

COURSE OUTCOMES (COs)

BENGALI

Study of Bengali literature and its criticism develops and improves the power of synthetic thinking as it combines both emotion and intellect. No ideal educational institution can run without recognizing literature. Ideals, values and ideologies are abstract concepts to be practiced in daily life of our society. Literature gives concrete shapes to these values and ideas.

CORE COURSE

Semester-1

1. CC1-Bangla sahityer itihās prachin o madhyayug. Students will learn periodization of Bengali literature

• Students able to find the character of Medieval literature. • Students find the different between pre chaitanya period and the post chaitanya period. • Students will learn 'Vaishnav' and 'sakta' culture in the period. • Students will learn the classification of Medieval literature. • Students will able to find the origin and history of 'charyagiti'.

2. CC2- Prachin O Madhyayuger Padpath Students will learn the Philosophical idea of Buddhism.

• Students will learn how much 'vaishnav vakti dharma' influenced Bengali literature in • Medieval period. Students will able to find the difference between pre Chaitanya vaishnav padabali and • post chaitanya vaishnav padabali. Students learn character of vaishnav dharma, shakta dharma and its influence on • Bengali literature. • Students will able to find social impact of chandimangal • Chaitanyabhagabat - Chaitanya Jiban O Mangalkabyapath Students will learn the life of chaitanyadev

Semester-2

3. CC3-Bangla vashar udvab o parichay Students will learn about definition and characteristic language

• Students will learn Historical classification of languages. • Students will be able to find the origin, history and periodization of the language. • Students will learn Bengali vocabulary, Semantics and the change of meanings. • Students will able to different between language and dialect. They also learn the • classification of dialect and the characteristics of various dialect.

4. CC4- Unish Bish Sataker Prabandha, Kabya sahityer itihās and Akhayan sahitya path Students will learn the difference between Modern Bengali Literature and Mediaeval • Bengali Literature. Students will learn orign and history of Bengali Prose. • Development of Bengali Prose. • Students will learn the role of essay in Bengali Literature. • Students will know the development of Poetry

Semester-3

5. CC5- Chanda, Alankar O Nirbachita Kabita Path Students will know about the Prosody

• Students will learn the important of Prosody to create a poem. • Students will know the basic concept of deferent Prosody. • Students will learn the classification of rhetoric. • Students will able to

solve the Rhetoric and Prosody. • Students will learn how to use of rhetoric in Bengali literature. • Students will know about the Modern poem in 1st part of twenty century.

6. CC6- Natya Path Students will learn the classification of Drama

• Students will learn the structure of Drama. • Students able to know the origin and history of Drama. • Students will learn various Drama in Bengali Literature. • Students will be able to sketch history of Drama from the beginning point to 2nd half of • twenty century.

7. CC7- Prabandha Path Students will know about the role of essay in Bengali Literature.

• Students learn about essay and increase their creativeness.

Semester-4

9. CC9- Rabindra Sahitya

• Students will know the social impact of Drama and theatre in Bengali Literature. • Students will know about the History of Bengali Novel. • Students will know the various type of novel and their characteristic. • Students will learn about the origin of short story

10. CC10- Upanyas Path Students will learn the classification of Novel.

• Students will be able to know the philosophy of the author. • Students will relate between Novel and Short story. • Students will learn about various Novel in Bengali Literature. • Students will learn about the evolution of Bengali novel. • Students will be able to know the origin and history of Novel.

Kabyatya, Paschatya sahitya samalochana O sahityer rupriti. Students will learn about the poetics

• Students will learn the role of 'Dhani' and 'Ros' in Bengali Literature. • Students will be able to know the vision and idea of Literary movement

Semester-5

11. CC11- Bengali Upanyas (Four Upanyas)

This Course deals with the Forms and features of contemporary novels, aiming at introducing the student to the analysis of a novel as a relatively long work of narrative fiction in prose and imparting a more mature understanding to the students about the challenging issues of the contemporary such as conflicts of interests between the society and the individual, the socio-cultural canopy of casteism, religious taboos, women's position in the Bengali household, environmental issues and people's struggle for socio-economic and political existence.

12. CC12- Bengali Story Path (Forty Bengali Stories)

The course help students to learn the four skills--listening, speaking, reading and writing--more effectively because of the motivational benefit embedded in the stories. In addition, with short stories, instructors can teach literary, cultural, and higher-order thinking benefits.

[In Semester V, students mandatorily take two Discipline Specific Elective (DSE) Courses: DSE-A-1, DSE-B-2, and DSE-C-3]

DSE-A-1- Medieval Literature - A comprehensive and detailed analysis of the history of social or cultural, political or the primitive mythological deep - rooted systems helps students to acquire a true understanding of evolution of the culture through various perspectives

DSE-B-2- Non-fictional and fictional Essays and Compositions - This course will impart knowledge of the emergence and growth of the essay, arguments, discourses, subjective perspectives from mid-19th century and will provide a comprehensive knowledge of linguistic and psychological tendencies of the 19th century, essays, categories of journalist views, reporting, personal essays, diary entries • the transitional phases during the World

wars and other adversities which involves new experimentations in form and narratives on fascist tendencies and xenophobic attitude towards the colonized, cultural hegemony and diversity.

DSE-C-3- Modern Bengali Poetry (after Rabindranath Tagore)- Emphasis is laid on a detailed method of structural analysis of poetry, how to read a poem, current literary terms , diction and multilayered discourse peculiar to each poet in a distinct time period. Understanding of semiotics in poetry through a post- colonial thread starting from the Modern poetry after freedom.

Semester-6

13. CC13- History of Sanskrit, English, Hindi and Assamese Literature

This course helps in learning about the evolution of literature in other Indian languages that have had a profound influence on the socio-cultural formations in India since early times and have also enriched Bengali language and literature. In this course students gain knowledge about • a comprehensive knowledge of comparative analysis of the Sanskrit Literature, along with English literature and main cultural trends. • the History of Hindi and Assamese Literature would help to access a proper perspective from different views and socio- political aspects.

11. CC14- Bengali Travel Literature

This is an enriching course which enhances students' knowledge of biographies, autobiographies and travelogues as separate creative formats which may help in many career opportunities

[In Semester VI, students mandatorily take two Discipline Specific Elective (DSE) Courses: DSE-D-4, DSE-E-5, and DSE-F-6]

DSE-D-4- Bengali Drama and concept of Bengali drama

• Knowledge of different forms of drama, satire or theatre with its social background with special emphasis on contemporary political culture. • Concept and impact of Proscenium theatre, folk opera, street theatre, farce and satirical dramas on women's education, practice of Sati, widow remarriage, the prevalent social traditions and customs and their imposition on the liberal individual.

DSE-E-5-Bengali Fictional Literature : Manvantar, Riot, Partition of Bengal

This course will provide a comprehensive analysis of the profound impact of Manvantar, Riot, and Partition of Bengal on the region's Literature.

DSE-F-6-Rabindranath Tagore: life, Work and Literature

This course helps in learning ideology of Rabindranath Tagore. He put emphasis on 'naturalism' for framing educational model. In education, freedom is the basic guiding force for inculcating interest within a student who will derive inspiration from nature to pursue any branch of knowledge he likes. The establishment of Shantiniketan fulfilled the desired goal of Tagore in the educational front.

SEMESTER I & II GENERAL

(Discipline Specific Core Course)

1. Bangla sahityer itihash prachin o madhyayug. Students will learn periodization of Bengali literature

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2. Bangla vashar udvab o parichay Students will learn about definition and characteristic language

• Students will learn Historical classification of languages. • Students will be able to find the origin, history and periodization of the language. • Students will learn Bengali vocabulary, Semantics and the

change of meanings. • Students will be able to differentiate between language and dialect. They also learn the • classification of dialect and the characteristics of various dialects.

AECC: MIL Communication [Compulsory choice for all 2nd Semester students]

.. • Students will learn grammatical evolution in Bengali Literature. • Students will learn how to make project. • Students will develop their creative writing.

SEMESTER III & IV GENERAL

(Discipline Specific Core Course)

3.Jibani Shahitya

•Students will be able to know the philosophy of the author. • Students will relate between Autobiographies. • Students will learn about various Autobiographies in Bengali Literature. • Students will learn about the evolution of Bengali Autobiographies. • Students will able to know the origin and history of Autobiographies.

4.Shisu Shahitya

•Students will be able to know the philosophy of the author. • Students will relate between Shisu Shahitya. • Students will learn about various Shisu Shahitya in Bengali Literature. • Students will learn about the evolution of Bengali Shisu Shahitya. • Students will able to know the origin and history of Shisu Shahitya.

Compulsory Bengali for B.A. General

MIL : BNGLCOR01T AND BNGLCOR02T

In Semester III- MIL : BNGLCOR01T -1. History of Bengali Literature (Nineteenth Century)

• 1. To make students interested in Bengali Society, culture, literature and history of the Bengali people. 2. To create a sense of history and historical analysis about Literature among the students. 3. To make students aware about basic textual nuances of Medieval and Modern Bengali Literature. 4. To make students aware about the evolution of the history of Bengali Literature and Culture. 5. To give the idea of the inextricable interconnection between Literature and Culture. 6. To create a strong foundation of studying future course of literature 7. Studying History of Bengali Literature helps students to know about Religion, Society, Culture and development of the Bengali Literature use in the Prose , poetry , drama , short story and novel . Our vision is to see our won literature, manifestation of our nationality transformation of content, form and style of writing technique through ages and indication of future direction in literature.

In Semester IV- MIL : BNGLCOR02T- 2. History of Bengali Literature (Twentieth Century)

•Detailed learning of various genres, literary terms and register. • This includes a deep probing within the literary texts from 20 c with a proper knowledge of the craft of fiction as a whole. • The course includes a comparative study of literary portfolios as tragedy, comedy, absurd theatre, satire, farce, third theatre and other contemporary experimentations.

SEMESTER V & VI GENERAL

[In Semester V, students mandatorily take one Discipline Specific Elective (DSE)

Course: DSE-1A, DSE-2B]

DSE-1A- Science fictional and Detective Bengali Literature

Student get to study Bengali detective novels, mystery thrillers, ghost stories and science fictions.

DSE-1B-Bengali Poetry

Bengali Poetry has been deeply influenced by the colonial modernism. Poets of this genre are Madhusudan Dutta, Rabindranath Tagore and Kazi Nazrul Islam to name a few. Post-colonial period has seen the emergence of poets in the modern, socialist and post-modern genre. In this course students get a comprehensive understanding about the poetry composed by the poets of such genres with a detailed knowledge of the twentieth century poetry, trends and intentions from Rabindranath to the later modern poets.

**[In Semester VI, students mandatorily take one Discipline Specific Elective (DSE)
Course: DSE-3C, DSE-4D]**

DSE-3C-Non-fictional Bengali Essay

This course will impart knowledge of the emergence and growth of the essay, arguments, discourses, subjective perspectives from mid-19th century and will provide a comprehensive knowledge of • linguistic and psychological tendencies of the 19th century, essays, categories of journalist views, reporting, personal essays, diary entries • the transitional phases during the World wars and other adversities which involves new experimentations in form and narratives on fascist tendencies and xenophobic attitude towards the colonized, cultural hegemony and diversity.

DSE-4D-Bengali Drama

Knowledge of different forms of drama, satire or theatre with its social background with special emphasis on contemporary political culture. A comprehensive and detailed analysis of the history of social or cultural, political or the primitive mythological deep - rooted systems helps students to acquire a true understanding of evolution of the culture through various perspectives

Generic Elective Course for B.A. General

In Semester V- Uses of Bengali Language in printing world

This course helps to know the growth of the Printing press and development of a global platform for Bengali speaking people; the growth of new genres and publications; • development of mass culture and activism through public theatre; the profound impact of social identity and mass protests as published in various journals, periodicals and weekly magazines; news data of theatre and staged dramas. Report Writing for Newspaper or for individual promotion, letter writing and correspondence, advertising for print and electronic media, mock interviews with personalities and people.

In Semester VI- Translation in Bengali and Writing

This course helps to freelance journalism, Report Writing for Newspaper or for individual promotion, letter writing and correspondence, advertising for print and electronic media, mock interviews with personalities and people, techniques of translation, English to Bengali translation.

