B.A. Honours in Bengali

Programme Specific Outcome(PSO)

By the end of the UG Hons. programme in Bengali, the students will be able to

- Learn in-depthdifferent genres of Bengali Literature.
- Solve the grammatical problems.
- Develop the skills of creative writing.
- They have experience in the field survey.
- Write research-related articles in various journals.
- Develop the skill of individual publication and group publication.
- Develop an interest in journalism and theatre.
- To improve their performance in competitive exams such as SSC, NET, SET.

Principal
Chandrakona Vidyasagar Mahavidyalaya
Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of Bengali
Chandrakona Vidyasagar Mahavidyalaya

Course Outcomes

BNGHCC01: Bangla vasharudvab o parichay

- Students will learn about the definition and characteristic language.
- Students will learn the 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.

BNGHCC02: Bangla sahityer itihas :prachin o madhyayug.

- Students will learn the periodization of Bengali literature.
- Students will be able to find the character of Medieval literature.
- Students find the difference between the pre-Chaitanya period and the post-Chaitanya period.
- Students will learn about 'Vaishnav' and 'Shakta' cultures in the period.
- Students will learn the classification of Medieval literature.
- Students will be able to find the origin and history of 'charyagiti'.

BNGHCC03: Prachin O Madhyayuger Padpath

Students will learn the Philosophical idea of Buddhism.
- Students will learn how much 'VaishnavBhakti dharma' influenced Bengali literature in the Medieval period.
- Students will be able to find the difference between pre-ChaitanyaVaishnavpadabali and post-ChaitanyaVaishnavpadabali.
- Students learn the character of Vaishnav dharma, Shakta dharma and its influence on Bengali literature.

BNGHCC04: Chaitanya Jiban O Mangalkabyapath

- Students will learn about the life of Chaitanya dev
- Students will learn how to spread Vaishnav dharma in Bengal and its influence on Bengali literature.

- Students will learn about the structure and classification of Mangalkavya.
- Students will be able to find the social impact of chandimangal and annadamangal in the medieval period.

BNGHCC05: Unish-BishSataker Prabandha, Kabyasahityeritihas and Akhayan sahitya path

- Students will learn the difference between Modern Bengali Literature and MediaevalBengali Literature.
- Students will learn the origin and history of the Bengali Prose.
- Development of Bengali Prose.
- Students will learn the role of essays in Bengali Literature.
- Students will know the development of Poetry

BNGHCC06:Chhanda, Alankar O Nirbachita Kabita

Path

- Students will know about the Prosody.
- Students will learn the importance of Prosody to create a poem.
- Students will know the basic concept of different Prosody.
- Students will learn the classification of rhetoric.
- Students will be able to solve the Rhetoric and Prosody.
- Students will learn how to use rhetoric in Bengali literature.
- Students will know about the Modern poem in 1st part of twenty century.

BNGH CC O7: Prabandha Path

- Students will know about the role of essays in Bengali Literature.
- Students learn about essays and increase their creativeness.

BNGHCC08: History of Drama, fiction and short stories about the nineteen-twenty century.

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

BNGHCC09: Kavya Path

- Students will be able to know the philosophy of poems.
- Students will learn the classification of poems.
- Students will relate to poems and Prose.

Principal
Chandrakona Vidyasagar Mahavidyalaya
Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of Bengali
Chandrakona Vidyasagar Mahavidyalaya

- Students will learn about various poetry in Bengali Literature.

BNGHCC10: Upanyas Path

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

BNGHCC11: Natya Path

- Students will learn the classification of Drama.
- Students will learn the structure of Drama.
- Students will be able to know the origin and history of Drama.
- Students will learn various Dramas in Bengali Literature.
- Students will be able to sketch the history of Drama from the beginning point to2nd half of the twentieth century.

BNGHCC12: Kabyatatya, Paschatya sahitya samalochana O sahityerrupriti.

- Students will learn about the poetics.
- Students will learn the role of 'Dhwani' and 'Rasa' in Bengali Literature.
- Students will be able to know the vision and idea of the Literary movement.

BNGHCC13: Loksahitya

- Students will learn the basic concept of 'Lok'.
- Students will define which is related to Lok Sahitya.
- Students will learn the classification of Lok Sahitya.
- Students will go to a field survey to collect the Folkculture and Folk literature.
- Students will define the sketch between urban literature and folk culture.

BNGHCC14: Sanskrit, Ingreji O Pratibeshi sahityer itihas.

- Students will know about the history of Sanskrit Literature.
- Students will know about the history of English Literature.
- Students will be able to connect with Sanskrit and English Literature.
- Students will relate to the other states' regional Literature

BNGHDS01: Prachin sahitya tattwa o sahitya tattwik

- Students will learn the role of 'Dhwani' and 'Rasa' in Bengali Literature
- Students will learn about the concept of prachya alankar tattwa
- Students will learn about the theory of bharatiya kabyatattwa

BNGHDS02: Bangla chhotogolpo, bhramankahini o goyendakahini path

- Students will learn about various aspects of the short stories, travel stories and detective stories.

BNGHDS03: godyo-sahitya path

- Students will learn origins and development of Bengali prose in the 19th Century
- They will be able to appreciate different genres of Bengali prose.

BNGHDS04: Rabindra-sahitya path

- Students will be able to appreciate and analyze various works of Rabindranath Tagore.
- They will form ideas about the philosophy of Rabindranath Tagore.
- Students will know the theory of translation from one literature to another literature.

BNGHSE01: Bangla Byakaran o anubadtattwa

- Students will be able to know the theory of translation.
- Students will learn grammatical evolution in Bengali Literature.

BNGHSE02: Bangla bhasha o sahitya bishayak prakalpa Rachana o prakalpa-patra upasthapana

- Students will learn how to make aproject.
- Students will develop their creative writing.

BNGHGE01:   Banglar bhukhanda,   jatir utpatti   o   dharma   o sangskritir itihas ebong loka-sahitya

- Students will learn about the geography of ancient Bengal and origins of the Bengali people.
- They will learn about the religion and culture of ancient Bengal.
- They will be to appreciate the folk literature of Bengal.

BNGHGE02: Kabyasahityerdhara o Vaishnabpadabali path

- Students will be able to know the philosophy of poems.
- Students will learn the classification of poems.
- They will be able to appreciate the medieval genres of Bengali literature

BNGHGE03: Upanyas o chhotogolpo path

- Students will learn the classification of Novels.
- Students will be able to know the philosophy of the author.
- Students will relate between Novels and Short stories.
- Students will learn about various Novels in Bengali Literature.
- Students will learn about the evolution of the Bengali novel.
- Students will be able to know the origin and history of the Novel.
- Students will learn about various aspects of the short stories

BNGHGE04: Bangla giti-sahitya, shishu-sahitya o ramyorachanardhara

- Students will be acquainted with various Bengali lyrics of different ages.
- They will be able to appreciate the impact of Bengali lyrics on the culture and society of Bengal
- They will learn various aspects of literature for children
- They will be able to appreciate Bengali belle letters of the 19th century.

H.O.D. / Assistant Professor
Dept. of Bengali
Chandrakona Vidyasagar Mahavidyalaya

Principal
Chandrakona Vidyasagar Mahavidyalaya
Paschim Medinipur

B.A. General in Bengali
Programme Specific Outcome (PSO)

By the end of the UG Hons. programme in Bengali, the students will be

able to

- Have an in-depth understanding of different genres of Bengali Literature.
- Solve the grammatical problems.
- Develop the skills of creative writing.
- Develop the skill of individual publication and group publication.
- Develop an interest in journalism and theatre.
- Seek a career in govt. and business sectors requiring the skills of Ben translators and interpreters.
- Seek a career in publishing houses as proof-readers, editors and readers.

H.O.D. / Assistant Professor
Dept. of Bengali
Chandrakona Vidyasagar Mahavidyalaya

Principal
Chandrakona Vidyasagar Mahavidyalaya
Paschim Medinipur

Course Outcome

BNGG CC 01 Bangla Sahityer Itihas O Bangla Bhasatatwa

- Students will learn about definition and characteristic language.
- Students will learn Historical classification of languages.
- Studentss will be able to find the origin, history and periodization of the language.
- Students will learn Bengali vocabulary, Semantics and the change of meanings.
- Studentss will able to different between language and dialect. They also learn the classification of dialect and the characteristics of various dialects.
- 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 a

BNGG CC 02   Kabya— Kabita

- Students will be able to know the philosophy of poem.
- Students will learn the classification of poem.
- Students will relate to Poem and Prose.
- Students will learn about various poetry in Bengali Literature.

BNGG CC 03   Bangla Katha Sahitya Natak O Prabandha

- Students will learn the classification of Drama.
- Students will learn the structure of Drama.
- Students able to know the origin and history o
- Students will learn various Drama in Bengali Literature.
- Students will able to sketch history of Drama from the beginning point to 2nd half of twenty
- century.
- ⮚Students will know about the role of essay in Bengali Literature.
- Students learn about essay and increase their creativeness.

BNGG CC 04 Sahittya tatwa O Sahitya Nirmankala

- Students will learn about the poetics.
- Students will learn the role of 'Dhani' and 'Ros' in Bengali Literature.
- Students will able to know the vision and idea of L
- 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 uses of rhetoric in Bengali literature.

BNGG DSE 01A Rabindranath

- Students will be able to know the philosophy of the author

Princial
Chandrakona Vidyasagar Mahavidyalaya
Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of Bengali
Chandrakona Vidyasagar Mahavidyalaya

- Students will know about Rabindra Sahitya

BNGG DSE 01B Upanyas O Chotogalpa

- 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 able to know the origin and history of Novel.
- ▢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.

CL-1Kabita O Chotogalpa

- Students will be able to know the philosophy of poem.
- Students will learn the classification of poem.
- Students will relate to Poem and Prose.
- Students will learn about various poetry in Bengali Literature.
- Students will learn about the origin of short story.
- Students will relate between Novel and Short story.

AECC (MIL-2) Unish Sataker Bangla Prabandha O Loksahitya

- Students will know about the role of essay in Bengali Literature.
- Students learn about essay and increase their creativeness.
- Students will learn the basic concept of 'Lok'.
- Students will define which is related to loke sahitya.
- Students will learn the classification of loke sahitya.
- Students will go to field survey for collect the Folk culture and Folk literature.
- Students will define the sketch between urban literature and folk culture.

BNGG SE 01 Likhan Naipunya Briddhi

- Students will able to know the theory of translation.
- Students will learn grammatical evolution in Bengali Literature.
- Students will learn how to make project.
- Students will develop their creative writing.

BNGG SE 02 Anubad Tattwa O Srijansil Rachana

- Students will develop their creative writing.
- Students will learn the theories of translation.
- Students will learn to translate from L1 to L2.

BNGG SE 03 Saili, Kabya saili Bichar, Gadya Saili Bichar O Natya saili Bichar

- Students will learn about literary style.
- Student will learn the stylistics differences of various genre of literature

BNGG SE 04 Bisay bhittik Alochona O Alochona patra Upasthapan

Principal
Chandrakona Vidyasagar Mahavidyalaya
Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of Bengali
Chandrakona Vidyasagar Mahavidyalaya

- Write research related articles in various journals.
- Develop the skill of individual publication and group publication.
- Develop the skill of Project Writing.

BNGG GE 01 Sisu sahitya O Goyenda Kahiini

- Student will learn the history of Bengali Children's Literature
- Student will learn about the authors of Children's Literature.
- Student will learn About GoyendaKahini.

BNGG GE 02 Prabandha O Sahityer Rup-Riti Bichar Paddhati

- Students will know about the role of essay in Bengali Literature.
- Students learn about essay and increase their creativeness
- Student will learn the differences of various genre of literature

Principal
Chandrakona Vidyasagar Mahavidyalaya
Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of Bengali
Chandrakona Vidyasagar Mahavidyalaya

B.Sc. Honours in Chemistry (CBCS)

Programme Specific Outcome (PSO)

By the end of the program UG in Chemistry, the students will be able to:

- Demonstrate in-depth knowledge in one of the foundational areas of the Chemical sciences.
- Pursue higher study in chemical Science and applied chemistry.
- Apply for different technical course related to chemistry.
- To improve their performance in chemistry competitions (like IIT-JAM, TIFR, BHU, IISC, CSIR- NET).
- Apply for job in different chemical company.
- Apply for job as lab technician.

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Sukla Nandi

H.O.D. / Assistant Professor
Dept. of Chemistry
Chandrakona Vidyasagar Mahavidyalaya

Course Outcome (CO)

CHEMHCC-01:

Bonding and Physical properties, General Treatment of Reaction Mechanism I, Stereochemistry I and Organic Chemistry I, Lab.

Outcomes:

Bonding and Physical properties:
- Students will know about the Valance Bond Theory.
- Students can grow their concept about electronic displacement.
- Students will know about the Molecular Orbital Theory and how to draw the MO picture of different types of organic molecule.
- Students will know about the Aromaticity.

General Treatment of Reaction Mechanism I:
- Student will gather knowledge about the comparative study of physical properties of the molecules.
- Students will know about Mechanistic classification and Reactive Intermediates.

Stereochemistry I:
- Students will know about the basic concept of stereochemistry

Organic Chemistry I Lab:
- Students will learn how to separate a binary Mixture of pure compound.
- Students will learn how to determine the boiling point of liquid.
- Students will also learn about the Identification of pure Organic Compound.

CHEMHCC-02:

Kinetic Theory of Gaseous State, Chemical Thermodynamics, Chemical Kinetics and Physical Chemistry I, Lab.

Outcomes:

Kinetic Theory of Gaseous State:
- Students will know about the basic of Kinetic Theory of Gaseous State.
- Students will learn about Maxwell's distribution of speed and energy.
- Students will know about Real gas and Viral equation.

Chemical Thermodynamics:
- Students will learn about Zeroth and 1st Law of Thermodynamics.
- Students will learn about Thermochemistry.
- Students can able to derive Thermodynamic relations.

Chemical Kinetics:
- Students will know how to calculate the order, Molecularity and rate of different chemical reaction.
- Students can correlate the temperature with reaction rate.
- Students will learn about the Homogeneous catalysis.

Physical Chemistry I Lab:
- Students can determine the pH of unknown solution (buffer), by color matching method.
- Students can determine the heat of neutralization of a strong acid by a strong base.

Sukla Nandi

H.O.D. / Assistant Professor
Dept. of Chemistry
Chandrakona Vidyasagar Mahavidyalaya

Principal
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

- Students can determine the Study of kinetics of acid-catalyzed hydrolysis of methyl acetate.
- Students can determine the kinetics of decomposition of H_2O_2.
- Students can determine the heat of solution of oxalic acid from solubility measurement.

CHEMHCC-03:

Extra nuclear Structure of atom, Chemical periodicity, Acid-Base reactions, Redox Reactions and precipitation reactions and Inorganic Chemistry I Lab.

Outcomes:

Extra nuclear Structure of atom:
- Students will know about the different theories of structure of atom and their application.
- Students will know how to write the electronic configuration of atoms and ions.

Chemical periodicity:
- Students will learn about Modern IUPAC Periodic table.
- Students will learn about periodicity in chemical and physical properties.

Acid-Base reactions:
- Students will learn about the different definition of acids and bases.
- Students will learn relative strength of acids.
- Students also learn about pH, buffer, Acid-base neutralisation curves, indicator, choice of indicators etc.

Redox Reactions and precipitation:
- Students can solve Ion-electron method of balancing equation of redox reaction.
- Students will learn Elementary idea on standard redox potentials with sign conventions, redox titration.
- Students also learn about Solubility product principle and common ion effect and their applications to the precipitation and separation of common metallic ions.

Inorganic Chemistry I Lab:
- Students can do Acid and Base Titrations.
- Students can do Oxidation-Reduction Titrimetric analysis.

CHEMHCC-04:

Stereochemistry II, General Treatment of Reaction Mechanism II, Substitution and Elimination Reactions and Organic Chemistry II Lab.

Outcomes:

Stereochemistry II:
- Students will know how Chirality arising out of stereoaxis.
- Students will know the Concept of prostereoisomerism.
- Students can do the conformation analysis of different organic compounds.

General Treatment of Reaction Mechanism II:
- Students will learn the Concept of organic acids and bases.
- Students will learn the Reaction thermodynamics.
- Students will learn about Tautomerism.

Sukla Nandi

H.O.D. / Assistant Professor
Dept. of Chemistry
Chandrakona Vidyasagar Mahavidyalaya

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Substitution and Elimination Reactions:
- Students can know about Free-radical substitution reaction.
- Students can know about Nucleophilic substitution reactions.
- Students can know about Elimination reactions.

Organic Chemistry II Lab:
- Students can prepare some common organic compounds by applying basic organic chemistry reaction.

CHEMHCC-05:

Transport processes, Applications of Thermodynamics – I, Foundation of Quantum Mechanics and Physical Chemistry II Lab.

Outcomes:

Transport processes:
- Students will learn about Fick's law.
- Students will learn about Viscosity.
- Students will learn about Conductance and transport number.

Applications of Thermodynamics – I:
- Students will know about Partial properties and Chemical potential.
- Students will clarify the concept of Chemical Equilibrium.
- Students will know how chemical potential and other properties of ideal substances-pure and mixtures are related.

Foundation of Quantum Mechanics:
- Students will know the Beginning of Quantum Mechanics.
- Students will gather the concept of Wave function and Operators.
- Students can solve the problem of Particle in a box and Simple Harmonic Oscillator.

Physical Chemistry II Lab:
- Students can study the viscosity of unknown liquid (glycerol, sugar) with respect to water.
- Students can determine the partition coefficient for the distribution of I_2 between water and CCl_4.
- Students can determine the Keq for $KI + I_2 = KI_3$, using partition coefficient between water and CCl_4.
- Students can study the Conductometric titration of an acid (strong, weak/ monobasic, dibasic) against base strong.
- Students can study the saponification reaction conductometrically
- Students can verify the Ostwald's dilution law and can determine Ka of weak acid.

CHEMCC-06:

Chemical Bonding-I, Chemical Bonding-II, Radioactivity and Inorganic Chemistry II Lab.

Outcomes:
Chemical Bonding-I:
- Students build deep concept about Ionic Bonding and Covalent Bonding.

Chemical Bonding-II:
- Students will learn Molecular orbital concept of bonding and know how to draw the MO diagram of different Inorganic compound.

Sukla Nandi

H.O.D. / Assistant Professor
Dept. of Chemistry
Chandrakona Vidyasagar Mahavidyalaya

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

- Students will learn the qualitative idea of valence bond and band theories, Semiconductors, insulators and defects in solids.
- Students will know about the Weak Chemical Forces.

Radioactivity:
- Students will learn about the various type nuclear reactions.
- Students also learn the Principles of determination of age of rocks and minerals, radio carbon dating, hazards of radiation and safety measures.

Inorganic Chemistry II Lab:
- Iodo / Iodimetric Titrations concept have been discussed in this topic.
- Students also learn How to Estimate the metal content in some selective samples.

CHEMHCC-07:
Chemistry of alkenes and alkynes, Aromatic Substitution, Carbonyl and Related Compounds, Organometallics and Organic Chemistry III Lab.

Outcomes:
Chemistry of alkenes and alkynes:
- Students will gather knowledge about the addition reaction to $C=C$ and to $C\equiv C$.

Aromatic Substitution:
- Students will acquire some basic concept of electrophilic aromatic substitution.
- Students will acquire some basic concept of Nucleophilic aromatic substitution.

Carbonyl and Related Compounds:
- Students will grow their concept on addition reaction to carbonyl compounds.
- Elementary ideas of Green Chemistry also discussed in this particular section.

Organometallics:
- Organo lithim, organo magnesium, organo copper based chemistry are discussed here.

Organic Chemistry III Lab:
- Students can handle the Qualitative Analysis of Single Solid Organic Compounds.

CHEMHCC-08:
Application of Thermodynamics – II, Electrical Properties of molecules, Quantum Chemistry and Physical Chemistry III Lab.

Outcomes:
Application of Thermodynamics – II:
- Students will know about the Colligative properties.
- Students will know about Phase rule.

Electrical Properties of molecules:
- Students will know about Ionic equilibria.
- Students will know about Electromotive Force.
- Student can solve the problem related to Dipole moment and polarizability.

Quantum Chemistry:
- Angular momentum related problems are discussed in this particular section.
- Students can solve quantum mechanical problem related to hydrogen atom and hydrogen- like ions.

Physical Chemistry III Lab:
Students will gather knowledge about the following practical
- Determination of solubility of sparingly soluble salt in water, in electrolyte with common ions and in neutral electrolyte (using common indicator).
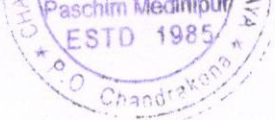
Sukla Nandi
H.O.D. / Assistant Professor
Dept. of Chemistry
Chandrakona Vidyasagar Mahavidyalaya

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

- Potentiometric titration of Mohr's salt solution against standard $K_2Cr_2O_7$ solution
- Determination of Ksp for AgCl by potentiometric titration of $AgNO_3$ solution against standard KCl solution
- Effect of ionic strength on the rate of Persulphate – Iodide reaction.
- Study of phenol-water phase diagram.
- pH-metric titration of acid (mono- and di-basic) against strong base.

CHEMHCC-09:

General Principles of Metallurgy, Chemistry of s and p Block Elements, Noble Gases, Inorganic Polymers, Coordination Chemistry-I and Inorganic Chemistry III Lab.

Outcomes:
General Principles of Metallurgy:
- Students will gather knowledge about the Chief modes of occurrence of metals based on standard electrode potentials.
- Students will gather knowledge about the Methods of purification of metals.

Chemistry of s and p Block Elements:
- Students will learn about the relative stability of different oxidation state
- Students will learn about the structural properties about the important inorganic compound.

Noble Gases:
- Students will know about the Occurrence and uses of Nobel Gases.
- Students will know about Molecular shapes of noble gas compounds (VSEPR theory).

Inorganic Polymers:
- Students will learn about the types of inorganic polymers.
- Students will learn synthesis, structural aspects and applications of silicones and siloxanes. Borazines, silicates and phosphazenes.

Coordination Chemistry-I:
- Werner's theory of coordination complexes is taught in this particular topic.
- IUPAC nomenclature of coordination complexes is also taught here.
- Students learn some basic concept of co-ordination chemistry.

Inorganic Chemistry III Lab:
- Students will acquire knowledge about Complexometric titration.
- Student s will learn Inorganic preparations of some complex compound.

CHEMHCC-10:
Nitrogen compounds, Rearrangements, the Logic of Organic Synthesis, Organic Spectroscopy and Organic Chemistry IV Lab.

Outcomes:
Nitrogen compounds:
- Students are taught how to synthesise Amines.
- Students can acquire knowledge about some specific reactions of Amines.
- Students are taught how to synthesise Nitro compounds (aliphatic and aromatic).
- Students can acquire knowledge about some specific reactions of Nitro compounds (aliphatic and aromatic).
- Students will grow their concept about the preparation and reaction of Alkylnitrile and isonitrile.

Sukla Nandi
H.O.D. / Assistant Professor
Dept. of Chemistry
Chandrakona Vidyasagar Mahavidyalaya

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

- Students will grow their concept about Diazonium salts and their related compounds.

Rearrangements:

- Rearrangement to electron-deficient carbon, nitrogen and oxygen are taught in this particular topic.
- Students are taught about Aromatic rearrangements.

The Logic of Organic Synthesis:

- Students will learn about Retrosynthetic analysis.
- Students will learn about strategy of ring synthesis.
- Students will learn about Asymmetric synthesis.

Organic Spectroscopy:

- Students will acquire knowledge about UV Spectroscopy, IR Spectroscopy, NMR Spectroscopy.
- Applications of IR, UV and NMR spectroscopy for identification of simple organic molecules are discussed broadly in this particular topic.

Organic Chemistry IV Lab:

The following practical are discussed separately in this particular topic

- Estimation of glycine by Sörensen's formol method.
- Estimation of glucose by titration using Fehling's solution.
- Estimation of sucrose by titration using Fehling's solution.
- Estimation of vitamin-C (reduced).
- Estimation of aromatic amine (aniline) by bromination (Bromate-
- Bromide) method.
- Estimation of phenol by bromination (Bromate-Bromide) method.
- Estimation of formaldehyde (Formalin).
- Estimation of acetic acid in commercial vinegar.
- Estimation of urea (hypobromite method).
- Estimation of saponification value of oil/fat/ester.

CHEMHCC-11:

  Coordination Chemistry-II, Chemistry of d- and f- block elements and Inorganic Chemistry IV Lab.

Outcomes:

Coordination Chemistry-II:

- Students will learn about VB description and its limitations.
- Students will learn about Elementary Crystal Field Theory.
- Students will learn about Magnetism and Colour of coordination compounds.

Chemistry of d- and f- block elements:

- Students are familiar about Transition Elements.
- Students are familiar about Lanthanoids and Actinoids.

Inorganic Chemistry IV Lab:

- Students will learn Principles involved in chromatographic separations,basically Paper chromatographic separation of metal ions are discussed.
- Students will learn Principles involved in Gravimetric analysis.
- Students will learn Principles involved in Spectrophotometric analysis.

Sukla Nandi
H.O.D. / Assistant Professor
Dept. of Chemistry
Chandrakona Vidyasagar Mahavidyalaya

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

CHEMHCC-12:

Carbocycles and Heterocycles, Cyclic Stereochemistry, Pericyclic reactions, Carbohydrates, Biomolecules and Organic Chemistry V Lab.

Outcomes:
Carbocycles and Heterocycles:
- Synthesis of Polynuclear hydrocarbons and their derivatives are discussed here.
- Reactions (with mechanism) of naphthalene, anthracene, phenanthrene and their derivatives are also discussed here.
- Synthesis of Heterocyclic compounds (5- and 6-membered) and their important chemical reactions are discussed here.

Cyclic Stereochemistry:
- Students will gather knowledge about I strain and conformation analysis of cyclohexane.
- Students will gather knowledge about elimination and substitution reaction in cylohexane derivatives.

Pericyclic reactions:
- Students will learn the Mechanism, stereochemistry and regioselectivity in case of Electrocyclic reactions, Cycloaddition reactions, Sigmatropic reactions.

Carbohydrates:
- Structure of Monosaccharides, Disaccharides and Polysaccharides are taught in this particular section.
- Reactions of Monosaccharides, Disaccharides and Polysaccharides are also discussed here.

Biomolecules:
- Students will learn about the synthesis and chemical reaction of Amino Acid.
- Students will learn how to form peptide linkage.
- Details structural study of nucleic acid is also learn by the student in this section.

Organic Chemistry V Lab:
- Students will acquire knowledge of Chromatographic Separations.
- Students will acquire knowledge of Spectroscopic Analysis of Organic Compounds.

CHEMHCC-13:

Bioinorganic Chemistry, Organometallic Chemistry, Catalysis by Organometallic Compounds, Reaction Kinetics and Mechanism and Inorganic Chemistry V Lab.

Outcomes:
Bioinorganic Chemistry:
- Basic chemical reactions in the biological systems and the role of metal ions (specially Na^+, K^+, Mg^{2+}, Ca^{2+}, $Fe^{3+/2+}$, $Cu^{2+/+}$, and Zn^{2+}) are taught to the students.
- Metal ion transport across biological membrane Na+ / K+- ion pump, Dioxygen molecule in life are also learn.

Organometallic Chemistry:
- Definition and classification of organometallic compounds on the basis of bond type are discussed here.
- Reactions of organometallic complexes: substitution, oxidative addition, reductive elimination and insertion reactions are also learn by the students.

Catalysis by Organometallic Compounds:
Students will learn study of the following industrial processes

Sukla Nandi

H.O.D. / Assistant Professor
Dept. of Chemistry
Chandrakona Vidyasagar Mahavidyalaya

- Alkene hydrogenation (Wilkinson's Catalyst)
- Hydroformylation
- Wacker Process
- Synthetic gasoline (Fischer Tropsch reaction)
- Ziegler-Natta catalysis for olefin polymerization.

Reaction Kinetics and Mechanism:
- Students will learn about the Substitution reactions in square planar complexes, Trans- effect and its application in complex synthesis.
- Mechanism of nucleophilic substitution in square planar complexes, Thermodynamic and Kinetic stability, Kinetics of octahedral substitution, Ligand field effects and reaction rates, Mechanism of substitution in octahedral complexes are also known to the students.

Inorganic Chemistry V Lab:
- Students will learn about the Qualitative semimicro analysis of Inorganic compounds.

CHEMHCC-14:
Molecular Spectroscopy, Photochemistry, Surface phenomenon and Physical Chemistry IV Lab.

Outcomes:
Molecular Spectroscopy:
- Students will gather knowledge about Rotation spectroscopy, Vibrational spectroscopy, Raman spectroscopy, Nuclear Magnetic Resonance (NMR) spectroscopy and Electron Spin Resonance (ESR) spectroscopy.

Photochemistry:
- Students will learn about Lambert-Beer's law.
- Students will learn about Photochemical Processes.
- Students will learn about Rate of Photochemical processes.

Surface phenomenon:
- Surface tension and energy are discussed here.
- Students will learn about Adsorption.
- Students will learn about Colloids.

Physical Chemistry IV Lab: students will gather knowledge about the following practical
- Determination of surface tension of a liquid using Stalagmometer.
- Determination of CMC from surface tension measurements.
- Verification of Beer and Lambert's Law for $KMnO_4$ and $K_2Cr_2O_7$ solution.
- Study of kinetics of $K_2S_2O_8 + KI$ reaction, spectrophotometrically.
- Determination of pH of unknown buffer, spectrophotometrically.

CHEMHDSE-01:
Crystal Structure, Statistical Thermodynamics, Special selected topics, Advanced Physical Chemistry Lab.

Outcomes:
Crystal Structure:
- Student will learn about Bravais Lattice and Laws of Crystallography.
- Students understand Crystal planes.
- Students can solve the crystal structure.

Sukla Nandi
H.O.D. / Assistant Professor
Dept. of Chemistry
Chandrakona Vidyasagar Mahavidyalaya

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Statistical Thermodynamics:
- Students acquire knowledge of Configuration.
- Students can understand Boltzmann distribution.
- Students can understand Partition function.

Special selected topics:
- Students learn a clear concept of Specific heat of solid.
- Students learn a clear concept of 3rd law.
- Students learn a clear concept of adiabatic demagnetization.
- Students learn a clear concept Polymers.

Advanced Physical Chemistry Lab:
Computer Programming based on numerical methods for the following are learn by the students.
- Roots of equations: (e.g. volume of van der Waals gas and comparison with ideal gas, pH of a weak acid).
- Numerical differentiation (e.g., change in pressure for small change in volume of a van der Waals gas, potentiometric titrations).
- Numerical integration (e.g. entropy/ enthalpy change from heat capacity data), probability distributions (gas kinetic theory) and mean values.
- Matrix operations (Application of Gauss-Siedel method in colourimetry).
- Simple exercises using molecular visualization software.

