **B.Sc. Honours (3 Year)**
System: **Choice Based Credit System (CBCS) *w.e.f.* Academic Year 2017-2018**
Affiliating University: **The University of Burdwan**

Course outline for B.Sc. Honours in Botany under CBCS

Semester	Core Course (14)	Ability Enhancement Compulsory Course (AEC) (2)	Skill Enhancement Course (SEC) (2)	Discipline Specific Elective: (DSE) (4)	Generic Elective: (GE) (4)
I	Microbiology and Phycology Archegoniatae	ENVS			GE-1
II	Mycology and Phytopathology Morphology & Anatomy	Communicative English /MIL			GE-2
III	Plant Ecology & Phytogeography Plant Systematics Economic Botany		SEC-1 Agricultural Botany		GE-3
IV	Palaeobotany & Palynology Biomolecules & Cell Biology Molecular Biology		SEC – 2 Herbal Technology		GE - 4
V	Plant Physiology Plant Metabolism			Reproductive Biology of Angiosperms Bioinformatics	
VI	Genetics & Plant Breeding Genetics & Plant Breeding			Plant Evolution & Biodiversity Horticulture Practices & Post-Harvest Technology	

PROGRAMME SPECIFIC OUTCOME (PSO):

PSO 1: Knowledge accumulation: The entire specific program helps in knowledge accretion of different fields of plant biology which starts from learning about the life forms and their metabolism of acellular life forms (viruses) to multicellular complex higher order plants.

PSO 2: Critical thinking and logical interpretational skills: The specific programs helps students nurture and enhance their critical thinking ability by interpreting the conclusions obtained from different results of physiology, metabolism, genetics, biostatistics and ecology and etc.

PSO 3: Practical skills: The program helps the students develop hands on training skills, efficiency, time management and accuracy while performing experiments related to anatomy, histology, cytology, physiology, metabolism, ecology, plant systematics etc.

PSO 4: Collaboration and management skills: The program offers opportunity to students to acquire life skills during excursion visits coupled with almost all the semesters where they learn to collaborate and attain organizational and managerial skills and also develop interpersonal communication skills within peer groups.

PSO 5: Application minded outlook: The programs offers scope to students where they learn advance application oriented subjects like molecular biology, cell biology, biochemistry, metabolism, bioinformatics, horticulture, agricultural botany, herbal and medicinal botany etc.

PSO 6: Conservation and ecosystem preservation: The program offers prospects for understanding of nature and natural resources under the study of ecology and archegoniate, microbiology, systematics. Besides, this program gives an idea of the importance of natural conservation and its significance in building up sustenance of life on earth.

PROGRAMME OUTCOME (PO):

PO 1: The undergraduate programme provides the comprehensive knowledge and understanding of broad range of plant diversity in terms of organization, role, interrelationships and evolution. The programme is envisioned to prepare students with requisite knowledge and practical skills that they study plants and their role in a holistic manner.

PO 2: The course content furnishes the student with in-depth logical knowledge of and promote research aptitude. Students acquire academic and research ethics, sharing, plagiarism, scientific misconduct etc. along with leadership qualities and encourages effective communication.

PO 3: The programme comprehend the role of the plant as a natural resource for sustainable development.

PO 4: The programme provides the understanding of a variety of analytical techniques in plant sciences and the use of plants as industrial resources or as human livelihood support system and is well versed with the use of transgenic technologies for basic and applied research in plant sciences.