COURSE OUTCOMES (CO'S)

EDUCATION

The word “**EDUCATION**” means an all-round development of human being. Though it is a social science but it is the culmination of various disciplines like Educational philosophy, Psychology, Mental health, Sociology, Ancient, medieval, and present system of education, Statistics, Educational management, Technology, Special education, Guidance and counseling, Curriculum, Comparative education and various contemporary issues which enables the students to understand and deal with the changing society. Therefore, Education is multidisciplinary in nature which appears to have different colors when seen from different angles that leads to the all-round development of a man. **The new CBCS syllabus under West Bengal state university promotes a new outlook towards ‘Education’ discipline and will help the students for further Excellency.**

- After completion of graduation eligible students can pursue post-graduation level like M.A, M.phil.
- Students can go for research work, or can work as project fellow.
- Students can appear at different competitive exam like NET, SET.
- Students can join B.Ed, M.Ed courses.

HONOURS

Semester:1

CC1: Philosophical foundation of Education/ (EDCACOR01T)

After completion of this course the students will be able to understand the followings:

- Understand the foundation of Education and disciplinary relationship between Education & Philosophy.
- Get an idea of the Philosophical bases in Education.
- Acquire knowledge of the Western & Indian Schools of Philosophy and their impact on Education.
- Understand contributions of some great educators and their Philosophies of Education.

CC2: Psychological foundation of Education/ (EDCACOR02T)

After completion of this course the students will be able to understand the followings:

- Learn about Psychology of Intelligence and Creativity and relate that with Education.
- Understand different aspects of Learning Psychology in the context of Education.

Semester: 2

CC3: Sociological foundation of Education / (EDCACOR03T)

- Understand the meaning of Sociology and its different perspectives related to Education.
- Realize the relationship between Education and Sociology.
- Get an idea of social development and role of Education.
- Connect with some social issues in education

CC4: Pedagogy/ (EDCACOR04T)

- Get an idea of Pedagogy as an academic discipline
- Understand about different bases of Pedagogy
- Develop an understanding of philosophical, sociological and psychological bases of Pedagogy
- Learn about Pedagogy as a science of teaching and Pedagogy of teaching -learning
- Get acquainted with some contemporary issues of Pedagogy and its application in class room situation.

Semester: 3

CC5: Education in Pre independence India (EDCACOR05T)

- Develop an idea of education in ancient and medieval India
- Know about the education under East India Company
- Perceive the development of education under Britishrule
- Develop a concept of education from1917-1947.

CC6: Education in Post-independence India /(EDCACOR06T)

- Understand about the development of education from1947-1953
- Develop a concept of education from1964-1968
- Know about the education from1986-1992
- Learn about the development of education from 1993onwards.

CC7T: Contemporary Issues in Indian education/ (EDCACOR07T)

- Explore the Traditional issues, Social issues and Educational issues of Indian educational system.

CC7P: Field tour & Report writing (EDCACOR07P)

- Gather experience regarding places of Philosophical, Psychological & Historical importance
- Field study includes proper planning, execution of journey and report writing.
- Students will able to link their learning with experience.

4th Semester

CC8: Educational Management/ (EDCACOR08T)

- Develop the concept, nature, types and need of educational management.
- Understand the importance of leadership in management.
- Know the agencies of educational management in Indian context.
- Understand the importance of planning and management in Education.

CC9: Basics of Educational Research and Evaluation/ (EDCACOR09T)

- Have preliminary concepts on research methodology
- Learn about Sampling and hypothesis
- Know about Evaluation and Measurement
- Explore the steps in standardization of a test

CC10T: Statistics in Education (EDCACOR010T)

- Develop the basic concept of Statistics
- Organize and tabulate data
- Learn about descriptive statistics
- Learn the calculation of Inferential Statistics Core Course.

CC10P: Statistics in Education (EDCACOR010P)

- Learn about data Collection
- Explore the method of data Analyses by any excel/ software and manual both
- Gather experience about statistical report writing.

5th semester

CC11: Guidance and Counseling (EDCACOR011T)

- Develop the basic concept of Guidance and Counseling.
- Understand the concepts of adjustment and maladjustment.
- Get acquainted with the basic data necessary for guidance, process of testing and diagnosis in Guidance and Counseling.

CC12: Educational Technology (EDCACOR012T)

- Acquire knowledge about the concept and approaches of educational technology.
- Understand the concepts, components and basic models of communication used in Education.
- Know the techniques of instructional technology used in Education.

Basic ICT (EDCACOR012P)

- Learn about computer and its components
- Know how to operate DTP & Excel
- Oral Presentation with PPT along with report writing.

DSE1: Women Education EDCADSE01T

- Acquire the knowledge about the concept of women education.
- Understand about the development of women education from 1600-2000.
- Know about the women rights in India.
- Develop a concept about the problems of women education.

DSE2: Teacher Education EDCADSE02T

- Acquire the knowledge about the concept Teacher education.
- Understand about the development of teacher education from pre- independent to post independent period.
- Know about the functions of teacher and teaching.
- Develop a concept about the methodology of teaching.

6th Semester

CC13: Curriculum Studies (EDCACOR013T)

- Develop a concept of Curriculum
- Understand the aims and objectives of Curriculum.
- Get acquainted with the development of Curriculum.
- Learn about the evaluation of Curriculum.

CC14: Special Education (EDCACOR014T)

- Acquire knowledge about basic concept of Special Education.
- Understand the development and organization of Special Education.
- Learn about Gifted and Slow Learners.
- Gather experiences about the different types of exceptionality.

DSE 3: Value Education EDCADSE04T

- Develop a concept of Value
- Understand value from different perspective.
- Learn about value crisis.
- Get acquainted with the value education.

DSE 4:Environmental Education EDCADSE06T

- Develop a concept of Environmental Education
- Learn about eco-system; Gather experiences about environmental pollution.
- Get acquainted with environmental awareness.

GENERAL

1st Semester

DSC 1A (EDCGCOR01T)/GE-1 (EDCHG01T): Philosophical Foundation of Education.

After completion of this course the students will be able to understand the followings

- The meaning nature and scope of education
- The aims, forms and factors of education
- The meaning and importance of value and the relation between value and education, and
- The life and contributions of great educators in the field of education.

2nd Semester

DSC 1B (EDCGCOR01T)/GE-2 (EDCHG02T): Psychological Foundations of Education.

- The relationship between education and psychology
- The meaning and nature of educational psychology and the contribution of educational psychology to education
- The meaning, principles, types and stages of human development and their educational significance
- The meaning, nature and types of attention and memory and the causes of forgetting and the role of education good memorisation, and The meaning characteristics types and measurement of personality and its importance in education.

3rd Semester

DSC 1C (EDCGCOR03T)/GE-3 (EDCHG03T): Development of educational policies since Independence

- The educational scenario of India from 1813 AD to 2016AD
- The educational provisions under the British Rule
- The recommendations of various Committees and commissions on education in India
- Various policies on education and educational schemes on education in India like SSM, RUSA and NPE etc.

4th Semester

DSC 1D (EDCGCOR04T)/GE-4 (EDCHG04T): Evaluation in education.

- The meaning, principles, types and importance of evaluation in education.
- Tools and techniques of evaluation, their advantages and disadvantages in education.
- The meaning, types and characteristics of tests such as educational tests and psychological tests.
- The meaning and utility of statistics and calculate central tendency and variability of a distribution.

5th Semester

DSE 1A (EDCGDSE01T) Sociological Foundations of Education.

- The meaning nature and scope of sociology and educational sociology and their inter relationship;
- The meaning and types and social groups and their role in socialization process;
- The meaning, nature and types of social agencies and their role as agencies of education; and
- Various social issues and their causes and impact on social life.

GE1 : Teacher Education in India **EDCGGECO1T**

- Acquire the knowledge about the concept Teacher education,
- Understand about the development of teacher education from pre- independent to post independent period.
- Know about the administrations of teacher education in India.
- Get acquainted with the modern concept of teacher education.

6th Semester

DSE 1B (EDCGDSE04T) Guidance and Counseling in Education

- The meaning, scope and need for adjustment and causes and remedies for maladjustment;
- Meaning, scope , types and importance of guidance and its need in secondary and higher secondary schools;
- The meaning, nature, scope, types and importance of Counseling;
- The techniques of data collection for guidance and counseling; and the students may use this knowledge in their own life situation.

GE2: Inclusive education in IndiaEDCGGECO2T

Develop a concept of meaning, nature and importance of inclusive education; Get acquainted with adult, social and special education; Understand about the issues in inclusive education

COURSE OUTCOME **DEPT OF ENGLISH**

English Literature courses at the Department of English expose our students to a wide range of writing from British, American and Anglophone traditions. These courses help the students to explore the ways writers use the creative resources of language in fiction, poetry, nonfiction prose, and drama in understanding the entire range of human experiences. With the introduction of new syllabus under CBCS which promotes a new thematic framework where classical Indian Bhasha literature shares space with contemporary literary output, the UG ENGLISH syllabus at Netaji Satabarshiki Mahavidyalaya will help the students in building up skills of analytical and interpretive arguments.

SEMESTER 5 CORE

CC 11 WOMEN'S WRITING

- 1. Students would have understood the ideas around gender equality and women's rights.**
- 2. Greater understanding over women's movements in different phases.**
- 3. Have greater awareness of the women's gaze in literature.**

CC 12 Early 20th century British Literature

- 1. Students would have understood the new literary techniques like psychoanalysis and stream of consciousness.**
- 2. Greater understanding of Women's movement and its impact on literature.**
- 3. Critical knowledge around the Avant-garde literary sensibilities.**
- 4. Be able to understand the concept of Modernism in all its complexities.**

DSE 1 Old English literature/Philology/Rhetoric Prosody

- 1. Students would have understood the socio-cultural background of OE literature.**
- 2. Critical knowledge on various aspects of OE religious, heroic and elegiac poetry.**
- 3. Critical understanding of the different influences on OE language.**
- 4. Understanding of Rhetoric and Prosody.**
- 5. Philological understanding of words**

DSE 2 Literary Types and Terms

- 1. Students would have understood different literary types in all their critical details.**
- 2. New literary terms and concepts would have been learnt.**
- 3. Students would have learnt the skill of applying theoretical knowledge to literary texts.**

ENGLISH SEC ELT (ENGLISH LANGUAGE TEACHING)

After the completion of the course a student would be able to

- 1. Acquire English language skills through speaking, reading and writing.**

2. Develop greater language accuracy and fluency in conversation.
3. Acquire varied range of vocabulary along with decent understanding of complex sentence structures both in reading and writing.

ENGLISH GEC: GENDER & HUMAN RIGHTS

After the completion of the course a student would

1. Acquire greater understanding of the current issues of Indian journalism.
2. Develop skill in editing for print and online media.
3. Would have greater awareness of the social media and its impact on our socio-cultural life.

Semester 6 Core

CC13 - Modern European Drama

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

1. Students will be acquainted with continental literature apart from British literature
2. Be familiar with the social, political change of the Modern Era
3. Be familiar with literary movements like Absurd theatre, existentialism and gradually develop a choice of specialisation for higher academic pursuit.

CC14 - Postcolonial Literature

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

1. Students will understand the problems and consequences of the decolonization of a country.
2. Be familiar with the ideas of literature and identity politics, region, race, gender and globalization.
3. Relate with the Indian context and analyse life and society better.
4. Develop a sense of choice of field of specialisation for higher academic pursuit.

DCE 3 - Literary Criticism

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

1. Be familiar with literary criticism
2. Learn to apply critical theories to literature
3. Broaden understanding of literature and learn to summarize, interpret and explore its value.

DCE 4 - Partition Literature

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

1. Understand the ideas of colonialism, nationalism, partition, communalism and violence, homelessness and exile.
2. Understand the plurality of human experiences and relate it to the Indian context
3. Understanding trauma and explore in depth issues of class, gender, religion, ostracization, and the meaning of existence.
4. Develop a sense of choice of field of specialization for higher academic pursuit.

ENGLISH SEC CREATIVE WRITING

COURSE OUTCOME: After the completion of the course a student would be able to

1. Engage in critical thinking within a structured framework.
2. Learn the techniques of writing essays, reviews and conversations on varied topics.
3. Learn tropes and figures of literary writing as well as develop greater understanding of the grammatical structure.

COURSE OUTCOMES (COs)
GEOGRAPHY

B.Sc. HONOURS

SEMESTER-I

GEOACOR01T – Geotectonic and Geomorphology

- Understand earth's tectonic and structural evolution.
- Gain knowledge about earth's interior.
- Develop an idea about concept of plate tectonics, and resultant landforms.
- Acquire knowledge about types of folds and faults and earthquakes, volcanoes and associated landforms.
- Develop an idea about geomorphology and different types of fundamental concepts.
- Explain different types of geomorphic processes like weathering and mass wasting and cycle of erosion.
- Understand the processes of erosion, deposition and resulting landforms.
- Acquire knowledge about slope forms and processes.