CHEMHDSE-02:
Qualitative and quantitative aspects of analysis, Optical methods of analysis, Thermal methods of analysis, Electroanalytical methods, Separation techniques, Analytical Methods of Chemistry Lab.

Outcomes:
Qualitative and quantitative aspects of analysis:
- Students can understand what is meaning by Sampling.
- Students can evaluate analytical data.

Optical methods of analysis:
- Students can acquire knowledge about the origin of spectra.
- Students will learn the basic principles of instrumentation of UV-Visible Spectrometry.
- Students will learn the basic principles of instrumentation of Infrared Spectrometry.
- Students will learn the basic principles of instrumentation of Flame Atomic Absorption and Emission Spectrometry.
- Students will learn the basic principles of quantitative analysis.

Thermal methods of analysis:
- Theory of thermogravimetry (TG), basic principle of instrumentation is taught in this particular section.
- Students will learn the Techniques for quantitative estimation of Ca and Mg from their mixture.

Electroanalytical methods:
- Students will learn the basic principle of pH metric titrations.
- Students will learn the basic principle of potentiometric titrations.
- Students will learn the basic principle of conductometric titrations.

Separation techniques:
- Students will acquire knowledge of Solvent extraction technique.

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Sukla Nandi
H.O.D. / Assistant Professor
Dept. of Chemistry
Chandrakona Vidyasagar Mahavidyalaya

- Students will learn qualitative and quantitative aspects of chromatographic methods of analysis: IC, GLC, GPC, TLC and HPLC.
- Students will understand the role of computers in instrumental methods of analysis.

Analytical Methods of Chemistry Lab:

Students will learn the following practicals in this particular course.
- Chromatography Separation techniques.
- Solvent Extractions techniques.
- Spectrophotometric analysis.

CHEMHDS-03:
Inorganic Materials of Industrial Importance

Outcomes:
- Students will learn about Silicate Industries.
- Students will learn the Manufacture of the nitrogen based fertilizers.
- Students will learn about Surface Coatings.
- Students will learn about Batteries.
- Students will learn about Alloys.
- Students will learn about Catalysis.
- Students will learn about Chemical explosives.

The following practical are also learn by the student.
- Determination of free acidity in ammonium sulphate fertilizer.
- Estimation of Calcium in Calcium ammonium nitrate fertilizer.
- Estimation of phosphoric acid in superphosphate fertilizer.
- Electroless metallic coatings on ceramic and plastic material.
- Determination of composition of dolomite (by complexometric titration).
- Analysis of (Cu, Ni); (Cu, Zn) in alloy or synthetic samples.
- Analysis of Cement.
- Preparation of pigment (zinc oxide).

CHEMHDS-04:
Polymer Chemistry

Outcomes:
- Students will acquire knowledge about the introduction and history of polymeric materials.
- Students will acquire knowledge about the functionality and its importance of polymer.
- Students will acquire knowledge about the Kinetics of Polymerization.
- Students will acquire knowledge about the Crystallization and crystallinity.
- Students will acquire knowledge about the Nature and structure of polymers.
- Students will acquire knowledge about the Determination of molecular weight of polymers.
- Students will acquire knowledge about the Polymer Solution.
- Students will acquire knowledge about the Properties of Polymer.
- Students will learn about the synthesis of polymer.
- Students will learn about the Polymer characterization.
- Students can understand how to analyse polymer.

CHEMHSEC-01:
   Pharmaceuticals Chemistry

Outcomes:

- Students will learn about drug discovery.
- Students will learn about design and development of drug.
- Students will learn about Basic retrosynthetic approach of drug.
- Student will learn about Fermentation.
- Student will learn how to prepare Aspirin.
- Student will learn how to prepare magnesium bisilicate (Antacid).

CHEMHSE-02:
   Basic Analytical Chemistry

Outcomes:
- Students can analyse soil.
- Students can analyse water.
- Students can analyse food products.
- Students can analyse cosmetics.

Principal
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Sukla Nandi
H.O.D. / Assistant Professor
Dept. of Chemistry
Chandrakona Vidyasagar Mahavidyalaya

B. Sc. General in Chemistry (CBCS)

Programme Specific Outcome (PSO)

By the end of the program B. Sc. General in Chemistry, the student will be able to:

- Students should discuss and analyse chemical concept through qualitative and quantitatively and apply them in day to day life.
- Development of preparation and measurement skill in different chemical aspects.
- Chemical industry related concept and skill development.
- This syllabus can increase basic knowledge of chemistry with practical skill of the student.
- Student can learn to operate different types of instrument.
- This course encourages the student for higher study.

Sukla Nandi

H.O.D. / Assistant Professor
Dept. of Chemistry
Chandrakona Vidyasagar Mahavidyalaya

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Course Outcome (CO)

- ### CHEMGDSC-1A T:

Inorganic Chemistry

Atomic Structure

Outcomes:

- Student can learn about different model of atomic structure with proper explanation.
- Quantum mechanics and H-spectra.
- Orbitals and electronic configuration.

Chemical Bonding and Molecular Structure

Outcomes:

- Acquire the Concept of ionic bond. Fajans rule, Lattice energy, Concept of covalent bond VBT and VSEPR theory and MO & LCAO

Organic Chemistry

Fundamentals of Organic Chemistry

Outcomes:

- Student can understand different type of Physical Effects, Electronic Displacements Organic acid base, Aromaticity: Huckels rule, spatial arrangement of molecule Concept of chirality, Isomerism, CIP rule and aliphatic hydrocarbons.

CHEMGDSC-1AP:

Section A:Inorganic Chemistry - Volumetric Analysis

Outcomes:

Student can develop their quantitative analysis skill through volumetric titration.

Section B: Organic Chemistry

Outcomes:

- Student will able to detect special element in organic compound and they learn Chromatographic separation technique

CHEMGDSC-1B T:

Section A: Physical Chemistry-1

Outcomes:

- Student will develop the knowledge about Laws of Thermodynamics, different aspect of enthalpy, Kirchoof's equation and third law of Thermodynamics.
- Student can learn about Free energy change, Thermodynamic derivation of the law of chemical equilibrium, ΔG, and Le Chatelier's principle Kp, Kc and Kx.
- Student can know about Strong, moderate and weak electrolytes, degree of ionization, factors affecting degree of ionization, ionization constant and ionic product of water.

Sukla Nandi

H.O.D. / Assistant Professor
Dept. of Chemistry
Chandrakona Vidyasagar Mahavidyalaya

Principal
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Ionization of weak acids and bases, pH scale, common ion effect. Salt hydrolysis calculation of hydrolysis constant, degree of hydrolysis and pH for different salts. Buffer solutions. Solubility and solubility product of sparingly soluble.

Section B: Organic Chemistry-2

Outcomes:

- Student can learn about preparation and reaction of aromatic hydrocarbon, Alkyl and Aryl Halides, Alcohols, Phenols and Ethers and Aldehydes and ketones.

CHEMGDSC-1BP:

Section A: Physical Chemistry

Outcomes:

- Student can develop their skill to determine enthalpy of different system and preparation of buffer.

Section B: Organic Chemistry

Outcomes:

- Student can experience the knowledge about Purification of organic compounds, Determination of melting and boiling points and Preparations.

CHEMGDSC-1C T:

Section A: Physical Chemistry-2

Outcomes:

- Student will know about Thermodynamics of ideal solutions, Raoult's law – non ideal solutions. Vapour pressure-composition, Lever rule, Azeotropes, Critical solution temperature, Nernst distribution law and solvent extraction.
- Student can learn about Phases, components and degrees of freedom of a system, Gibbs Phase Rule, Derivation of Clausius – Clapeyron equation, Phase diagrams.
- Students will gather knowledge about Conductivity, Kohlrausch law, Hittorf and Moving boundary methods, Ionic mobility, degree of ionization of weak electrolyte, solubility and solubility products of sparingly soluble salts, ionicproduct of water, hydrolysis constant of a salt and Conductometric.
- Student will know about Reversible and irreversible cells, EMF, Nernst equation Standard electrode potential, Thermodynamics of a reversible cell, Liquid junction potential and salt bridge and pH determination using hydrogen.

Section B: Organic Chemistry-3

Outcomes:

- Student can learn about preparation and reaction of Carboxylic acids and their derivatives, Amines and Diazonium Salts, Amino Acids, Peptides and Proteins, Carbohydrates.

Sukla Nandi

H.O.D. / Assistant Professor
Dept. of Chemistry
Chandrakona Vidyasagar Mahavidyalaya

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

CHEMGDSC-1CP:

Section A: Physical Chemistry

Outcomes:

- Student can gather practical knowledge about distribution, phase equilibria, conductance, Potentiometry and some organic synthesis and separation technique.

Section B: Organic Chemistry

- Students will learn about the systematic qualitative analysis of organic compounds.

CHEMDSC-1D T:

Outcomes:

- Student can learn about the property and reaction of transition element.
- Student can know about co-ordination chemistry and CSFE.
- Students will gather knowledge about nature and behaviour of gases, liquid and solid.
- Student can know about kinetics parameter of chemical reaction.

CHEMDSC-1DP:

Section A: Inorganic Chemistry

Outcomes:

- Student can develop their qualitative aptitude for detection ions with some quantitative estimation of ion.

Section B: Physical Chemistry

Outcomes:

- Student can practically learn Surface tension, viscometer and rate determination.

CHEMDSE-1 T:

Polymer Chemistry

Outcomes:

- Student can learn about the property, classification, Kinetics of Polymerization and lots of details about polymer.

CHEMDSE-1 P:

Outcomes:

- Students will learn about the synthesis, characterization and analysis techniques of different polymers.

CHEMDSE-2 T:

Industrial Chemicals and Environment

Outcomes:

Sukla Nandi

H.O.D. / Assistant Professor
Dept. of Chemistry
Chandrakona Vidyasagar Mahavidyalaya

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

- Student can gather knowledge about uses, preparation and hazards of different industrial chemicals and gases.
- They also gather knowledge about the environmental problems and solutions, green chemistry.

CHEMDSE-2 P:

Outcomes:

- Students will practically determine the DO, BOD, COD of various sources of water.

CHEMSEC-1 T:

Basic Analytical Chemistry

Outcomes:

- Skill enhancement course outcomes strengthen the learning and operating skills of various instruments and methodology in the field of interdisciplinary subjects.

CHEMDSE-2 P:

Students will learn the determination of
- pH of soil and water
- dissolved oxygen (DO) of a water
- constituents of talcum powder

CHEMSEC-2 T:

Analytical Clinical Biochemistry

Outcomes:

Students will learn about-
- Diagnosis of blood and urine
- Functions of steroid hormones, enzyme and proteins

CHEMDSE-2 P:

- Students will learn the identification and estimation of Carbohydrates – qualitatively and quantitatively.

CHEMSEC-3 T:

Pharmaceutical Chemistry

Outcomes:

- Students will learn about drug discovery.
- Students will learn about design and development of drug.
- Students will learn about Basic retrosynthetic approach of drug.
- Student will learn about Fermentation.

CHEMDSE-2 P:

- Student will learn how to prepare Aspirin.
- Student will learn how to prepare magnesium bisilicate (Antacid).

Sukla Nandi

H.O.D. / Assistant Professor
Dept. of Chemistry
Chandrakona Vidyasagar Mahavidyalaya

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

CHEMSEC-4 T:

Fuel Chemistry

Outcomes:

- Skill enhancement course increases the professional skill and techniques in renewable energy and energy harvesting technology for the learners.

Sukla Nandi
H.O.D. / Assistant Professor
Dept. of Chemistry
Chandrakona Vidyasagar Mahavidyalaya

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

B. Sc. General in Chemistry (3-TIER System)

Programme Specific Outcome (PSO)

By the end of the program UG in Chemistry, the students will be able to:

• Demonstrate in-depth knowledge in one of the foundational areas of the Chemical sciences.

• Pursue higher study in chemical Science and applied chemistry.

• Apply for different technical course related to chemistry.

• Apply for job in different chemical company.

• Apply for job as lab technician.

Sukla Nondi

H.O.D. / Assistant Professor
Dept. of Chemistry
Chandrakona Vidyasagar Mahavidyalaya

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Course Outcome (CO)

<u>Paper –I</u>
Group A (Organic Chemistry)
<u>Outcomes:</u>
Section-I

- Students will able to know about inductive effect.
- Students will able to know about conjugation.
- Students will able to know about resonance.
- Students will able to know about carbocations, carboanions and radicals.

Section-II

- Students will able to know about the aliphatic compound.
- Students will learn about the special arrangement of molecules.
- Students will learn about alkane.
- Students will learn about ether compounds.
- Students will learn about aldehydes and ketones.
- Students will learn about nitrogen compounds.

Section-III

- Students will able to know about carbohydrates.
- Students will able to know about the classification of carbohydrates.
- Students will able to know about reducing and non reducing sugar.

Section-IV

- Students can learn about the preparation and synthetic uses of Grignard reagents, ethyl malonate and ethyl aceto acetate.

Section-V

- Students can acquire the knowledge about the aromatic compounds.
- Students can know about the halogen derivatives of aromatic compounds.
- Students can acquire the knowledge about the nitrogenious aromatic compounds.
- Students can acquire the knowledge about the phenols.

Group B (General Chemistry)
Section– I

- Students can learn about the Rutherford's theory.
- Students can learn about the Bohr's theory of atomic structure and its limitation.
- Students can learn about the application of Bohr's theory to Hydrogen and hydrogen like atoms and ions, Spectrum of hydrogen atom, quantum numbers and their significance.
- Students can learn about the multi electron system.
- Students can learn about the Hund's rule and Aufbau principle.

Section– II

- Student can acquire knowledge about\radioactivity.
- Students can know about the stability of atomic nucleus.
- Students can know about the nuclear reactions.

Sukla Nandi
H.O.D. / Assistant Professor
Dept. of Chemistry
Chandrakona Vidyasagar Mahavidyalaya

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim M...

Unit-III

- Student can learn about the Modern periodic table.
- Student can learn about General Characteristic of s, p, d and f block elements and their compounds.
- Student can learn about the electro negativity, electron affinity and ionization potential.

Section– IV

- Student can acquire knowledge about ionic bonding and covalent bonding.
- Students can know about the weak chemical forces.
- Students can know about the coordination bonds and coordination compounds.

Paper-II
Group A (Inorganic Chemistry)
Section– I

- Student can learn about electronic configuration of p-block elements
- Student can learn about inert pair effect of p-block elements

Section– II

- Students can learn about inorganic acid –base concept.
- Students can learn about pH, buffer and its application.
- Students can learn about acid base- indicator.
- Students can learn about HSAB principle.

Section– III

- Student can about redox reaction
- Student can learn about elementary on standard redox potential with sign convention & Nernst equation.
- Student can learn about formal potential.
- Student can learn about redox titrations.

Section– IV

- Student can learn about chemical equilibrium
- Student can learn about common ion effect
- Student can learn about solubility product.

Group -B: Physical Chemistry
Section– I
Student can learn about

- Gas Laws, Kinetic theory of gas
- Maxwell's distribution law of molecular speeds (without derivation),
- most probable, average and root mean square speeds of gas molecules, principle of equipartition of frequencies Real gases, compressibility factor, deviation from ideality.
- van der Waals' equation

Section– II
Student can learn about

Sukla Nandi
H.O.D. / Assistant Professor
Dept. of Chemistry
Chandrakona Vidyasagar Mahavidyalaya

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

- Physical properties of liquids
- Vapour pressure, surface tension

Section– III

Students can gather knowledge

- The First Law, reversible and irreversible work.
- Concepts of internal energy and enthalpy, Isothermal and adiabatic process.
- Carnot's cycle.
- Qualitative ideas of entropy and of free energy (G).
- Joule-Thomson effect

Section– IV

Students can gather knowledge

- Dilute Solutions: The colligative Property
- Van't Hoff factor.

Section– V

Students can gather knowledge-

- Chemical Kinetics: order and molecularity of reactions.

Section– VI

Students can gather knowledge-

- The phenomenon of catalysis and the characteristics of catalyzed reactions.
- Elementary idea of absorption of heterogeneous catalysis.
- Meaning and examples of autocatalysis, catalytic poisons, promoters,
- enzyme catalysis, acid-base catalysis.

Section– VII

Students can gather knowledge-

- (Conductance): Anhenius
- kohlrausch's Law,
- conductometric titration.

Section– VIII

Students can gather knowledge-

- Colloidal state: Different types of colloids.
- Gold number, electrophoresis and endosmosis, isoelectric point, Tyndall effect Brovvnian motion.

Paper –III

Practical Chemistry

Inorganic Practical:

- Student can enhance their skill about qualitative analysis of acid andbasic radicals.
- Students can enhance their quantitative analysis skill by acidimetry-alkalimetry andoxidation-reduction method.

Organic Practical

- Student can enhance their skillon the qualitative analysis of spatial elements (N, S, Cl) and functional groups.

Sukla Nandi

H.O.D. / Assistant Professor
Dept. of Chemistry
Chandrakona Vidyasagar Mahavidyalaya

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

- Students can enhance their skill on the preparation of some organic compounds.

Paper –IV
Group A (Applied Chemistry)
- Student can enhance their knowledge on chromatographic separation.
- Student can enhance their knowledge on manufacturing of some important industrial product.
- Student can able to know about amino acids and nucleic acids.
- Student can able to know about drugs and pesticides.
- Student can able to know about food additives.
- Student can enhance their knowledge about error analysis.

Group B (Practical Chemistry)
- Student can enhance their skill for the determination of hardness of water.
- Student can enhance their skill for the estimation of available oxygen in pyrolusite and cement analysis.
- Student can enhance their skill about chromatographic separation by TLC.
- Student can enhance their skill for the determination of PH by colour matching method.
- Students can enhance their skill for the analysis of brass and determination of intrinsic viscosityof polymer.
- Students can enhance their skill to determine the composition of $HCl + CH_3COOH$ mixture by titration method.

Sukla Nandi
H.O.D. / Assistant Professor
Dept. of Chemistry
Chandrakona Vidyasagar Mahavidyalaya

Principal,
Chandrakona Vidyasagar Mahavidyalaya,
Chandrakona, Paschim Medinipur

B.Sc. Honours in Computer Science

Programme Specific Outcome (PSO)

By the end of the program UG in Computer Science, the student will be able to:

- To build the necessary skill set and analytical abilities for developing computer based.
- Solutions for real life problems.
- To help student's build-up a successful career in Computer Science. Entrepreneurs who can innovate and develop software products.
- Apply knowledge of computing and mathematics appropriate to the discipline.
- Develop problem-solving abilities using computer.
- Design the application using programming languages.
- Ability to understand the principles and development methodologies of computer systems.
- To improve their performance in Entrance examination (like JEST, JECA, CUCET, UGC- NET, GATE, TIFR), as well as their general computing skills in higher studies.

Course Outcome (CO)

COSHCC-01: Programming Fundamentals using C/C++ (Theory)
Outcomes:

The course is designed for to providing knowledge of C&C++. Students will be able to develop logics which will help them to create programs, applications. After the completion of this course, the students will be able to know the following:

- Understand basic C and C++concepts.
- Fundamentals of C language &Control Statements.
- Loop Control Structures & Arrays, Strings &Functions.
- Structure, Union, Pointers, File handling.
- Fundamentals of C++.
- Class & Object, Operator Overloading.
- Inheritance &Polymorphism.
- Exception handling &Templates
- Ability to read, write and debug elementary C and C++code
- Obtain working knowledge of datatypes, basic operations, portability issues, standard programming

COSHCC-01: Programming Fundamentals using C/C++(Practical)
Outcomes: Students will able to known the following:

- Understand the concept of datatypes, loops, functions, array, pointers, string, structures and files.
- Analysis problems, errors and exceptions.
- Apply programming concepts to compile and debug c programs to find solutions.
- Understandthedifferencebetweenobjectorientedprogrammingandproceduraloriented programming language.
- Program using C++ features such as composition of objects, Operator overloading, inheritance, Polymorphism etc.
- Construct appropriate diagrams and textual descriptions to communicate the static structure and dynamic behavior of an object-oriented solution.

COSHCC-02: Computer System Architecture (Theory)

Outcomes: Students will able to know the following

- Computer architecture helps to understand the basic concepts and structure of computers.
- After completion of the course, students will learn the following:
- Understand the theory and architecture of central processing unit.
- Analyses some of the design issues interims of speed, technology, cost, performance.
- Design as implement CPU with applying the theory concepts.
- Use appropriate tools to design verify and test the CPU architecture.
- Learn the concepts of parallel processing, pipelining and inter-processor communication.
- Understand the architecture and functionality of central processing unit.
- Exemplify in a better way the I/O and memory organization.
- Define different number systems, binary addition.

COSHCC-02: Computer System Architecture (Practical)

Outcomes:

- Minimize the Boolean algebra and designating logic gates.
- Analyses and design combinational circuit.
- Realize given function using combinational circuit.
- Design and develop sequential circuits
- Students will able to understand the organizational concept to CPU and its components.
- Students will able to use the concept of registers set, counters and many memory elements with the application of memory organization.
- Students will able to learn the concept of addressing, instruction sets, machine cycle, C PU to memory fetching, bus organization etc.
- Students will able to learn about the instruction format and instruction module.
- Students will able to understand the overall concept of CPU and its essential components mainly ALU, Registers, CU and their sub components.

GE-1(Inter disciplinary for other department)

GE-1: Computer Fundamentals (Theory)
Outcomes:

- Understand basic concepts of computers.
- Understand the role of software and different types of software.
- Understanding hardware components and technology.
- Introduction to computer memory.
- Overview of Emerging Technologies.

GE-1: Computer Fundamentals (Practical)
Outcomes:
- Understand basic functioning of computer.
- Practical exercises based on MSOffice/ Open Office tools using document preparation and spreadsheet and handling packages.
- Practical exercises based on ExcelSheet.

COSHCC-03: Programming in Java (Theory)

Outcomes: Java is the most, which is used to develop sever applications for the systems as well as embedded devices like mobile, laptops, tablets and many more. It is an object oriented programming language. There is huge scope for this programming language. After completion of the course, students will able to understand the following:

- Ablet o understand the use of OOPs concepts.
- Able to solve real world problems using OOP techniques.
- Able to understand the use of abstraction.
- Able to understand the use of Packages and Interface in java.
- Able to develop and understand exception handling, multithreaded applications with synchronization.

COSHCC-03: Programming in Java (Practical)

Outcomes: Students will able to know the following:

- Implement Object Oriented programming concept using basic syntaxes of control Structures, strings and function for developing skills of logic building activity.

- Identify classes, objects, members of a class and the relationships among them needed for finding solution to specific problem.

- Demonstrates how to achievers ability using inheritance, interfaces and packages and describes faster application development can be achieved.

- Demonstrate understanding and use of different exception handling mechanisms and efficient application development.

- Identify and describe common abstract user interface components to design GUI in Java using Applet &AWT along with response to events.

COSHCC-04: Discrete Structures

Outcomes: Discrete structure helps to develop logical thinking and its application to computer science. The subject enhances one's ability to reason and ability to present a coherent and mathematically accurate argument. After completion of the course, students will learn the following:

- The basic principles of sets and operations insets.
- Prove basic set equalities.
- Apply counting principles to determine probabilities.
- Determine when a functionis1-1 and "onto".
- Demonstrate different traversal methods for trees and graphs.
- .Model problems in Computer Science using graphs and trees
- The fundamentals of propositional logic.

GE-2(Inter disciplinary for other department)

GE2: Introduction to Database System (Theory)

Outcomes: This course is intended to provide you with an understanding of the

Current theory and practice of database management systems. To help you More fully appreciate their nature, the course provides a solid technical overview of database management systems. After completion of the course, students will learn the following:

- Understand basic data base concepts, including the structure and operation of the relational data model.

- Understand the role of a database management system in an organization.
- Constructs implead moderately advanced database queries using Structured Query Language (SQL).
- Understand and successfully apply logical data base design principles, including E-R diagrams and database normalization up to 3NF.
- Design and implement a small database project using SQL.

GE 2: Database Management Systems (Practical)

Outcomes: Students will able to learn the following:
- Creating Database Creating a Database creating a Table Specifying Relational Data Types Specifying Constraints Creating Indexes.

- Table and Record Handling INSERT statement using SELECT and INSERT together DELETE, UPDATE, TRUNCATE statements DROP, ALTER statements.
- Retrieving Data from a Database by using SELECT statement and WHERE clause.

COSHCC-05: Data Structures (Theory)

Outcomes:

Data structure is used organize data in the computer system to perform its task more efficiently. This course helps us to know the various types of abstract data such as queue, stack, list etc.

After completion of the course, students will able to understand the following:

- The concept to Dynamic memory management, datatypes, algorithms.
- Basic data structures such as arrays, linked lists, stacks and queues.
- The hash function and concepts of collision and it's resolution methods.
- Different sorting technique like merge sort, quick sort, binary search.
- Developing Recursive Definition of Simple Problems and their implementation.
- Solve problem involving graphs, trees and heaps.

COSHCC-05: Data Structures (Practical)

Outcomes: Students will able to know the following:

- Implement basic data structures such as arrays and linked list.
- Programs to demonstrate fundamental algorithmic problems including Tree Traversals, Graph traversals, and shortest paths.
- Implement various searching and sorting technique
- Programs to demonstrate the implementation of various operations on stack and queue.

COSHCC-06: Operating System (Theory)

Outcomes: After completion of the course, students will earn the following:

- The basics of operating systems like kernel, shell, types and views of operating systems.
- Describe the various CPU scheduling algorithm sand remove deadlocks.
- Explain various memory management techniques and concept of thrashing.
- Recognize file system interface, protection and security mechanisms.
- Explain the various features of OS like UNIX, Linux, windows etc.
- The basic of cloud computing on Linux system.

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Anindya Mondal
Head of the Department
Department of Computer Science
Chandrakona Vidyasagar M.V.

- Policy mechanism, Authentication, Internal access Authorization.

COSHCC-06: Operating System (Practical)

Outcomes:

- Demonstrate the installation process of various operating systems.
- Implement virtualization by installing Virtual Machine software.
- Apply UNIX/LINUX operating system commands.
- Implement various type of scheduling algorithms.
- Implementations of various system calls.
- UnderstanddifferentUNIX/LINUXshellscriptsandexecutevariousshellprograms.

COSHCC-07: Computer Networks (Theory)

Course outcome: This course is intended to provide you with an understanding of different components of computer networks, various protocols, modern technologies and their applications. The course provides a solid technical overview of computer networks. After the completion of this course, students should be able to understand the following:

- IdentifyandusevariousnetworkingcomponentsUnderstanddifferenttransmission media and design cables for establishing a network.
- Describe the functions of each layer in OSI and TCP/IP model.
- ExplainthefunctionsofApplicationlayerandPresentationlayerparadigmsandProto cols.
- Describe the Session layer design issues and Transport layer services.

- Describe the functions of data link layer and explain the protocols.
- Explain the types of transmission media with real time applications
- Implement any topology using network devices.
- Understand the TCP/IP configuration for Windows and Linux.
- Implement device sharing on network.
- Learnthemajorsoftwareandhardwaretechnologiesusedoncomputernetworks.

COSHCC-07: Computer Networks (Practical)

Outcomes:

- Identify and use various networking components Understand different transmission media and design cables for establishing a network.
- Simulate Cyclic Redundancy Check (CRC) error detection algorithm for noisy channel.
- Simulate and implement stop and wait protocol for noisy channel.
- Simulate and implement go back n sliding window protocol.
- Simulate and implement selective repeat sliding window protocol.
- Simulate and implement distance vector outing algorithm.
- Simulate and implement Dijkstra's algorithm for shortest path routing.
- Understand the TCP/IP configuration for Windows and Linux.
- Learn the major software and hardware technologies used on computer networks.

SEC-1: Android Programming (Theory)
Outcomes:

With this course, a new application created for devices running the Android operating system. Student will learn the following:

- Describe Android platform, Architecture and features.
- Design User Interface and develop activity for Android App.
- Use Intent, Broadcast receivers and Internet services in Android App.
- Design and implement Database Application and Content providers.
- Use multimedia, camera and Location based services in Android App.
- Discuss various security issues in Android platform

SEC-1: Android Programming (Programming)
Outcomes;

- Experiment on Integrated Development Environment for Android Application Development
- Design and Implement User Interfaces and Layouts of Android App.
- Use Intents for activity and broadcasting data in Android App.
- Design and Implement Database Application and Content Providers.5. Experiment with Camera and Location Based service.
- Develop Android App with Security features.

GE-3(Interdisciplinary for other department)

GE-3T: Introduction to C and C++ Programming

Outcomes: The course is designed for to providing knowledge of C&C++.Students will be able to develop logics which will help them to create programs, applications. After the completion of this course, the students will be able to know the following:

- Understand basic C and C++ concepts.
- Fundamentals of C language &Control Statements.
- Loop Control Structures & Arrays, Strings &Functions.
- Structure, Union, Pointers, File handling.
- Fundamentals of C++.
- Class & Object, Operator Overloading.
- Inheritance & Polymorphism.
- Exception handling &Templates
- Ability to read, write and debug elementary C and C++code

GE-3P: Introduction to C and C++ Programming Lab.
Outcomes: Students will able to know the following:

- Understand the concept to datatypes, loops, functions, array, pointers, string, structures and files.
- Analyses problems, errors and exceptions.
- Apply programming concepts to compile and debug c programs to find solutions.
- Understandthedifferencebetweenobjectorientedprogrammingandproceduraloriented programming language.
- Program using C++ features such as composition objects, Operator overloading, inheritance, Polymorphism etc.
- Construct appropriate diagrams and textual descriptions to communicate the static structure and dynamic behavior of an object-oriented solution.

COSHCC-08: Design and Analysis of Algorithms (Theory)

Outcomes: Students will able to understand the following

- Basics properties of an algorithm.
- Different technique to implement algorithm and associated operations
- Compute time and space complexity
- Different ion-linear algorithm like decision tree and red black trees.
- Different graph algorithm implementation like DFS, BFS, MST

COSHCC-08: Designing Analysis of Algorithms Lab (Practical)

Experiments should include but not limited to but some conditions of input

- Implementation of sorting like insertion, merge, heap, quick, radix sort with number of comparisons
- Implementation of balanced Red-Black trees with insertion, deletion, searching for a number and report colour node containing this number.
- Implementation of procedure to determine LCS of two given sequences.
- Implementation of graph traversal technique BFS, DFS, MST
-

COSHCC-09: Software Engineering (Theory)

Course Outcome: After
Completion for the course, students will learn about implementation of software its Characteristics and its risk management and maintenance.
- Evolution of a software, software crisis, its layered architecture, frame work and process module

- Need software and the requirement analysis and modelling SRS
- Software project planning and management of different criteria of software. Calculate risk identification
- Designing of software architecture and mapping of data flow diagram and quality management of software.
- Differ entreating strategy like black box testing and white box testing
- Maintenance of software.