COURSE OUTCOMES (CO): On completion of the course, students are able to:

Semester	Course Type	Course Title	Credits	Course Outcome
I	**CC-1 (Theory + Practical)**	**Microbiology and Phycology**	4+2=6	✦ Learn about the diversity of Viruses, Bacteria and Algae and their classification. ✦ Know the structure, function, reproduction methods and growth cycle of different bacteria and viruses. ✦ Learn about General characteristics, life cycle, vegetative and reproductive structure of different alagal species belongs to Cyanophyta, Xanthophyta, Chlorophyta, Charophyta, Phaeophyta, Rhodophyta. ✦ Be aware of economic importance of bacteria with reference to their role in agriculture and industry (fermentation and antibiotics).
	CC-2 (Theory + Practical)	**Archegoniatae**	4+2=6	✦ Understand identifying features of archegoniates, their transition and adaptation to land habit and their alternation of generations. ✦ Learn about general characteristics & classification, evolutionary trends, ecological and economic importance of various bryophytes, pteridophytes, and gymnosperms genera. ✦ Learn about morphology, anatomy, reproduction of *Riccia, Marchantia, Pellia, Anthoceros, Sphagnum* and *Funaria*. ✦ Learn about morphology, anatomy and reproduction of *Lycopodium, Selaginella, Equisetum, Pteris* and *Marsilea* ✦ Learn about Morphology, anatomy and reproduction of *Cycas, Pinus* and *Gnetum*
II	**CC-3 (Theory + Practical)**	**Mycology and Phytopathology**	4+2=6	✦ Know general characteristics, affinities with plants and animals, thallus organization, classification of true fungi. ✦ Learn about the characteristic features, thallus organization, Life cycle of different species belong to Chytridiomycota, Zygomycota, Ascomycota, Basidiomycota, Allied Fungi and Oomycota.

				✓ Learn about the structural and functional aspect of various symbiotic associations, such as, Lichens, Mycorrhiza etc. ✓ Be aware of industrial application of different fungal genera. ✓ Acquire knowledge on brief account of plant pathology with special emphasis on the life cycle of different pest and pathogen.
	CC-4 (Theory + Practical)	**Morphology & Anatomy of Angiosperms**	4+2=6	✓ Acquire knowledge on brief account of internal organization, classification of tissue systems and development of Plant Body ✓ Lean about the fundamental structures of different cell types. ✓ Understand the structural organization of root, shoot and leaf tissue of dicot and monocot. ✓ Study the structure, function and seasonal activity of Vascular and Cork Cambium. ✓ Understand the morphological structures of Leaves, Inflorescence, Flower, Fruit and Seed.
III	**CC-5 (Theory + Practical)**	**Plant Ecology & Phytogeography**	4+2=6	✓ Know basic concepts of ecology, inter-relationships between living world and the environment, their components, dynamism and homeostasis. ✓ Composition, variation, and importance of physical factors, such as, Soil, Water, Light, temperature, wind and fire. ✓ Understand the brief account of structural and Functional aspects of ecosystem. ✓ Learn about the concept of plant communities and population ecology ✓ Characteristic features of major Phytogeographical division of lndia with a special emphasis on the Vegetation characteristics of Eastern Himalaya and Sunderbans.
	CC-6 (Theory + Practical)	**Plant Systematics**	4+2=6	✓ Understand the Introduction and significance of Plant systematic for Plant identification, classification, Nomenclature ✓ Know the concept of Taxonomic hierarchy and Botanical nomenclature ✓ Study the plant classification based on Bentham and Hooker [1862-83] and Takhtajan [1997] and APG System of classification. ✓ Be aware about the fundamental concept of Biometrics, numerical taxonomy and cladistics