GEOACOR01P – Geotectonic and Geomorphology (Lab)

- Develop an idea about Geological Map.
- Identification of different types of rock and minerals.

GEOACOR02T – Cartographic Techniques

- Develop an idea about scale and draw different types of scale like linear, diagonal and vernier.
- Acquire knowledge different types of map projection.
- Gain knowledge about topographical maps and apply this knowledge in ground surface.
- Know about diagrammatic data presentation like line, bar and circle.
- Develop an idea about different types of thematic mapping techniques

GEOACOR02P – Cartographic Techniques (Lab)

- Developing an idea about scales and how to draw different types of scales; conversion of scales.
- Forming a clear concept on map projections.
- Topographical maps and its application in practical.

SEMESTER-II

GEOACOR03T – Human Geography

- Gain knowledge about major themes of human geography.
- Develop an idea about space and society.
- Build an idea about population growth and distribution of population.
- Know about population –resource relationship.
- Build an idea about urban and rural settlements, and its relationship with environment and also different theories related to settlement geography.

- Know about classification and morphology of settlements.
- Understand the trends and patterns of world urbanization.
- Know about different theories of urban growth.

GEOACOR04T – Cartograms and Thematic Mapping

- Will gain Concepts of rounding, scientific notation, logarithm and anti-logarithm, natural and log scales etc.
- Learn the diagrammatic representation of data e.g. Line, Bar, Isopleths and representation of area data: Dots and spheres, proportional circles and Choropleth
- Theory and logic to preparation and interpretation of land use land cover maps.
- Basic concept of bearing: Magnetic and true, whole-circle and reduced
- Basic concepts of surveying and survey equipment: Prismatic Compass, Dumpy Level, Theodolite

GEOACOR04P – Cartograms and Thematic Mapping (Lab)

- Brings direct interaction of different types of surveying instruments like Dumpy level and Theodolite with environment.
- Students' will able to make different types of thematic map for different purposes.

SEMESTER-III

GEOACOR05T – Climatology

- Learn the interaction between the atmosphere and the earth's surface.
- Understand the importance of the atmospheric pressure and winds.
- Understand how atmospheric moisture works.
- Develop an idea about cyclones.

GEOACOR05P – Climatology (Lab)

- Learn to use of various meteorological instruments.
- Gain knowledge about Indian daily weather report.
- Learn to draw monthly temperature and rainfall graphs.

GEOACOR06T – Geography of India

- They can know about their own countries land formation, climate and natural vegetation.
- They understand the economic resources of India.
- They understand the social distribution of population of their country.
- Develop an idea about regionalization of India.

GEOACOR07T – Statistical Methods in Geography

- Learn the significance of statistics in geography.
- Understand the importance of use of data in geography

- Know about different types of sampling.
- Develop an idea about theoretical distribution.

GEOACOR07P – Statistical Methods in Geography (Lab)

- Learn to use tabulation of data.
- Gain knowledge about association and correlation.
- Learn about data matrix, sampling etc.

SEMESTER-IV

GEOACOR08T – Regional Planning and Development

- They can know about concept, basic elements, and measures of level of rural development.
- They understand the paradigms of rural development.
- They understand the area based approach to rural development.
- Develop an idea about target group approach to rural development.
- Gain knowledge about rural governance.
- Gain knowledge about definition of region, evolution and types of regional planning.
- Develop an idea about choice of a region for planning.
- Build an idea about theories and models for regional planning.
- Know about measuring development indicators.

GEOACOR09T — Economic Geography

- Understand the concept of economic activity, factors affecting location of economic activity.
- Gain knowledge about different types of primary activities.
- Develop an idea about different types of secondary activities.
- Acquire knowledge about different types of tertiary activities.

GEOACOR10T—Environmental Geography

- Gain knowledge about concept, scope of environmental geography and components of environment.
- Develop an idea about human-environment relationships.
- Build an idea about ecosystem.
- Know about environmental programmes and policies.

GEOACOR10P—Environmental Geography (Lab)

- They can know how prepare a questionnaire on the basis of perception survey on environmental problems.
- Gain knowledge about doing project on environmental problems of North Bengal.

(5TH SEMESTER)

GEOACOR11T /Field Work and Research Methodology*4 Credits, 50 Marks

1. Learn the significance of field work in geographical studies.
2. Understand the meaning of field and identifying the case study.
3. Know about different types of field techniques.
4. Develop an idea about research problems.

GEOACOR11P /Field Work and Research Methodology (Lab) *2 Credits, 25 Marks

1. Conducting field excursions and preparation of field report on research on problem in different areas of India
2. Have expertise in identification of area of study, methodology, quantitative and qualitative analysis, and conclusions to be drawn about the area – fundamental to geographical research.
3. Handle logistics and other emergencies on field.
4. Develop skills in photography, mapping and video recording.

GEOACOR12T/Remote Sensing and GIS*4 Credits, 50 Marks

1. They can know about concepts, components, development, platforms and types of remote sensing and GIS.
2. They understand about Aerial photography and Satellite Remote Sensing.
3. Know about GIS data structures.
4. Develop an idea about interpretation and application of remote sensing and GIS.

GEOACOR12P /Remote Sensing and GIS (Lab)*2 Credits, 25 Marks

1. Interpret satellite imagery and understand the preparation of false color composites from them.
2. Training in the use Geographic Information System (GIS) software for contemporary mapping skills.
3. Analyzing and interpreting remotely sensed satellite images and aerial photographs in order to understand topographical and cultural variations on the Earth's surface.
4. Apply GIS to the preparation of thematic maps.
5. Use GNSS.

GEOADSE01T /Soil and Biogeography *6 Credits, 75 Marks

1. They can know the soil formation processes, development and soil physical and chemical composition.
2. Understand the genetic soil classification and U.S.D.A. soil taxonomy.
3. Students can learn the scope and significance of biogeography. Also know, factors affecting the growth and distribution of natural vegetation.
4. They also gather knowledge about biome, acetone and community, types and component parts of ecosystem, bio-energy cycle, food chain and tropic level. This can help them to predict the future change of biogeographically components.
5. They can illustrate the importance about bio-diversity

GEOADSE02T /Settlement Geography*6 Credits, 75 Marks

1. Build an idea about urban and rural settlements, and its relationship with environment and also different theories related to settlement geography.
2. Know about classification and morphology of settlements.
3. Understand the trends and patterns of world urbanization.
4. Know about different theories of urban growth.

GEOADSE03T /Population Geography*6 Credits, 75 Marks

1. Gain knowledge different aspects of population geography.
 2. Understand the nature of population. Know about composition of population, like- age, sex marital status, family, economic composition and language.
 3. Analyze the global trend and patterns of population growth in developing countries, and migration patterns.
 4. Evaluate the population growth theory and migration theories.
- Understand the population policies in different countries.

(6TH SEMESTER)

GEOACOR13T/Evolution of Geographical Thought*6 Credits, 75 Marks

1. Gain knowledge about development of geographical thought.
2. Develop an idea about evolution of geographical thinking and disciplinary trends in Germany, France, Britain, and United States of America.
3. Build an idea about between environmental determinism and possibilism, systematic and regional.
4. Know about the trends of geographical thoughts.

GEOACOR14T /Disaster Management *4 Credits, 50 Marks

1. Understand the definition, classification of hazards and disasters
2. Gain knowledge about approaches to hazard study.
3. Develop an idea about factors, consequences and management of earthquake, landslide, flood and riverbank erosion.
4. Acquire knowledge about human induced disaster.

GEOACOR14P /Disaster Management (Lab)*2 Credits, 25 Marks

1. Prepare hazard zonation maps.
2. Assessing the nature, impact and management of major natural and man-made hazards affecting the Indian subcontinent.

GEOADSE04T /Hydrology and Oceanography*6 Credits, 75 Marks

1. Analyze the concepts of Hydrology and Oceanography.
2. Emphasizing the significance of groundwater quality and its circulation.
3. Evaluate the role of the global hydrological cycle.
4. Studying the behavior and characteristics of the global oceans.

5. Identify marine resources and characteristics of ocean waters.
6. Interpret hydrological and rainfall dispersion graphs and diagrams.

GEOADSE05T /Social Geography*6 Credits, 75 Marks

1. Evaluate the social issues such as- racism, cast conflict, social distance.
2. Understand the causes of social inequality and their impact on society.
3. Students can understand indicators of social well-being and quality of life.
4. Discuss about the social space, social groups and intra-urban mobility.
5. They can define the cultural region of the world.
6. Students can learn about rural settlement morphology, urban-industrial landscape.
7. Analysis the social set-up in Indian villages.

GEOADSE06T /Resource Geography*6 Credits, 75 Marks

1. Develop an idea about resource.
2. Understand the concept of different types of resources.
3. Acquire knowledge about different types of power resources.
4. Explain population - resource relationship and different types of population resources.

B.A. GENERAL

SEMESTER-I

GEOGCOR01T– Physical Geography

- The students will be familiar with the earth's interior.
- Develop an idea about earth movements and the related topography.
- Acquire knowledge about different types of rock and their origin. Influence of the rocks on land form and topography.
- Getting familiar with the concept of hydrology
- Understanding the processes of erosion, deposition and resulting landforms.
- Students will learn about the atmosphere and the climate, pressure belts, wind systems, monsoon and their importance, difference between climate and weather.

SEMESTER-II

GEOGCOR02T – Human Geography

- The students will be aware of the scope and contents of human geography.
- Man's adaptation in various environments.
- This particular module aims to develop an idea about the world population distribution and the factors that lead to uneven distribution of the population. It also focuses on the problem that is likely to arise due to an increase in the world population.
- Different types of settlement and characteristics and their definitions.
- Scope and content of social geography; race characteristics and distribution; factors and characteristics of underdevelopment.

SEMESTER-III

GEOGCOR03T – General Cartography

- Concept of map scale: Types and Application. Reading distances on a map.
- Lessons on cartograms like pie graph, bar graph etc.
- Reference scheme of Indian Topographical Map and all about the information on its margin.

GEOGCOR03P – General Cartography (Lab)

- Developing an idea about scales and how to draw different types of scales; conversion of scales.
- Forming a clear concept on map projections.
- Topographical maps and its application in practical.

SEMESTER-IV

GEOGCOR04T – Environmental Geography

- Gain knowledge about concept, scope of environmental geography and components of environment.
- Develop an idea about human-environment relationships.
- Build an idea about ecosystem.
- Know about environmental programmes and policies.

GENERAL (5TH SEMESTER)

GEOGDSE01T /A. Soil and Biogeography*6 Credits, 75 Marks

1. They can know the soil formation processes, development and soil physical and chemical composition.
2. Understand the genetic soil classification and U.S.D.A. soil taxonomy.
3. Students can learn the scope and significance of biogeography. Also know, factors affecting the growth and distribution of natural vegetation.
4. They also gather knowledge about biome, acetone and community, types and component parts of ecosystem, bio-energy cycle, food chain and tropic level. This can help them to predict the future change of biogeographically components.
5. They can illustrate the importance about bio-diversity

GEOGDSE02T /B. Regional Development*6 Credits, 75 Marks

1. Understand and identify regions as an integral part of geographical study.
2. Appreciate the varied aspects of development and regional disparity, in order to formulate measures of balanced development.
3. Analyzing the concept of regions and regionalization.
4. Studying typical physiographic, planning, arid and biotic regions of India. Understanding the detailed geography of India.
5. Gain knowledge about definition of region, evolution and types of regional planning.
6. Develop an idea about choice of a region for planning.
7. Build an idea about theories and models for regional planning.
8. Know about measuring development indicators.
9. They can know about delineation of formal regions and also delineation of functional regions.

GEOGDSE03T /C. Disaster Management*6 Credits, 75 Marks

1. Understand the definition, classification of hazards and disasters
2. Gain knowledge about approaches to hazard study.
3. Develop an idea about factors, consequences and management of earthquake, landslide, flood and riverbank erosion.
4. Acquire knowledge about human induced disaster.

GENERAL (6TH SEMESTER)

GEOGDSE04P /Project Report Based on Field Work*6 Credits, 75 Marks

1. Necessity of field report in practical geography; collection of data and how to prepare a report from the data collected.
2. Conducting field excursions and preparation of field report on research on problem in different areas of India.
3. Handle logistics and other emergencies on field.
4. Develop skills in photography, mapping.

COURSE OUTCOMES (COs)

HISTORY

Semester 1

HONOURS

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

- Students of history will come to know about the notion of history, meaning of prehistory, protohistory and history.
- Students understand how tough was the life of the primitive men and their journey from the stage of food gatherers to food producers.
- Students can gain knowledge about the greatness of Indian civilization with the advent of Harappan civilization, Vedic civilizations. They also learn the social, political, cultural changes that people of ancient India were going through the ages.