COSHCC-09: Software Engineering (Practical)
Outcomes:

After completion students will learn how to develop software in real world. They will learn how to implement practically using language independent software and its maintenance also.

- Understanding of software requirements and the SRS documents.
- Understanding of the role of project management including planning, scheduling, risk management, etc.
- Describe data models, object models, context model and behavioral models.
- Understanding of different software architectural styles.
- Understanding of implementation is such as modularity and coding standards.
- Understanding of approaches to verification and validation including static analysis, and reviews. Understanding of software testing approaches such as unit testing and integration testing.

- Describe software measure software risks.
- Understanding of software evolution and related issues such as version management.
- Understanding on quality control and how to ensure good quality software.

COSHCC-10: Database Management Systems (Theory)

Course outcome:
This course is intended to provide you with an understanding of the Current theory and practice of database management systems.

At the completion of this course, students should be able to do the following:

- Understand the role of a database management system in organization.

- Constructs implead moderately advanced database queries using Structured Query Language (SQL).

- Understand and successfully apply logical database design principles, including E-R diagrams and data base normalization up to BCNF.

COSHCC-10: Database Management Systems (Practical)

- Student will able to know Structured Query Language (SQL):

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Arindya Mondal
Head of the Department
Department of Computer Science
Chandrakona Vidyasagar M.V.

- Creating a Database, creating a Table Specifying Relational Data Types Specifying Constraints Creating Indexes
- Creating a Database Creating a Table Specifying Relational Data Types Specifying Constraints Creating Indexes
- Table and Record Handling INSERT statement
- Using SELECT and INSERT together DELETE, UPDATE, TRUNCA TE statements DROP, ALTER statements
- Retrieving Data formal Data base, The SELECT statement Using the WHERE clause Using Logical Operators in the WHERE clause Using IN, BETWEEN, LIKE, ORDERBY, GROUPBY and HAVING Clause Using Aggregate

- Functions Combining Tables Using JOINS Sub queries
- Database Management Creating Views Creating Column Aliases Creating Database Users Using GRANT and REVOKE Cursors in Oracle PL/ SQL Writing Oracle PL/ SQL Stored Procedures

SEC2: HTML PROGRAMMING (Theory)
Outcomes:
Student will learn HTML is the standard markup language for Web   pages. With HTML you can create your own website.

- Use knowledge of HTML and CSS code and an HTML editor to create personal and/or business websites following current professional and/or industry standards.

- Use critical thinking skills to design and create web sites.
- Use a stand-alone FTP program to up load files to a web server.

SEC2:HTML PROGRAMMING (Programming)
Outcomes:
- Completion of a multi-page website

- Use knowledge of HTML and CSS code and an HTML editor to create personal and/or business web sites following current professional and/or industry standards.
- Use critical thinking skills to design and create websites.
- Use a stand-alone FTP program to up load files to a webserver.

COSHCC-11: Advanced Java (Theory)

Outcomes:

Java is the most famous platform, which is used to develop several applications.

After completing this course the student must demonstrate the knowledge and ability to:

- Able to understand the use of OOPs concepts.
- Able to solve real world problems using OOP techniques.
- Able to understand the use of abstraction.
- Able to understand the use of Package sand Interface in java.
- Able to develop and understand exception handling, multithread application switch synchronization.
- Able to understand the use of Collection Framework.
- Able to design GUI based applications and develop applets for web applications.

COSHCC-11 Advanced Java (Practical)

After learning concepts of advance java students are able to make a website which can be connected to the server.

- After learning advance java students can able Servlet Context, Servlet Config, Deployment Descriptor, Request and Response, CRUD Operation with Servlet
- By learning advance java student can move their carrier to different levels as most of the real time applications (Servlet, JSP, EJB, JPA, JSF…. etc.) are developed using concepts of advance java.
- Short comings of Servlet: Solution in JSP, JSP Scripting Elements, JSP Lifecycles.
- After learning advance java student will be able to work with web servers and apps

COSHCC-12: Theory of Computation (Theory)

Outcomes:

Course should provide a formal connection between algorithmic problem solving and the theory of languages and automata and develop the min to a mathematical (a endless magical) view towards algorithmic design and in general computation itself. The course should in addition clarify the practical view towards the applications of these ideas in the theoretical computer science. After completing the course, the student will be able to:

- Model, compare and analyses different computational models using combinatorial methods.
- Apply rigorously formal mathematical methods to prove properties of languages, grammars and automata.
- Construct algorithms for different problems and argue formally about correctness different restricted machine models of computation.
- Identify limitations of some computation al models and possible methods of proving them.

- Have an over view of how the theoretical study in this course is applicable to and engineering application like design Ing the compilers.

DSE-1: Operational research (Theory)

Outcomes:

- Student will learn to solve real world problem.
- Students can use the analytical skills and creativity
- Students can learn methodology it's limitation and applications
- Simplex method, Linear
  Programming problem and two-phase method also the will learn.
- Duality and it's definition and strategy of dual simplex method also have introduced here.

• DSE-1: Operational Research (Practical)

Outcomes:

- Using MATLAB or any other software they can developer linear programming problem.
- Simplex method also they will learn.
- Student will be able to solve M-Charnes method
- Two phase method also they will solve.
- Based on problem dual simplex method also they will learn.

DSE-2: Machine Learning (Theory)

Outcomes:

Man machine interaction is necessary. Machine learning is a subfield of artificial intelligence (AI). The goa to machine learning generally is to understand the structure of data and fit that data into models that can be understood and utilized by people. Although machine learning is a field within computer science, it differs from traditional computational approaches. In traditional computing, algorithms are sets of explicitly programmed instructions used by computers to calculate or problem solve

- Student will learn the concept to machine learning, difference between AI and Machine learning and it's steps and it's application.

- Different types of learning technique have been introduced here like supervised, unsupervised, reinforcement method. Statistical, bayes theorem, and naive bayes classifier they will learn.

- Some programming code has been introduced in the reticulate.

o Classification of data using linear regression with one and multiple variable and logistic regression they will learn. Also here introduce defeature reduction and selection and their difference

- Regularization, overfitting problem application of regularization
  it's biased variance so they will learn.

- Basic neural network has been introduced in gleaner,
  multi-layer, backpropagation algorithm they will learn

DSE2: Machine Learning (Practical)

Outcomes:
Based on theory here students may use MATLAB/R/Python software to develop some limited number of exercises based on the availability of dataset* provided by the syllabus.

- Student can perform basic arithmetic cooperation like addition, multiplication etc. and few logical operations AND, OR, NOT like operation
- Creation of array using some conditions and also some matrix operation
- Creation of data and using that data create plot/chart, subplot
- Implement logistic regression based some data set.
- Neural network back propagation algorithm the will implement using the help of internet
  o All program of machine learning will be completed based on free data set availability on inter net.

COSHCC-13: Artificial Intelligence (Theory)

Outcomes: Students will able to:
- Demonstrate knowledge of the building blocks of AI as pr resented terms of intelligent agent s.
- Analyze and formalize the problem as a state space, graph, design heuristics and select amongst different search or game-based techniques to solve them.
- Develop intelligent algorithms for constraint satisfaction problems and al so design intelligent systems for Game Playing
- Attain the capability to represent various real life problem domains using logic-based technique using use this to perform inference or planning.
- Formulate and solve problems with uncertain in formation using Bayesian approaches.
- Apply concept Natural Language processing to problems leading to understanding of cognitive computing.

COSHCC-13: Artificial Intelligence (Practical)

Outcomes: Artificial Intelligence Program using PROLOG.

Students will able to Write the following programs using PROLOG:
- Solve a program to solve8-queens problem.
- Solve any problem using depth first search.
- Solve any problem using best first search.
- Solve8-puzzle problem using best first search.
- Solve Robot(traversal) problem using means End Analysis.
- Solve Traveling Salesman problem.

COSHCC-14: Computer Graphics (Theory)
Outcomes:

Students will able to learn:
- To introduce the use of the components of a graphics system and become familiar with building approach of graphics system components and algorithms related with them.
- To learn the basic principles of 3-dimensional computer graphics.
- Provide an understanding of how to scan convert the basic geometrical primitives, how to trans form the shapes to fit them as per the picture definition.
- Provide a understanding of mapping from a world coordinates to device coordinates, clipping, and projections.
- To be able to discuss the application of computer graphics concepts in the development of computer games, information visualization, and business, applications.

COSHCC-14: Computer Graphics (Practical)
Outcomes:

- Student will learn library-based command to draw some object like bus, rectangle Using DDA, Bresenham line drawing, Bresenham-circle drawing, midpoint circle drawing algorithm student can improve their knowledge.
- Drawing ellipse will enhance their power using previous knowledge.
- Some filling programme of object is introduced here.
- Using Cohen and Sutherland-clipping students are able to clip some object.
- Applying 2D operation like translation, rotation, reflection and also some 3Doperationwilll earn.

DSE-3 Digital Image processing (Theory)
Outcomes:

Students will be able to:

- Remember the fundamental concepts of image processing.

Arindya Mondal
Head of the Department
Department of Computer Science
Chandrakona Vidyasagar M.V.

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

- Explain different Image enhancement techniques.
- Understand and review image trans forms.
- Analyze the basic algorithms used for image processing & image compression with morphological image processing.
- Contrast Image Segmentation and Representation

- Design & Synthesize Colour image processing and its realworld applications.

DSE-3 Digital Image processing (Practical)
Outcomes:

To understand better image processing using MATLAB or SCILAB it is necessary to implement hands on experience.

- Display digital image, resize, convert colour.
- Some image processing programs like negative image, contrast stretching etc.
- Image logical operations like AND, OR, EX-OR, NOT operation
- Image geometric operation
- Image noise models and remove noise using spatial filters
- Some frequency domain filtering like FFT, IFFT operation.

DSE-4 Projectwork/Dissertation
Outcomes:

- Project will be assigned to students under the supervision of internal faculty members.

- The students will prepare a project report in consultation with the supervisor allotted by the department committee which will be presented by the student in front of faculty members of college and after successful presentation they will present same project to the University.

B. Sc. General in Computer Science

Programme Specific Outcome (PSO)

By the end of the program UG in Computer Science, the student will be able to:

- To build the necessary skill set and analytical abilities for developing computer based.
- Solutions for real life problems.
- To help students build-up a successful career in Computer Science.
- Entrepreneurs who can innovate and develop software products.
- Apply knowledge of computing and mathematics appropriate to the discipline.
- Develop problem-solving abilities using computer.
- Design the application using programming languages.
- Ability to understand the principles and development methodologies of computer systems.
- To improve their performance in Entrance examination (like JEST, JECA, CUCET, UGC- NET, GATE, TIFR), as well as their general computing skills in higher studies.

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Head of the Department
Department of Computer Science
Chandrakona Vidyasagar M.V.

Course Outcome (CO)

Part – I

Paper - I

Group-A: Computer Fundamental

Outcomes: The course is designed for providing a basic idea of the organization of computer system and its peripheral components as well as the steps to develop a solution in syntactic and graphical forms and the number systems that are commonly used with their mathematical approaches and conversions.

After the completion of this course, the students will be able to know the following:

- Understand basic components of computer system.
- Understand the theory and architecture of central processing unit.
- Knowledge of Algorithms and Flow Charts.
- Knowledge about the number systems and its conversions.
- Knowledge about binary arithmetic, mathematical solving and code conversions.

Group-B: Digital Electronics

Outcomes: The course is designed for providing a basic idea of the digital logic and its implementation for designing circuits along with the concept of Boolean algebra and its applications, rules and simplifications. It also entails different techniques for generating an optimize solution and simplification which are required to develop logic circuits as well as memory units and peripherals.

After the completion of this course, the students will be able to know the following:

- Understand basic concept of Boolean algebra.
- Knowledge of different codes and their conversions.
- Understand the logic gates, simplification techniques of logic expressions.
- Knowledge about different digital logic circuits and their implementations.
- Knowledge of constructions of different flip flops and idea of converters.
- Knowledge about memory based components.
-

Group-C: Programming in C

Outcomes: The course is designed to acquire the knowledge of C programming language. Students will be able to develop different techniques, approaches and logics which will help them to create programs, applications etc.

After the completion of this course, the students will be able to know the following:

- Understand basic C concepts.
- Fundamentals of C language & Control Statements.
- Loop Control Structures & Arrays.
- Strings & Functions.
- Structure, Union, Pointers.
- File handling and management.

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Anindya Mondal

Department of Computer Science
Chandrakona Vidyasagar M.V.
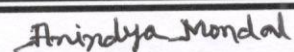
Group-D: Data Structure

Outcomes: This course is designed to provide knowledge about how to organize data in the computer system to perform its task more efficiently. This course helps the students to know the various types of abstract data such as queue, stack, list etc. along with different algorithms for implementing several searching and sorting techniques.

After completion of the course, students will able to understand the following:

- Understand the concept of data types and their interpretations.
- Knowledge of elementary data structures like arrays, linked lists, stacks and queues.
- Concept of dynamic memory management, analysis of algorithms.
- Knowledge about asymptotic notations and complexities.
- Understand the iterative and recursive approaches.
- The hash function and concepts of collision and its resolution methods.
- Different sorting technique like bubble sort, merge sort, quick sort etc.
- Different searching techniques like linear search, binary search etc.
- Problem solving regarding graphs, trees and heaps.

Part – II

Paper – II

Group-A (Unit-I): Basic concepts of Operating Systems

Outcomes: This course is designed for providing knowledge about several types of operating systems and its various components and aspects as well as different process, disk scheduling and memory management techniques. This course also entails some real life problems, deadlocks and diversified algorithmic techniques for solving several problematic issues. Students can also learn about authorization, protection and security mechanisms. After completion of the course, students will able to understand the following:

- Basics of operating systems and its types as well as views.
- Knowledge about the components of operating system like kernel, shell, etc.
- Understanding of processes, PCB, IPC and various CPU scheduling techniques.
- Knowledge about deadlocks and identification, removal and avoidance of deadlocks.
- Explanation various memory management techniques and concept of thrashing.
- Usage of disk management and disk scheduling algorithms for better utilization of external memory.
- Recognize file system interface, protection and security mechanisms.
- Explain the various features of OS like UNIX, Linux, windows etc.
- The basic of cloud computing on Linux system.
- Policy mechanism, Authentication, Internal access Authorization.

Group-A (Unit-II): DBMS

Outcomes: This course is intended to provide with an understanding of the current theory and practice of database management systems to help for fully appreciating the data related concepts. The course provides a solid technical overview of database management systems, using a current database product as a case study. In addition to technical concerns, more general issues are emphasized. These include data independence, integrity, security, recovery, performance, database design principles, and database administration. At the completion of this course, students should be able to do the following:

- Understand the role of a database management system in an organization.
- Understand basic database concepts, including the structure and operation of the relational data model.
- Construct simple and moderately advanced database queries using Structured Query Language (SQL).
- Understand and successfully apply logical database design principles, including E-R diagrams and database normalization up to BCNF.
- Design and implement a small database project using SQL.
- Understand the concept of a database transaction and related database facilities, including concurrency control, journaling, backup and recovery, and data object locking and protocols.
- Knowledge about files and file organizing concepts.

Group-B: Database Management System <ORACLE> (Practical)

Outcomes: This course is designed to provide a practical knowledge of database management systems and its related concepts with the usage of Structured Query Language (SQL). In addition to, this course provides an application level idea about data independence, integrity, security, recovery and performance.

After the completion of this course, the students will be able to implement the following:

- Use of DBMS tools.
- Creation of Databases and Tables and their manipulations.
- Implementation of different types of SQL queries.
- Retrieving and Grouping of resultant set data.
- Usage of clauses and joining concepts.

Knowledge about authorization and protection.

Paper – III

Group-A: Digital Electronics (Practical)

Outcomes: The course is designed for testing the basic idea of the digital logic and its implementation for designing circuits both combinatorial and sequential using necessary ICs as per requirements.

After the completion of this course, the students will be able to implement the following:

- Verification of Logic gates (Basic, Universal & Exclusive).
- Implementation of Half, Full and Parallel Adders, Subtractors.
- Designing Code conversion circuits.
- Implementation of different Multiplexers, Demultiplexers, Encoders and Decoders.
- Designing Comparators, Seven Segment Display.
- Construction of different Flip Flops (SR, D, JK, T, Master-Slave).
- Implementation of Shift Registers, Mod counters etc.
- Study and verification of workflow of 74189, 7489, 2114 or any other modular chip.

Group-B: Programming in C and Data Structure (Practical)

Outcomes: The course is designed to test the possessed or acquired knowledge of C programming language through practical implementation. Students can test to develop different techniques, approaches and logics for creating programs, applications etc. as well as data structure concepts like Stacks, Queues, Linked lists and the implementation of different searching and sorting techniques.

After the completion of this course, the students will be able to implement the following:

- Programs on control statements (If-Else, Switch, Loop).
- Programs using Arrays, Strings, Functions, Structure, Union.
- Programs on Searching and Sorting.
- Programs using Pointers and Dynamic memory allocation.
- Programs on different sorting technique like bubble sort, merge sort, quick sort etc.
- Programs on different searching techniques like linear search, binary search etc.
- Programs regarding graphs, trees and heaps.

Group-C: MS Word, Excel and Power Point (Practical)
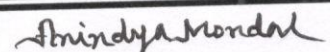
Outcomes: The course is designed to acquire knowledge about Microsoft Office work packages where the students can create documents, charts, tables and presentations.

After the completion of this course, the students will be able to implement the following:

- Concept of general tools and menu options in MS Word, Excel and Power Point.
- Document preparation in MS Word with several objects, images and tables.
- Knowledge and implementation of different MS Excel charts and formulas.
- Analysis of graphical representations, plotting of different diagrams (Bar, Pie chart etc.) in MS Excel.
- Creation of transition and animation in MS Power Point presentation slides.

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Anindya Mondal

Head of the Department
Department of Computer Science
Chandrakona Vidyasagar M.V.

Part – III

Paper – IV

Group-A (Unit-I): Computer Networks

Outcomes: This course is intended to provide with an understanding of different components of computer networks, data communication and its several aspects, various protocols, modern technologies and their applications. The course provides a solid technical overview of computer networks.

After the completion of this course, students should be able to understand the following:

- Identify and use various networking components.
- Knowledge about data communication and several topologies.
- Understand different transmission media and design cables for establishing a network.
- Describe the functions of each layer in OSI and TCP/IP model.
- Explain the functions of Application layer and Presentation layer paradigms and Protocols.
- Describe the Session layer design issues and Transport layer services.
- Classify the routing protocols and analyse how to assign the IP addresses for the given network.
- Describe the functions of data link layer and explain the protocols.
- Explain the types of transmission media with real time applications.
- Understand the TCP/IP configuration for operating systems.

Group-A (Unit-II): OOPs using C++

Outcomes: The course is designed to acquire the knowledge of C++ programming language and its object oriented approaches. This course will help to the students to develop different techniques, features and logics which will help them to create programs, applications etc.

After the completion of this course, the students will be able to know the following:

- Understand the difference between object oriented programming and procedural type programming language.
- Fundamentals of C++ language & Control Statements.
- Loop Control Structures & Arrays.
- Idea of Class concept and its members.
- Program using C++ features such as composition of objects, Operator overloading, inheritance, Polymorphism etc.
- Construct appropriate diagrams and textual descriptions to communicate the static structure and dynamic behaviour of an object oriented solution.
- Knowledge about exception handling and management of handling errors.

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Arindya Mondal
Head of the Department
Department of Computer Science
Chandrakona Vidyasagar M.V.

Group-B: Programming in C++ (Practical)

Outcomes: The course is designed to test the possessed or acquired knowledge of C++ programming language and object oriented programming concepts through practical implementation. Students are being tested to develop different techniques, approaches and logics for creating programs, applications etc.

After the completion of this course, the students will be able to implement the following:

- Simple programs with mathematical implications.
- Programs on control statements (If-Else, Switch, Loop).
- Programs using Arrays, Strings, Functions, Structure, Union.
- Programs using Classes and Objects.
- Programs on Overloading and Overriding.
- Programs using different Inheritance (Single, Hierarchical, Multiple etc.) concepts.
- Programs with Virtual function and Polymorphism. • Programs for Exception handling and management.

Group-C : Project Work

Outcomes: This is the most interactive course which is designed for the practical implementation and development of some applications, or websites, systems or models as project work using different programming languages (C++, JAVA, Python, HTML, PHP etc.) and platforms or frameworks (.NET, Apache, Android Studio, Eclipse etc.) or by using different tools like Sensors, Micro-controllers, IC Chips etc.

After the completion of this course, the students will be able to know and implement the following:

- Required steps for the development of Project work.
- Software and Hardware requirements.
- Planning, design and modelling the desired objectives.
- Technical implementation and construction.
- Testing and debugging process.
- Final deployment and presentation.
- Documentation and report writing.

B.Sc. Honours in Economics

Programme Specific Outcome

1	To provide a solid foundation of understanding in a variety of economics and related fields.
2	To help students acquire good simulation, data analysis, and interpretation skills.
3	To get students ready to compete successfully for jobs in industries, research techniques, data analysis, and economics.
4	Apply your knowledge and abilities in the fields of mathematics, research, statistics, and economics to increase your employability in these fields.
5	To incorporate knowledge, abilities, and attitudes that will support a creative and learning environment among aspiring students
6	Showcase social skills, leadership, cooperation, and excellent communication with many societal stakeholders.

B.Sc. Honours in Economics

Course Outcome

Course Code	Course Name	Course Outcome
ECOHCC01	Introductory Microeconomics	The purpose of this course is to introduce students to the fundamental ideas of microeconomic theory. The course will demonstrate how to think like an economist and how to apply microeconomic ideas to assess situations in real life.
ECOHCC02	Mathematical Methods for Economics-I	This is the first of two required courses in this sequence. Specifically, the courses on microeconomic theory, macroeconomic theory, statistics, and econometrics outlined in this syllabus are intended to provide the foundational mathematics needed to study economic theory at the undergraduate level.
ECOHCC03	Introductory Macroeconomics	The purpose of this course is to familiarize the students with the fundamental ideas of macroeconomics. The overall economy is the subject of macroeconomics. The foundational ideas behind calculating and measuring aggregate macroeconomic variables, such as GDP, money, savings, investments, inflation, and the balance of payments, are covered in this course.
ECOHCC04	Mathematical Methods for	This course is the second part of a compulsory two-course sequence. This part is to be taught in

	Economics-II	Semester II following the first part in Semester I. The objective of this sequence is to transmit the body of basic mathematics that enables the study of economic theory at the undergraduate level, specifically the courses on microeconomic theory, macroeconomic theory, statistics and econometrics set out in this Syllabus. In this course, particular economic models are not the ends, but the means for illustrating the method of applying mathematical techniques to economic theory in general.
ECOHCC05	Intermediate Microeconomics-I	The course is designed to provide a sound training in microeconomic theory to formally analyze the behaviour of individual agents. Since students are already familiar with the quantitative techniques in the previous semesters, mathematical tools are used to facilitate understanding of the basic concepts. This course looks at the behaviour of the consumer and the producer and also covers the behaviour of a competitive firm.
ECOHCC06	Intermediate Macroeconomics-I	This course introduces the students to formal modelling of a macro-economy in terms of analytical tools. It discusses various alternative theories of output and employment determination in a closed economy in the short run as well as medium run, and the role of policy in this context. It also introduces the students to various theoretical issues related to an open economy.
ECOHCC07	Statistical Methods for Economics	This is a course on statistical methods for economics. It begins with some basic concepts and terminology that are fundamental to statistical analysis and inference. It then develops the notion of probability, followed by probability distributions of discrete and continuous random variables and of joint distributions. This is followed by a discussion on sampling techniques used to collect survey data. The course introduces the notion of sampling distributions that act as a bridge between probability theory and statistical inference. The semester concludes with some topics in statistical inference that include point and interval estimation.
ECOHCC08	Intermediate Microeconomics-II	This course is a sequel to Intermediate Microeconomics I. The emphasis will be on giving

		conceptual clarity to the student coupled with the use of mathematical tools and reasoning. It covers general equilibrium and welfare, imperfect markets and topics under information economics.
ECOHCC09	Intermediate Macroeconomics-II	This course is a sequel to Intermediate Macroeconomics I. In this course, the students are introduced to the long run dynamic issues like growth and technical progress. It also provides the micro-foundations to the various aggregative concepts used in the previous course.
ECOHCC10	Introductory Econometrics	This course provides a comprehensive introduction to basic econometric concepts and techniques. It covers statistical concepts of hypothesis testing, estimation and diagnostic testing of simple and multiple regression models. The course also covers the consequences of and tests for misspecification of regression models.
ECOHCC11	Indian Economy-I	Using appropriate analytical frameworks, this course reviews major trends in economic indicators and policy debates in India in the post-Independence period, with particular emphasis on paradigm shifts and turning points. Given the rapid changes taking place in India, the reading list will have to be updated annually.
ECOHCC12	Development Economics-I	This is the first part of a two-part course on economic development. The course begins with a discussion of alternative conceptions of development and their justification. It then proceeds to aggregate models of growth and cross national comparisons of the growth experience that can help evaluate these models. The axiomatic basis for inequality measurement is used to develop measures of inequality and connections between growth and inequality are explored. The course ends by linking political institutions to growth and inequality by discussing the role of the state in economic development and the informational and incentive problems that affect state governance.
ECOHCC13	Indian Economy-II	This course examines sector-specific polices and their impact in shaping trends in key economic indicators in India. It highlights major policy debates and evaluates the Indian empirical evidence. Given the rapid changes taking place in the country, the reading list will have to be updated annually.

ECOHCC14	Development Economics-II	This is the second module of the economic development sequence. It begins with basic demographic concepts and their evolution during the process of development. The structure of markets and contracts is linked to the particular problems of enforcement experienced in poor countries. The governance of communities and organizations is studied and this is then linked to questions of sustainable growth. The course ends with reflections on the role of globalization and increased international dependence on the process of development.
ECOHDSE01	Economics of Health and Education	The importance of education and health in improving wellbeing is reflected in their inclusion among the Millennium Development Goals adopted by the United Nations member states, which include among other goals, achieving universal primary education, reducing child mortality, improving maternal health and combating diseases. This course provides a microeconomic framework to analyze, among other things, individual choice in the demand for health and education, government intervention and aspects of inequity and discrimination in both sectors. It also gives an overview of health and education in India.
ECOHDSE02	Money and Financial Markets/Applied Econometrics	Money and Financial Market- This course exposes students to the theory and functioning of the monetary and financial sectors of the economy. It highlights the organization, structure and role of financial markets and institutions. It also discusses interest rates, monetary management and instruments of monetary control. Financial and banking sector reforms and monetary policy with special reference to India are also covered. Econometrics- The aim of this course is to provide a foundation in applied econometric analysis and develop skills required for empirical research in economics. Topics include specification and selection of regression models, dynamic econometric models, advanced methods in regression analysis and panel data models. Since the emphasis is on application of methods, this course requires understanding of econometric software and computing skills.
ECOHDSE03	Environmental Economics	This course focuses on economic causes of environmental

		problems. In particular, economic principles are applied to environmental questions and their management through various economic institutions, economic incentives and other instruments and policies. Economic implications of environmental policy are also addressed as well as valuation of environmental quality, quantification of environmental damages, tools for evaluation of environmental projects such as cost-benefit analysis and environmental impact assessments. Selected topics on international environmental problems are also discussed.
ECOHDSE04	Dissertation/Project	

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

B. SC. General in Economics

Programme Outcome

By the end of the program B. SC. General in Economics the student will be able to:

P.O-1 Develop the ability to explain core economic terms, concepts, and theories

P.O-2 Demonstrate the ability to employ the "economic way of thinking."

P.O-3 Demonstrate awareness of global, historical, and institutional forces

P.O-4 Apply economics theories and concepts to contemporary social issues as well as formulation and analysis of policy.

P.O-5 Recognize the role of ethical values in economic decisions

P.O-6 Demonstrate the ability to collect, process and interpret data, including statistical inference

P.O-7 Be able to use critical thinking skills within the discipline of economics about economic matters.

P.O-8 Apply both oral and written communication skills within the discipline.

Programme Specific Outcomes

After completing B. SC. General in Economics students will have the power of

P.S.O-1 Understanding how different degrees of competition in a market affect pricing and output.

P.S.O-2 Understanding the efficiency and equity implications of market interference, including Government policy.

P.S.O-3 Developing the research knowledge in economics.

P.S.O-4 Developing the skill of data collection and use of sampling techniques in research.

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona. Paschim Medinipur

B.SC. (General) in Economics

Course Outcome

Course code	Course Name	Course Outcome
ECOG-CC-01	Microeconomics	This course is designed to expose the students to the basic principles of microeconomic theory. The course will illustrate how microeconomic concepts can be applied to analyse real-life situations.
ECOG-CC-02	Macroeconomics	This course aims to introduce the students to the basic concepts of Macroeconomics. Macroeconomics deals with the aggregate economy. This course discusses the preliminary concepts associated with the determination and measurement of aggregate macroeconomic variable like savings, investment, GDP, money, inflation, and the balance of payments.
ECOG-CC-03	Development Economics	The course begins with a discussion of alternative conceptions of development and their justification. It then proceeds to aggregate models of growth and cross-national comparisons of the growth experience that can help evaluate these models. The axiomatic basis for inequality measurement is used to develop measures of inequality and connections between growth and inequality are explored. The course ends by linking political institutions to growth and inequality by discussing the role of the state in economic development and the informational and incentive problems that affect state governance.
ECOG-CC-04	Features of Indian Economy	This course reviews major trends in economic indicators and policy debates in India in the post-Independence period, with particular emphasis on paradigm shifts and turning points. Given the rapid changes taking place in India, the reading list will have to be updated annually.
ECOG-SEC-01	Indian Financial System	This paper introduces students to the economics of finance which involves inter temporal decision making in the financial domain in the presence of uncertainty, risk and asymmetric information. The paper is divided into three sections, namely, investment theory and portfolio analysis; options and derivatives; and corporate finance.
ECOG-SEC-02	Computer Application in Economics	This paper introduces students to the Computational economics uses computer-based economic modelling to solve analytically and statistically formulated economic problems.
ECOG-SEC-03	Research Methodology	This course is designed to help undergraduate students appreciate, learn and practice data-based research skills that will help them in writing term papers, and project reports in their discipline and general elective courses. This course gives an outline as to how to identify nature of research, formulation of research topic, review of literature, approaches to research and research strategy, research ethics, using secondary data, how to use primary data, how to use sample selection methods, analysis of data, and writing of project report, with reference to different styles.
ECOG-SEC-04	Data Analysis	This paper is the first step to learn how to make sense of piles of data using graphical and numerical measures. It introduces students to the collection and presentation of data, also discussing how data can be summarized and analysed for drawing statistical inferences. Students are trained how to use important data sources using statistical tools which are useful for further research in economics.
ECOH-GE-03	MONEY AND BANKING	This course provides a general idea to the students regarding the theory and functioning of the monetary and financial sectors of the economy. It focuses special attention to rates of interests, monetary management and instruments of monetary control. It also provides an insight into financial and banking sector reforms and monetary policy with special reference to India. It also provides students the tools to determine rates of interest, and its theories of term structure of interest rates. It also makes students aware about functions, balance sheet, goals, targets, indicators and instruments of monetary control, along with current monetary policy of India.