				✓ Know the origin and evolutionary trends of angiosperms based of phylogenetic tree construction.
	CC-7 (Theory + Practical)	**Economic Botany**	4+2=6	✓ Gain brief knowledge on origin of cultivated plants and of cultivated plants, evolution of new crops/varieties, importance of germplasm diversity ✓ Learn about the origin, morphology, processing and economic importance of various plant used as a source of cereals, legumes, sugars and starches, spices beverages, oils and fats, natural rubber drug, timber, and fibers.
	SEC-1 (Theory)	**Agricultural Botany**	2	✓ Lean about fundamental physiological processes of plants. ✓ Gain knowledge on brief account of organic farming using microbes, cyanobacteria and mycorrhiza ✓ Study the importance of plant breeding, tissue culture and biotechnology approaches to improve agriculture.
IV	**CC-8 (Theory + Practical)**	**Palaeobotany & Palynology**	4+2=6	✓ Study the concise introduction and scope of palaeobotany ✓ Understand the process of fossilization and their types based on mode of preservation ✓ Learn about the earth age, Geologic Time Scale, major events of plant life through geologic time. ✓ Study the brief account on Microsporogenesis, megasporogenesis and Pollination techniques
	CC-9 (Theory + Practical)	**Biomolecules and Cell Biology**	4+2=6	✓ Study the structural, functional features and types of various biomolecules, such as, carbohydrates, lipids, proteins, nucleic acids ✓ Study the laws of thermodynamics, concept of ATP, Enzymes classification and function ✓ Chemistry, structure and function of plant cell wall and cell membrane ✓ Structural organization and functional features of different cellular organelles, such as, nucleus, cytoskeleton, chloroplast, mitochondria, peroxisomes, endomembrane system
	CC-10 (Theory + Practical)	**Molecular Biology**	4+2=6	✓ Study the structural organization of DNA and RNA ✓ Learn about the basic molecular mechanism related to central dogma; replication, transcription and translation.

				✓ Acquire enough knowledge regarding the transcriptional and post transcriptional processing and modification of RNA, post-translational modifications of proteins
	SEC-2	**Herbal Technology**	2	✓ Understand brief history, importance and scope of using herbal medicines in siddha systems emphasizing their cultivation - harvesting - processing - storage -marketing and utilization. ✓ Learn about medicinal uses of the following herbs, like, Tulsi, Ginger, Fenugreek, Indian Goose berry and Ashoka. ✓ Gain knowledge on active principles and utilization of various plants used as cardiotonic, drugs acting on nervous system, anti-rheumatic, memory booster ✓ Study the drug adulteration types, methods of drug evaluation, biological testing of herbal drugs
V	**CC-11 (Theory + Practical)**	**Plant Physiology**	4+2=6	✓ Learn about elaborative physiological processes related to plant water relationship, mineral nutrition, nutrient uptake ✓ Gain knowledge on the sugar translocation mechanism in phloem, structure and function of plant growth regulators, flowering mechanism of plants ✓ Understand the chemical nature of phytochrome, cryptochrome and phototropins and their role in photomorphogenesis.
	CC-12 (Theory + Practical)	**Plant Metabolism**	4+2=6	✓ Know elaborative metabolic processes of carbohydrate, lipid and nitrogen ✓ Learn about broad outline of carbon oxidation processes ✓ Learn about ATP synthesis mechanism ✓ Understand brief account of signal transduction mechanism
	DSE-1 (Theory + Practical)	**Reproductive Biology of Angiosperms**	4+2=6	✓ Learn about genetic and molecular aspects of flower development ✓ Understand the structure and function of anther and pollen wall emphasizing NPC system of classification, microsporogenesis and microgametogenesis ✓ Learn about detailed ovule structure, types, megasporogenesis and megagametogenesis organization and ultrastructure of mature embryo embryo sac