CC II- Social Formations & the Cultural Patterns of the Ancient World

- Students understand the evolution of humankind & how the nomadic prehistoric people settled down with time and became civilized. The hard attempts of human beings gave birth to ancient civilizations.
- Students can compare among the civilizations & understand their differences.
- By studying the paper Students can understand that they can achieve success with hard work and dedication like the ancient people.

GENERAL

DSC 1A Paper I: History of India from the Earliest Times upto c.300 CE

- Students of history will gain knowledge about the notion of history, the sources of Indian history and their importance.
- They would know the historical journey from the prehistoric age to the age of shakas by studying this paper. The rise and fall of empires and achievement of different rulers will also be known by them.
- Students will understand the literary creation, philosophical and spiritual greatness of their country.

Semester 2

HONOURS

CC III-HISTORY OF INDIA-II (300-750 CE)

- students will understand that History of India promotes the value of ‘Unity in diversity’.
- Students should understand that equality of human beings is the natural right irrespective of caste, creed, religion and gender.
- Students will come to know about the rich cultural heritage, scientific developments, high spiritual- philosophical thoughts that emerged in India in ancient and early-medieval India.
- Every empire experienced the downfall. So nothing is permanent. With these sensibilities They should be prepared for all the ups and downs in their life.

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

- They will learn the origin and of ancient Roman civilization, its imperial history and Republican ideas.
- Students can locate the historical context of the classical Roman period- ,art,architecture,literature, history writing etc.
- They will acquire knowledge about the rise of Islam and Islamic sociocultural, political-economic developments in the central Islamic lands.

GENERAL

DSC 1B Paper-II: History of India from. c. 300 to 1206 CE

- While studying this paper student will value the idea of ‘Unity in diversity which is the main motto of Indian tradition.
- Students will locate the historical context of the rise of Bengal in the mainstream Indian politics and emergence of Bengali identity.
- Students will learn the characteristics of Indian feudalism, rise of regional kingdoms and their struggle for empire.
- They would know the cause and consequence of arab and turkish invasions in India.

Semester 3

HONOURS

CC V- -HISTORY OF INDIA-III (750CE-1206 CE)

- While studying this paper Students would realize that Unity is the main power. As Indian kings fought among themselves, arabs, turkish invaders attacked our land, became conquerors, looted the country.
- Students will locate the historical context of the rise of Bengal in the mainstream Indian politics and emergence of Bengali identity.
- Students will get an insight into the Bhakti movement and the idea of love and syncretism within it.
- They will learn the sociocultural, political, and economic developments of the early-medieval India.

CC VI- Rise of Modern West – I

- Students would have understood the socio-political context of the period from 14th century to 16th century in Europe .
- Students would understand the importance of Renaissance and the activity of the great scholars and artists of that period.
- Be familiar with the features of feudalism, the debate regarding transition from feudalism to capitalism.
- Students will understand the meaning of the new world, the sea voyages and world wide trade expansion.

CC VII: HISTORY OF INDIA-IV (1206 CE-1526 CE)

- History writing became an important aspect during this period- Students will obtain a better understanding of this.
- Students would trace the foundation,consolidation and political structure of the Delhi sultanate.
- Students would comprehend the significance of Iqta system, revenue free land grant and other economic activities like karkhanas, Indian ocean trade of the sultani period.
- Students would gain knowledge about the emergence of provincial kingdoms like, Bahamanis, Vijayanagar and Bengal and their cultural identities.
- They would be able to value the synthetic religious ideas that emerged out of bhaktism and sufism.

GENERAL

DSC 1C Paper III: History of India from 1206 CE to 1707 CE

- students will get to know about the period of Delhi Sultanate and Mughal rule in India. They can compare the two periods and understand the changes that came in socio-political, cultural and economic spheres.
- They would come to know the administrative policies of sultans and mughal rulers: like the Iqta system, price regulation system, mansabdari system, Jaigirdari system etc and their importance.
- Rise of regional powers and their struggle for expansion will also be known by them.
- Knowledge about bhakti and sufi movement will help the students to develop their mentality with the idea of love, brotherhood and syncretism.

Semester 4

HONOURS

CC VIII Rise of Modern West – II

- Students would analyze the significance of reason, logic and experiments in the modern technologically advanced world while studying the scientific revolution and its impact.
- They would be able to understand the significance of mercantilism and the roads towards Industrial revolution.
- They would come to know about different political ideas that emerged in Europe within 17th and 18th century

CC IX: HISTORY OF INDIA-V (1526 CE-1757 CE)

- By studying this paper Students will know the Struggle for Empire between the sultanate and the mughals and the foundation of Mughal Rule in India.
- The rich cultural heritage of the mughal art, architecture and literary creation will be known by the students.
- Students can get insight of the 18th century in India- fall of the mughals, emergence of Regional powers like rajputs, sikh and marathas, rise of the English East India Company

CC X- HISTORY OF INDIA VI (1757 CE-1857 CE)

- Students will come to know that about the historical context of the rise of English East India Company and the 100 yrs of its rule in India.
- They will be informed of the various administrative policies, legal acts, police reforms that were introduced by the EIC to legalize the colonial rule in India.

- Students will analyze both the positive and negative aspects of the EIC rule in India- the socioreligious, educational reforms etc
- Students will understand the significance of Bengal Renaissance, the contribution of Bengal intellectuals, and their attempt of developing the position of women in the society.
- They will learn about the popular resistances against the British power in the 1st half of the 19th century and will understand the nature of British oppression In India.

GENERAL

DSC 1D Paper-IV: History of India (1707-1950 CE.)

- Students will come to know about the downfall of the mughal empire and 18th century debate in India.
- They will gain knowledge about the rise of the British East India Company in India, its 100 yrs of rule and after that direct British rule in India.
- Students will analyze both the positive and negative aspects of the British rule in India.
- They will learn about the popular resistances that gave rise to the nationalist sentiments. Role of Newspapers, political associations and the context of anti-colonial struggle in India. They would be able to understand why both the path of Gandhian non-violent mass movements, and the revolutionary ways of struggle followed by Bhagat singh, Netaji Subhas chandra bose and others were necessary for gaining freedom.
- They would come to know about the growth of communal politics and the reason behind partition of India. Communalism is not good for the progress of a country- this historical truth will be realized by them.
- By studying this paper student will understand the meaning of freedom and the struggle of Indian freedom fighters.

Semester V

Honours

- **CC XI- HISTORY OF MODERN EUROPE I (1789 CE-1919 CE)**
- Students will come to know that about the historical context of the rise of French Revolution and Its impacts on Europe.
- They would come to know about rise and fall of Napoleon Bonaparte.
- Students will gain knowledge about various revolution occurs in Europe and importance of Industrial revolution.
- Students will come to know about Bismark, causes and outbreak of First World War.
- By studying this paper students will understand about important history of Modern Europe.

CC XI- HISTORY OF INDIA- VII (1858 CE-1947 CE)

- By studying this paper student will understand the meaning of freedom and the struggle of Indian freedom fighters.
- They would come to know about the growth of communal politics and the reason behind partition of India. Communalism is not good for the progress of a country-this historical truth will be realized by them
- Students will come to know about various freedom movements in India and they would be able to understand why both the path of Gandhian non-violent mass movements, and the revolutionary ways of struggle followed by Bhagat singh, Netaji Subhas chandra bose and others were necessary for gaining freedom.
- Students will gain knowledge about Tebhaga and Telengana movementa in India.

DSE I – ASPECTS OF THE HISTORY OF MODERN SOUTH EAST ASIA -I

- This course introduces the students to the regional identity of Southeast Asia and it's ethnic features.
- Students will get to know about the colonial regime in Southeast Asia, and it will give them an insight to analyze comparatively the effect of colonialism in India and in Southeast Asia.

DSE II – ASPECTS OF THE HISTORY OF MODERN SOUTH EAST ASIA -II

- This course encourages students to understand that right to freedom is a basic human right for which people of Southeast Asia fought anti-colonial struggle, became martyr and achieved freedom.
- Students will be able to understand the post-1945 world politics for which Southeast Asians took initiative to negotiate through regional organizations for independent nation building process.

HISG DSE-I

SOCIETY AND ECONOMY OF MODERN EUROPE (15TH – 18TH CENTURY)

- Students would have understood the socio-political context of the period from 14th century to 16th century in Europe .
- Students would understand the importance of Renaissance and the activity of the great scholars and artists of that period.
- Be familiar with the features of feudalism, the debate regarding transition from feudalism to capitalism.
- Students will understand the meaning of the new world, the sea voyages and world wide trade expansion.

HISGGEC01T

HISTORY OF INDIAN JOURNALISM : COLONIAL AND POST COLONIAL PERIOD

- Students will know about pre-colonial history of written records and advent of print media.
- They will gain knowledge about nationalism and print culture in Bengal and specially know about Amrita Bazar Patrika, Ananda Bazar Patrika and Hindusthan Standard.
- Students will understand about writing and reporting.

Semester VI

Honours

CC XIII- HISTORY OF INDIA (INDIA SINCE 1947 CE)

- Students will come to know about the Nehru era in India and his five years plan, making of constitutions.
- They will understand about partition, riots and rehabilitation in India.
- They will understand about Non Aligned Movement and economy, society and culture of India from 1950 – 1970s.

CC XIV – TRENDS IN WORLD POLITICS (1919 CE – 2001 CE)

- Students will come to know about Nazism and Fascism in Europe and great depression of 1929.
- They will understand the road to Second World War and its impact.
- Students will come to know about origin and function of UNO.
- They will acquire knowledge about Cold War, rise of communist China, Cold war in Asian Countries, Third World and Non Aligned Movement.
- They also known about Globalization and its impact, rise of terrorism with special references to 9/11 incident.

DSE04

HISTORY OF MODERN EAST ASIA – 1 (1839 CE – 1919 CE)

- Students will come to know about Pre-colonial China, nature and structure of the traditional Chinese society, Government bureaucracy and central control and pre-modern economy.
- They will understand Anglo Chinese relations till the Opium War, Canton trade and its collapse, First & Second Opium War and Financial Imperialism ; Open Door policy.
- Students will come to know about The Taiping Rebellion, Tung-Chih Restoration, Boxer Uprising, The Rebellion of 1911, Yuan Shih-Kai and warlordism, the rise of the Kuomintang.
- They will acquire knowledge about Pre-Meiji Japan, Tokugawa Shogunate, Economic condition, The crisis and fall of the Shogunate, Meiji Restoration, Transformation of Japan and Meiji Constitution.
- They also known about Sino-Japanese War, The Anglo-Japanese Alliance, Russo-Japanese War and Japan and the First World War.

HISTORY OF MODERN EAST ASIA – 2 (1919 CE – 1939 CE)

- Students will come to know about Yuan Shih Kai, May 4th Movement.
- They will understand The rise of the Kuomintang Party, Ten Year of Nanking Government.
- Students will come to know about Background of the foundation of the Communist Party, CCP under Mao Tse-tung and The Yen-an experiment.
- They will acquire knowledge about Modern Japan, rise of the political parties and Industrialization in Japan.
- They also know about Japan and the First World War, Manchurian crisis and Japan and the Second World War.

HISG

DSE04- SOME ASPECTS OF EUROPEAN HISTORY : C.1780-1939 CE

- Students will come to know that about the historical context of the rise of French Revolution and Its impacts on Europe.
- They would come to know about rise and fall of Napoleon Bonaparte.
- Students will gain knowledge about various revolutions that occurred in Europe and importance of Industrial revolution.
- Students will come to know about Bismark, causes and outbreak of First World War.
 - By studying this paper students will understand about importance of history of Modern Europe and rise of Fascism, Nazism and origin of World War II.

HISGGEC02

SOME PERSPECTIVES OF WOMEN'S RIGHTS IN INDIA

- Students will gain knowledge about definition of Human Rights, Indian Constitutions and Women's Rights.
- Students will know about minimum Wage Act 1948, Family Courts Act 1986, Dowry Prohibition Act 1961 etc.
- They will gather knowledge about issues of violence against women and role of NGOs
- They enriched with present status of women's rights in India.

COURSE OUTCOME (COs)MUSIC

Music Honours Courses at the Department of Music expose our students to a wide range of Music from North Indian Classical, Light Classical, Rabindra Sangeet, Bengali Song and Folk Song traditions. Our Courses also provide a basic knowledge of Western Music and Karnataki Music. These Courses help the students to understand the ancient as well as the modern traditions and trends of Indian Music. The students can experience the essence of different types of Music at different stages of their study through this CBCS syllabus. This syllabus in our Netaji SatabarshikiMahavidyalaya will help our students to understand this subject analytically and in building their skills as a good artist in future with a cognitive sense of Art.