ECOH-GE-04   PUBLIC FINANCE

Public Finance as a subject for undergraduate students is very important in the highly competitive world. Given the limited resources and unlimited demand and desires, the subject helps students understand how government should use the funds of the public. The paper includes topics such as public goods, budget and some of the latest tax reforms. All this helps the student to understand the working of the economy in context of above mentioned topic and thus makes them capable of evaluating the pros and cons of public policies.

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

B.A HONOURS IN EDUCATION (3 TIER)
PROGRAMME SPECIFIC OUTCOME(PSO)

By the end of the programme of B.A Honours in Education the students will be able to:

➢ Able to recognize that Education as a subject of arts as well as science
➢ Able to know that how philosophy affects education systems. Also apply cognition in teaching –learning process
➢ Comprehend about the psychological effects in Education and Societal Education Systems
➢ Understand the development of history of Indian Education from Ancient to Modern Era.
➢ Explain about sociological foundation education and states about the advantages of various societal process like social change , social mobility , social stratification.
➢ Acknowledge the role of information communication Technology in Education and Administer technical knowledge in teaching learning process
➢ Explain about educational organization , management and planning and prepare an ideal school plant & time table.
➢ Generalize and compare about Measurement , evaluation different tool and techniques related of evaluation. Select the traits of good test.
➢ Apply the concept of statistic in Education and use different statistical technics in teaching learning process.
➢ Understand the concept of various Types of Guidance and counseling .Analysis the role of guidance ad counseling . Differentiate between ARC and CRC.
➢ Understand about the various approaches of curriculum . Apply knowledge revised Bloom Taxonomy in Educative process.
➢ Explain the concept of Education of children with special needs and identify various impairment and disabilities.
➢ Able to prepare project work on various subject matters and also develop creativeness and advancement skills.

COURSE OUTCOME (CO)

By the end of the program of B.A Honours in Education the student will be able to:

1ST YEAR(PART -1)
1ST SEMESTER

CC1-Introduction of Education

➢ To develop an understanding of meaning , aims , objectives ,and function of Education. Also Factors of education and concept of curriculum , co-curriculum activities and their significance in Education.

➢ To Elaborate concept of child centrism and play way in Education
➢ To develop knowledge about Agencies of Education like as Home school and Maas Media

CC2-History of Education

➢ To be Acquinted with the features of Education in India : As Ancient period , Medieval period and British period.
➢ To develop knowledge regarding Hunter commission , primary , secondary and higher secondary Education . National Education movement & basic Education.
➢ To progress the concept about Education in India After independence

2ND SEMESTER

CC3- Psychological foundation of Education
➢ To develop an understanding comprehensive relation between psychology and education and also concept of educational intelligence and emotional intelligence.
➢ To develop knowledge regarding various theories of teaching and learning to reinforce students to the field of pedagogy.

CC4-- Philosophical foundation of Education
➢ To develop knowledge about importance of philosophy in education and concept about Indian school of philosophy.
➢ To advance knowledge about western schools of Philosophy and also philosophy for development of humanity

2ND YEAR(PART -II)
3RD SEMESTER

CC5-Sociological foundation of Education
➢ Understanding and meaning of sociology of education and concept related social change , social groups , social mobility , and social stratification
➢ To develop knowledge on social communication in India

CC6-Education , organization , Management and planning
➢ Understand about nature , scope , process of management and organization also relation with education
➢ Develop knowledge regarding meaning aims, steps and significance of educational planning.

CC7-Giudance and counseling
➢ To Elaborate overall concept on Guidance and Counseling .Need for guidance in secondary school
➢ To develop knowledge About tools or basic data necessary for Guidance . And Importance of CRC & ARC.

SEC-1 Communication skill
➢ To develop concept regarding communication related various skills
➢ To develop knowledge on barriers to listening and group discussion

GE-Education of children with special needs
➢ To elaborate understanding about education of children with special needs. And various education

programs , intervention for different type of special child.

CC8- Technology of Education
- To develop knowledge about meaning scope, of educational technology and classification , components and needs of system approach
- Understand about ICT and e-learning

CC9- Curriculum studies
- Comprehend regarding meaning , scope, functions and various approaches of curriculum. And curriculum development process
- Revised bloom Taxonomy and Bruner's Theory of instruction

CC10- Inclusive Education
- Understanding concept about Inclusive education , inclusion , various types of disabilities, and education for multicultural society.
- Understanding social Inclusion : role of education

SEC-2- Special Education
- To elaborate knowledge of children with multiple disabilities and their special education , intervention.
- Comprehend about Learning disabilities

GE-Mental Health Education
- To develop concept about Mental health and educational implications
- Understand regarding Adjustment and Maladjustment relation with education.

3RD YEAR(PART -III)
5TH SEMESTER

CC11- Measurement and Evaluation in Education
- Comprehend regarding overall process of Measurement and Evaluation.
- Concept about various tools and techniques . Also criteria of good tool and its construction

CC12-Statistics in Education
- Understandings the concept of statistics and descriptive statistics in Education
- Analysis and use, interpretation of various statistical method In education.

DSE-1- Peace Education and Value Education
- To develop knowledge about aims , scope , peace education and role of peace for non-violence
- To elaborate concept on value education and conflict resolution

DSE-2- Teacher Education
- Comprehensive concept of teacher education .
- Development of teacher education in India.

6TH SEMESTER

CC12-Psychology of Adjustment
- To develop concept about Adjustment , Maladjustment and problem Behavior.
- Comprehend regarding KNPI AND KIPI

CC13-Basic concept of Educational Research
- Understandings regarding concept of educational research , literature review , data collection
- Writing research proposal

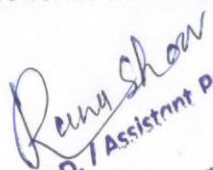### DSE-3 –Educational thought of great educators
- To develop knowledge regarding Educational thoughts of Indian and western Educators as plato, Rousseau , Dewey , Pestalozzi, and Rabindranath Tagore , Vivekananda and Begum Rokeya.

DSE-4 -Women Education
- Historical perspectives of Women Education.
- Role of Indian Thinkers in promoting women education and Women empowerment in modern society.

B.A GENERAL IN EDUCATION (3 TIER)

PROGRAM SPECIFIC OUTCOME(PSO)

By the end of the program of B.A General in education , the student will be able to:

- Able to acknowledge that Education of arts as well as science
- Able to know about the concept of education , its factors and functions of Education
- Comprehend about the psychological effects in education and must apply its knowledge in educational process.
- Understand the developmental history of Indian education system from Ancient period to Modern era.
- Differentiate between measurement and evaluation. Knowledge regarding various tool and techniques of evaluation and also features of good test.
- Understand the concept of guidance and counseling , generalize the role of guidance and counseling. Difference between CRC & ARC.

COURSE OUTCOME (CO)

By the end of the UG General program , the student will be able to :

1ST YEAR (PART-1)
1st SEMESTER & 2nd SEMESTER

DSC-1A- Principles of Education

- To elaborate knowledge regarding meaning , aims , objectives and functions of Education.

DSC-1B- Educational psychology

- To develop an understanding of the process of learning and teaching and problems of Learning

2nd year (PART-II)
3RD SEMESTER & 4TH SEMESTER
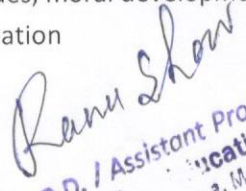
DSC-1C- Educational Sociology

- To concept of sociology, educational sociology,relation between sociology & education, social change, socialization,social control, social agence in education

SEC 1 Value Education

- Concept value education ,Needs, morality, social values, moral development,
- Aims, values in Peace education , human rights education
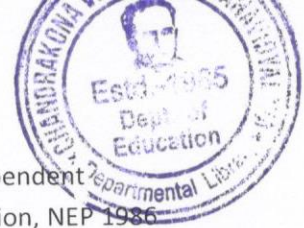
DSC-1D –History of Education in India

- Understand the Indian education system Before & after independent
- Missionary, charter act, woods dispatch, NEM, sadler commission, NEP 1986

SEC 2 –Educational Guidance & Counseling

- Meaning,needs, programme of educational guidance & counseling, difference between guidance & counseling , different forms guidance.

3rd Year (Part –III)

5TH SEMESTER & 6TH SEMESTER

DSE-1A – Educational Technology

- Able to recognize the concept, & use educational technology , system approach and communication process

SEC -3 Distance Education

- Abale to understand the concept of Distance Education and also the application ICT in Distance education

GE- 1 Mental nHealth & Hygiene

- Mental health,hygiene and role in education , Adjustment process and illustrate about the various forms of maladjustment

DSE-1B Guidance & Counseling

- Interpret about the Guidance & Counseling in Education and how Guidance & Counseling helpingteaching learning process

SEC – 4 Mental Health Education

- Define & concept of Mental health,hygiene and role in education , Adjustment process and illustrate about the various forms of maladjustment

GE – 2 Environmental education

- Historical backround of Environmental education , ecosystem , effect disasters and sustainable development, and difference method of environmental education

B.A HONOURS IN ENGLISH

PROGRAMME SPECIFIC OUTCOME

The programme:

- ❖ helps students comprehend the development of language and culture over time through the study of literature.

- ❖ Develops a broad awareness of individual responsibility towards society and the enhancement of collective welfare.

- ❖ Promotes critical thinking abilities among students through analysis and interpretation of intricate literature.

- ❖ Provides students with the necessary skills to excel in competitive examinations.

- ❖ Improves students' reading comprehension, analytical skills, and written communication proficiency.

- ❖ Introduces literature authored by and about Dalit and tribal communities, offering insight into unconventional aesthetics.

- ❖ Ensures acquaintance with various burgeoning fields of English Literature

COURSE OUTCOME(CO)

SEMESTER: I

CC-1: British Poetry and Drama: Beginning to 14th Century and History of English Language (6 credits)

Course Contents:

Group: A (History of Literature)

• Old English poetry and prose

• Beowulf

• Chaucer: The Wife of Bath's Prologue

Group: B (Philology)

• Influences: Greek, Latin, Scandinavian, French

Course outcome:

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

1. Understand key concepts of old and medieval poems include in the syllabus

2. Become acquainted with the spirit of the old and Middle Ages as reflected through certain poetic texts.

3. Account for the role of context(s) in the production, reception, and

transmission of major literary works during the old and Middle Ages

4. Engage analytically with existing criticism and interpretations of old and middle English poetry, and work independently on practical as well as

theoretical problems of literary analysis and interpretation

5. Know the process of beginning and growth of the English language

6. Analyse a wide range of problems relating to literary and historical scholarship

CC-2: British Poetry and Drama: Renaissance to 17th and 18th Centuries (6 credits)

Course Contents:

Poetry:

• Edmund Spenser: Sonnet LXXV "One day I wrote her name"

• William Shakespeare: Sonnet 130 "My mistress' eyes are nothing like the sun"

• John Donne: 'Good Morrow'

• Milton: Paradise Lost Book-I

• Pope: Rape of the Lock (3 cantos)

Play:

• Christopher Marlowe: Edward II

• William Shakespeare: Macbeth

Literary terms related to poetry and drama:

Allegory, Ballad, Blank-Verse, Heroic Couplet, Bathos, Comedy, Dramatic Monologue, Elegy, Image, Ode, Carpe-diem, Soliloquy, Symbol, Tragedy, Catharsis, Hamartia, Three Unities, Anagnorisis, Antagonist, Chorus, Denouement, Comic-relief, Aside, Anti-Hero, Catastrophe

Course outcome:

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

1. Understand key concepts of poems and drama-texts included in the syllabus.

2. Learn some important literary terms related to poetry and drama

3. Refer to relevant contemporary literary theories.

4. Demonstrate conceptual and textual understanding in tests and exams

5. Prepare and present papers, and address the questions asked.

6. Contest in competitive examinations—written and interactive—related to teaching at all levels.

SEMESTER:II

CC-3: British Literature (fiction and non-fiction): 18th Century Credits 06

Course Contents:

Play: • William Congreve: The Way of the World

Prose:

• Jonathan Swift: Gulliver's Travels (Books III and IV)

• Addison and Steele: 'Sir Roger at Church'

• Laurence Sterne: The Life and Opinions of Tristram Shandy, GentlemanLearning outcome:

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

1. Understand key concepts of 18th-century fictional and non-fictional prose writings as well as drama included in the syllabus.

2. Account for the role of context(s) in the production, reception, and transmission of major literary works of this age

3. Prepare and present papers, and address the questions asked.

4. Express Concepts through Writing

5. Demonstrate conceptual and textual understanding in tests and exams

6. Contest in competitive examinations—written and interactive—related to teaching at all levels.

CC-4: British Romantic Literature (1798-1832) (6 credits)

Course Contents:

Poetry:

• William Blake: 'The Lamb', 'The Tyger'

• William Wordsworth: 'Tintern Abbey'

• Samuel Taylor Coleridge: 'Christabel' Part-1

• Percy Bysshe Shelley: 'Ozymandias'

• John Keats: 'Ode to a Nightingale'

Novel:

• Mary Shelley: Frankenstein

• Jane Austen: Pride and Prejudice

Course outcome:

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

1. Gain knowledge of the representative texts of Romantic poetry and fiction included in the syllabus.

2. Become acquainted with the spirit of the Romantic age.

3. Account for the role of context(s) in the production, reception, and transmission of major literary works of the Romantic age.

4. Engage analytically with existing criticism and interpretations of Romantic poetry and fiction, and work independently on practical as well as theoretical problems of literary analysis and interpretation.

5. Analyse a wide range of problems relating to literary and historical scholarship

SEMESTER: III

CC-5: British Literature: 19th Century (1832-1900) (6 credits)

Course Contents:

Poetry:

• Alfred Tennyson: 'Ulysses'

• Robert Browning: 'My Last Duchess', 'The Last Ride Together'

• Mathew Arnold: 'Dover Beach'

Novel:

• Charles Dickens: Hard Times

Course outcome:

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

1. Gain knowledge of representative texts of Victorian poetry and fiction.

2. Become acquainted with the spirit of the Victorian age as reflected through certain Poems.

3. Account for the role of context(s) in the production, reception, and transmission of major literary works of the Victorian age.

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona :: Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of English
Chandrakona Vidyasagar Mahavidyalaya

4. Engage analytically with existing criticism and interpretations of 19th-century poetry and fiction and work independently on practical as well as theoretical problems of literary analysis and interpretation

5. Analyse a wide range of problems relating to literary and historical scholarship

CC-6: British Literature: The Early 20th Century (6 credits)

Course Contents:

Poetry:

• W.B. Yeats: 'The Second Coming', 'The Wild Swans at Coole'

• T.S. Eliot 'The Love Song of J. Alfred Prufrock'

Fiction:

• Joseph Conrad: The Secret Sharer

• Katherine Mansfield: 'The Fly'

Course outcome:

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

1. Know about the meaning and scope of the concepts of the Modern/Modernity/Modernism.

2. Develop an understanding of the various forms of critique of modernity that evolved in England (and Europe) in the course of the 20th century

3. Study and interpret representative writings of the 20th century.

4. Acquaint themselves with the great tradition of modern European fiction.

5. Examine various literary techniques that writers of 20th century used in their writings, and demonstrate an understanding of these techniques.

6. Reflect upon the great upheaval that the world has undergone during 20th century and the constructive role of literary activism/movements in restoring human values.

CC-7: American Literature (6 credits)

Course Contents:

Poetry:

- Robert Frost: 'The Road not Taken'

- Langston Hughes: 'Harlem to be Answered'

- Walt Whitman: 'O Captain, My Captain'

Stories:

- Edgar Allan Poe: 'The Purloined Letter'

Novel:

- Mark Twain: The Adventures of Tom Sawyer Play:

- Tennessee Williams: A Streetcar Named Desire

Course outcome:

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

1. Identify the salient features of representative literary texts of American Literature

2. Contextualize the production and reception of the literary texts included in the syllabus.

3. Identify major theories related to literature and apply those theoretical approaches to a wide range of texts within American Literature.

4. Locate, analyse and collate available secondary resources for researching a scholarly topic within American Literature

5. Write papers that construct logical and informed arguments.

6. Prepare and deliver effective oral presentations and arguments.

SEMESTER: IV

CC-8: European Classical Literature (6 credits)

Course Contents:

- Homer: The Iliad, tr. E.V. Rieu (Harmondsworth: Penguin,1985)(Book I).

- Sophocles: Oedipus the King, tr. Robert Fagles in Sophocles: The Three Theban Plays (Harmondsworth: Penguin, 1984).

- Plautus: Pot of Gold, tr. E.F. Watling (Harmondsworth: Penguin, 1965).

• Ovid Selections from Metamorphoses 'Bacchus', (Book III), 'Pyramus and Thisbe' (Book IV), tr. Mary M. Innes (Harmondsworth: Penguin, 1975).

Course outcome:

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

1. Read and understand the rich classical texts of Greco-Roman literature in translated versions.

2. Trace the nature of influence that all the classical texts have on modern English literature.

3. Appreciate these texts as a source of great wisdom.

4. Interpret these texts from contemporary points of view.

CC-9: Modern European Drama (6 credits)

Course Contents:

• Henrik Ibsen: Ghosts

• Bertolt Brecht: The Good Woman of Szechuan

• Samuel Beckett: Waiting for Godot

Course outcome:

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

1. Acquaint themselves with the writers like Henrik Ibsen, Bertolt Brecht and Samuel Beckett and their writings.

2. Compare and contrast the writers from around the world and their unique styles.

3. Gain the ability to practically analyse any literary work by identifying different aspects of literature.

4. Interpret the text intensively and distinguish its salient features.

5. Appreciate the literary works at varied levels of comprehension.

6. Demonstrate the ability to use critical theories in literary evaluation.

CC-10: Popular Literature (6 credits)

Course Contents:

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona :: Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of English
Chandrakona Vidyasagar Mahavidyalaya

- Lewis Carroll: Through the Looking Glass

- Agatha Christie: The Murder of Roger Ackroyd

- Shyam Selvadurai: Funny Boy

- Sukumar Ray: AbolTabol (Translated by Sukanta Chowdhuri)/Autobiographical Notes on Ambedkar (For the Visually Challenged students)

Course outcome:

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

1. Know the meaning of Popular Literature and its distinct characters.

2. Read and understand the representative popular literary pieces included in the syllabus.

3. Understand how formulaic elements create the ideal world without limitations or uncertainties in readers' imagination.

4. Probe into the literary and aesthetic merits of popular fiction.

SEMESTER: V

CC-11: Postcolonial Literature (6 credits)

Course Contents:

Poetry:

- Pablo Neruda: 'Tonight I can Write' 'The Way Spain Was'

- Derek Walcott: 'A Far Cry from Africa' 'Names'

- Mamang Dai: 'Small Towns and the River' 'The Voice of the Mountain'

Novel:

- Chinua Achebe: Things Fall Apart

Stories:

- Bessie Head: 'The Collector of Treasures'

- Ama Ata Aidoo: 'The Girl who can'

Course outcome:

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

1. Know how a literary text, explicitly or allegorically; represents various aspects of colonial oppression.

2. Question how a text reveals the problematics of post-colonial identity.

3. Learn how a text reveals the politics and/or psychology of anti-colonialist resistance.

4. Trace the history of post-colonial movements in India and its textual representations.

5. Locate and represent subaltern voices through their own writings.

CC-12: Women's Writing (6 credits)

Course Contents:

Poetry:

• Emily Dickinson: 'I cannot live with you', 'I'm wife; I've finished that'

• Sylvia Plath: 'Daddy'

• Eunice De Souza: 'Advice to Women'

Fiction:

• Mahashweta Devi 'Draupadi', tr. Gayatri Chakravorty Spivak (Calcutta: Seagull, 2002)

• Toni Morrison: Beloved

Non-Fiction:

• Baby Kamble: Our Wretched Life

• Rassundari Debi Excerpts from Amar Jiban in Susie Tharu and K. Lalita, eds., Women's Writing in India, vol. 1 (New Delhi: OUP, 1989) pp. 191–2.

Course outcome:

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

1. Learn how and on what grounds women's writings can be considered as a separate

genre.

2. Read and understand canonical texts written by Women writers across different ages.

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona :: Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of English

3. Differentiate between sex and gender and how the latter is a social construction.

4. Be aware about the issues and concerns of the women writers of the developed, developing and under-developed countries.

SEMESTER: VI

CC-13: Indian Classical Literature (6 credits)

Course Contents:

• Kalidasa. Abhijnana Shakuntalam, tr. Chandra Rajan, in Kalidasa: The Loom of Time(New Delhi: Penguin, 1989).

• Vyasa. 'The Dicing' and 'The Sequel to Dicing, 'The Book of the Assembly Hall', 'The Temptation of Karna', Book V 'The Book of Effort', in The Mahabharata: tr. and ed. J.A.B.van Buitenen (Chicago: Brill, 1975) pp. 106–69.

• Sudraka. Mrcchakatika, tr. M.M. Ramachandra Kale (New Delhi: MotilalBanarasidass,1962).

Course outcome:

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

1. Read and understand the rich classical texts of Indian literature written in Sanskrit, in translated versions.

2. Trace the nature of influence that all the classical texts have on modern English literature both in British and Indian writing in English

3. Appreciate these texts as a source of great wisdom.

4. Interpret these texts from contemporary points of view.

CC-14: Indian Writing in English (6 credits)

Course Contents:

Poetry:

• R.K. Narayan: Swami and Friends

• H.L.V. Derozio: 'The Harp of India'

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona :: Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of English
Chandrakona Vidyasagar Mahavidyalaya

- Kamala Das: 'Introduction'
- Nissim Ezekiel: 'The Night of the Scorpion'

Fiction:

- Mulk Raj Anand: 'Two Lady Rams'
- Salman Rushdie: 'The Free Radio'

Drama:

- Girish Karnad: Tughlaq

- Course outcome:

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

1. Gain a comprehensive idea of the origin, growth and development of Indian English literature

2. Account for the role of context(s) in the production, reception, and transmission of major literary works of Indian Literature

3. Express Concepts through Writing

4. Demonstrate conceptual and textual understanding in tests and exams

Discipline Specific Electives (DSE)

DSE-1: Nineteenth Century European Realism Credits 06

Course Contents:

- Fyodor Dostoyevsky: Crime and Punishment, tr. Jessie Coulson London: Norton, 1989).

- Gustave Flaubert: Madame Bovary, tr. Geoffrey Wall (London: Penguin, 2002).

Learning outcome:

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

1. Acquaint themselves with the writers like Fyodor Dostoevsky and GustaveFlaubert and their writings in translated versions.

2. Compare and contrast the writers from around the world and their unique styles.

3. Gain the ability to practically analyse any literary work by identifying different aspects of literature.

4. Interpret the text intensively and distinguish its salient features.

5. Appreciate the literary works at varied levels of comprehension.

6. Demonstrate the ability to use critical theories in literary evaluation.

DSE-2: World Literatures Credits 06

Course Contents:

• V.S. Naipaul: Bend in the River (London: Picador, 1979).

• Julio Cortazar: 'Blow-Up', in Blow-Up and other Stories (New York: Pantheon, 1985).

• Judith Wright: 'Bora Ring', in Collected Poems (Sydney: Angus & Robertson, 2002) p. 8.

Course outcome:

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

1. Acquaint themselves to the writers like V.S. Naipaul and Julio Cortazar and their writings

2. Interpret the text intensively and distinguish its salient features.

3. Appreciate the literary works at varied levels of comprehension.

4. Demonstrate the ability to use critical theories in literary evaluation.

DSE-3: Science Fiction and Detective Literature Credits 06

Course Contents:

• Wilkie Collins: The Woman in White

• Arthur Conan Doyle: The Hound of the Baskervilles

Course outcome:

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

1. Know the meaning of science fiction and detective literature and their distinct characters.

2. Read and understand the representative literary pieces of science fiction and detective literature included in the syllabus.

3. Understand how formulaic elements create the ideal world without limitations or uncertainties in readers' imagination.

4. Probe into the literary and aesthetic merits of science fiction and detective literature.

OR DSE-3: Literature and Cinema Credits 06

Course Contents:

• William Shakespeare, Romeo and Juliet, and its adaptations: Romeo & Juliet (1968;

dir. Franco Zeffirelli, Paramount); and Romeo + Juliet (1996; dir. Baz Luhrmann,

20th Century Fox).

• Bapsi Sidhwa, Ice Candy Man and its adaptation Earth (1998; dir. DeepaMehta,

Cracking the Earth Films Incorp.)

• Amrita Pritam, Pinjar: The Skeleton and Other Stories, tr. Khushwant Singh (New Delhi: Tara Press, 2009) and its adaptation: Pinjar (2003; dir. C.P. Dwivedi, Lucky Star Entertainment).

Course outcome:

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

• Trace the nature of influence that literature has on cinema and vice versa

• Read and understand the literary pieces and their adaptations included in the syllabus

• Express Concepts through Writing

• Demonstrate conceptual and textual understanding in tests and exams

DSE - 4: Partition Literature Credits 06

Course Contents:

• Amitav Ghosh: The Shadow Lines.

• Dibyendu Palit: 'Alam's Own House', tr. Sarika Chaudhuri, Bengal Partition Stories: An Unclosed Chapter, ed. Bashabi Fraser (London: Anthem Press, 2008) pp. 453– 72.

- Manik Bandyopadhyay, 'The Final Solution', tr. Rani Ray, Mapmaking: Partition Storiesfrom Two Bengals, ed. Debjani Sengupta (New Delhi: Srishti, 2003) pp. 23–39.

- Saadat Hasan Manto, 'Toba Tek Singh', in Black Margins: Manto, tr. M. Asaduddin (NewDelhi: Katha, 2003) pp. 212–20.

- Jibanananda Das, 'I Shall Return to This Bengal', tr. SukantaChaudhuri, in Modern Indian Literature (New Delhi: OUP, 2004) pp. 8–13.

Course outcome:

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

1. Gain knowledge of representative texts of Partition Literature included in the syllabus.

2. Become acquainted with the spirit of the age as reflected through the texts included in the syllabus.

3. Account for the role of context(s) in the production, reception, and transmission of these literary works.

Or DSE - 4: Travel Writing Credits 06

Course Contents:

- Ibn Battuta: 'The Court of Muhammad bin Tughlaq', Khuswant Singh's CityImprobable: Writings on Delhi, Penguin Publisher

- Mark Twain: The Innocent Abroad (Chapter VII , VIII and IX) (Wordsworth Classic Edition)

- William Dalrymple: City of Djinn (Prologue, Chapters I and II) Penguin Books

- Rahul Sankrityayan: From Volga to Ganga (Translation by Victor Kierman) (Section I toSection II) Pilgrims Publishing

Course outcome:

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

1. Read and understand the representative works of Travel Literature included in the syllabus.

2. Express Concepts through Writing

3. Demonstrate conceptual and textual understanding in tests and exams

Principal
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona :: Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of English
Chandrakona Vidyasagar Mahavidyalaya

Skill Enhancement Courses (SEC)

SEC-1: English Language Teaching Credits 02

Course Contents:

- Knowing the Learner

- Structures of English Language

- Methods of Teaching English Language and Literature

- Materials for Language Teaching

- Assessing Language Skills

- Using Technology in Language Teaching

Course outcome:

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

1. Know about various innovative ways of using the English language in verbal and nonverbal communications.

2. Write clearly, effectively, and creatively, and adjust the writing style appropriate to the content, the context, and the nature of the subject.

3. Think about the relation between language and literature

4. Emerge as perspective writers, editors, content developers, teachers etc.

5. Demonstrate conceptual and textual understanding in tests and exams

Or SEC-1: Soft Skills Credits 02

Course Contents:

What is soft skill? Teamwork, Adaptability, Leadership, Problem solving

Development of Soft skills: Precis; Comprehension; Essays.

Course outcome:

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

1. Know the qualities needed for certain types of employment that do notdepend on acquired knowledge: they include common sense, the ability to deal with people, positive flexible attitude, etc.

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona :: Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of English
Chandrakona Vidyasagar Mahavidyalaya

2. Know about various innovative ways of using the English language in verbal and nonverbal communications.

3. Write clearly, effectively, and creatively, and adjust writing style appropriately to the

content, the context, and the nature of the subject.

4. Gain knowledge of time management, teamwork, and leadership traits.

Or SEC-1: Translation Studies Credits 02

Course Contents:

1. Introducing Translation: a brief history and significance of translation in a multi-linguistic and multicultural society like India.

2. Exercises in different Types / modes of translation, such as: a) Semantic / Literal translation b) Free / sense/ literary translation c) Functional / communicative translation

3. a) Introducing basic concepts and terms used in Translation Studies through relevant tasks, for example, Equivalence, Language variety, Dialect, Idiolect, Register, Style, Mode, Code mixing / Switching. b) Translation in Practice. Resources for Practice: Dictionaries Encyclopedias Thesauri GlossariesSoftware of translation

Course outcome:

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

1. Communicate effectively with others

2. Know the theory, description, application and significance of translation in a multilinguistic and multicultural society like India.

3. Come to know different works that expand their knowledge.

4. Emerge as perspective writers, translators, editors, content developers, teachers, etc.

SEC-2: Creative Writing Credits 02

Course Contents:

Unit 1: What is Creative Writing?

Unit 2: The Art and Craft of Writing

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona :: Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of English
Chandrakona Vidyasagar Mahavidyalaya

Unit 3: Modes of creative Writing

Unit 4: Writing for the Media

Unit 5: Preparing for Publication

Course outcome:

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

1. Gain knowledge of creative writing and its various modes

2. Know about various innovative ways of using the English language to write a good original composition

3. Emerge as perspective writers

4. Demonstrate conceptual understanding in tests and exams

Or SEC-2: Business Communication Credits 02

Course Contents:

• Introduction to the essentials of Business Communication: Theory and practice

• Writing a project report

• Writing reports on field work/visits to industries, business concerns etc. /Business negotiations.