				✓ Acquire knowledge on different types and significance pollination and fertilization, brief concept of Self incompatibility, Structure and types of embryo, endosperm and seed, polyembryony and apomixis
	DSE-2 (Theory + Practical)	**Bioinformatics**	4+2=6	✓ Acquire knowledge on brief introduction, aim, scope, research areas and different branches of Bioinformatics ✓ Study classification of nucleic acid and protein Databases and its Retrieval System ✓ Learn about Basic local alignment search tool (BLAST) ✓ Learn about Sequence Alignments tool with special emphasis on Percent Accepted Mutation (PAM), Blocks of Amino Acid Substitution Matrix (BLOSUM) ✓ Learn about different methods of Molecular Phylogeny and software tools for Phylogeny construction ✓ Know the applications of Bioinformatics emphasizing QSAR) techniques in Drug Design, Microbial genome applications, Crop improvement
VI	**CC-13 (Theory + Practical)**	**Genetics & Plant Breeding**	4+2=6	✓ Learn about history, principles of inheritance of Mendelism and its Chromosome theory of inheritance, various allelic and non-allelic interactions, pedigree analysis ✓ Acquire knowledge on linkage, crossing over and chromosome mapping based on two factor and three factor crosses, concept of Interference and coincidence ✓ Learn about number and structural variation of chromosomes, types and Molecular basis of gene mutations of various physical and chemical mutagens, fine structure of gene, population and evolutionary genetics ✓ Learn about plant breeding systems, methods of crop improvement, Inbreeding depression and heterosis
	CC-14 (Theory + Practical)	**Plant Biotechnology**	4+2=6	✓ Learn about Plant Tissue Culture techniques, Composition of culture media, concept of Totipotency, organogenesis, embryogenesis, protoplast culture and plant tissue culture applications in various fields ✓ Learn about various Restriction Endonucleases and Cloning Vectors

				✓ Know about gene Gene Cloning techniques and different Methods of gene transfer, concept of selectable marker and reporter genes ✓ Learn about applications of Biotechnology for producing Pest resistant and herbicide resistant plants, transgenic crops with improved quality traits, improved horticultural varieties etc.
	DSE-3 (Theory + Practical)	**Plant Evolution & Biodiversity**	4+2=6	✓ Gain knowledge about earliest forms of plant life ✓ Learn about evolutionary trends from green algae to angiosperm, land adaptation processes, evolution of photosynthetic pathways ✓ Learn about phylogeny of basal flowering plants and Eumagnoliids, Monocots, Eudicots, Core eudicots ✓ Understand the evolutionary theories ✓ Learn about plant diversity around the world and their adaptive features based on existing environmental conditions.
	DSE-4 (Theory + Practical)	**Horticulture Practices & Post-Harvest Technology**	4+2=6	✓ Learn about the types, classification, identification and salient features of some Ornamental plants ✓ Learn about the production, origin and distribution, description and economic products, management and marketing of vegetable and fruit crops plants ✓ Know about different horticultural techniques, Landscaping and garden design, concept of floriculture and post-harvest technology in horticultural crops ✓ Understand the disease control and management strategies of different Horticultural crops ✓ Understand documentation, conservation and management processes of different Horticultural crops

Name of the Department: **UG Department of Botany**
Institution: **Sarat Centenary College, Hooghly**
Programme: **B.Sc. General (3 Year)**
System: **Choice Based Credit System (CBCS) *w.e.f.* Academic Year 2017-2018**
Affiliating University: **The University of Burdwan**

Course outline for B.Sc. General in Botany under CBCS

	DISCIPLINE CORE COURSE (6)	**Ability Enhancement Compulsory Course (AECC) (4/2)**	**Skill Enhancement Course (SEC) (2)**	**Discipline Specific Elective DSE (6)**
SEM-I	Discipline- 1 (BOT) CC- 1A:Biodiversity (Microbes, Algae, Fungi and Archegoniate) Discipline- 2 (Other) Discipline- 3 (Other)	ENVS		
SEM-II	Discipline- 1 (BOT) CC- 1B:Plant Ecology and Taxonomy Discipline- 2 (Other) Discipline- 3 (Other)	Communicative English /MIL		
SEM-III	Discipline- 1 (BOT) CC- 1C:Plant Anatomy and Embryology Discipline- 2 (Other) Discipline- 3 (Other)		SEC – 1	
SEM-IV	Discipline- 1 (BOT) CC- 1D:Plant Physiology and Metabolism Discipline- 2 (Other) Discipline- 3 (Other)		SEC - 2	
SEM-V			SEC – 3	DSE – 1A(BOT) :Economic Botany and Biotechnology/ Analytical Techniques in Plant Sciences/ Bioinformatics DSE – 2A(Other) DSE – 3A(Other)
SEM-VI			SEC – 4	DSE – 1B (BOT) :Cell and Molecular Biology/ Research Methodology/ Dissertation DSE – 2B (Other) DSE – 3B (Other)

PROGRAMME SPECIFIC OUTCOME (PSO):

The specific program offers the following outcomes to students at the end of the program:

PSO 1: They learn about the nature and its natural biodiversity and the intra and intercommunication within the different components of ecosystem.