Semester 1 Core

Elementary theory of Music (CC1)

At the end of the Semester the students will

1. Be familiar with the various definitions regarding elementaryMusic.
2. Know the significance of TenThatas.
3. Understand essential features of the Indian Raga.
4. Explore the Time bound significance of performing aRaga.
5. Experience basic Ragas by the performance of DrutKhayal.
6. Understand basicTalas.
7. Identify the Swaras of the TenThatas.
8. Experience introductory knowledge of a VilambitKhayal.

General Study on Music (CC2)

At the end of the Semester the students will

1. Know about ancient and modern classifications ofRaga-Ragini.
2. Experience the theoretical knowledge of Hindustani and Karnataki Musicssystem.
3. Understand various types of Light Classical forms both theoretically andpractically.
4. Experience the classifications ofInstruments.
5. Learn to perform a VilambitKhayal.
6. Learn to perform a Dhrupad and a Dhamar with simplelayakari.
7. Know how to keep Talas with handbeats.

Semester 2 Core

History of Indian Music (CC3)

At the end of the Semester the students will

1. Get knowledge of Music in Pre-Vedic and Vedic period.
2. Study on Music in our Epicera.
3. Get knowledge of Music in Purana.
4. Experience the Music in Charyapadas.
5. Experience practical knowledge of Thumri Singing.
6. Be able to perform Semi Classical Song form like Kajri/Chaiti/Dadra/Hori/Bhajan.
7. Be able to perform Classical Tappa.

Theory of Music including Notation System(CC4)

At the end of the Semester the students will

1. Experience the knowledge of different North Indian Notation Systems and will be able to differentiate each system with the others.
2. Come to know about the History of Gharana System and will be able to critically analyse them.
3. Understand the influence of Vaishnavpadavali on Rabindranath Tagore.
4. Come to know about Brahma Sangeet and its influence on Bengali Song.
5. Be able to perform Dhrupad based Rabindra Sangeet and Bengali Song.
6. Be able to perform Khayal based Rabindra Sangeet and Bengali Song.

Semester 3 Core

Evolution of Bengali Song (CC5)

1. Students have to understand the evolution and development of old form of Bengali Songs such as Chaya Geeti, Mangal Geeti, Shri Krishna Kirtan etc.
2. Students will come to know about evolution of Bengali Tappa with special reference of Nidhubabu.
3. They will experience the characteristic features and varieties of Songs from Shaktapadavali.
4. They have to understand and perform Rabindra Sangeet from different Paryayas.
5. Students will come to know about the influence of Ramprasadi Sur and Tappa style on Rabindra Sangeet as well as Bengali Song.

Basic knowledge of Bengali Song and Rabindra Sangeet (CC6)

1. The students will learn on the characteristic features and various types of Nazrul Geeti.
2. They have to understand the characteristics and various forms of Puratani Bengali Song.
3. They will study on the origin and development of Modern Bengali Song and will be able to understand new style of modern Bengali Song with an analytical foresight.
4. They will get knowledge of Rabindra Sangeet influenced by old traditional Kirtan of Bengal.

5. They will learn to perform Rabindra Sangeet from Vanusinher Padabali and Kirtan based Rabindra Sangeet.
6. The students will experience a glimpse of traditional Bengali Kirtan style from Vidyapati, Chandidas, Gobindadas etc.
7. They have to learn traditional Puratani Bengali Song such as Kathakata, Panchali Gaan etc.

Knowledge of Bengali Song and Rabindra Sangeet (CC7)

1. Students will know about the influence of Thumri and Tappa style on Rabindra Sangeet.
2. They will know the impact of Vaidik Sangeet and Brahma Sangeet on Rabindra Sangeet.
3. They will study on Rabindra Kavya Geeti both theoretically and practically.
4. They will get knowledge of Bengali Song influenced by Thumri and Ghazal style.
5. They will learn to perform Rabindra Sangeet based on Brahma Sangeet, Veda Gana and Thumri.
6. They will also learn to perform Bengali Song based on Thumri and Ghazal style in order to realise their impact.

Semester 4 Core

Theory of Western Music and Karnataki (CC8)

1. The students will be familiar with the Western Scales and Notes including some theoretical application part.
2. They will be able to solve simple problems on Western Scales, Intervals, Triads and Chords etc. as an application form.
3. They will know basic definitions on Western Music which will help them to understand Indian Music also.
4. They will study on the contributions of some Western as well as Karnataki Music Composers.
5. They will get knowledge on Karnataki Mela System and Tala System with simple theoretical application parts thereof.
6. In practical part they will learn to perform Rabindra Sangeet based on Western Tunes as well as Provincial Tunes.
7. They will learn to perform Western Music based Bengali Songs by eminent Composers of Bengal and thus they will be able to analyze the application of Western Tunes in Bengali Song.

Theory of Tala (CC9)

1. From this paper the students will be acknowledged with basic definitions regarding North Indian Tala.
2. They will learn to write a Tala in proper Talalipi with Layakari.
3. They will learn Rabindrik Talas and Chandas and will be able to apply it practically.
4. They will get knowledge on special features of Kirtanangiya Tala which will help them to understand Kirtan style of singing properly.
5. They will be able to show Talas with their Layakari by keeping hand beat sand that will help them to get clear conception on a Tala.

6. By learning basic Kirtanangiya Tala they will be able to perform a Kirtan with their full confidence.

Theory on variety of Rabindra Sangeet and Bengali Song (CC10)

1. They will be introduced with Geetinatya and Nrityanatya composed by Rabindranath both theoretically and practically.
2. They will study on different types of Bengali Folk Song and their characteristics in order to understand Bengal's own folkheritage.
3. They will experience the pleasure of studying the history of Pre Independence and Post-Independence Swadeshi Gaan and will learn Songs of Pre Bangabhanga and Post Bangabhanga with an analytical view.
4. They will learn to perform National Anthem, National Song and Swadesh Paryay Songs of Rabindranath and will be able to relate them with their history behind.
5. They will be able to sing the songs composed by eminent Bengali Musical Personalities of Pre and Post-Independence period.

Semester 5 Core

Musicology (CC11)

1. The students will learn about ancient Musical terms of Music.
2. They will know about the Moorchhana System of ancient Indian Music.
3. They will learn about Prabandha Sangeet of ancient India which is considered as the mother of Classical Music.
4. They will come to know about the ancient Musicological Texts of our country.
5. In the Practical part they will learn different types of Bengali Song such as Atulprasadi, Songs of Rajanikanta Sen, Ghazal based Songs and Brahma Sangeet etc.
6. They will also learn to perform the compositions of eminent Bengali Composers.

Study on Musical Acoustics (CC12)

1. The students will come to know about the scientific terms regarding Musical Acoustics such as Frequency, Pitch, Vibrations, S.H.M, and Resonance etc.
2. They will learn about human vocal and hearing organ, their structure and functions which is of much

importance for a student of Music.

3. They will come to know about Musical Sound and its salient features. Thus they will learn the technical framework supporting Music.
4. In the practical part they will learn to perform different types of Bengali Folk Song.
5. The student will also learn to perform Rabindra Sangeet based on Baul Style and Bengali Song based on PurataniGaan.

Harmonium accompaniment and Tuning of Tanpura (DSE 1)

1. In this part the students will gather knowledge about various parts of Harmonium and Tanpura which are the basic Musical instruments.
2. They will come to know about the role of these instruments in the field of Music.
3. In the practical part they will learn the finger techniques followed in Harmonium.
4. They will learn to perform different Swaras in three Octaves on Harmonium.
5. They will learn the techniques of putting strings properly on Tanpura.
6. They will also learn to tune a Tanpura by hearing standing notes.

Music and Psychology (DSE2)

1. In this part the students will come to know about the relation between Music and Psychology.
2. They will be enhanced to know about Musical Mind which will help them to develop Musical Thoughts.
3. They will learn about Musicality and different assessments of measuring Musicality in a person.
4. They will come to know the difference between Musical Talent and Musical Prodigy.
5. They will also be introduced to Musical Behavior which would lead them to adapt themselves as a Musical mind.

Science in Music (DSE3)

1. This part will help the students to make difference between a Musical Sound and Noise.
2. They will learn about Sound Waves, its varieties and characteristics. They can also learn about the Sound Waves which are related to Music.
3. The students will know about Auditory Perception which will help them Study to learn and acknowledge Music properly.
4. Study on Microphone will help the students in practical usage of it.
5. .They will learn about the relationship between Music and Mathematics applying Chhanda, Laya and Layakari.

Semester 6 Core

Indian Music and Musical Personalities (CC13)

1. In this part the students will know the life and contributions of the great Indian Musicians and Musicologists. This portion will inspire them to follow the way of the great Music Maestros.
2. They will learn about the origin and development of Dhrupad and Khayal which are considered as the base Classical Music.
3. They will also learn about the origin and development of Bengali Kirtan, the heritage Art form of Bengal.
4. In the practical part the students will learn to perform Bengali Song based on Indian Ragas.
5. They will also learn to perform Bengali Song of different eminent lyricists and composers of Bengal. Thus they can assimilate their knowledge with original Bengali Songs.

Musical Aesthetics (CC14)

1. In this part they will be acknowledged with the aesthetic value of Music and the idea of Universality of Music.
2. They will learn the relationship between Reality and Music.
3. They will study on the application of the Theory of Imitation in Music.
4. They will also learn on the Role of Emotions and Imaginations in the field of Music.
5. They will come to know about the Tagore's Musical thoughts and ideas which will help them to perform Rabindra Sangeet with a perfection.
6. In the practical part a revision of previous lesson is done where they can clear their doubts and perform with more perfection.

Harmonium Accompaniment and Tuning of Tanpura (DSE4)

1. In this part the students can get a theoretical knowledge of Tuning Tanpura which may help them practically.
2. They will know the reasons of the importance of using Tanpura.
3. Students are usually accustomed with Harmonium. Here they will know the Merits and Demerits of using Harmonium for practice.
4. In the practical part they will learn to accompany Harmonium with various types of Classical, Semi-classical and Light Songs.
5. They will learn to perform a Raga or a Song individually in Harmonium with different Talas.
6. They will also learn to perform by changing Scales as well as Kharaj in both Harmonium and Tanpura.

Music and Psychology (DSE5)

1. In this part the students will learn how to evaluate or appreciate Music as an Art Form.
2. They will also learn about the relationship between a performer and a listener which is an important thing to be an Artist.
3. They will come to know about Musical Memory as well as Tonal Imagery which are the essential lesson for the students of Music.
4. They will also be introduced to the importance of Imagination of different types of Tunes to be a creative Musician.

Social Aspects of Music (DSE6)

1. From this part the students will learn about the Social Commitments of Music as well as the responsibility of an artist towards their Society.
2. They will know the necessity of Music Education at the Institutional level, so that they can be able to justify their position as a student of Music.

3. They will be introduced to the basic usage of Music in Medical Science and the contribution of Music in the field of Musical Science.
4. Thus the students can prepare themselves not only as a performer but also as a Musical Person committed towards the Art and Society.

COURSE OUTCOMES

(COs)POLITICAL

SCIENCE

The undergraduate course of political science helps to familiarize the students with the basic ideas of political science. To help them understand and distinguish between basic concepts like political theory, political thought and political philosophy it further helps the students to understand and relate the concepts and facts with the political realities of the country and different parts of the world.

The course inculcates the students to develop the ability to make logical inferences about social and political issues on the basis of comparative and historical knowledge, to understand the changes in patterns of political behavior, ideas and structures and to be able to assess how global, national and regional developments affect polity and society. Above all, it aids students in becoming informed citizens by amplifying knowledge on their entitlement to the rights and duties within a state.

SEMESTER 1

CC1-UNDERSTANDING POLITICS

- This course introduces the students to the idea of political theory, its history and approaches
- An assessment of its critical and contemporary trends and is designed to reconcile political theory and practice through reflections on the ideas and practices related to democracy.
- Various fields like administration, media, teaching etc are open to the students for their career establishment.

CC2- Constitutional Government and Democracy in India

- This course acquaints students with the constitutional design of state structures and institutions, and their actual working over the years.
- It further encourages a study of state institutions in their mutual interaction, and in interaction with the larger extra-constitutional environment.

GE 1/DSC 1 - Introduction to Political Theory

- This course introduces the students to the idea of political theory, its history and approaches, and an assessment of its critical and contemporary trends
- It is designed to reconcile political theory and practice through reflections on the ideas and practices related to democracy.