• Summarizing annual report of companies

• E-correspondence

• Spoken English for business communication (Viva for internal assessment)

Course outcome:

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

1. Know about various innovative ways of using English language in verbal and nonverbal communications.

2. Write clearly, effectively, and creatively, and adjust writing style appropriately to the content, the context, and nature of the subject.

3. Speak English fluently

4. Demonstrate conceptual understanding in tests and exams

Or SEC-2: Technical Writing Credits 02

Course Contents:

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona :: Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of English
Chandrakona Vidyasagar Mahavidyalaya

1. Communication: Language and communication, distinct features of writing.

2. Writing Skills; Selection of topic, thesis statement, developing the thesis introductory, developmental, transitional and concluding paragraphs, linguistic unity, coherence and cohesion, descriptive, narrative, expository and argumentative writing.

3. Technical Writing: Scientific and technical subjects; formal and informal writings; formal

writings/reports, handbooks, manuals, letters, memorandum, notices, agenda, minutes; common errors to be avoided.
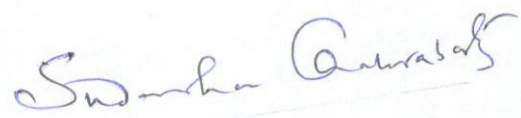
Course outcome:

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

1. Know about various innovative ways of using the English language in verbal and nonverbal communications.

2. Write clearly, effectively, and creatively, and adjust writing style appropriately to the content, the context, and the nature of the subject.

3. Emerge as perspective writers, editors, content developers, teachers, etc.

4. Demonstrate conceptual and textual understanding in tests and exams.

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona :: Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of English
Chandrakona Vidyasagar Mahavidyalaya

B.A GENERAL IN ENGLISH

PROGRAMME SPECIFIC OUTCOME

The programme:

- ❖ Enables students to develop an understanding of the evolution of language and culture through the study of literature.

- ❖ Imparts a holistic notion of social responsibility and well-being.

- ❖ Encourages students' critical thinking skills by encouraging them to analyse and interpret complex texts.

- ❖ Equips the students with the requisite skills to perform well in competitive exams.

- ❖ Enhances students' reading comprehension, analytical abilities, and written communication skills.

- ❖ Introduces works authored by and concerning Dalit and tribal communities, providing knowledge in the realm of unconventional aesthetics.

- ❖ Ensures acquaintance with various burgeoning fields of English Literature

COURSE OUTCOME(CO)

SEMESTER: I

DSC-1A (CC-1) : Poetry & Short Story **Credits 06**

Course Contents:

1. a) William Shakespeare: Sonnet 116

b) William Wordsworth: "A Slumber did my Spirit Seal"

2. a) John Keats – "Bright Star"

b) Wilfred Owen – "Strange Meeting"

3. Charles Lamb – "Dream Children"

4. H. E. Bates – "The Ox"

Course outcome:

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

1. Understand key concepts of poems and short stories -texts included in the syllabus.
2. Get acquainted with different ages of English literature and different literary genres.
3. Demonstrate conceptual and textual understanding in exams
4. Prepare and present papers, and address the questions asked.
5. Contest in competitive examinations—written and interactive—related to teaching at all levels.

SEMESTER: II

DSC-1B (CC-2): Essay, Drama & Novel **Credits 06**

Course Contents:

1. George Orwell – "Shooting an Elephant'

2. R. K. Narayan – "A Library without Books"

3. George Bernard Shaw – *Arms and the Man*

4. J. B. Priestley – *An Inspector Calls*

5. Ernest Hemingway – *The Old Man and the Sea*

Course outcome:

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

1. Understand key concepts of 20th century fictional and non-fictional prose writings as well as drama included in the syllabus.
2. Account for the role of context(s) in the production, reception, and transmission of major literary works of this age
3. Prepare and present papers, and address the questions asked.
4. Demonstrate conceptual and textual understanding in exams
5. Contest in competitive examinations—written and interactive—related to teaching at all levels.

SEMESTER: III

DSC-1C (CC-3):: Contemporary India: women and empowerment   **Credits 06**

Course Contents:

1. Social Construction of Gender:

- Masculinity, Femininity

- Patriarchy

- Sex & Gender

- Gender Socialization

- Gender discrimination

- Gender stereotyping

Texts: (any one) Nivedita Menon : Sexualities: Issues in Contemporary Indian Feminisms (selections) Nivedita Menon : Gender and Politics in India (Selections)

2. History of Women's Movements in India (Pre- and Post-Independence):

H.O.D. / Assistant Professor
Dept. of English
Chandrakona Vidyasagar Mahavidyalaya

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona :: Paschim Medinipur

B.A GENERAL IN ENGLISH

PROGRAMME SPECIFIC OUTCOME

The programme:

- ❖ Enables students to develop an understanding of the evolution of language and culture through the study of literature.

- ❖ Imparts a holistic notion of social responsibility and well-being.

- ❖ Encourages students' critical thinking skills by encouraging them to analyse and interpret complex texts.

- ❖ Equips the students with the requisite skills to perform well in competitive exams.

- ❖ Enhances students' reading comprehension, analytical abilities, and written communication skills.

- ❖ Introduces works authored by and concerning Dalit and tribal communities, providing knowledge in the realm of unconventional aesthetics.

- ❖ Ensures acquaintance with various burgeoning fields of English Literature

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona :: Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of English
Mahavidyalaya

COURSE OUTCOME(CO)

SEMESTER: I

DSC-1A (CC-1) : Poetry & Short Story **Credits 06**

Course Contents:

1. a) William Shakespeare: Sonnet 116

b) William Wordsworth: "A Slumber did my Spirit Seal"

2. a) John Keats – "Bright Star"

b) Wilfred Owen – "Strange Meeting"

3. Charles Lamb – "Dream Children"

4. H. E. Bates – "The Ox"

<u>**Course outcome:**</u>

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

1. Understand key concepts of poems and short stories -texts included in the syllabus.
2. Get acquainted with different ages of English literature and different literary genres.
3. Demonstrate conceptual and textual understanding in exams
4. Prepare and present papers, and address the questions asked.
5. Contest in competitive examinations—written and interactive—related to teaching at all levels.

SEMESTER: II

DSC-1B (CC-2): Essay, Drama & Novel **Credits 06**

Course Contents:

1. George Orwell – "Shooting an Elephant'

2. R. K. Narayan – "A Library without Books"

3. George Bernard Shaw – *Arms and the Man*

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona :: Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of English
Chandrakona Vidyasagar Mahavidyalaya

4. J. B. Priestley – *An Inspector Calls*

5. Ernest Hemingway – *The Old Man and the Sea*

Course outcome:

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

1. Understand key concepts of 20th century fictional and non-fictional prose writings as well as drama included in the syllabus.
2. Account for the role of context(s) in the production, reception, and transmission of major literary works of this age
3. Prepare and present papers, and address the questions asked.
4. Demonstrate conceptual and textual understanding in exams
5. Contest in competitive examinations—written and interactive—related to teaching at all levels.

SEMESTER: III

DSC-1C (CC-3):: Contemporary India: women and empowerment   **Credits 06**

Course Contents:
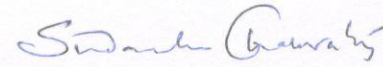
1. Social Construction of Gender:

- Masculinity, Femininity
- Patriarchy
- Sex & Gender
- Gender Socialization
- Gender discrimination
- Gender stereotyping

Texts: (any one) Nivedita Menon : Sexualities: Issues in Contemporary Indian Feminisms (selections) Nivedita Menon : Gender and Politics in India (Selections)

2. History of Women's Movements in India (Pre- and Post-Independence):

- Women and Nationalism

- Women and Partition

- Women and Political Participation

Text: (any two)

1. "Letters to a Wife: Satyendranath Tagore's Letters to Jynadanandini Tagore" from Epistolary Cultures in 19 th century Bengal, StreeSamya, Kolkata,

2. Gholam Murshed "Chapter Four" from The Reluctant Debutante.

3. Urvashi Butalia 'Beginnings' from The Other Side of Silence

4. Jashodhara Bagchi and Shubharanjan Dasgupta. The Trauma and The Triumph:Gender and Partition in Eastern India,Vol I ("Introduction")

3. Women and Law:

- Women and the Indian Constitution

- Personal Laws

- Customary practices on inheritance and Marriage

Text: (Selections from any one text)

1. Flavia Agnes. Ed. Women and Law in India: An Omnibus Comprising

2. Flavia Agnes. Enslaved Daughters (selections).

3. Sudhir Chandra. Hindu Women and Marriage Law

4. MonomoyeeBasu. Law and Gender Inequality.

4. Women and Violence:

- State interventions

- Domestic violence

- Female foeticide

- Sexual harassment

Texts: (any one)

1. RokeyaSakhawat Hussain – Sultana's Dream

2. Bama Faustina Soosairaj – Karukku

Course outcome:

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

1. Differentiate between sex and gender and how the latter is a social construction.
2. Trace the history of women's movements in India (Pre- and Post-Independence) and its textual representations.
3. Learn the laws prevalent in contemporary India for securing gender equity.
4. Gain knowledge of female foeticide, sexual harassment, domestic violence against women and state interventions to prevent these crimes.
5. Read and understand canonical texts written by such women writers as Rokeya Sakhawat Hussain and Bama Faustina Soosairaj.

SEMESTER: IV

DSC-1D (CC- 4): Academic Writing and Composition   **Credits 06**

Course Contents:

1. Introduction to the Writing Process: Conventions of Academic Writing, Writing in one's own words – Summarizing and Paraphrasing

2. Critical Thinking: Syntheses, Analyses, and Evaluation

3. Structuring an Argument: Introduction, Interjection, and Conclusion

4. Citing Resources, Editing, Book and Media Review

Course outcome:

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

1. Know about various innovative ways of using English language.

2. Distinguish between summarizing and paraphrasing.

3. Learn how to cite resources after writing a research article.

4. Learn how to write book and media review.

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona :: Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of English
Chandrakona Vidyasagar Mahavidyalaya

5. Write clearly, effectively, and creatively, and adjust writing style appropriately to the content, the context, and nature of the subject.

6. Demonstrate conceptual and textual understanding in tests and exams.

DISIPLINE SPECIFIC ELECTIVE (DSE)

DSE -1: British Literature   Credits 06

Course Contents:

1. William Shakespeare – As you Like It

2. Thomas Hardy- Ah, Are Digging on My Grave?

3. Robert Lynd- On Not Being a Philosopher

Course outcome:

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

1. Understand key concepts of the texts included in the syllabus.

2. Demonstrate conceptual and textual understanding in tests and exams.

3. Prepare and present papers, and address the questions asked.

4. Contest in competitive examinations—written and interactive—related to teaching at all levels.

Or
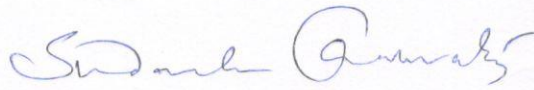
DSE- 1: Indian Literature in Translation   Credits 06

Course Contents:

1. Rabindranath Tagore – The Wife's Letter (Translation of Steer Patra)

2. Vijay Tendulkar – Silence: The Court is in Session (Translation of Shantata: Court Chalu Ahe)

3. Mahasweta Devi- 'Draupadi'

Course outcome:

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

1. Acquaint themselves with such Indian writers like Rabindranath Tagore, Vijay Tendulkar and Mahasweta Devi, and their writings in translated versions.

2. Appreciate the literary works included in the syllabus at varied levels ofcomprehension.

3. Prepare and present papers, and address the questions asked.

4. Contest in competitive examinations—written and interactive—related to teaching at all levels.

DSE2T: Partition Literature   Credits 06

Course Contents:

1. Sa'adat Hasan Manto, 'Toba Tek Singh', in Black Margins: Manto, tr. M. Asaduddin (New Delhi: Katha, 2003) pp. 212–20.

2. 2. Jibananda Das, 'I Shall Return to This Bengal', tr. Sukanta Chaudhuri, in ModernIndian Literature (New Delhi: OUP, 2004) pp. 8–13.

Course outcome:
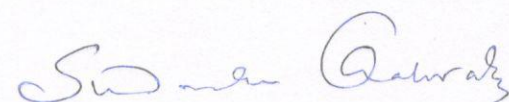
After the completion of this course the students will be able to:

1. Read and understand the representative literary pieces of Partition Literature included in the syllabus.

2. Become acquainted with the spirit of the age as reflected through the texts included inthe syllabus.

3. Account for the role of context(s) in the production, reception, and transmission of these literary works.

4. Prepare and present papers, and address the questions asked.

5. Contest in competitive examinations—written and interactive—related to teaching at all levels.

Or

DSE-2 : Nation, Culture and India Credits 06

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona :: Paschim Medinipur

H.O.D. / Assistant Professor
H.O.D. / Assistant Professor
Dept. of English
Chandrakona Vidyasagar Mahavidyalaya

Course Contents:

1. Amartya Sen – "Secularism and its Discontents" (from The Argumentative Indian)

2. Rabindranath Tagore – "Nationalism and India" (from Nationalism)

Course outcome:

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

1. Acquaint themselves with such Indian writers as Amartya Sen and RabindranathTagore, and their writings included in the syllabus.
2. Account for the role of context(s) in the production, reception, and transmission of these literary works.
3. Prepare and present papers, and address the questions asked.
4. Contest in competitive examinations—written and interactive—related to teaching at all levels.

SKILL ENHANCEMENT COURSE (SEC)

SEC-1: Soft Skills Credits 02

Course Contents:

1. Teamwork

2. Emotional Intelligence

3. Adaptability

4. Leadership

5. Problem solving

Courseoutome:

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

1. Know the qualities needed for certain types of employment that do not depend on acquired knowledge: they include common sense, the ability to deal with people and positive flexible attitude.
2. Know about various innovative ways of using English language in verbal and non-verbal communications.

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona :: Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of English
Chandrakona Vidyasagar Mahavidyalaya

3. Write clearly, effectively, and creatively, and adjust writing style appropriately to the content, the context, and nature of the subject.

4. Gain knowledge of time management, teamwork and leadership traits.

Or

SEC-1: Film Studies   Credits 02

Course Contents:

1. Evolution of the Cinema: Silent Film, Talkie, Colour Film, Digital Age, 3D Films.

2. Response and Review: (Illustrative film shows & appreciation programme to be arranged)

Course outcome:

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

1. Learn the history and evolution of the cinema and its various aspects.

2. Express concepts through writing.

3. Demonstrate conceptual and textual understanding in tests and exams.

SEC-2: Creative Writing   Credits 02

Course Contents:

Unit 1. What is Creative Writing?

Unit 2. The Art and Craft of Writing

Unit 3. Modes of creative Writing

Unit 4. Writing for the Media

Course outcome:

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

1. Gain knowledge of creative writing and its various modes

2. Know about various innovative ways of using English language to write a good original composition

3. Emerge as perspective writers

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona :: Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of English
Chandrakona Vidyasagar Mahavidyalaya

B.A GENERAL IN ENGLISH

PROGRAMME SPECIFIC OUTCOME

The programme:

- ❖ Enables students to develop an understanding of the evolution of language and culture through the study of literature.

- ❖ Imparts a holistic notion of social responsibility and well-being.

- ❖ Encourages students' critical thinking skills by encouraging them to analyse and interpret complex texts.

- ❖ Equips the students with the requisite skills to perform well in competitive exams.

- ❖ Enhances students' reading comprehension, analytical abilities, and written communication skills.

- ❖ Introduces works authored by and concerning Dalit and tribal communities, providing knowledge in the realm of unconventional aesthetics.

- ❖ Ensures acquaintance with various burgeoning fields of English Literature

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona :: Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of English
Chandrakona Vidyasagar Mahavidyalaya

COURSE OUTCOME(CO)

SEMESTER: I

DSC-1A (CC-1) : Poetry & Short Story **Credits 06**

Course Contents:

1. a) William Shakespeare: Sonnet 116

b) William Wordsworth: "A Slumber did my Spirit Seal"

2. a) John Keats – "Bright Star"

b) Wilfred Owen – "Strange Meeting"

3. Charles Lamb – "Dream Children"

4. H. E. Bates – "The Ox"

Course outcome:

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

1. Understand key concepts of poems and short stories -texts included in the syllabus.
2. Get acquainted with different ages of English literature and different literary genres.
3. Demonstrate conceptual and textual understanding in exams
4. Prepare and present papers, and address the questions asked.
5. Contest in competitive examinations—written and interactive—related to teaching at all levels.

SEMESTER: II

DSC-1B (CC-2): Essay, Drama & Novel **Credits 06**

Course Contents:

1. George Orwell – "Shooting an Elephant'

2. R. K. Narayan – "A Library without Books"

3. George Bernard Shaw – *Arms and the Man*

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona :: Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of English
Chandrakona Vidyasagar Mahavidyalaya

B.A GENERAL IN ENGLISH

PROGRAMME SPECIFIC OUTCOME

The programme:

- ❖ Enables students to develop an understanding of the evolution of language and culture through the study of literature.

- ❖ Imparts a holistic notion of social responsibility and well-being.

- ❖ Encourages students' critical thinking skills by encouraging them to analyse and interpret complex texts.

- ❖ Equips the students with the requisite skills to perform well in competitive exams.

- ❖ Enhances students' reading comprehension, analytical abilities, and written communication skills.

- ❖ Introduces works authored by and concerning Dalit and tribal communities, providing knowledge in the realm of unconventional aesthetics.

- ❖ Ensures acquaintance with various burgeoning fields of English Literature

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona :: Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of English
Chandrakona Vidyasagar Mahavidyalaya

COURSE OUTCOME(CO)

SEMESTER: I

DSC-1A (CC-1) : Poetry & Short Story **Credits 06**

Course Contents:

1. a) William Shakespeare: Sonnet 116

b) William Wordsworth: "A Slumber did my Spirit Seal"

2. a) John Keats – "Bright Star"

b) Wilfred Owen – "Strange Meeting"

3. Charles Lamb – "Dream Children"

4. H. E. Bates – "The Ox"

<u>**Course outcome:**</u>

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

1. Understand key concepts of poems and short stories -texts included in the syllabus.
2. Get acquainted with different ages of English literature and different literary genres.
3. Demonstrate conceptual and textual understanding in exams
4. Prepare and present papers, and address the questions asked.
5. Contest in competitive examinations—written and interactive—related to teaching at all levels.

SEMESTER: II

DSC-1B (CC-2): Essay, Drama & Novel **Credits 06**

Course Contents:

1. George Orwell – "Shooting an Elephant'

2. R. K. Narayan – "A Library without Books"

3. George Bernard Shaw – *Arms and the Man*

Principal
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona :: Paschim Medinipur.

H.O.D. / Assistant Professor
Dept. of English
Chandrakona Vidyasagar Mahavidyalaya

4. J. B. Priestley – *An Inspector Calls*

5. Ernest Hemingway – *The Old Man and the Sea*

Course outcome:

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

1. Understand key concepts of 20th century fictional and non-fictional prose writings as well as drama included in the syllabus.
2. Account for the role of context(s) in the production, reception, and transmission of major literary works of this age
3. Prepare and present papers, and address the questions asked.
4. Demonstrate conceptual and textual understanding in exams
5. Contest in competitive examinations—written and interactive—related to teaching at all levels.

SEMESTER: III

DSC-1C (CC-3):: Contemporary India: women and empowerment   **Credits 06**

Course Contents:

1. Social Construction of Gender:

- Masculinity, Femininity

- Patriarchy

- Sex & Gender

- Gender Socialization

- Gender discrimination

- Gender stereotyping

Texts: (any one) Nivedita Menon : Sexualities: Issues in Contemporary Indian Feminisms (selections) Nivedita Menon : Gender and Politics in India (Selections)

2. History of Women's Movements in India (Pre- and Post-Independence):

- Women and Nationalism

- Women and Partition

- Women and Political Participation

Text: (any two)

1. "Letters to a Wife: Satyendranath Tagore's Letters to Jynadanandini Tagore" from Epistolary Cultures in 19 th century Bengal, StreeSamya, Kolkata,

2. Gholam Murshed "Chapter Four" from The Reluctant Debutante.

3. Urvashi Butalia 'Beginnings' from The Other Side of Silence

4. Jashodhara Bagchi and Shubharanjan Dasgupta. The Trauma and The Triumph:Gender and Partition in Eastern India,Vol I ("Introduction")

3. Women and Law:

- Women and the Indian Constitution

- Personal Laws

- Customary practices on inheritance and Marriage

Text: (Selections from any one text)

1. Flavia Agnes. Ed. Women and Law in India: An Omnibus Comprising

2. Flavia Agnes. Enslaved Daughters (selections).

3. Sudhir Chandra. Hindu Women and Marriage Law

4. MonomoyeeBasu. Law and Gender Inequality.

4. Women and Violence:

- State interventions

- Domestic violence

- Female foeticide

- Sexual harassment

Texts: (any one)

B.A GENERAL IN ENGLISH

PROGRAMME SPECIFIC OUTCOME

The programme:

❖ Enables students to develop an understanding of the evolution of language and culture through the study of literature.

❖ Imparts a holistic notion of social responsibility and well-being.

❖ Encourages students' critical thinking skills by encouraging them to analyse and interpret complex texts.

❖ Equips the students with the requisite skills to perform well in competitive exams.

❖ Enhances students' reading comprehension, analytical abilities, and written communication skills.

❖ Introduces works authored by and concerning Dalit and tribal communities, providing knowledge in the realm of unconventional aesthetics.

❖ Ensures acquaintance with various burgeoning fields of English Literature

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona :: Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of English

Course Outcomes(CO)

Of

Ability Enhancement Compulsory Course (AECC- Environmental Studies)

- ➢ The course will empower the undergraduate students by:
- ➢ Gaining in-depth knowledge on natural processes that sustain life
- ➢ Developing critical thinking for shaping strategies (scientific, social, economic and legal) for environmental protection and conservation of biodiversity sustainable development.
- ➢ Acquiring values and attitudes towards understanding complex environmental economic-social challenges, and participating actively in solving current environmental problems and preventing the future ones.
- ➢ Adopting sustainability as a practice in the life for community well being.

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Semanti Das
HEAD OF THE DEPARTMENT
DEPARTMENT OF GEOGRAPHY
Chandrakona Vidyasagar Mahavidyalaya

B. Sc. Honours in Geography

Programme Specific Outcomes(PSO)

Developing a strong foundation of Geo-tectonics, Geomorphology, Biogeography, Soil Geography, and instrumentation techniques and their applications to examine and appreciate the inherent complexity of landscape systems at the micro-level.

• Conceptualizing the basic atmospheric and climatic phenomena of the earth and their effect on man. Developing advanced level concepts of Remote Sensing and Geographical Information systems and their applications in present-day situations.

• Understanding the principles and applications of Hydrology and Oceanography to address water resource and environment-related problems. Conceptualizing the Social, Cultural, Political, and Settlement Geography and the ethical considerations associated with their environmental impact. Understanding the development of Geographical thought from the ancient period to recent times.

• Understanding and analyzing the ground reality through field visits and field surveys of the selected area which may be either an urban or rural area. Field visits or survey was done for obtaining the primary data through Household survey, Road survey, Physical setup, etc. of the selected area. A field book was prepared after analyzing data focusing on socio-economic conditions, land use& Land cover map of the surveyed area.

Course Outcomes(CO)

GEOHCC01

Geo-Tectonics and Geomorphology

Outcomes:

It helps to understand the formation of the earth,the arrangement, and structure of rock masses of the Earth's crust, and the natural processes which act on the Earth's surfaces.

Semanti Das

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

HEAD OF THE DEPARTMENT
DEPARTMENT OF GEOGRAPHY
Chandrakona Vidyasagar Mahavidyalaya

GEOHCC02

Cartographic Techniques lab

Outcomes:

It helps us to visualize spatial distributions and relationships

GEOHCC03

Human Geography

Outcomes:

It examines human societies and how they develop, their culture, economy, and politics, all within the context of their environment. It focused on the recent trend of demographical change and its effect on the socio-economic structure of the society.

GEOHCC04

Cartograms and Thematic Mapping +lab

Outcomes:

It helps to involve the superimposition of political, cultural, or other non-geographical divisions onto the representation of a geographical area. The map is produced in the lab.

GEOHCC05

Climatology

Outcomes:

This content is very much useful to understand the characteristics of all-weather elements. Global warming and other environmental issues are also focused by science.

GEOHCC06

Statistical methods in Geography

Outcomes:

It is applied in all fields of academic research; wherever data are collected and summarized or wherever any numerical information is analyzed.

Semanti Das

HEAD OF THE DEPARTMENT
DEPARTMENT OF GEOGRAPHY
Chandrakona Vidyasagar Mahavidyalaya

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Deptt. of
Geography
Dist.-Paschim
Medinipur
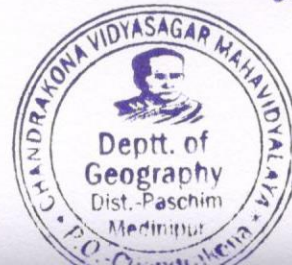
GEOHCC07

Geography of India

Outcomes:

It helps to know the physical, cultural, and economic aspects of the country. This is a very important subject to understand about our country.

GEOHCC08

Regional planning and development

Outcomes:

It helps to know the specific unique characteristics of places related to their culture, economy, topography, climate, politics, and environmental factors

GEOHCC09

Economic Geography

Outcomes:

It helps to know the spatial aspects of wealth and poverty, innovation and productivity, trade and exchange, and the world's non-random distribution of its physical and human resources. It focused on the spatial distribution of resources.

GEOHCC10

Environmental Geography +lab

Outcomes:

It describes the spatial aspects of interactions between humans and the natural world or the Ecology of the natural environment.

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Semanti Das
HEAD OF THE DEPARTMENT
DEPARTMENT OF GEOGRAPHY
Chandrakona Vidyasagar Mahavidyalaya

GEOHCC11

Field work and Research Methodology +lab

Outcomes:

Fieldwork provides an opportunity for students to develop their sensitivity to and appreciation of a wide range of different environments. Research methodology helps to identify, select, process, and analyze information about a topic.

GEOHCC12

Remote sensing and GIS +lab

Outcomes:

It helps to acquire details about an object without physical on-site observation using satellite or aircraft.

GEOHCC13

Evolution of Geographical thought

Outcomes:

It emphasizes the importance of geographic thought and its relevance to our understanding of what it is to be human, and to the people, places, and cultures of the world in which we live.

GEOHCC14

Disaster Management +Project work

Outcomes:

It helps to build an appreciation for the challenges and complexities involved in Disaster Management and should encourage students to reflect and spur creative ways for solving community problems.

Semanti Das

HEAD OF THE DEPARTMENT
DEPARTMENT OF GEOGRAPHY
Chandrakona Vidyasagar Mahavidyalaya

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur
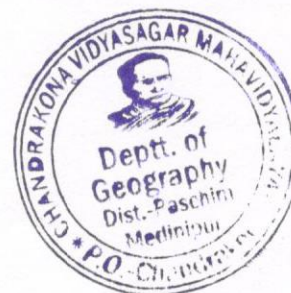
GEOHGE01

Disaster Management

Outcomes:

It helps to build an appreciation for the challenges and complexities involved in Disaster Management.

GEOHGE02

Geospatial Technology

Outcomes:

Geospatial technology enables to acquisition of data that is referenced to the earth and use it for analysis, modeling, simulations and visualization.

GEOHGE03
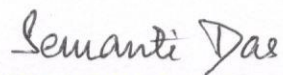
Geography of Tourism

Outcomes:

It helps to know about the spatial and temporal dynamics, as well as the interactions between the tourism resources and the students will be able to find out new eco tourist spot of their locality.

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Semanti Das
HEAD OF THE DEPARTMENT
DEPARTMENT OF GEOGRAPHY
Chandrakona Vidyasagar Mahavidyalaya
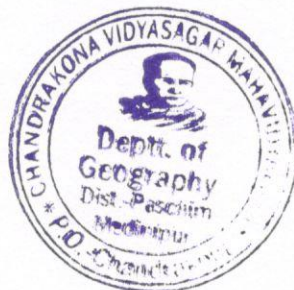
B. Sc. Honours in Geography (3 Tier)

Programme Specific Outcomes(PSO)

By the end of the program UG in Geography, the student will be able to know the following through their syllabus oriented several topics. ;-

• Developing a strong foundation of Geo-tectonics, Geomorphology, Biogeography, Soil Geography, and instrumentation techniques and their applications to examine and appreciate the inherent complexity of landscape systems at the micro-level.

• Conceptualizing the basic atmospheric and climatic phenomena of the earth and their effect on man. Developing advanced level concepts of Remote Sensing and Geographical Information systems and their applications in present-day situations.

• Understanding the principles and applications of Hydrology and Oceanography to address water resource and environment-related problems. Conceptualizing the Social, Cultural, Political, and Settlement Geography and the ethical considerations associated with their environmental impact. Understanding the development of Geographical thought from the ancient period to recent times.

• Understanding and analyzing the ground reality through field visits and field surveys of the selected area which may be either an urban or rural area. Field visits or survey was done for obtaining the primary data through Household survey, Road survey, Physical setup, etc. of the selected area. A field book was prepared after analyzing data focusing on socio-economic conditions, land use& Landcover map of the surveyed area.

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Semanti Das
HEAD OF THE DEPARTMENT
DEPARTMENT OF GEOGRAPHY
Chandrakona Vidyasagar Mahavidyalaya
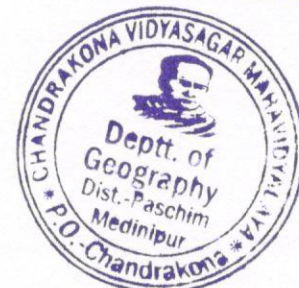
Course Outcome (CO)

GEOH01 Theoretical Geo-tectonics, Geomorphology, Hydrology and Oceanography.

Outcomes:-

¬ Students will be able to learn about the formation of earth surface.

¬ Students will be able to learn about various geomorphic features and their formation over the earth surface.

¬ Students will understand about global hydrological cycle and its importance.

¬ Surface run-off, infiltration, percolation, ground water recharge, aquifer etc. will be clearly understood by the students through this paper.

¬ Various types of diastrophisms and the reasons, behind it will be learned by the students.

¬ Students will be able to know about the oceanic resources, various types of tide, oceanic surface characteristics etc. through this paper.

GEOH02 Theoretical Economic, Social, Cultural and Political Geography

Outcomes:-

• Students will be able to differentiate various economic activities.

• Students will know about Resource Concept and classification.