PSO 2: Students learn about the details of the life cycles of different plant groups ranging from lower to higher order plants.

PSO 3: Students gain hands on training skills, efficiency and accuracy while dealing with practical classes.

PSO 4: Students obtain communication and managerial skills during excursional trips.

PSO 5: Students learn application oriented subjects such as biotechnology, cell biology and genetics, ecology, physiology, medicinal botany which they can utilize for their specific job oriented higher studies as well as entrepreneurship skills.

PROGRAMME OUTCOME (PO):

PO1: Demonstrate and apply the fundamental knowledge of the basic principles of major fields of biology.

PO2: Apply knowledge to solve the issues related to plant sciences with the help of computer technology.

PO3: Apply knowledge for conservation of endemic and endangered plant species.

PO 4: Apply the knowledge to develop the sustainable and eco-friendly technology in Industrial Botany.

COURSE OUTCOME: On completion of the course, students are able to:

Semester	Course Type	Course Title		Credits	Course Outcome
I	**CC-1A** **(Theory + Practical)**	**Biodiversity (Microbes, Algae, Fungi and Archegoniate)**	Microbes	4+2=6	1. Know the structure, function, reproductive methods and growth cycle of different bacteria and viruses. 2. To become aware of economic importance of bacteria.
			Algae		1. Learn about General characteristics, life cycle, vegetative and reproductive structure of different algal species like *Chlamydomonas, Oedogonium, Chara, Fucus, Polysiphonia* 2. Economic importance of Algae
			Fungi		1. Study the general characteristics, ecology, thallus organization, classification of Fungi. 2. life cycle of *Rhizopus* (Zygomycota), *Ascobolus* (Ascomycota), *Puccinia, Agaricus* (Basidiomycota) 3. Symbiotic associations like lichen, mycorrhiza and its significance.
			Archegoniate		1. Understanding the identifying features of archegoniates, their transition and adaptation to land habit and their alternation of generations. 2. Learn about general characteristics & classification and economic importance of various bryophytes, pteridophytes, and gymnosperms genera. 3. Ecological importance of Bryophytes. 4. Learn about morphology, anatomy, reproduction of *Riccia*, *Marchantia* and *Funaria*. 5. Learn about morphology, anatomy reproduction of *Lycopodium, Selaginella, Equisetum* and *Pteris* 6.Learn about morphology, anatomy and reproduction of *Cycas* and *Pinus*

II	**CC- 1B** **(Theory + Practical)**	**Plant Ecology and Taxonomy**	Plant Ecology	4+2=6	1. To learn about adaptation of hydrophytes, halophytes and xerophytes. 2.Learn about succession, ecotone and edge effect, biogeochemical cycles 3.Concept about different biogeographical zones and endemism
			Plant Taxonomy		1.Learn about scientific approach to classify and identify a plant specimen 2. Taxonomic evidences from palynology, cytology, phytochemistry and molecular data 3. Learn about artificial, natural and phylogenetic classification. 4. Learn about ICN 5. Learn about numerical taxonomy along with biometrics and cladistics.
III	**CC- 1C** **(Theory + Practical)**	**Plant Anatomy and Embryology**	Plant Anatomy	4+2=6	1. Learn about different types of plant tissue along with shoot and root apical meristems 2.Learn about secondary growth 3. Learn about role of epidermis, cuticle and stomata in plant adaptation and protection. 4. General idea about adaptations in xerophytes and hydrophytes.
			Embryology		1. Learn about different structures associated with plat reproduction like anther, pollen, ovules, embryo sacs etc. 2 .Pollination mechanisms and adaptations, double fertilization. 3. Seed dispersal mechanisms and significance of seed dispersal in plant life. 4. Learn about different types of endosperms and dicot and monocot embryo. 5. Learn about apomixis and polyembryony.