SEMESTER II

CC3- Political Theory-Concepts and Debates

- This course helps the student familiarize with the basic normative concepts of political theory.
- Each concept is related to a crucial political issue that requires analysis with the aid of our conceptual understanding

- This exercise is designed to encourage critical and reflective analysis and interpretation of social practices through the relevant conceptual toolkit. It further introduces the students to the important debates in the subject.

CC 4- Political Process in India

- This course maps the working of 'modern' institutions, premised on the existence of an individuated society, in a context marked by communitarian solidarities, and their mutual transformation thereby.
- It also familiarizes students with the working of the Indian state, paying attention to the contradictory dynamics of modern state power.

GE 2/DSC 2 - Indian Government and Politics

- Introducing the Indian Constitution with a focus on the role of the Constituent Assembly and examining the essence of the Preamble.
- Examining the Fundamental Rights and Duties of Indian citizens with a study of the significance and status of Directive Principles.
- Assessing the nature of Indian Federalism with focus on Union-State Relations. CO 4- Critically analyzing the important institutions of the Indian Union: the Executive:

SEMESTER III

CC5- Introduction to Comparative Government and Politics

- This is a foundational course in comparative politics. The purpose is to familiarize students with the basic concepts and approaches to the study of comparative politics.
- More specifically the course will focus on examining politics in a historical framework while engaging with various themes of comparative analysis in developed and developing countries.

CC6-Perspectives on Public Administration

- The course provides an introduction to the discipline of public administration. This paper encompasses public administration in its historical context with an emphasis on the various classical and contemporary administrative theories.
- The course also explores some of the recent trends, including feminism and ecological conservation and how the call for greater democratization is restructuring public administration
- The course will help students to the understanding of public policy, administration as choice for further studies.

CC7- Perspectives on International Relations and World History

- This paper seeks to equip students with the basic intellectual tools for understanding International Relations. It introduces students to some of the most important theoretical approaches for studying international relations.
- The course begins by historically contextualizing the evolution of the international state system; then the students are introduced to different theories in International Relations. It provides a fairly comprehensive overview of the major political developments and events starting from the twentieth century. Students are expected to learn about the key milestones in world history and equip them with the tools to understand and analyze the same from different perspectives.
- A key objective of the course is to make students aware of the implicit Euro-centricism of International Relations by highlighting certain specific perspectives from the Global South.

GE 3/DSC 3 - Introduction to Comparative Government and Politics

- This is a foundational course in comparative politics. The purpose is to familiarize students with the basic concepts and approaches to the study of comparative politics.
- More specifically the course will focus on examining politics in a historical framework while engaging with various themes of comparative analysis in developed and developing countries.

SEMESTER IV

CC8 Political Processes and Institutions in Comparative Perspective

- In this course students will be trained in the application of comparative methods to the study of politics.
- The course is comparative in both what we study and how we study. In the process the course aims to introduce undergraduate students to some of the range of issues, literature, and methods that cover comparative political arena.

CC9 Public Policy and Administration in India

- The paper seeks to provide an introduction to the interface between public policy and administration in India.
- The essence of public policy lies in its effectiveness in translating the governing philosophy into programs and policies and making it a part of the community living.
- It deals with issues of decentralization, financial management, citizens and administration and social welfare from a non-western perspective.

CC10 - Global Politics

- This course introduces students to the key debates on the meaning and nature of globalization by addressing its political, economic, social, and cultural and technological dimensions.
- It imparts an understanding of the working of the world economy, while analyzing the changing nature of relationship between the state and trans-national actors and net works
- The course also offers insights into key contemporary global issues.

GE 4/DSC 4 - Introduction to International Relations

- With a focus on politics at the transnational or global level, it demonstrates a generalized understanding of the diplomatic relationship between nation- states, the functioning of international organizations, international law and economy, disarmament and peace efforts, foreign policies of states, the behavior and roles of nation-states in diverse political situations and also help gain an insight into subjects of Human Rights law and theory.
- Understanding and critically evaluating the theories and approaches to international relations, including realism, liberalism, classical and neo-Marxism

SEMESTER V

CC11- Modern Political Philosophy 1

- Philosophy and politics are closely intertwined.
- The course is aimed to look into the ancient and modern political philosophy and thought.

CC 12-Indian Political Thought-I

- This course introduces the specific elements of Indian Political Thought spanning over two millennia.
- The basic focus of study is on individual thinkers.
- The course as a whole is meant to provide a sense of the broad streams of Indian thought while encouraging a specific knowledge of individual thinkers and texts.

DSE 01 – Reading Gandhi

- The course initially seeks to acquaint the students with the art of reading texts and enable them to grasp its conceptual and argumentative structure.
- It helps students to help them acquire the skills to locate the texts in a broader intellectual and socio-historical context.
- It aims to acquaint the students with the social and political thought of Gandhi.

DSE 03 – Understanding Global Politics

- The purpose of this course is to give students a basic understanding of what is meant by the phenomenon of globalization, its source and forms.
- In addition, students will obtain a familiarity with both key global actors and certain urgent problems that requires solutions and global level.

GEC 01 (for General Students as DSC 3) - Human Rights in a Comparative Perspective

- This course aims at enabling the students to understand the issues concerning the rights of citizens in general and the marginalized groups in particular.
- It assesses the institutional and policy measures which have been taken in response to the demands of various movements. The course will equip the students with theoretical and conceptual understanding of socio – economic and political problems of marginalized groups in society.

DSC – Reading Gandhi (for General Students as DSE 01)

- The course initially seeks to acquaint the students with the art of reading texts and enable them to grasp its conceptual and argumentative structure.
- It helps students to help them acquire the skills to locate the texts in a broader intellectual and socio-historical context.
- It aims to acquaint the students with the social and political thought of Gandhi.

SEMESTER VI

CC13- Modern Political Philosophy 2

- In this course different trend in modern political thinking is analyzed.
- It is designed to make the students aware about various strands in modern politics.

CC 14 Indian Political Thought-II

- Based on the study of individual thinkers, the course introduces a wide span of thinkers and themes that defines the modernity of Indian political thought.
- The objective is to study general themes that have been produced by thinkers from varied social and temporal contexts.

DSE 04 – Public Policy in India

- Understanding the basic concepts such as public policy, policy analysis, public policy process and governance
- Knowledge of different stages of the Public policy process in terms of theoretical formulation and the process
- Necessary competence to undertake policy analysis

DSE 06 – Governance: Issues and Challenges

- It provides a comprehensive view of key concerns and debates in the realm of governance specially in development and development strategy.
- Governance comprises intricate mechanisms, processes, structures and institutions through which citizens and groups articulate their interests, opinions and respond to the problems.
- It also deals with the level of human development.

GEC 02 (for General Students as DSC 3) - Governance: Issues and Challenges

- It provides a comprehensive view of key concerns and debates in the realm of governance specially in development and development strategy.
- Governance comprises intricate mechanisms, processes, structures and institutions through which citizens and groups articulate their interests, opinions and respond to the problems.
- It also deals with the level of human development.

DSC – Understanding Global Politics (for General Students as DSE 02)

- The purpose of this course is to give students a basic understanding of what is meant by the phenomenon of globalization, its source and forms.
- In addition, students will obtain a familiarity with both key global actors and certain urgent problems that requires solutions and global level.

COURSE OUTCOMES

(COs)SANSKRIT

Sanskrit is a unique language that surpasses all other languages in terms of its antiquity vastness of literature contained therein, depth, uniqueness of expressions, facility to convey the most subtle concepts of all aspects associated with human nature including society, spirituality and such other aspects apart from being the most flexible language and several other issues.

In the last few decades, the study of Sanskrit has also emerged not only as language but also as ancient Indian knowledge heritage. Its learning can empower students to engage with social reality of India through a critical lens and thus contribute to society. Many people, all over the world are today showing enormous interest towards the wisdom as well heritage of Sanskrit. A critical reading of our cultural past would demand that we study and teach Sanskrit not only from the curiosity point of view but from a desire to learn what has been achieved by ancient Indian thinkers, philosophers, and scientists which is totally missing and neglected in our socio-cultural life in India.

SEMESTER-1

CLASSICAL SANSKRIT LITERATURE (POETRY) -CC1

- Students would be able to know the original source of later developments in ornate poetry.

CRITICAL SURVEY OF SANSKRIT LITERATURE – CC2

- Students would know the critical reasoning, understanding Sanskrit literature and have capacity analysis of key features and concepts of various commentaries in the discipline.

SEMESTER-2

CLASSICAL SANSKRIT LITERATURE (PROSE) -CC3

- Students would know the variety of prose-writings in Sanskrit & they will be able to analysis compound formation.

SELF MANAGEMENT IN THE GITA -CC4

- Through Gita they will be manage their cognition, emotive apparatus, confusion and conflict of mind.

SEMESTER-3

CLASSICAL SANSKRIT LITERATURE (DRAMA) -CC5

- Students would be able to acknowledge the literary riches of their all-time great classical Sanskrit drama.
- Students would be able to learn the inner structure of Sanskrit drama by themselves.

POETICS AND LITERARY CRITICISM -CC6

- Students would be able to evaluate any Sanskrit drama with the help of Rasa-theory of Bharat Muni & will be able to pick up any flaws in poetry if present.

INDIAN SOCIAL INSTITUTIONS AND POLITY -CC7

- The students would learn about the ancient Indian Educational system and polity, their nature, concepts through the text of Dharmasastra and Arthasastra.

SEMESTER-4

INDIAN EPIGRAPHY, PALEOGRAPHY AND CHRONOLOGY -CC8

- Students will be able to write Devnagari scripts which provide them paleographical knowledge to read out the script of modern languages like Hindi and Marathi.
- The students would know about the historical importance of Indian Epigraphy, Paleography, Chronology and Inscription.

MODERN SANSKRIT LITERATURE -CC9

- Students would be able to understand ten types of literature and his example through Sivarajavijayam, Bharatavivekam and Chipitakacharvanam.

SANSKRIT AND WORLD LITERATURE -CC10

- Students would be able to know the special contribution of William Jones, Max Muller, Weber and h. Wilson in the field of world Sanskrit literature

SEMESTER-5

VEDIC LITERATURE-CC11

- Students would know about the Vedic mantras, their application, Vedic grammar, socio-cultural life.
- Students would know the eastern and western interpretations of the Veda, Sunahsepopakhyana, and Mundakopanisad.

SANSKRIT GRAMMAR –CC12

- Grammar is very important part of this language to make a sentence, to know appropriate meaning of text, build up the concept about Sutra, Upasarga, Guna, Samprasarana.
- Linguistics should also help them to know the source of this language and the relation between other language.

VEDA & VYAKARANA-DSE-1

- Ability to derive the correct strilinga forms of words.
- Appreciation of arguments presented in the commentaries and shastric method of developing arguments and building siddhanta.

KAVYA-DSE-3

- Sahityadarpana of Vishvanatha is one of the most popular basic texts of Sahityashastra,
- Detailed introduction to the study of poetics in Sanskrit and traces the views of major alankarikas.

SEMESTER-6

ONTOLOGY AND EPISTEMOLOGY-CC13

- It introduces students with essentials of Indian philosophy.
- It also intends to give them an understanding of essential aspects of Indian philosophy.

SANSKRIT COMPOSITION AND COMMUNICATION-CC14

- Capacity for creative writing and literary appreciation will be developed.
- Students will be able to learn the skills needed to participate in conversation that builds knowledge collaboratively.

VEDA & VYAKARANA DSE-4

- The student comes to know the Vedic culture, literature and grammar in West Bengal.
- Moreover, the student can get some type of spiritual knowledge from Sukta etc which makes them moral in their behavior and life.
- Bhattikavyam is like a lamp to those who perceive the meaning of words and like a hand mirror for a blind man to those without grammar.

KAVYA DSE-6

- Kavyalankara Sutravritti is a very significant work that comes up with original ideas and concepts. It is regarded as the earliest attempt at evolving a philosophy of literary aesthetics.

GENERIC ELECTIVE COURSE

SEMESTER-5

BASIC SANSKRIT

- Sanskrit is much known for a long tradition of grammatical and semantic analysis of the language. Panini's grammar has always been highly reflected for providing the best model for structural and semantic study. This course aims to get students to learn the basic of Sanskrit grammar through nominative forms of pronouns and special verb forms.
- Through Gita students also develop their personality.

SEMESTER-6

CRITICAL SURVEY OF SANSKRIT LITERATURE

This course will help the students develop a fair idea of great Sanskrit seers. They will be able to improve their knowledge about philosophy, socio-religious life, polity as depicted in the prescribed areas of study.