• Students will be able to know about the geographical distribution of various resources and also know its utilities towards mankind.

• Through the paper of social geography students will know about various social process and how these are acting over society. Course Outcome (CO)

• Social groups, social behaviours and contemporary social environmental issues (Poverty, pogrom and crime) will be understood by the students in our country.

• Students will know about the interrelationship between global politics and geography.

Semanti Das

HEAD OF THE DEPARTMENT
DEPARTMENT OF GEOGRAPHY
Chandrakona Vidyasagar Mahavidyalaya

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur
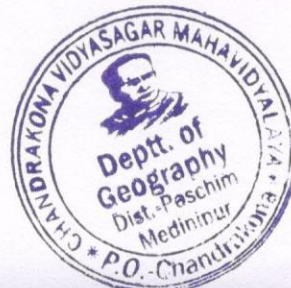
GEOH03 Theoretical Climatology, Soil Geography & Bio-Geography

Outcomes:-

¬ Students will be able to know about various weather elements and its importance. ¬ Students will be known about the formation of cloud, raindrop, and various weather phenomena.

¬ Students will be understood about soil formation, soil characteristics, and various types of soil.

¬ By the paper of Bio- Geography students will learned about eco-system, bioms, eco-tone, ecosystem mechanism etc.

GEOH04 Theoretical Geographical Thought and Geography of India

Outcomes:-

♣ Geographical thought; this paper deals with the historical background of ancient, medieval, classical, modern, and post-modern geographical evoluation.so, through this paper students will be learned about evolution of geography with time.

♣ Geography of India examines the physical and cultural set up all over the India. Students could be understood about the physical and cultural phenomena of their country.

GEOH05 Practical Applied & Analytical Geographical Techniques (Scale, Geological Map, Map Projection Survey, Rocks and Mineral Identification)

Outcomes:-

¬ Students will be able to construct various types of scale like linear, diagonal, vernier, and learned about their usages.

¬ Students will able to construct different types of map projection their utility by Map projection practical paper.

¬ Students will be able to identify various types of rocks and minerals.

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Semanti Das

HEAD OF THE DEPARTMENT
DEPARTMENT OF GEOGRAPHY
Chandrakona Vidyasagar Mahavidyalaya

Deptt. of
Geography
Dist.-Paschim
Medinipur
P.O.-Chandrakona
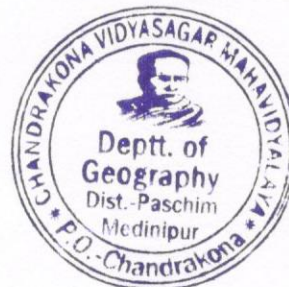
GEOH06 Theoretical Remote Sensing and GIS, Population Geography Settlement and Regional Planning

Outcomes:

• Students will be able to know about this modern tools of geography. They also know about various satellite, and their function.

• Students will know about the utilities of G.I.S.

• Population geography will be helpful to the students to know about the demographical aspects of India as well as the world.

GEOH07 Practical Cartographic Techniques in Geography [Topographical Map, Analysis of Climatic Data and Maps, Laboratory Works (Barometer, Soil texture and pH) and Survey Schedule, Cartograms.)

Outcome

¬ This practical will be helpful to the students about to analysis of topographical map, climatic data.

¬ Students will learn to construct different cartograms and do measure the soil characteristics by using soil kits instruments.

GEOH08 Practical Modern Geographical Techniques, Field Report and Remote Sensing and GIS (Statistical Techniques, Field Report and Remote Sensing and GPS)

Outcome

•Students will learn about use of different cartographic techniques.

• Students will learn about different statistical methods and diagrams and use it for interpretation of geographical data.

• Students will be learned about the importance of field excursion and how to acquired primary data through household survey. They can able to prepare field book.

• Students can able to use different remote sensing and G.I.S software for preparation of map.

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Semanti Das
HEAD OF THE DEPARTMENT
DEPARTMENT OF GEOGRAPHY
Chandrakona Vidyasagar Mahavidyalaya

B. Sc. General in Geography

Programme Specific Outcomes(PSO)

By the end of the program B. Sc. General in Geography the student will be able to:

• Developing a strong foundation of Geo-tectonics, Geomorphology, Biogeography, Soil Geography, and instrumentation techniques and their applications to examine and appreciate the inherent complexity of landscape systems at the micro-level.

• Conceptualizing the basic atmospheric and climatic phenomena of the earth and their effect on man. Developing advanced level concepts of Remote Sensing and Geographical Information systems and their applications in present-day situations.

• Understanding the principles and applications of Hydrology and Oceanography to address water resource and environment-related problems. Conceptualizing the Social, Cultural, Political, and Settlement Geography and the ethical considerations associated with their environmental impact. Understanding the development of Geographical thought from the ancient period to recent times.

• Understanding and analyzing the ground reality through field visits and field surveys of the selected area which may be either an urban or rural area. Field visits or survey was done for obtaining the primary data through Household survey, Road survey, Physical setup, etc. of the selected area. A field book was prepared after analyzing data focusing on socio-economic conditions, land use& Land cover map of the surveyed area.

Course Outcomes(CO)

GEOGCC01

Physical Geography:-

Outcomes

This study is very important to understand about our planet.

GEOGCC02

Human Geography:-

Outcomes

It examines human societies and how they developed, their culture, economy and politics, all within the context of their environment.

Semanti Das

HEAD OF THE DEPARTMENT
DEPARTMENT OF GEOGRAPHY
Chandrakona Vidyasagar Mahavidyalaya

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

GEOGCC03

Maps and Diagrams:-..

Outcomes

It involve the superimposition of political, cultural, or other non-geographical divisions onto the representation of a geographical area.

GEOGCC04

Environmental Geography:-

Outcomes

It describes the spatial aspects of interactions between humans and the natural world.

GEOGSE01

Remote sensing:-

Outcomes

It is the process of acquiring details about an object without physical on-site observation using satellite or aircraft.

GEOGSE02

Computer basics:-.

Outcomes

It has enriched the discipline of geography with the development of automated geography,

GEOGSE03

Remote Sensing and GPS based Project Report:-

Outcomes

It enables the user to determine very accurate locations on the surface of the Earth.

GEOGSE04

Field Techniques and Survey based Project Report:-

Outcomes

Fieldwork provides an opportunity for students to develop their sensitivity to and appreciation of a wide range of different environments.

GEOGDS01

Geography of India:-

Outcomes

It helps to know the physical, cultural and economic aspect of the country.
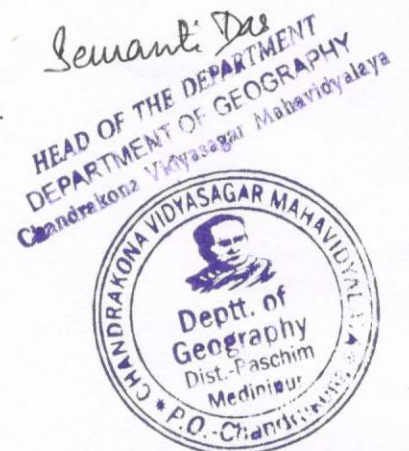
GEOGDS02

Economic Geography:-

Outcomes

It helps to know the spatial aspects of wealth and poverty, innovation and productivity, trade and exchange, and the world's non-random distribution of its physical and human resources.
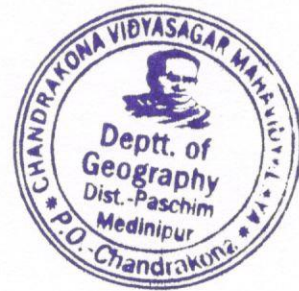
B. Sc. General in Geography (3 Tier)

Programme Specific Outcomes(PSO)

Geography deals with the relationship between man and the environment. There are so many things in nature that are built up through various processes. Diastrophism is the main force behind it. Besides natural phenomena so many cultural elements also are understood if we want to understand the role of human beings in this relationship. The present syllabus also contains so many applied techniques like Remote sensing, G.I.S, etc. These modern tools of geography also are very helpful to the students to understand and measure the nature under which they lived. By the end of the program UG in Geography, the student will be able to know the above through their syllabus oriented several topics.

Course Outcomes(CO)

Part -I GEOG01: Theoretical Physical geography

Outcomes:-

Students will be able to learn about the formation of earth surface.

Students will be able to learn about various geomorphic features and their formation over the earth surface.

¬ Students will understand about global hydrological cycle and its importance.

¬ Surface run-off, infiltration, percolation, ground water recharge, aquifer etc. will be clearly understood by the students through this paper.

¬Various types of diastrophisms and the reasons, behind it will be learned by the students.

¬ Students will be able to know about the oceanic resources, various types of tide, oceanic surface characteristics etc. through this paper.

Part -II GEOG02 Theoretical Geographical Thought, Economic and Human Geography

Outcomes:-

♣ Geographical thought; this paper deals with the historical background of ancient, medieval, classical, modern, and post-modern geographical evoluation.so, through this paper students will be learned about evolution of geography with time.

♣ Geography of India examines the physical and cultural set up all over the India. Students could be understood about the physical and cultural phenomena of their country.

♣ Students will be able to differentiate various economic activities.

♣ Students will know about Resource Concept and classification.

Principal
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

HEAD OF THE DEPARTMENT
DEPARTMENT OF GEOGRAPHY
Chandrakona Vidyasagar Mahavidyalaya

♣ Students will be able to know about the geographical distribution of various resources and also know its utilities towards mankind.

♣ Population geography will be helpful to the students to know about the demographical aspects of India as well as the world

♣ Students will be able to differentiate various economic activities.

♣ Students will know about Resource Concept and classification.

♣ Students will be able to know about the geographical distribution of various resources and also know its utilities towards mankind.

♣ Through the paper of social geography students will know about various social process and how these are acting over society.

♣ Social groups, social behaviours and contemporary social environmental issues (Poverty, pogrom and crime) will be understood by the students in our country.

GEOG03 Practical Cartographic Techniques in Geography Practical V

¬ Students will be able to construct various types of scale like linear, diagonal, vernier, and learned about their usages.

¬ Students will able to construct different types of map projection their utility by Map projection practical paper.

¬ Students will be able to identify various types of rocks and minerals.

Outcomes:

• Students will be able to know about this modern tools of geography. They also know about various satellite, and their function.

• Students will know about the utilities of G.I.S.

• Population geography will be helpful to the students to know about the demographical aspects of India as well as the world.

PART – III GEOG04 Applied Geography, Remote Sensing and GIS

• Students will learn about use of different cartographic techniques.

• Students will learn about different statistical methods and diagrams and use it for interpretation of geographical data.

• Students will be learned about the importance of field excursion and how to acquired primary data through household survey. They can able to prepare field book.

• Students can able to use different remote sensing and G.I.s software for preparation of map.

Semanti Das

HEAD OF THE DEPARTMENT
DEPARTMENT OF GEOGRAPHY
Chandrakona Vidyasagar Mahavidyalaya

Principal
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

B.A. Honours in History

Programme-Specific Outcome (PSO)

After the completion of the UG honours programme in history, students will be able to

- Understand various perspectives on civilization.
- Appreciate the notions of liberty, equality, and fraternity as a civilizational basis for the modern democratic order.
- Analyse the political, social, economic, and cultural aspects of a historical phenomenon.
- Understand and appreciate the forces of change and the forces of continuity in a given society.
- To pursue his higher studies in history, archaeology, museology, and public administration for international relationships.
- Pursue his higher studies in the field of journalism and public relations.
- complete in government services like WBCS, IAS, IPS, IFS, etc., Or seek a career in the travel and tourism sector.

Course Outcome (CO)

HISHCC01: Greek and Roman Historians

Unit I

Module I: Greek Historiography

- A new form of inquiry (historia) in Greece in the sixth century BCE
- Students will learn what history is and its origin.
- They will learn about different views on the development of historical thinking.

Module II: Herodotus and His Histories

- They will learn different methods of history writing.

Module III: Thucydides, the founder of scientific history writing

- They will learn what scientific history writing is.
- Students will learn about a comparative study of Greek historians.

Module IV: The Next Generation of Greek Historians

- Here they will learn different views on Greek historians.

Module IV: The Next Generation of Greek Historians

- Here they will learn different views on Greek historians.

Principal
Chandrakona Vidyasagar Mahavidyalaya
Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of History
Chandrakona Vidyasagar Mahavidyalaya

Unit II Roman Historiography

Module I: Development of Roman Historiographical Tradition

- They will acquire knowledge of different aspects of Roman historiography.

Module II: Imperial historians

- Students will learn the origins of Imperial history.
- They will acquire knowledge about Roman history and its historians.

Module III: Historical Methods in Ancient Rome

- They will learn about the different methods of history writing in ancient Rome.

HISHCC02: Early Historic India (protohistory to the 6th century B.C.)

Unit I

Module I: Understanding Early India

- The students in this department will have deep knowledge of the idea of Bharat Varsha.
- They will learn different theories and interpretations about the Indian past.
- They will have a wide knowledge of the literary and archaeological sources of ancient Indian history.

Module II: Neolithic to Chalcolithic Settlements

- The students in this department will be well informed about the different stages of early civilization.
- They will learn about the different aspects of Harrapan civilization, its formation, and its downfall.

Module III: The Aryans in India: Vedic Age

- Students will learn the historiography of the concept of 'Aryan."
- They will be aware of the political development, culture, and rituals of Aryan culture.

Module IV: North India in the sixth century BCE

- They will learn about the formation of kingdoms, clans, and oligarchies.
- They will get a brief knowledge of the emergence of Magadha as an empire.

Unit II

Module I: Ideas and Institutions in Early India

- Students will gain knowledge about the roots of casteism.
- They will learn about the condition of women and society in the ancient past.

Module II: Cults, doctrines, and metaphysics

- Here, the students will be aware of the different cults and their doctrines.

Module III: Aspects of the Economy in the Age of Buddha

- The module helps the students understand the economic changes in the ancient past and how the second urbanisation took place.

Module IV: The cultural milieu

- This module helps the students develop their knowledge about ancient science, technology, language, and literature.

HISHCC03: Mauryan and Gupta Empires

- The students will get to know a brief history of the Magadha Empire, its formation, and its downfall.
- They will learn about the post-Maurya developments in politics and society.
- Here, we also focused on the brief history of the empirical Guptas, their politics, and their culture.

HISHCC04: Political History of Early Mediaeval India (600 AD to 1200 AD)

- Students will learn the sources of the early mediaeval history of India.
- They will be aware of the regional culture of early mediaeval India.
- They will get a brief knowledge of the early history of South India.
- They will also learn about the feudal character of Indian politics.
- They will be taught how political changes took place in late mediaeval India.
- They will also be taught how a centralised military power like the Cholas emerged as an empire.

HISHCC05: Delhi Sultanate

- The students of our department will learn the sources of the history of the Delhi Sultanate.
- They will also gain a brief knowledge of the socio-political, economic, and cultural history of the Sultanate.

Principal
Chandrakona Vidyasagar Mahavidyalaya
Paschim Medinipur

Manmohan Guru
H.O.D. / Assistant Professor
Dept. of History
Chandrakona Vidyasagar Mahavidyalaya

- They will be taught that the regional state emerged as a political power in the said period.
- They also taught about the religion, society, and culture of the period.

HISHCC06: The Feudal Society

- The students of our department will learn the basic characteristics of a feudal society.
- They will be taught the origins of feudal society in Europe.
- They will learn about the socio-economic conditions in feudal societies.
- They will be taught how cultural changes took place in feudal society.

HISHCC07: Akbar and the Making of Mughal India

- The students will be taught the historiographical sources of Mughal India.
- They will learn about the foundation and formation of Mughal India.
- They will learn about the rural society and economy of Mughal India.
- They will also learn about the religious and cultural dimensions of Mughal India.

HISHCC08: Renaissance and Reformation

- The students will be taught here what the Renaissance and Reformation are.
- They will learn about the background of the Renaissance and Reformation.
- They will be taught about the impact of the Renaissance on world politics.
- They will gain a brief knowledge of secular culture and society.

HISHCC09: The French Revolution and Napoleon Bonaparte

- Here, the student will gain knowledge of the historiography of the French Revolution.
- They will learn how several crises led to the revolution.
- They will learn about the rise of Napoleon and his empire.
- They will be taught about the impact of the revolution outside of France.

HISHCC10: 19th-Century Revolutions in Europe

- Here the students will get a brief knowledge of world politics after Napoleon.
- They will learn how the concept of nationalism emerges in world politics.
- They will learn about the transformation in society and economy in nineteenth-century Europe.

HISHCC11: Select Themes in the Colonial Impact on Indian Economy and Society

- The students are taught here about Colonial State institutions and ideologies.
- They will learn the colonial policies used to extort the Indian economy.
- They will learn about reformism and revivalism in Hindu culture.
- We take a look at Islamic reform in India.

HISHCC12: Peasant and Tribal Uprisings in Colonial India in the 19th Century

- Here the lectures are delivered on early colonial rule and revenue operations, revenue demands, and settlements.

Principal
Chandrakona Vidyasagar Mahavidyalaya
Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of History
Chandrakona Vidyasagar Mahavidyalaya

- They will learn how the tribal and peasant movements developed in the early colonial period.
- They will learn about the peasant movements in the late 19th century and the conflict between landlords and tenants.
- We also take a look at the revolutionary potential of the Indian peasantry.

HISHCC13: International Relations after the Second World War

- The students will get to know various viewpoints on international relations.
- They will appreciate India's role as a non-aligned country in international relations.
- They will get to know the different stages of the Cold War and its aftermath.
- They will understand the intricacies and new challenges of the new world order since the fall of the Soviet Union.

HISHCC14: Modern Nationalism in India

- Here we deal with the emergence of nationalism in India and its historiography.
- The students will get a brief knowledge of Gandhian mass movements—non-cooperation, civil disobedience, and the Quit India Movement.
- They will be taught the Roots of Communalism and the Community Award.
- They will be taught how the Pakistani demand took root.
- They will learn about the partition and its aftermath.

HISHDS01: Modern Transformation of China (1839–1949)

- Students in the department will learn about the Modern Transformation of China (1839–1949).

HISHDS02: The Modern Transformation of Japan

- Students in the department will have a comprehensive understanding of the modern transformation of Japan.

HISHDS03: War and Diplomacy, 1914-1945

- The students of the department will learn about war and diplomacy, 1914–1945.
- They will get to know about the fallout of the failure of diplomacy and democracy.

HISHDS04: Pre-colonial South-East Asia

- Students will learn the history of pre-colonial Southeast Asia.
- They will get to understand the closeness of Indian civilization to Southeast Asian culture.

Principal
Chandrakona Vidyasagar Mahavidyalaya
Paschim Medinipur

Manmohan Guru
H.O.D. / Assistant Professor
Dept. of History
Chandrakona Vidyasagar Mahavidyalaya

HISHSE01: Literature and History: Bengal

- Students will learn the relationship between history and literature.
- They will be acquainted with the major Bengali novels that have historical bearings on 19th and 20th century society and politics..
- They will appreciate the different notions of nationalism and internationalism.

HISHSE02: The Making of Indian Foreign Policy

- Students will acquire knowledge about the making of Indian foreign policy.
- They will appreciate India's role as a non-aligned country in international relations.

HISHGE01: Theories of the Modern State

- Students will get to know the origins of the modern state and its main features.
- They will appreciate the notions of liberty, equality, and justice.

HISHGE02: Science and Empire

- Students will understand how the spread of modern science under colonial aegis helped the colonial rulers exploit the colony.
- They will understand the sociological perspectives on modern science.
- They will appreciate the contributions of indigenous scientists to the development of national science.
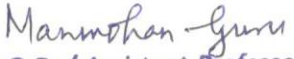
HISHGE03: Some Perspectives on Women's Rights in India

- Students will appreciate the struggle of women to secure their rights in India.
- They will learn about various laws protecting women's rights in India.
- They will understand the limitations of laws and form opinions about what more can be done.

HISHGE04: Gender and Education in India

- Students will understand the limited scope of women's education in the ancient and mediaeval periods.
- They will understand the background and the reasons for the development of girls' schools and women's colleges since the 19th century.
- They will appreciate the roles of personalities like Bethune, Vidyasagar, Rokeya, and Sakhawat in the sphere of women's education.
- They will become aware of the limitations and obstacles to women's education that they must overcome.

Principal
Chandrakona Vidyasagar Mahavidyalaya
Paschim Medinipur

Manmohan Guru
H.O.D. / Assistant Professor
Dept. of History
Chandrakona Vidyasagar Mahavidyalaya

B.A. General in History

Programme-Specific Outcome (PSO)

After the completion of the UG honours programme in history, students will be able to

- Understand various perspectives on civilization.
- Appreciate the notions of liberty, equality, and fraternity as a civilizational basis for the modern democratic order.
- Analyse the political, social, economic, and cultural aspects of a historical phenomenon.
- Understand and appreciate the forces of change and the forces of continuity in a given society.
- Pursue higher studies in history, archaeology, museology, and public administration for international relationships.
- Go for a B.Ed., D.Ed., or MBA.
- pursue his higher studies in the fields of journalism and public relations.
- Complete government services like WBCS, IAS, IPS, IFS, etc., or seek a career in the travel and tourism sector.

Course Outcome (CO)

HISGCC01: Ancient India

- Students will learn about prehistoric times in the Indian subcontinent.
- They will learn about ancient Indian political, social, economic, and cultural history.
- They will understand that ancient Indian society was not static.
- They will be able to appreciate the high culture of the classical age of ancient India.
- They will understand that India was a multireligious country even before the advent of Islam in the subcontinent.

HISGCC02: Mediaeval India

- Students will learn about the political history of the Sultanate and Mughal rule in India.
- They will be able to appreciate the high Persianate culture of mediaeval times.
- They will be able to analyse the economic and social conditions of the pre-modern states that rose on the pillars of agricultural growth.
- They will be able to discern the areas of conflict and the areas of confluence between Indian and Perso-Islamic cultures.

HISGCC03: Select themes in the Colonial Impact on Indian Economy and Society

- Students will be able to analyse the character of British colonialism.

Principal
Chandrakona Vidyasagar Mahavidyalaya
Paschim Medinipur

Manmathan Guru
H.O.D. / Assistant Professor
Dept. of History
Chandrakona Vidyasagar Mahavidyalaya

- They will realise how India was economically drained by the British empire.
- They will be able to analyse how the Indians reacted to British rule and their ideology.
- They will learn about the influences that shaped modern Hindu and Muslim minds.

HISGCC04: Modern Nationalism in India

- They will learn about the various approaches to the study of modern nationalism in India.
- They will be able to distinguish different phases and trends in the anti-colonial struggle in India.
- They will be able to see many voices from Indian society from a different perspective.
- They will be able to trace the origins of communalism in India and analyse how India was partitioned.

HISGDS1A: Renaissance and Reformation

- Students will learn about the political, economic, and socio-cultural developments in pre-modern Europe.
- They will learn about the renewed interest in the works of antiquity.during the Renaissance and how it shaped the modern mind.
- They will learn about the religious reformation in Europe.
- They will become aware of the dangers of the persecuting spirit of religious enthusiasm.
- They will learn about the development of national monarchies and modern states.
- They will be able to trace the origins of the scientific revolution and its impact.

HISGDS1B: Modern Europe

- Students will come to know the meaning and impact of the Enlightenment.
- They will learn about the great Bourgeois Revolution in France in 1789.
- They will learn about the rise and fall of Napoleon.
- They will be able to analyse the interplay of forces of change and forces of continuity in 19th-century Europe and the resultant liberal revolutions.
- They will learn about the causes and process of industrialization in England and its differences from those in Europe.
- They will be able to analyse the failure of diplomacy and the causes of the First and Second World Wars.
- They will realise the dangers the totalitarian powers pose to civilization.

HISGSE01: The Making of Indian Foreign Policy

- Students will acquire knowledge on the making of Indian foreign policy.
- They will appreciate India's role as a non-aligned country in international relations.

Principal
Chandrakona Vidyasagar Mahavidyalaya
Paschim Medinipur

Manmohan Guru
H.O.D. / Assistant Professor
Dept. of History
Chandrakona Vidyasagar Mahavidyalaya

HISGSE02: Literature and History: Bengal

- Students will learn the relationships between history and literature.
- They will be acquainted with the major Bengali novels that have historical bearings on 19th and 20th century society and politics.
- They will appreciate the different notions of nationalism and internationalism.

HISGSE03: Colonial Science in India: Institutions and Practises

- Students will understand how the spread of modern science under colonial aegis helped the colonial rulers exploit the colony.
- They will understand the sociological perspectives on modern science.
- They will appreciate the contributions of indigenous scientists to the development of national science.

HISGSE04: Art appreciation: an introduction to Indian art

- Students will learn about the essence of Indian art.
- They will be able to appreciate the aesthetic quality of new modern art and its relation to nationalism in Bengal.
- They will understand and value the tradition of folk art in India.

HISGGE01: Theories of the Modern State

- Students will get to know the origins of the modern state and its main features.
- They will appreciate the notions of liberty, equality, and justice.

HISGGE02: Gender and Education in India

- Students will understand the limited scope for women's education in the ancient and Middle Ages.
- They will understand the background to and the reasons for the development of girls' schools and women's colleges since the 19th century.
- They will appreciate the roles of personalities like Bethune, Vidyasagar, Rokeya, and Sakhawat in the sphere of women's education.
- They will become aware of the limitations and obstacles to women's education and overcome them.

HISGGE02: Some Perspectives on Women's Rights in India

- Students will appreciate the struggle of women to secure their rights in India.
- They will get to know the various laws protecting women's rights in India.

Principal
Chandrakona Vidyasagar Mahavidyalaya
Paschim Medinipur

Manmohan Guru
H.O.D. / Assistant Professor
Dept. of History
Chandrakona Vidyasagar Mahavidyalaya

- They will understand the limitations of laws and form an opinion about what more can be done.

B. Sc. Honours in Mathematics

Programme Specific Outcome (PSO)

By the end of the program UG in Mathematics, the student will be able to:

- Demonstrate in-depth knowledge in one of the foundational areas of the mathematical sciences.
- Communicate mathematical ideas using numerical, graphical, and symbolic representations.
- Construct abstract models using appropriate mathematical and statistical tools.
- Analyze, test, and interpret technical arguments, and form independent judgments.
- Solve complex problems by identifying feasible divisions into simpler sub-problems.
- Gather and organize relevant qualitative and quantitative information such as related problems, examples, and counterexamples.
- To improve their performance in math competitions (like IIT-JAM, NBHM, CSIR- NET), as well as their general mathematical skills if math competitions are not their main goal their higher studies.

Principal
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Chotan Roy
S.A.C.T-I
Dept. of Mathematics

Course Outcome (CO)

MTMHCC01: Calculus, Geometry & Differential Equation

Outcomes:
Calculus:

- Students will be able to differentiate a function successively.
- Students will be able to integrate functions like $\sin^n x$, $\cos^n x$,... by applying the reduction formula.
- Students will learn about the hyperbolic function, concavity, and inflection points.
- Students will be able to find envelopes and asymptotes of a curve.
- Students will know and indeterminate form and be able to solve this type of problem.
- Students will be able to sketch graphs of various curves.
- Students will be able to obtain the surface of the revolution of curves.

Geometry:

- Students will be able to classify the conics with the help of a determinant and find their canonical forms.
- Students will have clear concepts about the polar coordinate section.
- Students will know about conicoid in three dimensions and be able to solve various problems regarding conicoids.

Differential equation:

- Students will be able to formulate differential equations from various practical problems and solve them.
- Students will be able to solve various types of differential equations of 1st order.
  - Students will be able to sketch ellipsoid, hyperboloid of one and two sheets, ellipticcone, elliptic, paraboloid, and hyperbolic paraboloid using cartesian coordinates.

MTMHCC02: Algebra

Outcomes:

- Students will be able to know about the polar form of a complex number and be experts in solving problems of complex numbers in polar form.
- Students will be experts in solving an algebraic equation up to degree 4 and able to solve various inequality problems
- Students will know about equivalence relations and their properties.
- Students will know about functions, the composition of functions, Invertible functions, one-to-one correspondence, and the cardinality of a set.
- Students will know about the fundamental theorem of arithmetic.
- Students will be able to solve a system of linear equations.
- Students will know the fundament definition and ideas of linear transformations.

Chotan Roy
S.A.C.T-I
Dept. of Mathematics

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

MTMHCC03: Real Analysis

Outcomes:
- Students will know the fundamental topological concepts and many properties of realnumber systems.
- Students will know about sequence and infinite series of real numbers and be able to solve problems regarding sequence and series.

MTMHCC04: Differential Equations & Vector Calculus

Outcomes:
- Students will able to solve differential equations 2nd order and know about the power series solution of a differential equation.
- Students will obtain the basic concepts of vector differentiation and integration.

MTMHCC05: Theory of Real Functions & Introduction to Metric Space

Outcomes:
- Students will know the concept and various theorems on limit, continuity, and differentiation of a real function and can solve various problems regarding this.
- Students will obtain the basic concepts of metric space and its properties.

MTMHCC06: Group Theory 1

Outcomes:
- Students will know the concept, definitions, and various theorems on Group, subgroup, centralizer, normalizer, center of the group, cyclic group, permutations, normal subgroups, factor group, and external and internal direct product of groups.
- Students will also be able to solve various problems on the aforesaid topics.
- Students will know the definitions, properties, and various problems on homomorphism, isomorphism, and automorphism.
- Students will learn First, Second, and Third isomorphism theorems with their proof.

MTMHCC07: Numerical Methods

Outcomes:
- Students will know about rounding off a number and possible errors regarding round-off.
- Students will be able to solve various types of equations, differentiate and integrate various functions and solve various differential equations by numerical methods.
- Students will be able to solve the above problems by C++ programming in the departmental lab.

Chotan Roy
S.A.C.T-I
Dept. of. Mathematics

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Madinipur

MTMHCC08: Riemann Integration and Series of Functions

Outcomes:
- Students will know the concept, definitions, and various theorems on Riemann and Improper integral and can integrate various functions by those methods.
- Students will know about the sequence of functions, series of functions, power series, and Fourier series and can solve various problems.

MTMHCC09: Multivariate Calculus

Outcomes:
- Students will know about the difference between derivation and differentiation.
- Students will be experts in calculating double and triple integrals by the calculus method and vector method.
- Students will be experts in calculating area, surface, and volume by integration method.
- Students will know the relation between single, double, and triple integral.

MTMHCC10: Ring Theory and Linear Algebra I

Outcomes:
- Students will know definitions, examples, and properties of the ring, integral domain, field, subring, ideals, and factor ring.
- Students will know the basic concept of vector space.
- Students will be able to know the isomorphism in linear transformation.