	Skill Enhancement Course (SEC-1) (Theory)	**Herbal Technology**	2	1. Learn about entire process of cultivation of medicinal plants. 2. Role of tulsi, ginger and Indian Goose berry in treatment of different disease. 3.Learn about Phytochemistry and Phytochemical screening tests for secondary metabolites (alkaloids, flavonoids, steroids, triterpenoids, phenolic compounds) 4. Application of Tissue Culture technique in some important medicinal plants such as neem and tulsi. 5. Learn about drug alteration and different methods of drugs evaluation. 6. Learn about role of *Catharanthus roseus* as cardiotonic, *Withania somnifera* as drugs acting on nervous system and *Centella asiatica* as memory booster.
Semester IV	**CC- 1D (Theory + Practical)**	**Plant Physiology and Metabolism**	4+2=6	1. Learn about different physiological process of plant like transpiration, photosynthesis, respiration. 2. Learn about essential elements, its role and transportation. 3. Translocation in phloem. 4. Learn about structure, properties and mechanism of actions along with its inhibition. 5. Learn about nitrogen metabolism with emphasize on Biological nitrogen fixation; Nitrate and ammonia assimilation. 6.Learn about plant regulators (auxins, gibberellins, cytokinins, ABA, ethylene) 7. Learn about Plant response to light and temperature.
	Skill Enhancement Course (SEC -2) (Theory)	**Medicinal Botany**	2	1. Learn about indigenous and traditional medicinal sciences Ayurveda, Siddha and Unani. 2. Conservation of endangered and endemic medicinal plants. 3. Concise knowledge about Ethnobotany and Folk medicines. 4. Application of natural products to cure certain diseases like Jaundice, cardiac, infertility, diabetics, Blood pressure and skin diseases.

V	**Discipline Specific Elective (DSE 1A)** **(Theory + Practical)**	**Economic Botany and Biotechnology**	Economic Botany	4+2=6	1.Origin of cultivated plants with reference to Vavilov's work 2.Learn about origin , morphology and uses of wheat (cereals) 3. Legumes (gram , soybean) , spices (clove, black pepper), beverages (Tea) , oils and fats (emphasize on ground nut), fibre yielding plants (emphasize on cotton)
			Biotechnology		1. Introductory discussion on Biotechnology. 2. Contribution of Indian scientists in the field of Biotechnology. 3. Learn about micropropagation; haploid production through androgenesis and gynogenesis; brief account of embryo & endosperm culture with their applications in plant tissue culture part. 4. Can get knowledge about enzymes in recombinant DNA technology, cloning vector, DNA library, PCR, DNA fingerprinting and application of recombinant DNA technique.

VI	**Discipline Centric Elective (DSE 1B)** **(Theory + Practical)**	**Cell Biology, Genetics and Molecular Biology**	4+2=6	1. Learn about different techniques like Light Microscopy, Phase contrast microscopy, Fluorescence microscopy, Confocal microscopy, Electron microscopy to study cell. 2. Basic concepts about cells 3. Study about cell wall, cell membrane and different cell organelles. 4. Learn about Linkage and Crossing over. 5. Learn about mutations and chromosomal aberrations. 6. Study of mitosis, meiosis and different phases of cell cycle with its control mechanism. 7. Learn about genetic material i.e. DNA 8. Learn about Central Dogma of Molecular 9. Biology i.e. replication, transcription and translation both in Prokaryotes and Eukaryotes. 10. Learn about regulation of gene expression in both prokaryotes (Lac and Tryptophan Operon) and eukaryotes.

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