SOCIOLOGY HONOURS (UNDER GRADUATE)
COURSE LEARNING OUTCOME
SEMESTER I

- **Introduction to Sociology I (SOCACOR01T)**

Course Learning Outcomes

1. The students learn to apply the sociological perspective in understanding how society shapes our individual lives.
2. It also provides a foundation for the other more detailed and specialized courses in sociology.
3. The students also learn about the basics of doing field work and use it for doing field work based projects. They also learn to write project reports.
4. The students learn how to read and interpret complex ideas and texts and to present them in a cogent manner.

- **Sociology of India I (SOCACOR02T)**

Course Learning Outcomes:

1. The course lays the foundation of viewing images and ideas of India through a sociological lens. It further investigates sociological concepts and institutions in the Indian context.
2. Through informed interrogation of images, ideas, concepts and institutions of India, the course contributes to the development of critical and analytical thinking.
3. The course, supported by an inter-disciplinary approach, facilitates learning and reflecting about the multiple – and contextual – socio-cultural registers of Indian society.
4. Given the high standard/quality of the syllabus and use of innovative teaching-learning methods, the course prepares students to successfully compete in global academia.

SEMESTER II

- **Introduction to Sociology II (SOCACOR03T)**

Course Learning Outcomes:

1. The students are introduced to the relationship between theory and perspectives.
2. The students are introduced to sociological theories which they learn in greater detail during the later semesters.
3. This paper also provides a foundation for sociological theories that are a part of papers in the subsequent semesters.
4. The students learn critical thinking skills. They learn how to read, interpret and critique original works of various thinkers.

- **Sociology of India II (SOCACOR04T)**

Course Learning Outcomes:

1. The course adds to the sociological interpretation of Indian history and society. The India-specific themes of the course – discourse/knowledge-making, mobilization, transformation, ideology, identity and politics, for example – are treated, moreover, by drawing from sociological concepts and theories. The course connects the practical and conceptual in terms of both substance and relevance.
2. By focusing on the nuanced character of historical and social ideas and processes, the course sharpens the faculties of critical and analytical thinking and doing.
3. The adoption of an inter-disciplinary framework, without losing sight of the sociological, makes the course wider in scope and scale. It broadens viewpoints and encourages students to reflect deeply on the multicultural reality which is the defining feature of India.
4. The course, in terms of both high quality syllabus-content and innovative teaching learning techniques, matches global standards. Consequently, it adequately trains students to compete in global academia.

SEMESTER III

- **Political Sociology (SOCACOR05T)**

Course Learning Outcomes:

1. An ability to comprehend the embeddedness of political and the social in each other.
2. Familiarity with different theoretical and conceptual issues in political sociology and a capacity to use them to grasp political phenomena in a cross-cultural and comparative perspective.
3. Be able to understand and appreciate the diversity of ways in which politics operates historically and spatially to generate a more expansive notion of the realm of the political.
4. Be able to understand the relationship between state and society in shaping politics in India both historically and analytically.
5. Be able to generate hypotheses and research questions within the theoretical perspectives and ethnographic contexts in political sociology.

- **Sociology of Religion (SOCACOR06T)**

COURSE LEARNING OUTCOMES:

1. Students will be acquainted with representative texts that symbolize the development of knowledge in the field of Sociology of Religion. They will be able to identify different theories, approaches and concepts that make up the study of religion, distinguish between them and also use terms specific to the field in specific context.
2. Students will be able to make a link between texts and paraphrase their arguments and use these to communicate their ideas in research papers, projects and presentations.
3. By encompassing contemporary developments the course enables students to think about linkages between religion and society at various levels.

- **Sociology of Gender (SOCACOR07T)**

Course Learning Outcomes:

1. An understanding of concepts such as sex and gender by problematising common-sensical notions of gender.
2. Raising key issues of power and subordination within the purview of gender and the need for and solutions resorted to as measures to initiate change through gender-based movements.
3. Understanding issues relating to gender both at a national and global level.
4. Places gender in juxtaposition with other forms of stratification and identity such as caste, class, family and work.

SEMESTER IV

- **Economic Sociology (SOCACOR08T)**

Learning Outcomes:

1. Develops familiarity with different theoretical and conceptual aspects of economic sociology as a specialized branch of knowledge.
2. Develops background knowledge about the diverse ways in which economy is interlinked with other aspects of society and culture.
3. Acquire capacities to understand and analyse the transformations of economy and its key processes in a historical and comparative perspective.
4. Develops abilities to generate research questions and arguments about the intersections of economy and society.

- **Sociology of Kinship (SOCACOR09T)**

Course Learning Outcomes

1. Grasp the historical evolution of kinship theories from a biological deterministic approach to culture of relatedness.
2. Develop an analytical perspectives on concepts relevant for understanding kinship.
3. Comprehend the coexistence of multiple perspectives in the study of family, marriage and kinship.
4. Acknowledge the significance of the emergence of new reproductive technologies on recasting kinship.

- **Social Stratification (SOCACOR10T)**

Course Learning Outcomes:

1. Students will learn about the socio-historical context of stratification theoretical concerns and problems and contemporary issues related to inequalities and its forms.
2. Inculcate in them a truly inter-disciplinary approach in the study of society especially stratification in all its manifestations.
3. Understanding of stratification and theories would sensitize students to its various sociological aspects, providing ample scope for applied learning and application.
4. Examining forms of stratification, understanding the relevance of caste, race and ethnic identities in contemporary world.

SEMESTER V

- **Sociological Thinkers I (SOCACOR11T)**

Course Learning Outcome

1. Understanding the grand foundational themes of sociology.
2. Application of theories and concepts from classical sociological theories to develop intellectual openness and curiosity.
3. Appreciation of the classical concepts and theories to develop awareness of the limits of current knowledge.

- **Sociological Research Methods I (SOCACOR12T)**

COURSE LEARNING OUTCOMES

1. Students are introduced to sociological research both from a theoretical and methodological perspective. They understand the importance of research in social science.
2. Students develop the ability to evaluate the methodological validity of the claims made by theory.
3. The course enables students to evaluate a piece of research and move towards designing a simple research project.

4. Identify the difference between quantitative and qualitative methods.
5. Students will learn to identify ethical and practical issues in research. They also engage with the ideals of objectivity and reflexivity.
6. Students learn that research methods are universal and not bound by cultural location.

- **Urban Sociology (SOCADSE01T)**

Course Learning Outcomes:

1. To appreciate the significance of the city and the process of urbanization and its consequences across the globe, through cross disciplinary texts and ethnographic studies.
2. To understand the urban in the historical as well as modern contexts - the idea of urbanism and urban space and the intersections in these of institutions, processes and identities. This is to be achieved by exposing students to critical theoretical debates which help them to gain a deeper understanding of city life and urban environment which can also help them understand their own social environment better.
3. To learn about key urban processes such as migration, displacement and urban slums, as well as critical contemporary issues such as resettlement and rehabilitation and also engage in issues of public policy, urban transformation and change. Knowledge of such themes will help students pursue further studies in academic areas such as development and also engage in research on public policy, urban transformation and change.
4. To develop critical thinking and a reflective perspective through exposure to multicultural thought; to enhance disciplinary knowledge, research-related skills and develop a problem-solving competence.

- **Agrarian Sociology (SOCADSE02T)**

Course Learning Outcomes:

1. An empathy for and ability to engage agrarian communities as living societies and understand grasp they condition as human condition.
2. An appreciation of agrarian world and familiarity with the trajectory of theoretical conversation on agrarian issues and their social, political and policy implications.
3. An understating of emerging as well as enduring issues of concern in Indian agrarian scene.
4. To be ready for a range of academic and professional roles that may require a knowledge of agrarian societies.

- **Environmental Sociology (SOCADSE03T)**

Course Learning Outcomes:

1. An understanding of dynamic between natural and social worlds from a sociological perspective.
2. A grasp of fundamental principles and core theoretical debates of the discipline.
3. An ability to contribute from a sociological stand point to any research endeavors or public policy conversations that assess causes, effects and possible solutions of environmental issues and problems.
4. To be alive to the questions of ecology and inequity and sensitive to the questions of environmental justice and ethics.

SEMESTER VI

- **Sociological Thinkers II (SOCACOR13T)**

Learning Outcomes:

Understanding the characteristics and dynamics of the social world, and how post-classical sociologists attempt to understand the social world.

1. Appreciating the relevance and limits of the contemporary theories or theoretical approaches to make sense of social reality.
2. Understanding the basic methodological approaches of the thinkers, through some original texts and their role in building sociological knowledge.

- **Sociological Research Methods II (SOCACOR14T)**

Course Learning Outcomes

1. Students are introduced to the concept of conducting research, which is inclusive of formulating research designs, methods and analysis of data. Some knowledge of elementary statistics is also provided to the students to acquaint them with quantification of data.
2. The thrust of the course is on empirical reasoning, understanding and analysis of social reality, which is integral to the concepts of quantitative research. Students learn to differentiate between qualitative and quantitative aspects of research in terms of collection and subsequent analysis of data.
3. Through the competing theoretical perspectives and methodologies, students are able to understand that social reality is multi-faceted, heterogeneous and dynamic in nature.
4. By imparting the knowledge of theory and praxis of research, students are prepared to arrive at a critical understanding of the course. It also equips them with necessary skills for employment in any social research organization.

- **Sociology of Work (SOCADSE04T)**

Course Learning Outcomes:

1. Understanding work in its social aspects such as gendered work and unpaid work, as different from its better known economic dimension.
2. Understanding work in its global dimensions, including the mutual relation between work in underdeveloped societies and that in developed ones, thus bringing out the importance of the comparative perspective in the study of work.
3. Learning about the complexities, disparities and inequalities in the area of work.
4. Learning about the socio-historical context of work, theoretical concerns and problems, and contemporary issues in the area of work and industry.

- **Sociology of Health and Medicine (SOCADSE05T)**

Course Learning Outcomes:

1. To be able to use the key concepts developed in sociology and anthropology to understand biomedical practices of health and illness.
2. To critique biomedicine and have an understanding of medicine as a plurality.
3. To analyse the everyday experiences of health and illness as produced through social, economic, political and cultural forces.
4. To gain insights on issues of public health in India and arrive at independent analysis.

- **Indian Sociological Traditions (SOCADSE06T)**

Course Learning Outcomes

1. Ensure that students have conceptual clarity and can articulate the main debates and arguments with regard to sociology in India.
2. Acquaint the students to the continuities and contradictions in Indian society.
3. To ensure that students have understood the formation of the discipline in India and the challenges that it has faced.
4. To help students understand the history of ideas related to the analysis of Indian society.

COURSE OUTCOMES(COs)

ECONOMICS

Undergraduate Programme: B.Sc. General with Economics

Course Outcomes(COs)

Economics is the study of how people decide to use resources on an individual and collective basis. It examines the kinds of work people do and how much time they spend doing it. Economics also looks at production, investments, taxation and how people spend and save money. It is the study of how societies, governments, business, households and individuals allocate their scarce resources. The study of Economics can also provide valuable knowledge for making decisions in everyday life.

Semester – 1(ECOGCOR01T) (DSC 1A)

Introductory Microeconomics

At the end of the semester, students will be able to:-

1. Analyze about the Traditional and Modern Definitions of Economics.
2. Supply and demand analysis to analyze the impact of economic events on markets.
3. Analyze the behavior of consumers in terms of the demand for products.
4. Analyze the performance of firms under different market structures.
5. Evaluate the factors affecting firm behaviour, such as production and costs.

Semester – 2(ECOGCOR02T) (DSC 1B)

Introductory Macroeconomics

1. Macroeconomics helps to understand how a economy is moving as a whole.
2. Analyze different measures macroeconomic activities such as the national income accounts, inflation, and unemployment and evaluate the shortcomings of traditional economic measures.
3. Analyze the forces that affect the aggregate level of economic activity and the business cycle using AD-AS analysis.
4. Analyze how monetary and fiscal policy can be used to achieve policy goals.
5. It analyses the stability in price level and fluctuations in business activities.

Semester-3(ECOGCOR03T) (DSC 1C)

Development Economics

1. Classify the concepts of Economic Growth and Development.
2. It analyses poverty and inequality, globalization and trade and the contesting experience of success and failures in the economies of different regions of the world.
3. It explains the concept of economic growth.
4. It explains inequalities between rich and poor countries.

5. It explains the development of international trade patterns and central theories of international trade.

Semester – 4(ECOGCOR04T) (DSC 1D)

Indian Economy

1. It explains Indian Agriculture, New Agricultural policy, Green revolutions, Land reforms, Effects of GATT on Indian Agriculture.
2. It explains industrial growth under planning, role of small-scale industries, role of trade union.
3. It explains role of Indian Commercial Banks and Reserve Bank of India.
4. It explains India's foreign trade.
5. Identify the objectives of economic planning.