MTMHCC11: Partial Differential Equations &Applications

Outcomes:
- Students will know the basic concept of vector space.
- Students will know the basic concept of the partial differential equation.
- Students will be able to solve various types of 1st order partial differential equations and some special types of 2nd order partial differential equations like Wave equation, Heat equation, Cauchy problem, Semi-infinite string problem, etc.
- Students will know the basic concept of a central force, constrained motion, tangential and normal components of accelerations and velocity, planetary motion, and Keplar's law.

MTMHCC12: Group Theory II

Outcomes:

Chotan Roy
S.AC.T-I
Dept. of Mathematics

- Students will know details about the automorphism group and properties of external and internal direct products.
- Students will learn about group action, p-group, Sylow's theorem, and Cauchy theorem.

MTMHCC13: Metric Spaces and Complex Analysis

Outcomes:
- Students will know details about convergence in metric space, limit, and continuity in metric space.
- Students will learn about the analytic function and its properties.
- Students will learn about various types of infinite series of a complex number and can solve problems from these chapters.

MTMHCC14: Ring Theory and Linear Algebra II

Outcomes:
- Students will know about polynomial rings and their properties.
- Students will know about dual space and inner product space in vector space.

MTMHSEC01: Logic and Sets

Outcomes:

- Students will know about truth table, negation, conjunction, disjunction, implications, biconditional propositions, converse, contrapositive, and inverse propositions, and precedence of logical operators.
- Student will learn about Propositional equivalence and Predicates and quantifiers.
- Students will be able to know the definitions and properties of sets, subsets, finite sets, empty sets, classes of sets, and the power set of a set.
- Students can solve various problems on difference and symmetric difference of two sets, union, and intersections of sets, and relations.

MTMHSEC02: Graph Theory

Outcomes:
- Students knows about definition, examples and basic properties of graphs, pseudo graphs, complete graphs, bipartite graphs isomorphism of graphs.
- Student will learn about Eulerian circuits, Eulerian graph, semi-Eulerian graph, theorems, Hamiltonian cycles, theorems Representation of a graph by matrix, the adjacency matrix, incidence matrix, weighted graph.

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Chotan Roy
S.A.C.T-I
Dept. of Mathematics

- Student will learn about Travelling salesman's problem, shortest path, Tree and their properties, spanning tree, Dijkstra's algorithm, Warshall algorithm.

MTMHDSE01: Linear Programming

Outcomes:
- Students will learn the definition and formation of linear programming problem.
- Students can find various types of solutions of an LPP by graphical approach, simplex method, two-phase method and Big-M method.
- Students can learn about the convex sets, duality, formulation of the dual problem, primal-dual relationships, economic interpretation of the dual.
- Student can find the solution of transportation problem(using Vogal approximation method), assignment problem(using Hungarian method).
- Student will learn the formation of two person zero sum Games, solving two person zero sum Games, graphical solution procedure of Games, linear programming solution of games.

MTMHDSE02: Probability & Statistics

Outcomes:
- Student will learn about Sample space, Probability axioms, Real random variables (discrete and continuous), cumulative distribution function, probability mass/density functions, mathematical expectation, moments, moment generating function, characteristic function, discrete distributions: uniform, binomial, Poisson, geometric, negative binomial, continuous distributions: uniform, normal, exponential.
- Students can solve problems on Joint cumulative distribution function and its properties, joint probability density functions, marginal and conditional distributions, the expectation of a function of two random variables, conditional expectations, independent random variables, bivariate normal distribution, correlation coefficient, joint moment generating function and calculation of covariance, linear regression for two variables.
- Students will learn about Chebyshev's inequality, (weak) law of large numbers and strong law of large numbers, the Central limit theorem for independent and identically distributed random variables with finite variance, Markov chains, Chapman- Kolmogorov equations, and classification of states.
- Students can solve problems on Random Samples, Sampling Distributions, Estimation of parameters, and Testing of hypotheses.

MTMHDSE03: Mechanics

Outcomes:
- Student will learn about Co-planar forces, Astatic equilibrium, friction, virtual work, forces in three dimensions, center of gravity of a body, stable and unstable equilibrium.
- Student will learn equation of motion referred o a set of rotating axes, motion of a projectile in a resisting medium, Stability of nearly circular orbits, motion under the inverse square law, motion of artificial satellites.
- Student can solve problems on motion in three dimensions, motion on a smooth sphere,

cone and on any surface of revolution.

- Student knows about degrees of freedom, moments and products of inertia, momental ellipsoid, principal axes, D'Alembert's principle, impulsive forces, conservation of momentum and energy.

MTMHDSC04: Mathematical Modelling

Outcomes:

- Students will learn about the solution methodology of Bessel's equation and Legendre's equation by Power Series Method, Laplace transform and inverse transform, application to initial value problem up to second order.
- Student will briefly know about Monte Carlo simulation modelling, queuing models, Optimization model, Linear programming model.

MTMHGE01: Calculus, Geometry & Differential Equation

Outcomes:
Calculus:

- Students will be able to differentiate a function successively.
- Students will be able to integrate functions like $\sin^n x$, $\cos^n x$,... by applying the reduction formula.
- Students will learn about the hyperbolic function, concavity, and inflection points.
- Students will be able to find envelopes and asymptotes of a curve.
- Students will know and indeterminate form and be able to solve this type of problem.
- Students will be able to sketch graphs of various curves.
- Students will be able to obtain the surface of the revolution of curves.

Geometry:

- Students will be able to classify the conics with the help of a determinant and find their canonical forms.
- Students will have clear concepts about the polar coordinate section.
- Students will know about conicoid in three dimensions and be able to solve various problems regarding conicoids.

Differential equation:

- Students will be able to formulate differential equations from various practical problems and solve them.

- Students will be able to solve various types of differential equations of 1st order.

- Students will be able to sketch ellipsoid, hyperboloid of one and two sheets, elliptic cone, elliptic, paraboloid, and hyperbolic paraboloid using cartesian coordinate.

Chotan Roy
S.A.C.T-I
Dept. of Mathematics

MTMHGE02: Algebra

Outcomes:

- Students will be able to know about the polar form of a complex number and be experts in solving problems of complex numbers in polar form.
- Students will be experts in solving an algebraic equation up to degree 4 and able to solve various inequality problems
- Students will know about equivalence relations and their properties.
- Students will know about functions, the composition of functions, Invertible functions, one-to-one correspondence, and the cardinality of a set.
- Students will know about the fundamental theorem of arithmetic.
- Students will be able to solve a system of linear equations.
- Students will know the fundament definition and ideas of linear transformations.

Principal
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Chotan Roy
S.A.C.T.-I
Dept. of Mathematics

B.Sc. General in Mathematics

Programme Specific Outcome(PSO)

By the end of the program B. Sc. General in Mathematics, the student will be able to:

- Students should formulate, analyze and solve complex and diverse problems through analytical and computational techniques and apply them to other disciplines when appropriate.
- Recognize the need for and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological challenges.
- Analyses, test, and interpret technical arguments, and form independent judgments.
- Gather and organize relevant qualitative and quantitative information such as related problems, examples, and counter examples.
- The graduates will be able to communicate mathematical ideas via extended, clear, and well-organized written presentations.
- The mathematics degree will prepare students for careers in the corporate sector, tech industry and government agencies.

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Chotan Roy
S.A.C.T-I
Dept. of. Mathematics

Course Outcome(CO)

MTMGCC01: Differential Calculus

Outcomes:
- Students will learn about concepts about Limit and Continuity (ε and δ definition), Types of discontinuities, Differentiability of functions, Successive differentiation, Leibnitz's theorem, Partial differentiation, and Euler's theorem on homogeneous functions.
- Students can solve problems on Tangents and normals, Curvature, Asymptotes, Singular points,
- Students can trace various curves and are able to understand about Parametric representation of curves and tracing of parametric curves, Polar coordinates, and tracing of curves in polar coordinates.
- Students will know about Rolle's theorem, Mean Value theorems, and Lagrange's and Cauchy's theorems. Taylor's theorem with Lagrange's and Cauchy's forms of the remainder, Power series and its convergences. Taylor's series, Maclaurin's series of $\sin x$, $\cos x$, e^x, $\log(1+x)$, $(1+x)^m$, Maxima and Minima, and Indeterminate forms.

MTMGCC02: Differential Equations

Outcomes:
- Students will able to solve 1st order exact differential equations, 1st order higher degree equations solvable for x, y, p, higher order differential equations, Linear homogenous equations with constant coefficients, Linear non-homogenous equations, the Cauchy-Euler equation, Simultaneous differential equations, and Total differential equations.
- Students will learn about integrating factors, rules to finding an integrating factor, methods for solving Basic theory of linear differential equations, Wronskian and its properties. Solving a differential equation by reducing its order.
- Students can find out solutions to differential equations by the method of variation of parameters.
- Students will learn about the order and degree of partial differential equations, the concept of linear and non-linear partial differential equations, the formation of first-order partial differential equations, linear partial differential equations of the first order, Lagrange's method, Charpit's method.
- Students can classification of second-order partial differential equations into elliptic, parabolic and hyperbolic.
- Students will able to find the power series solution of a differential equation.

MTMGCC03: Real Analysis

Outcomes:
- Students will learn about sets, suprema and infima of sets, completeness property of R, Archimedean property of R, intervals, and cluster points.
- Students will gather knowledge about the Real Sequence, the Infinite series, the sequences, the series of functions, and the power series and their properties.

Chotan Roy
S.A.C.T - I
Dept. of. Mathematics

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

MTMGCC04: Algebra

Outcomes:

- Students will know the definition and examples of abelian and non-abelian groups.
- Students will learn about these special groups like
    - i) The group Z_n of integers under addition modulo n,
    - ii) The group $U(n)$ of units under multiplication modulo n.
    - iii) Complex roots of unity.
    - iv) Circle group,
    - v) The general linear group $GL_n (R)$,
    - vi) Groups of symmetries of an isosceles triangle, an equilateral triangle, a rectangle, and a square.
    - vii) The permutation group.
    - viii) Group of quaternions.
- Students can solve problems on Cyclic groups from number systems, subgroups, cyclic subgroups, the concept of a subgroup generated by a subset and the commutator subgroup of the group, and examples of sub groups including the center of a group.
- Students will learn about cosets, the order of an element, and Normal subgroups.
- Quotient groups.
- Students can learn definitions and properties of Rings, Fields, Subring, Sub Field, Integral Domain and Ideals.
- Students can gather knowledge about number systems, Zn the ring of integers modulo n, the ring of real quaternions, rings of matrices, polynomial rings, and rings of continuous functions.

MTMGSEC01: Logic and Sets

Outcomes:

- Students will know about truth table, negation, conjunction, disjunction, implications, biconditional propositions, converse, contrapositive, and inverse propositions, and precedence of logical operators.
- Student will learn about Propositional equivalence and Predicates and quantifiers.
- Students will be able to know the definitions and properties of sets, subsets, finite sets, empty sets, classes of sets, and the power set of a set.
- Students can solve various problems on difference and symmetric difference of two sets, union, and intersections of sets, and relations.

MTMGSEC02: Graph Theory

Outcomes:

- Students knows about definition, examples and basic properties of graphs, pseudographs, complete graphs, bipartite graphs, isomorphism of graphs.
- Student will learn about Eulerian circuits, Eulerian graph, semi-Eulerian graph, theorems, Hamiltonian cycles, theorems Representation of a graph by matrix, the adjacency matrix, incidence matrix, weighted graph.
- Student will learn about Travelling salesman's problem, shortest path, Tree and their properties, spanning tree, Dijkstra's algorithm, Warshall algorithm.

Chotan Roy
S.A.C.T-I
Dept. of Mathematics

MTMGSEC03: Number Theory

Outcomes:

- Student will know about Linear Diophantine equation, prime counting function, statement of prime number theorem, Goldbach conjecture, linear congruences, complete set of residues. Chinese remainder theorem, Fermat's little theorem, Wilson's theorem.
- Students will learn about Number theoretic functions, sum and number of divisors, totally multiplicative functions, definition and properties of the Dirichlet product, the Mobius Inversion formula, the greatest integer function, Euler's phi-function, Euler's theorem, reduced set of residues, some properties of Euler's phi-function.

MTMGSEC04: Probability and Statistics

Outcomes:

- Student will learn about Sample space, Probability axioms, Real random variables (discrete and continuous), cumulative distribution function, probability mass/density functions, mathematical expectation, moments, moment generating function, characteristic function, discrete distributions: uniform, binomial, Poisson, geometric, negative binomial, continuous distributions: uniform ,normal, exponential.
- Students can solve problems on Joint cumulative distribution function and its properties, joint probability density functions, marginal and conditional distributions, the expectation of a function of two random variables, conditional expectations, independent random variables.

MTMGDSE01: Linear Algebra

Outcomes:

- Students will know the basic concept of vector space.
- Student will learn about quotient space, linear combination of vectors, linear span, linear independence, basis and dimension, dimension of subspaces.
- Students will know the fundament definition and ideas of linear transformations.
- Student will learn about Isomorphisms, invertibility and isomorphisms, change of coordinate matrix.

MTMGDSE02: Linear Programming

Outcomes:

- Students will learn the definition and formation of a linear programming problem.

Chotan Roy
S.A.C.T-I
Dept. of Mathematics

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

- Students can find various types of solutions an LPP by graphical approach, simplex method, two-phase method, and Big-M method.
- Students can learn about the convex sets, duality, formulation of the dual problem, primal-dual relationships, economic interpretation of the dual.

Chotan Roy
S.A.C.T-I
Dept. of. Mathematics

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

CHANDRAKONA VIDYASAGAR MAHAVIDYALAYA

B.A. HONOURS IN PHILOSOPHY

(UNDER CBCS SYSTEM)
W.e.f. 2018-2019

Programme Specific Outcome (PSO)

After end of the programme UG Hons. in Philosophy, students will be able to

1. To examine and critically analyze the thought of a particular figure in the histor philosophy from ancient to modern times identifying movements and philosophy.
2. Understanding the nature and basic concepts of philosophy related to the area of Metaphysics, Epidemiology, Logic, Ethics etc.
3. To have an overview of the current state of knowledge in a given field and to lool the solution to philosophical problems in contemporary times.
4. Developing the expressive and communicative skill of logical and consistent reasoning.
5. To have an in-depth understanding of main issues and problems epistemology, l and ethics.
6. To have analytical and critical thinking skills.
7. To understand the nature of mind, matter, language, knowledge and reality.
8. To think logically by developing skills responding to Philosophical Theories, is and claims.

Countersign by Principal

Sign, H.O.D. , Dept. of Philosophy

Course Outcome (CO)

Semester	Paper Code	Credit	Title of course
I	PHIHCC-01	6 (6 hours/week)	Outlines of Indian Philosophy- I

Indian Philosophy is the first systematic study of Indian thought. After going through the paper students can gain knowledge and comprehensive accounts of different ancientPhilosophers and philosophical schools.

Course outcome :
1. Knowledge about the definition and division of orthodox school and heterodox Schools of Indian Philosophy.
2. Description of Carvaka Philosophy and gain knowledge about the Epistemology, Metaphysical, Ethics of Carvaka Philosophy.
3. This course will also focus on Jaina Philosophy and Jaina's Epistemology, Metaphysics etc.
4. Knowledge about four noble truths , theory of momentary, as well as various theories associated with Buddha Philosophy.
5. Description, analysis of various concepts of Nyaya school, know the instruments, methodology and classification of perception .
6. Definition and description of Anumiti,Anumana,Vypti. Students are able to know the classification of Anumana, Upamana and Sobda.
7. Can gain knowledge about Vaisevika view of seven padartha, guna and karma.
8. Knowledge about detailed description of the Vaisesika view of padartha or seven categories and the atomistic pluralism of this school.
9. Description of the very idea of the cause which is defined as an unconditional and invariable antecedent of an effect and the concept of Asatkaryavada.

Semester	Paper Code	Credit	Title of course
I	PHIHCC-02	6 (6 hours/week)	History of Western Philosophy - I
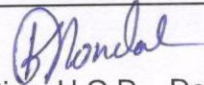
Classical western philosophy originated in ancient Greece . Greek philosophy is said to be divided into three periods which are as follous. Pre Socratic period marks the rise of Greek philosophy .This period includes the ionics,Xenophanes, Pythagoream,Heraclitus,Eleatics and others. Sophists to Aristotle period includes both the contemporary and predecessors of Socrates, Plato and Aristotle. The Post-Aristotelian period marks the decline of national thought. The post Aristotelian period marks the end of the golden age of decay and dissolution. This period includes the Stoics, the Epicureans and the Pyrrhonists.

Course Outcome:
1. Difference between various kinds of matter which are qualitative.
2. Air, which is constantly in motion, brings about the development of the universe .
3. All things are exchanged for fire and fire for all , according to Haraclitus.

Countersign by Principal

Principal
Chandrakona Vidyasagar Mahavidyalaya
Paschim Medinipur

Sign, H.O.D. , Dept. of Philosophy

H.O.D. / Assistant Professor
Dept. of Philosophy
Chandrakona Vidyasagar Mahavidyalaya

4. The universe is a naturalistic and scientific principle, without the aid of myths and anthropomorphic God.
5. To acquaint students with Plato and Aristotle's metaphysics.
6. Identify and explain the key philosophical concepts as theory arise in the different historical periods, including knowledge, reality, reason, substance, identity, experience, etc
7. Knowledge gain about St. Thomas Aquinas's theory of faith, Descartes's theory of doubting method, Spinoza's Pantheism, Leibniz's monadology etc.

Semester	Paper Code	Credit	Title of course
II	PHIHCC-03	6 (6 hours/week)	Outlines of Indian Philosophy- II

The philosophy of a country is the cream of its culture and civilization. The different schools of Indian philosophy presenta diversity of views, although there are some similarities amongst them. we can discern even in them the common stamp of an Indian culture. We may briefly describe this unity as the unity of moral and spiritual outlook. To understand this, let us consider its main aspects and illustrate points of agreement among the different schools.

Course Outcome:

1. Description of Samkhya theory of cause and explanation of the dualistic view of Prakriti and Purusa.
2. Knowledge about the different Samadhi or meditation, as well as the eightfold path of discipline, Ashtanga Yoga which generates certain supra-normal power.
3. Able to know through explanation of the Prabhakara and Bhatta school and the theories associated with this school.
4. Description of Samkara's Vedanta school and the analysis of the concept of Brahma as the ultimate reality and the knowledge of Satta.
5. Knowledge about Ramanujacharya's attempt to harmonize the absolute and the personal theism and also the detailed view of Brahman which is Jiva and Jagat.

Semester	Paper Code	Credit	Title of course
II	PHIHCC-04	6 (6 hours/week)	History of Western Philosophy - II

After studying the paper students will be able to realize the Western thoughts as well as they can apply this thoughts in day to day life.

Course Outcome:

1. LOCKE : Ideas will be increased i,e. innate ideas, the origin and formation of ideas, simple and complex ideas, substance, modes and relations, knowledge and its degrees, limits of knowledge, primary and secondary qualities, representative realism etc.
2. BERKELEY: Concept of abstract ideas. Criticism of Locke's distinction between primary and secondary qualities, Immaterialism, esse est percipi, role of God and also Differential thoughts between two philosophers .

Countersign by Principal

Principal
Chandrakona Vidyasagar Mahavidyalaya
Paschim Medinipur

Sign, H.O.D. , Dept. of Philosophy

H.O.D. / Assistant Professor
Dept. of Philosophy
Chandrakona Vidyasagar Mahavidyalaya
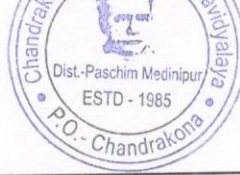
3. **KANT:** Know the cohesion of rationalism and empiricism, Conception of critical Philosophy, distinction between a priori and a posteriori judgements, distinction between analytic and synthetic judgements. Synthetic a priori judgements, General problem of the Critique, Copernican Revolution in Philosophy, Transcendental Aesthetic, Metaphysical & Transcendental expositions of the ideas of space & time.
4. **HUME:** Concept of ideas, causality Skepticism.Impression and ideas, association of ideas, distinction between judgements concerning relations of ideas and judgements concerning matters of fact, and personal identity.

Semester	Paper Code	Credit	Title of course
III	PHIHCC-05	6 (6 hours/week)	Philosophy of Mind

Philosophy of mind is the study of mind.It is the knowledge of Mind or soul.This subject describes various aspects of human being, like sensation perception, emotion, learning, intelligence, personality, methods etc.

Course Outcome:
1. Description of nature and also the scope of psychology.As a growing science the purpose of this paper is to build up general principles.
2. Understand the explanation of the different methods associated with psychology and also their acceptability.
3. Knowledge building towards analysis of the different concepts like sensation, perception and their correlation with different theories associated with perception.
4. Imparting the knowledge towards the idea of learning as well as the explanation of different theories associated withLearning.
5. Knowledge about the different philosophical theories regarding the relation between mind and body,and the influences of bodily conditions on mental processes which are the matter of common observation.

Semester	Paper Code	Credit	Title of course
III	PHIHCC-06	6 (6 hours/week)	Social and Political Philosophy
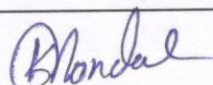
Social and Political Philosophy are the important branches of philosophy. From this course the students will gain some valuable education and knowledge about our society and political events.

Course Outcome :
1. Acquaintance with the true nature of society also the relation between social and political philosophy.
2. Knowledge about the primary concepts like society, community, social group, various customs and laws of society, distinction between Institution, Association and habits.
3. Importance, necessity and utility of the idea of family as well as the role of family as best source of self-culture for the parents.
4. Knowledge about the concept of social gradation, social class and cast system of ancient varnashrama Dharma, the social status as well as the inequalities in our society.

Countersign by Principal

Principal
Chandrakona Vidyasagar Mahavidyalaya
Paschim Medinipur

Sign, H.O.D. , Dept. of Philosophy

H.O.D. / Assistant Professor
Dept. of Philosophy
Chandrakona Vidyasagar Mahavidyalaya

5. Understand the meaning of human life, relation between society and individual and different theories regarding the relation between the two.
6. Acquaintance with the description of the manifold diversities in race, religion, language as well as the unity and the knowledge about the Political Philosophy, the meaning and nature of Secularism as well as the nature of Secularism in India.
7. Understand the true nature and relation of social progress or development as well as the Marxist and Gandhian interpretation and theories of social change and progress or development.

Semester	Paper Code	Credit	Title of course
III	PHIHCC-07	6 (6 hours/week)	Philosophy of Religion

Religion is a special aspect of human experience and therefore needs a philosophical explanation. The function of Philosophy of Religion is to determine the significance and value of human experience of religion. Philosophy of religion is self-establishment of religious experience with the following concepts related to Philosophy of Religion.

Course Outcome:

1. Description about nature as well as scope of Philosophy of Religion.
2. Enable them to analyze different doctrines of karma, rebirth or Janmantarabada and the theory of liberation.
3. Understand the meaning and concept of the Philosophical teachings of the Holy 'Quran'.
4. Knowledge about the different features of religion and can know the basic tenets of Christianity.
5. Gather knowledge about the concept of religious pluralism and the concept of universal religion.
6. Explanation of ground for disbelief in God and Peculiarity of Religious Language.

Semester	Paper Code	Credit	Title of course
IV	PHIHCC-08	6 (6 hours/week)	Western Logic -I

Logic is the essence of philosophy and after completion of this course the students will gain logical power.
Course Outcome :
1. Identify arguments in ordinary language, distinguish premises from conclusion, differentiate deductive arguments from inductive arguments and construct arguments of their own.
2. Detect mistakes in reason, including both formal and informal fallacies.
3. Translate sentences from ordinary language into standard form of categorical proposition.
4. Translate ordinary language arguments into standard form categorical syllogism ,evaluate immediate inference and syllogism using the traditional square of opposition and Venn diagrams.

Countersign by Principal
Principal
Chandrakona Vidyasagar Mahavidyalaya
Paschim Medinipur

Sign, H.O.D. , Dept. of Philosophy

H.O.D. / Assistant Professor
Dept. of Philosophy
Chandrakona Vidyasagar Mahavidyalaya

Semester	Paper Code	Credit	Title of course
IV	PHIHCC -09	6 (6 hours/week)	Western Logic - II

After studying the paper students will be able to uplift their understanding level in mathematical perspectives. The students will be able to get a broader concept of the following matters.

Course Outcome:

1. CO1. Symbolic Logic: value of symbols, Truth functions; Dagger and stroke functions; inter--definability of truth functors. Tautologous, Contradictory and Contingent Statement Of Thought. Forms; The Paradoxes of Material Implication; The three Laws thought.
2. Testing Argument Form and argument for validity by i.The Method of Truth Table. ii. The Method of Resolution (Fellswoop & Full Sweep)
3. The Method of Deduction: How to prove the formal proof of validity and invalidity.
4. Formal Proof of Validity: Difference between Implicational Rules and the Rules of Replacement; Construction of Formal Proof of Validity by using nineteen rules; Proof of invalidity by assignment of truth values.
5. Quantification Theory: Concept of Quantifications and its need.
6. The value and role of special symbols.
7. Singular Propositions; Quantification;
8. Translating Traditional subject predicate proposition into the logical notation of propositional function and quantifiers.

Semester	Paper Code	Credit	Title of course
IV	PHIHCC -10	6 (6 hours/week)	Epistemology and Metaphysics (Western)

Epistemology: philosophy is the search for knowledge .This search is critical ,Hence ,the first problem which arises before a philosopher is about the nature of knowledge and its limitations. Therefore, epistemology is the most fundamental branch of philosophy. It discusses philosophically truth and falsehood, validity of knowledge limits and nature of knowledge, knower and known. Etc. Metaphysics: metaphysics is the main branch of philosophy . It is the science of reality. Its main problem are , what is reality ?Is the world one or many ? What is space ?What is the purpose of creation ?Is there a God? In brief metaphysics discuss the three aspects of Reality.

Course Outcome :

1. Learn about different theories of justification and how they are different.
2. Describe a significant aspect of one or more of the major epistemological traditions.
3. Increase their understanding about drawbacks of the famous theories of justification and experimental -based naturalistic approaches to epistemological issues.
4. Investigate the foundations for knowledge, the scope of knowledge, meaning of how much can we know and how deep can we dig into our knowledge

Countersign by Principal

Principal
Chandrakona Vidyasagar Mahavidyalaya
Paschim Medinipur

Sign, H.O.D. , Dept. of Philosophy

H.O.D. / Assistant Professor
Dept. of Philosophy
Chandrakona Vidyasagar Mahavidyalaya

Semester	Paper Code	Credit	Title of course
V	PHIHCC -11	6 (6 hours/week)	Nyaya Logic and Epistemology - I

After studying the paper students can realize the cognitta area. The students will be able to get a broader concept of the following matters:

Course Outcome :
1. Definition of buddhi or jñāna (cognition) , its kinds; Definition of sm ṛ ti (memory); two kinds smriti.
2. Definition of anubhava, its division into veridical (yathārtha) and non (ayathārtha);
3. Three kinds of nonveridical anubhava;
4. Definitions clarified in Tarkasangraha Dīpikā.
5. Four-fold division of pramā and pramāna (yathartha gnan & the source of ayathartha gnan.)
6. Definition of "Kārana" (special causal condition) and "kāra ṇ a" (general causal condition).
7. The concept of anyathāsiddhi (irrelevance) and its varieties. The definition of kārya (effect). Kinds of cause: smavāyi, a-samavāyi and nimitta kārana (definitions and analysis).
8. Definition of pratyaksa and its two-fold division ; nirvikalpaka and savikalpaka jñāna. Evidence for the actuality of nirvikalpaka.
9. Sannikarsa and its six varieties.
10. Problem of transmission of sound; the claim of "anupalabdhi" as a distinctive pramāna examined.
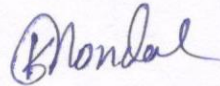
Semester	Paper Code	Credit	Title of course
V	PHIHCC -12	6 (6 hours/week)	Ethics (Indian)

After studying the paper students can establish ethical knowledge as well as their responsibilities towards the society in their life.

Course Outcome:

1. Gain acknowledgement power, Presuppositions, Concept of Sthitaprañjna,
2. Karmayoga: Aware their root duty, (Gīta) Puruṣārthas and their interrelations.
3. Meaning of Dharma, Concept of ṛna and ṛta.
4. Classification of Dharma: sādhāraṇadharma and Asadharana Dharma,Varnasrama Dharma
5. Vidhi and Niṣedha , What can be done or not ?
6. Buddhist Ethics: Able to realize Buddhist Ethics i,e.Pancaśīla, Brahmavihārabhāvanā (Bauddha) Anubrata, Mahābrata, Ahimsā.
7. Jaina Ethics: After knowing Jaina Ethics, they can relate it in day to day life. Also the concepts of anubrata, mahūbrata
8. Mimāṁsa Ethics: Know the different type of karma. nitya naimittika karma and kāmya karma, the imperative in kāmya karmas and in kāmya karmas involving himsā.

Countersign by Principal
Principal
Chandrakona Vidyasagar Mahavidyalaya
Paschim Medinipur

Sign, H.O.D. , Dept. of Philosophy
H.O.D. / Assistant Professor
Dept. of Philosophy
Chandrakona Vidyasagar Mahavidyalaya

Semester	Paper Code	Credit	Title of course
VI	PHIHCC - 13	6 (6 hours/week)	Nyaya Logic and Epistemology - II

Nyaya , (Sanskrit: "Rule" or "Method") one of the six systems(darshans) of Indian philosophy, important for its analysis of logic and Epistemology. The major contribution of the Nyaya system is its working out in profound detail the means of knowledge known as inference (see anumana). Like the other systems, Nyaya is both philosophical and religious. Its ultimate concern is to bring an end to human suffering, which results from ignorance of reality. Liberation is brought about through right knowledge. Nyaya is thus concerned with the means of right knowledge. In its metaphysics, Naya is allied to the Vaisheshika system, and the two schools were often combined from about the 10th century. Its principal text is the Nyaya- sutras, ascribed to Gautama (C.2ND Century BCE). The Nyaya system –from Gautama through his important early commentator. Vatsyayana until Udayancharya became qualified as the old Nyaya in the 11th century. When a new school of Nyaya arose in Bengal. The best known philosopher of the Navya Nyaya, and the founder of the modern school of Indian logic, was Gangesha. Taking this course will enable the students to students will gain a basic understanding of the insights of many of the most influential schools of philosophy in the Indian pre- modern period.