Semester-5(ECOGDSE01T)(DSE-1A)

Elementary Statistics

1. The basic concept and definitions of various statistical terms along with various Statistical techniques which, in turn, helps the students to quantify the various micro and macro economic variables.
2. The quantitative measurement of different development indices in economic theory.

Semester-6(ECOGDSE04T)(DSE-2B) Public Finance

- 1) Understand the sources of finance both public and private, demonstrate the role of government to correct market failures and possible advantage of public financing.
- 2) Attain the advantages and knowledge of public investments and other government expenditures. Understand the causes of growing public expenditures for various programmes and policies within and outside the country.
- 3) Understand the possible burden, benefits and distribution of various types of taxes among various classes of people, know the general trend and impact on general welfare and arouse them to suggest good and bad tax system.
- 4) Understand the needs of public borrowing from all possible sources to meet necessary public Investment/expenditures. Also be alerted to find sources for repayment.
- 5) Deliver effectively the preparation of budget and how they are passed in the house. Understand the changes in size and flexibility of state and central budget along with the role played by Finance Commission.

Undergraduate Programme :B.A. General with Economics

**Sem-5(GE-1)(ECOGGEC01T)-Introductory Microeconomics(If Economics is not selected as DSC)
Course Outcomes are same as Semester-1**

**Sem-6(GE-2)(ECOGGEC02T)-Introductory Macroeconomics(If Economics is not selected as DSC)
Course Outcomes are same as Semester-2**

COURSE OUTCOMES

(COs).JOURNALISM AND MASS

COMMUNICATION

Journalism and Mass Communication courses at the Department of Journalism and Mass Communication expose our students to wide aspects of journalistic perspectives and mass media exploration in film/documentary making. These courses help the students to know basic concepts about reporting and editing, photography, film making, and documentary making. These courses also help the students to understand the media impact aspects, documentary making, and the editing process. With the introduction of a new syllabus under CBCS which promotes a new framework that gave the students aspects of understanding non-fiction cinema to recent trends of cinema, different aspects of mass media discourses and field experience of film/documentary making, the UG Journalism and Mass Communication syllabus at Netaji Subbaraj Mahavidyalaya will help the students in building up skill of analytical arguments and technical experience in this field.

Semester I

Basic of Journalism (DSC1A) (JORG-COR01T)

At the end of the semester, the students will

1. Students would understand the basics of reporting and writing for print media.
2. Students would acknowledge the news values and qualities of reporters.
3. Students would understand various types of journalism and their importance.
4. The units provide students with an understanding of the importance of public opinion and the role of journalism in framing it.
5. Students would understand the newspaper organization structure and editorial department.

Semester II

Photography (DSC1B)

(JORG-COR02T)

At the end of the semester, the students will

1. Students would understand both advanced digital and analogue camera operations with an understanding of formats, photographic exposure, depth of field, and shutter speed, and illustrate proper placement of the plane of focus.
2. Students would have the ability to determine what type of lighting equipment is necessary to properly light various types of objects, people, spaces, and locations.
3. Students would understand digital software proficiency and know about photography software's uses.

Semester III

Film Appreciation (DSC1C) (JORGCOR03T)

At the end of the semester, the students will

1. Students would understand the Film Form and Style of German Expressionism, Film Noir, Italian Neo-realism, French New-Wave, Genre, and the development of Classical Hollywood Cinema.
2. Students would understand how well the eminent personalities of Indian cinema did their job.
3. Students would have understood Feminist Film Theory.
4. They will understand the language of world cinema as well as Indian cinema.
5. They will understand the different techniques of filmmaking.

Semester IV

Introduction to Documentary (DSC1D) (JORGCOR04T)

At the end of the semester, the students will

1. Students would have gained an understanding of how the documentary was made.
2. Students would understand the pre-production, production, post-production process.
3. They would understand the grammar of editing, transitions, sound effects, visual effects, aspect ratio, language, duration, and marketing of DVD,etc.
4. They will explore the process of documentary editing and production system.

Semester V

Print Journalism and Production (DSE1A) (JORGDSE02T)

At the end of the semester, the students will

1. Students will get an understanding of the overall knowledge of print media.
2. They will understand all processes of print media production.
3. The paper will enable students to develop their skills in print media.

Semester VI

Media, Gender and Human Rights (DSE1B) (JORGDSE04T)

At the end of the semester, the students will

1. Students will understand media, gender, and human rights as an academic field of study, be familiar with its major concepts, history, assumptions, and theories/theorists, and recognize its epistemological and methodological diversity and character.
2. Students will recognize the intersections between gender and other social and cultural identities, including, but not limited to, race, ethnicity, national origin, religion, class, and sexuality.
3. The paper will analyze how societal institutions and power structures impact the material realities of women's lives.
4. The paper will evaluate and interpret information from a variety of sources including print and electronic media, film, video, and other information technologies.
5. The paper will engage in promoting social justice and human rights.

COURSE OUTCOMES (COs) PHYSICAL EDUCATION

Physical Education course at the Department of Physical Education expose our student to wide range of personality development is normally referred to as the science that aims to develop all-inclusive aspects of human personality through physical and sports activities. Physical education is a multidisciplinary subject that cannot be studied in seclusion under the scope of one or two subjects with the introduction of new syllabus under CBCS which promotes new thematic frame work were physical education as a subject is very broad. It caters to the need for developing capability of the students on physical, mental and social aspects. Physical education also aims to develop activity as an alternate and prophylactic medicine. The key areas of study within the Physical Education are ‘Exercise Physiology, Sports Psychology, Sports Sociology, Sports Management, Sports Journalism, Kinesiology- Biomechanics, Sports Training, Sports Medicine, Kinanthropometry etc. Physical Education covers topics that overlap with the areas outlined above and that address the interfaces of Physical Education with other subjects such as Physiology, Bio-Chemistry, Physics, Physiotherapy, Psychology, Management, Sociology along with training pedagogy employed for enhancing the functional status of individuals with varied needs. As a part of the effort, to enhance the employability of graduates of Physical Education, programs include learning experiences that offer opportunities in various spheres of human existence. The UG Physical Education syllabus at Netaji Satabarshiki Mahavidlayala will help the students in building up leadership qualities and cooperation and team work.

SEMESTER –I

Title: History and Foundation of Physical Education

Learning outcomes:

1. The pass out would be able to compare the relationship between general education and Physical education.
2. He would be able to identify and relate with the History of Physical Education.
3. He would be able to comprehend the relationship between Philosophy, Education and Physical Education.
4. He would able to identify the works of Philosophers of Education and Physical Education.
5. He would know recent developments and academic foundation of Physical Education.

SEMESTER – II

Title: Management of Physical Education & Sports

Learning outcomes:

1. The student would understand the importance of management of Physical Education.
2. He shall gain knowledge regarding management of Physical Education and Sports at different level.
3. He will be able to organize various Physical Education program.
4. He would know about various schemes and policies of State & Central Government.
5. He would know about planning of facility and financial management.

SEMESTER – III

Title: Anatomy, Physiology and Exercise Physiology

Learning Outcomes:

1. The student will be oriented with the basic structure and function of human body by identifying, comparing and relating different systems, organs and their functional and structural units.
2. He would be able to Relate and interpret the role of exercise on body systems and its relation to well-being through literature reviews and physical conditioning exercises.

3. Adapt the art to apply the knowledge of anatomy and physiology in physical activity classes at school level.
4. Construct anatomy and physiology related pedagogical materials exploring their creative imaginations while working in group and using technology.

SEMESTER-IV

Title: Health Education, Test, Measurement & Evaluation in Physical Education

Learning Outcome:

1. The student will be able to identify and synthesize the factors that influence health
2. The student will be able to recognize the health related challenges in current time and able to apply the preventive measures.
3. The student will be able to identify the role of peers, community and media in health promotion and protection.
4. The student will be able to demonstrate the expertise in above stated domains in a school Set up.
5. The student will be able to value the knowledge and skills required to preserve community health and well-being.
6. The students will be able to recognize and relate the concept of test, measurement and evaluation in the context of Physical Education.
7. The students will be able to construct and conduct the physical fitness and sports skill test.
8. The students will be able to implement the criteria of test selection.

SEMESTER – V

Title: Sports Training & Mechanics

Learning outcomes

1. Understand training as performance based science
2. Explain different means and methods of various training
3. Prepare training schedule for various sports and games
4. Appraise types of periodization for performance development
5. Create various training facilities and plans for novice to advance performers

SEMESTER – VI

Title: Psychology in Physical Education and Sports

Learning outcomes

1. Explain group mechanisms and group psychology in a sports context
2. Reflect upon motivational psychology as applied to sports activities
3. Formulate relevant constructs of exercise psychology
4. Demonstrate the ability to discuss sociological theories, concepts, and ideas in large and small groups and to express empirically as well as theoretically-based opinions.
5. To apply core sociological theories to specific social problems in order to analyze social problems.

COURSE OUTCOMES

(COs)MATHEMATICS

SEMESTER 1

DIFFERENTIAL CALCULUS (MTMGCOR01T)

At the end of the semester, students will

- a. Be familiar with Limit, Continuity, Differentiability, Partial Differentiation, Leibnitz's Theorem, Euler's Theorem etc.
- b. Be familiar with Tangent, Normal, Asymptote, Curvature, Singular Points, Tracing of Curve etc.
- c. Be familiar with Rolle's Theorem, Mean Value Theorem, Taylor and Maclaurin Series, Maxima and Minima, Indeterminate Form etc.
- d. Gather basic concepts and knowledge of Calculus.

SEMESTER 2

DIFFERENTIAL EQUATIONS (MTMGCOR02T)

At the end of the semester, students will

- e. Be familiar with First Order Exact Differential Equations, Integrating Factors, Higher Order Differential Equations, Linear Differential Equations, Wronskian etc.
- f. Be familiar with Linear Homogeneous and Non-Homogeneous Differential Equations, Variation of Parameters, Cauchy-Euler Equations, Simultaneous and Total Differential Equations etc.
- g. Be familiar with First Order Linear and Non-Linear Partial Differential Equations, Lagrange's and Charpit's Method, Classification of Second Order Partial Differential Equations etc.
- h. Gather basic concepts and knowledge of Ordinary and Partial Differential Equations.

SEMESTER 3

REAL ANALYSIS (MTMGCOR03T)

At the end of the semester, students will

- i. Be familiar with Set and its several characteristics, Completeness and Archimedean Property of Real Number, Bolzano – Weierstrass Theorem etc.
- j. Be familiar with Sequence and its various characteristics, Convergence Criterion, Cauchy's Theorem on Limits, Squeeze Theorem etc.

- k. Be familiar with Infinite Series and its characteristics, Test of Convergence of Series etc.
- l. Be familiar with Sequence and Series of Functions, Point wise and Uniform Convergence, Power Series and Radius of Convergence etc.
- m. Gather basic concepts and knowledge of Real Analysis.

SEMESTER 3

C-PROGRAMMING LANGUAGE (MTMSSEC01M)

At the end of the semester, students will

4. Be familiar with Basic of Computer Programming, Fundamentals of Programming, Statements, Arrays, Multi-dimensional Arrays, and Functions etc.

SEMESTER 4

ALGEBRA (MTMGCOR04T)

At the end of the semester, students will

5. Be familiar with Groups and Subgroups with their various characteristics and Properties etc.
6. Be familiar with Rings, Subrings, Ideals, Integral Domains, Fields and their corresponding characteristics etc.
7. Gather basic concepts and knowledge of Abstract Algebra.

SEMESTER 4

LOGIC AND SETS (MTMSSEC02M)

At the end of the semester, students will

8. Be familiar with Logic and its various characteristics etc.
9. Be familiar with Set and its various characteristics, operations etc.

SEMESTER 5

MATRICES (MTMGDSE01T)

At the end of the semester, students will

- Be familiar with process of solving a system of linear equations by row-reducing its augmented form.
- Be familiar with the matrix operations of addition, multiplication and transposition and express a system of simultaneous linear equations in matrix form. Also determine whether or not a given

matrix is invertible and if it is, how to find its inverse.

- Be familiar with vector spaces and linear transformations with their applications.

SEMESTER 6

NUMERICAL METHODS (MTMGDSE03T)

At the end of the semester, students will Be familiar with derivation of numerical methods for various mathematical operations such as interpolation, differentiation, integration, the solution of linear and nonlinear equations and the solution of differential equations.

- Be familiar with analyze and evaluation the accuracy of several numerical process.