Course Outcome:
1. Students will develop the ability to relate Indian methods of argumentation to their own fields of study.
2. Students will improve their ability to interact with philosophical ideas, both in active participation during class.
3. Students will gain basic familiarity with the historical background out of which Indian philosophical debates arose.
4. Understand how validity of knowledge can be achieved.
5. Learn how to validate justified true belief.
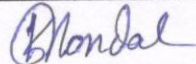
Semester	Paper Code	Credit	Title of course
VI	PHIHCC - 14	6 (6 hours/week)	ETHICS (Western)

The study of ethics makes the student less biased and more comprehensive in his outlook. The study of ethics engenders a firm conviction in the normal ideal. The chief value of Ethics is not the guidance it gives in particular cases, but in the development of a wider outlook and seriousness of purpose in dealing with moral matters.

Course Outcome:
1. Has a bearing on moral life, able to know the exact nature of the subject, its range subject matter for discussion as well as its classification.
2. Gain knowledge about moral and non-moral actions. Can know the object of moral in judgements.
3. Description of the moral theories of eminent philosophers like Plato and Aristotle which explain the moral relation between individual and Society and also the science of morality.
4. Understands the different theories regarding the ultimate moral standard. Moral theories are different in nature, and know the true nature and types of various theories.

Countersign by Principal
Principal
Chandrakona Vidyasagar Mahavidyalaya
Paschim Medinipur

Sign, H.O.D. , Dept. of Philosophy
H.O.D. / Assistant Professor
Dept. of Philosophy
Chandrakona Vidyasagar Mahavidyalaya,

5. Able to know the concept and Justification of the very idea of 'punishment 'we know that punishment shrinks the personality of the wrongDoer. It makes a wrong doer conscious of the social ideal. It brings consciousness in the mind of a wrongdoer about the necessity of punishment into our society.

6. It enables the students to get an idea about the clarification of the nature of environmental Ethics. It is a study of ethical principles that guide human interaction with nature, can know the Anthropocentric and non-anthropocentric view as well as Biocentric view, protection and preservation of wilderness for future generations.

Semester	Paper Code	Credit	Title of course
V	PHIHDSE -01	6 (6 hours/week)	Philosophy of Language (Indian)

Annambhatta has arranged the topics under discussion in the Tarkasangraha text by following the specific text commentary of the wide foot. He first showed their division by mentioning these seven substances . In the discussion of evidence, he has mostly followed Ganges Upadhyay, the founder of 'Nabya Nyaya'

Course Outcome:
1. Definition and classification of Pada
2. Description of different type of Laksana
3. Explanation of Sabdabodh or Verbal testimony)
4. Analysis Introduction of Concept of Asatti, YogyataTatparya, and Akamsa
5. Explanation of Anvitabhidhanvada and Abhihitanvayavada.
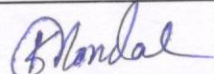
Semester	Paper Code	Credit	Title of course
V	PHIHDSE -02	6 (6 hours/week)	Ethics (Applied ethics)

After studying the paper students can establish ethical knowledge as well as their responsibilities towards the society

Course Outcome:
1. Know their responsibility, Nature and scope of applied ethics.
2. Realize the nature of life.
3. Killing: Suicide, Euthanasia, Animal killing.
4. Poverty, Affluence and Morality.
5. War and Violence: Terrorism.
6. Right: Nature and race, caste and religion.
7. The Ethics of Care. Value of Human Rights — Discrimination on the basis of
8. Value beyond sentient beings, Reverence for life, Deep Ecology, Concepts of Kinship Ethics.
9. Ecological Concern in Indian thoughts: Jaina and Bauddha views.

Countersign by Principal
Principal
Chandrakona Vidyasagar Mahavidyalaya
Paschim Medinipur

Sign, H.O.D. , Dept. of Philosophy

H.O.D. / Assistant Professor
Dept. of Philosophy
Chandrakona Vidyasagar Mahavidyalaya

Semester	Paper Code	Credit	Title of course
VI	PHIHDSE - 03	6 (6 hours/week)	An Enquiry Concerning Human Understanding - David Hume

According to Hume there are two kinds of contents of the mind namely impression and ideas. He says that only perception composes the human mind. impressions and ideas are divided into simple and complex. No separation or distinction is admitted by all ideas or impressions. Complex ideas or impressions are composed of simple parts. Impression is further divided into sensation and reflection. Sensation arises from unknown causes whereas the reflection derives over ideas. Reflection is regarded as secondary, whereas sensation impressions of reflection are regarded as original facts.

Course Outcome:
1. The mind is a kind of theatre several perception successive make their appearance.
2. All the objects of human reason or enquiry may naturally are relation of ideas and matters of fact.
3. There is properly no simplicity in it at one time ,nor identity in differencet. Whatever natural propension we may have to imagine that is simplicity and identity.
4. According to Hume, a substance means a collection of simple ideas and these collections are united by imagination only.

Semester	Paper Code	Credit	Title of course
VI	PHIHDSE - 04	6 (6 hours/week)	M.K. Gandhi
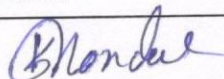
The main objective of this unit is to introduce the students to socio-political significance of Gandhian concept of ahimsa and satyagraha. It would also enable one to know how to apply these principles in one's social and political intervention. Along with these, it is intended to evaluate and compare adequately the present-day political system with Gandhian vision. Ahimsa and satyagraha imply great significance in the life and philosophy of Mahatma Gandhi.

Course Outcome:

1. Two socio-political weapons used in achieving the various goals, that is Ahimsa and satyagraha which are not new ideal but the eternal principles of Gandhi's life. However, these ideals lacked universality and fullness of meaning .They were regarded as cloistered virtues .
2. The great adventure of Gandhi that he reinterpreted and rested these fundamental principles of human behavior in new ways and showed their universality .He made several experiments with them and with great zeal applied them in an original way practically in every aspect of human life especially in the social and political fields.
3. Able to knows the Gandhian main concepts like truth, ahimsa, satyagraha, Sarvodaya, etc., are not individual and independent concepts but they are interrelated. Satyagraha is nothing but the implementation of truth and ahimsa in the different walks of life.
4. Understand the concept of Satyagraha which is a logical development of the doctrine of Ahimsa.
5. Know the history of Indian culture in the history of evolution.

Countersign by Principal

Principal
Chandrakona Vidyasagar Mahavidyalaha
Paschim Medinipur

Sign, H.O.D. , Dept. of Philosophy

H.O.D. / Assistant Professor
Dept. of Philosophy
Chandrakona Vidyasagar Mahavidyalaya

6. Knowledge of Satyagraha is a practical application of ahimsa to politics .
7. Ahimsa is the foundation of satyagraha, the irreducible minimum to which satyagraha adheres to .The ideal and practice of satyagraha constitute the heart and soul of Gandhi's belief in non -violence.

Semester	Paper Code	Credit	Title of course
III	PHIHSEC- 01	2 (2 hours/week)	Philosophy of Human Rights

Human right is a broad field of study covering issues related to the basic freedom and rights to which every person is entitled. Many topics fall under the realm of human rights and there are many different career paths which students can choose after studying this paper. Human Rights can be a rewarding and challenging field of study leading to a fulfilling career .Here are just some of the many reasons why one might choose to study human rights.

Course Outcome:

1. Identify and evaluate the historical, philosophical, political and cultural developments establishing human rights as a set of global norms, agreement and procedures.
2. Understand the importance of the Human Rights Act1998.
3. Explore global human rights institution, law, and processes and assess the impact of their interaction with national and local cultural, practices and norms.
4. Critically examine the impact of diverse Geographic, cultural and theoretical contexts on the social acceptance and practical application of human rights norms.
5. Reflectively evaluate the effectiveness of human rights practice on local, national or international humanitarian efforts.

Semester	Paper Code	Credit	Title of course
IV	PHIHSEC -02	2(2 hours/week)	Man and Environment

After studying the paper, students can establish ethical knowledge as well as their responsibilities towards society.

Course Outcome:
1. Classical Indian Attitude to Environment.
2. The students will be able to get a broader concept on about the Upanisadic world-view.For example :Veda, Different Sections of Veda.(Mantra,Brahman,Aronyak, & Upanishad.) and Hota,Udgota,Adharsu & Brahma.
3. The students will be able to get a border concept about Tagore's understanding of nature. For example :Surplus in Man, Dharma i,e.while Tagore says- "Human body is the temple of God" . So we can obviously relate Swamiji's quote "To serve man is to serve God." Truth , i.e.The truth of human unity is the truth of Man's God.
4. The students will be able to get a border concept on about the post-Upanisadic view of nature: Unity-in-diversity in post- Upanisadic Indian system of philosophy,Upanisad: Primary meaning and Secondary meaning, Upanisadic Brahma:Monism,Idealism.Upanisadic Atman, Brahma &

Countersign by Principal

Principal
Chandrakona Vidyasagar Mahavidyalaya
Paschim Medinipur

Sign, H.O.D. , Dept. of Philosophy

H.O.D. / Assistant Professor
Dept. of Philosophy
Chandrakona Vidyasagar Mahavidyalaya

Atman: Means Absolute Self.

5. Respect for Nature.
6. Ethical standards as well as different rules that follow from the attitude of respect to nature.
7. Inherent worth of nature.
8. Intrinsic Value of nature : Concept of Intrinsic properties,Realization of Intrisic value,After Moore.
9. Attfield on the intrinsic value of nature,
10. Callicott'idea of intrinsic value.

Semester	Paper Code	Credit	Title of course
III	PHIHGE -03	6 (6 hours/week)	Theory of Inference in Nyāya

The Second of knowledge is anumana or inferential or relational and its means is called anumana or inference. It is defined as that cognition which presupposes some other cognition. It is mediate and indirect and arises through a 'mark', the middle term' (linga or hetu) which is invariably connected with the major term(sadhya). It is knowledge(mana) which arises after (anu) other knowledge.

Course Outcome:
1. Definition and classification of Anumiti.
2. Description the different type of inference such as Svartha(for oneself) and paratha (for others).
3. Description of Pancabayabinaya such as Pratijna, hetu, udaharana, upanaya, nigamana.
4. Inportance of Pancabayabinaya.
5. Definition and classification of Svarthanumana.

Semester	Paper Code	Credit	Title of course
IV	PHIHGE -04	6 (6 hours/week)	Termination of Life & Ethics
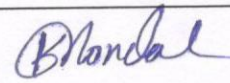
Ethics is said to be the system of moral principle which affects how people make decisions and lead their lives. Ethics is concerned with what is good for individuals and society. It is also described as Moral Philosophy. The term ethics is derived from the Greek word 'ethos' which means custom, habit, character or disposition. Applied Ethics deals with controversial topics like Abortion, Euthanasia, war, animal rights, capital punishment etc .

Course Outcome:
1. Students will be able to know that "euthanasia" has different meanings depending on usage. The first apparent usage of the term "euthanasia" belongs to the historian Suetonius, who described how the Emperor Augustus, "dying quickly and without suffering in the arms of his wife, Livia, experienced the 'euthanasia' he had wished for. The word "euthanasia" was first used in a medical context by Francis Bacon in the 17th century, to refer to an easy, painless, happy death, during which it was a "physician's responsibility to alleviate the 'physical sufferings' of the body." Bacon referred to an "outward euthanasia"—the term "outward" he used to distinguish from a spiritual concept—the euthanasia "which regards the preparation of the soul.
2. Abortion is the ending of a pregnancy by removal or expulsion of an embryo or fetus An

abortion that occurs without intervention is known as a miscarriage or "spontaneous abortion" and occurs in approximately 30% to 40% of pregnancies. When deliberate steps are taken to end a pregnancy, it is called an induced abortion, or less frequently "induced miscarriage". The unmodified word abortion generally refers to an induced abortion.

Countersign by Principal

Principal
Chandrakona Vidyasagar Mahavidyalaya
Paschim Medinipur

Sign, H.O.D. , Dept. of Philosophy

H.O.D. / Assistant Professor
Dept. of Philosophy
Chandrakona Vidyasagar Mahavidyalaya

CHANDRAKONA VIDYASAGAR MAHAVIDYALAYA

B.A. GENERAL IN PHILOSOPHY

(UNDER CBCS SYSTEM)
W.e.f. 2018-2019

Programme Specific Outcome (PSO)

After end of the programme UG Gen. in Philosophy, students will be able to

1. Developing the capacity to analyse Concepts, Definitions, Arguments and Problems.
2. Acquiring the capacity to develop new direction and new hypothesis and will be capable of further development.
3. Developing to acquire ethical knowledge as well discharge one's responsibility towards the society.
4. Increasing the power of skill in rational thinking.
5. Developing the capacity of the urge of quest for understanding the challenging problems of philosophy.
6. Attaining the skill of application of philosophical knowledge and methodology to other inter disciplinary domains of learning.
7. Developing the expressive and commutative power and systematic argument constructive skill.
8. Developing the capacity of less biased and more comprehensive in his/her outlook.
9. Acquiring the knowledge of intrinsic value for understanding the important challenging problems of philosophy.
10. Developing the capacity to enhance one's problem solving ability in day to day life.
11. Developing the ability to select an optimistic path in his career within the domain of the subject related areas.

Countersign by Principal

Principal
Chandrakona Vidyasagar Mahavidyalaya
Paschim Medinipur

Sign, H.O.D., Dept. of Philosophy

H.O.D. / Assistant Professor
Dept. of Philosophy
Chandrakona Vidyasagar Mahavidyalaya

Course Outcome (CO)

SEMESTER	PAPER CODE	Credit	Title of course
I	DSC-1A/2A	6 (6 hours/week)	Indian Philosophy

The achievements of the Indians in the field of philosophy are very important. It is impossible for a man to live without a philosophy. Indian philosophy has been intensely spiritual and has always emphasized the need of practical realisation of truth. 'See the self' is the keynote of all schools of Indian philosophy. By studying this paper students can gain the knowledge and understanding of the various comprehensive accounts of different Indian schools

Course Outcome :

1. Students can get the fundamental historical introduction outlying the sources of philosophical thought. Gain the common characteristics of Indian philosophy - such as - the idea of theory and practice, pessimistic outlook, belief in an eternal moral order, idea of law of Karma and Rebirth.
2. Knowledge about Materialism in Indian thought, which has never been a force, knows the origin of carvaka school and theory of pratyaksa or perception as the only source of knowledge. Know the fact of how to refute Anumana and sabda as well as the Dehatmavada Vada.
3. Understand the Jaina theory of Reality which is realistic and relativistic pluralism, theory of sevenfold judgement or Jaina Logic that distinguishes seven forms of judgements.
4. Able to know the Buddha's life and philosophy, which comprises four Noble Truths and the different theories i.e. theory of Impermanence, Nairatmavada as well as the theory of Dependent Origination which is the foundation of all the teaching of Buddha.
5. Description of Nyaya school which is allied to the Vaisesika system. Know the concepts of perception, inference, comparison or analogy and verbal testimony as the four kinds of Vaid knowledge. Get the idea of Saptapadartha or seven categories.
6. Understand the concept of 'Cause' in Samkhya philosophy, which is dualistic in nature, able to know the theory of Casualty and theory of evolution associated with the idea of 'Cause'.
7. Gain knowledge about the Yoga School of Indian thought which is allied to Sam khya, the concept of Chittavrittis and modification of the Chitta through meditation, the Astanga Yoga or eightfold means.
8. Description of the two concepts of Mimamsa school, i.e. arthapatti and anupalabdhi or nonapprehension as a source of knowledge
9. Able to know the Advaita Vedanta concepts of Brahman, Jiva and Jagat.

SEMESTER	PAPER CODE	Credit	Title of course
II	DSC-1B/2B	6 (6 hours/week)	Western Philosophy

Western Philosophy has remained more or less true to the etymological meaning of 'Philosophy', in being

Countersign by Principal

Principal
Chandrakona Vidyasagar Mahavidyalaya
Paschim Medinipur

Sign, H.O.D., Dept. of Philosophy

H.O.D. / Assistant Professor
Dept. of Philosophy
Chandrakona Vidyasagar Mahavidyalaya

essentially an intellectual quest for truth. Both eastern and western philosophy is nothing but the history of Philosophical ideas.

Course Outcome:

1. Able to know the concept of Metaphysis, which is the knowledge of things as they are in themselves i.e. of super sensuous. Gather knowledge about the impossibility of Metaphysics, the nature of metaphysics.
2. Description of the concept of realism which explains the fact that there is a world of real thought and persons, with qualities and relations which are as real as the things. Acquire knowledge regarding different theories associated with this topic i.e like scientific realism or Representative realism. it believes in two world's
3. Knowledge about Idealism which is the doctrine of epistemological dualism as the World of mind, the world of external substance, as well as know the subjective idealism of Berkely and Objective Idealism.
4. Description of the very idea of Kant's critical theory. We know that Kant's theory is an attempt at avoiding the Solipism of Hume. Kant accepts an independent external reality as the ground.
5. Acquire knowledge about theories of causality. We know Cause is the agent which actively produces the effect and gains knowledge about the theories associated with the idea of cause.
6. Knowledge about the concept of substance which is a permanent thing that remains same throughout its changing steps and qualities, Get the overall idea of Descartes, Spinoza, lock and Berkeley. Locke and Berkeley admitted the concept of substance whereas Spinoza admits God as substance.
7. Able to know the exact relation between mind and body. And the different theories associated with this concept, such as Interactionism of Descartes and Parallelism of Spinoza.
8. Knowledge about the evidences for the idea of evolution which implies slow process of gradual change of development and get the idea of Mechanistic view and the Emergent theory of Evolution.

SEMESTER	PAPER CODE	Credit	Title of course
III	DSC-1C/2C	6 (6 hours/week)	Logic

Western philosophy is based on conscious thought where unconscious thought is central to spiritual awakening and development processes of the brain being far more extensive and unfettered by logic create far more original and dynamic thinking.

Course Outcome:

1. Identify arguments in ordinary language, distinguish premises from conclusion, differentiate deductive arguments from inductive arguments and construct arguments of their own.
2. Detect mistakes in reason, including both formal and informal fallacies.
3. Translate sentences from ordinary language into standard form of categorical proposition.
4. Translate ordinary language arguments into standard form categorical syllogism ,evaluate immediate inference and syllogism using the traditional square of opposition and Venn

diagrams

SEMESTER	PAPER CODE	Credit	Title of course
III	SEC-1	2 (2 hours/ week)	**Philosophy of Human Rights**

Human rights is a broad field of study covering issues related to the basic freedom and rights to which every person is entitled. Many topics fall under the realm of human rights and there are many different career paths which students can choose after studying this paper. Human Rights can be a rewarding and challenging field of study leading to a fulfilling career .Here are just some of the many reasons why one might choose to study human rights.

Course Outcome:

1. Identify and evaluate the historical, philosophical, political and cultural developments establishing human rights as a set of global norms, agreement and procedures.
2. Understand the importance of the Human Rights Act1998.
3. Explore global human rights institutions, law, and processes and assess the impact of their interaction with national and local cultural, practices and norms.
4. Critically examine the impact of diverse Geographic, cultural and theoretical contexts on the social acceptance and practical application of human rights norms.
5. Reflectively evaluate the effectiveness of human rights practice on local, national or international humanitarian efforts.

SEMESTER	PAPER CODE	Credit	Title of course
IV	DSC-1D/2D	6 (6 hours/week)	**Contemporary Indian Philosophy**

Contemporary Indian Philosophy is an important area of philosophy. From this course students will know humanism, spirituality, monism, concept of non-violence, truth , God etc.

Course Outcome:
1. The students will be able to get a broader concept on Rabindranath Tagore
2. Nature of man : The Finite Aspect of Man, For example: Bodily limitation, Differential concept about existence.By limitation, a man can realize the concept of spirituality.
3. the Infinite Aspect of Man,
4. The Finite Infinite Aspect of Man,where man realize his infinite capabilities
5. Nature of Religion,   Problem of Evil ,   Surplus in man. Fecundity.
6. Swami Vivekananda Practical Vedānta, Universal Religion, Yoga
7. Sri Aurobindo Nature of Reality, Human Evolution- its different stages Integral Yoga
8. S. Radhakrishnan nature of Man, Nature of Religious Experience,   Nature of Intuitive Apprehension
9. Mahatma Gandhi - God and Truth , Ahimsa, Trusteeship
10. Md. Iqbal- Nature of the Self, Nature of the World, Nature of God.

SEMESTER	PAPER CODE	Credit	Title of course
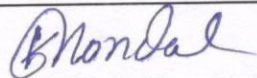
IV	SEC-2	2 (2 hours/ week)	Man and Environment

After studying the paper, students can establish ethical knowledge as well as their responsibilities towards the society.

Course Outcome:
1. A.Classical Indian Attitude to Environment..
2. The students will be able to get a broader concept about the Upanisadic world-view.For example :Veda, Different Sections of Veda.(Mantra,Brahman,Aronyak, & Upanishad.) and Hota,Udgota,Adharsu & Brahma.
3. The students will be able to get a border concept about Tagore's understanding of nature. For example :Surplus in Man, Dharma i,e.while Tagore says- "Human body is the temple of God" . So we can obviously relate Swamiji's quote "To serve man is to serve God." Truth , i.e.The truth of human unity is the truth of Man's God.
4. The students will be able to get a border concept on about the post-Upanisadic view of nature: Unity-in-diversity in post- Upanisadic Indian system of philosophy,Upanisad: Primary meaning and Secondary meaning, Upanisadic Brahma:Monism,Idealism.Upanisadic Atman, Brahma & Atman: Means Absolute Self.
5. Respect for Nature.
6. Ethical standards as well as different rules that follow from the attitude of respect to nature.
7. Inherent worth of nature.
8. Intrinsic Value of nature : Concept of Intrinsic properties,Realization of Intrisic value,After Moore.
9. Attfield on the intrinsic value of nature,
10. Callicott'idea of intrinsic value.
11. Deep ecology and its third word critique: Meaning of Deep ecology,and its critique.
12. Eco-feminism: understanding nature,feminine,dualisms,masculinity,humanity and nature.

SEMESTER	PAPER CODE	Credit	Title of course
V	DSE-1A/2A	6 (6 hours/week)	Philosophy of Religion

Religion is a special aspect of human experience and therefore needs a philosophical explanation. The function of Philosophy of Religion is to determine the significance and value of human experience of religion. Philosophy of religion is self-establishment of religious experience with the following concepts related to Philosophy of Religion

Course Outcome:
1. Description about nature as well as scope of Philosophy of Religion.
2. Enable them to analyze different doctrines of karma, rebirth or Janmantarabada and the theory of liberation.
3. Understand the meaning and concept of the Philosophical teachings of the Holy 'Quran'.
4. Knowledge about the different features of religion and can know the basic tenets of Christianity.

5. Gather knowledge about the concept of religious pluralism and the concept of universal religion.
6. Explanation of ground for disbelief in God and Peculiarity of Religious Language.

SEMESTER	PAPER CODE	Credit	Title of course
V	SEC-3	2 (2 hours/ week)	Value Education

Value education is the essencial curriculum at present time. Because we see in our society value of life, value of human beings, value of nature etc. are continuously demotion.

Course Outcome:
1. Students can get the meaning of value education, and value of life.
2. Knowledge about respectness to others.
3. Knowledge about different kinds of value education.
4. Understand about peace education.

SEMESTER	PAPER CODE	Credit	Title of course
V	GE-1	6 (6 hours/week)	Indian Philosophy

The achievements of the Indians in the field of philosophy are very important. It is impossible for a man to live without a philosophy. Indian philosophy has been intensely spiritual and has always emphasized the need of practical realisation of truth. 'See the self' is the keynote of all schools of Indian philosophy. By studying this paper students can gain the knowledge and understanding of the various comprehensive accounts of different Indian schools

Course Outcome :

1. Students can get the fundamental historical introduction outlying the sources of philosophical thought. Gain the common characteristics of Indian philosophy - such as - the idea of theory and practice, pessimistic outlook, belief in an eternal moral order, idea of law of Karma and Rebirth.
2. Knowledge about Materialism in Indian thought, which has never been a force, knows the origin of carvaka school and theory of pratyaksa or perception as the only source of knowledge. Know the fact of how to refute Anumana and sabda as well as the Dehatmavada Vada.
3. Understand the Jaina theory of Reality which is realistic and relativistic pluralism, theory of sevenfold judgement or Jaina Logic that distinguishes seven forms of judgements.
4. Able to know the Buddha's life and philosophy, which comprises four Noble Truths and the different theories i.e. theory of Impermanence, Nairatmavada as well as the theory of Dependent Origination which is the foundation of all the teaching of Buddha.
5. Description of Nyaya school which is allied to the Vaisesika system. Know the concepts of perception, inference, comparison or analogy and verbal testimony as the four kinds of Vaid knowledge. Get the idea of Saptapadartha or seven categories.
6. Understand the concept of 'Cause' in Samkhya philosophy, which is dualistic in nature, able to

know the theory of Casualty and theory of evolution associated with the idea of 'Cause'.

7. Gain knowledge about the Yoga School of Indian thought which is allied to Sam khya, the concept of Chittavrittis and modification of the Chitta through meditation, the Astanga Yoga or eightfold means.
8. Description of the two concepts of Mimamsa school, i.e. arthapatti and anupalabdhi or nonapprehension as a source of knowledge
9. Able to know the Advaita Vedanta concepts of Brahman, Jiva and Jagat.

SEMESTER	PAPER CODE	Credit	Title of course
VI	DSE-1B/2B	6 (6 hours/week)	Tarkasamgraha with Dipika

The Vaisheshika system is regarded as conducive to the study of all systems .Its main business is to deal with the categories and to unfold its atomistic pluralism.A category is called padartha and the entire universe is reduced to six or seven padarthas. The seven padarthas are as follows: 1.Substance 2.Quality 3. Action 4.Generality 5.particularity 6.Inherence 7.Non-being.

Course Outcome:

1. Students will get knowledge about ultimate reality.
2. Students will get a clear picture of Nyaya-Vaisesika philosophy.
3. Students will understand the similarities and dissimilarities between Nyaya and Vaisheshika philosophy.
4. Students can understand and materialistic worlds are not their destings.

SEMESTER	PAPER CODE	Credit	Title of course
VI	SEC-4	2 (2 hours/ week)	Logical Reasoning and Application

1.

SEMESTER	PAPER CODE	Credit	Title of course
VI	GE-2	6 (6 hours/week)	Philosophy of Mind

Philosophy of Mind is the study of mind, the meaning of which is the science or knowledge of the soul. Human beings not only occupy space, but are also capable of movement. We know that men have their Minds as they are conscious beings. By studying philosophy of Mind students can know the nature of mind and also the various concepts associated with our mind.

Course Outcome:

1. Able to define the two concepts of our mind i.e sensation and perception.

Sensation is a simple psychological phenomena resulting from the stimulation of the peripheral extremity of an afferent nerve when this is propagated to the brain. They get the idea of attributes or factors of sensation.

2. Knowledge about the concept of Perception, analysis of the correlation between sensation and perception, being able to know the Gestalt theory of perception which is opposite to the theory of associationists like Wundt, Titchener and the concept of Illusion and Hallucination.

3. Explain the conscious, unconscious and subconscious levels of mind. Consciousness is a constant change. Within each personal consciousness, thought is sensibly continuous. Get the idea or evidence for the existence of the unconscious and also the idea of Freud's dream theory.

4. Description and analysis of the idea of memory factors of memory i.e learning, retention, reproduction, recognition, localisation, which are important, as well as the laws of association and the concept of forgetfulness.

5. Know the concepts of learning which means modification of behaviour, the various theories of learning i.e Gestalt theory of learning, Pavlov's conditioned response theory. Able to know the factor of motivation which is an important factor of learning.

6. Able to know the very idea of Intelligence, the meaning of which is 'intellect put to use', the important theories associated with the concept of Intelligence as well as know the measurement of IQ test of Intelligence.

B.A General in Physical Education

Course Outcomes

Foundation of Physical Education

After successfully completing this course, the student will be able to:

1. Understand & differentiate the concept of History, Principles and Philosophy of physical education

2. Choose the physical education as a remedial tool to inculcate values and ethics

3. Get acquainted with historical development and its impact on nature of physical education in India and abroad 4. Acquaint with historical perspective as an influence on physical education, Abroad and in India.

5. Identify the students with different Issues, challenges and opportunities in Physical education & sport Course

Anatomy and Physiology

After successfully completing this course, the student will be able to:

1. Understand the basic structure and function of the human body and demonstrate its knowledge for the development of skills and fitness

2. Demonstrate knowledge and understanding of the effect of exercise on the different systems

3. Classify types of joints and explain the structure and function of human joints

4. Identify and differentiate various movements of the body and demonstrate knowledge of the importance of appropriate movements during exercise and sports.

5. Recognize the need of different energy systems of the human body for its efficient performance during exercise and sports Course

Health Education

After successfully completing this course, the student will be able to:

1. Understand the importance of health education and strive for good health.

2. Understand the concept of health education and environment studies

3. Understand the concept, importance & determinants of health and environment studies.

4. Demonstrate the Understanding and causes, symptoms and case to be taken for various ailments

5. Understand the importance of body posture and acquire the appropriate body posture. 6. Understand the importance of diet and implement a balanced diet in own life to stay healthy Course

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Asst. Prof in Physical Education

History of Physical Education

After successfully completing this course, the student will be able to:

1. Discuss about the history of Physical Education; Ancient and Modern
2. Get acquainted with Olympic historical development and its impact on nature of physical education in India and abroad
3. Identify the students with different Issues, challenges and opportunities in Physical education & sports Course

Officiating and Coaching

After successfully completing this course, the student will be able to:

1. An official should face unusual circumstances during the course of the game.

2. A capable official must face the circumstances with courage and without overstepping the rules or the code of ethics.

3. An official is always above prejudices.

4. The sports official is a role model who is charged with enforcing the concepts of fair play and good sportsmanship.

5. They provide leadership and guidance to participants, ensuring that the competition is conducted in a safe and fair manner.

6. Knowledge about the different sports and their rules.

7. Learn about the ground layout.

8. Knowledge about the different equipment of game and sports.

Yoga

After successfully completing this course, the student will be able to:

1. Describe knowledge of classical and theoretical foundations of the field of Yoga

2. Demonstrate knowledge and ability to use professional conduct during the practice of Yoga Therapy

3. Develop an ability to apply knowledge learned in this curriculum to assess the needs of students, and to evaluate their performance

4. Acquire knowledge of the interconnections between the body, the breath, the mind, and the emotions in the context of maintaining resilience and well-being

5. Communicate effectively, implement effective teaching methods by adapting to unique styles of learning, providing supportive and effective feedback while evaluating and acknowledging the progress of the student Course

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Asst. Prof in
Physical Education

Organization and Administration in Physical Education

After successfully completing this course, the student will be able to:

1. Describe the fundamentals of Sports Management, Organization and Administration in Sports Industry.

2. Organise competitions at different levels.

3. Prepare and execute the intramural program for their school and college.

4. Prepare their own SOP for purchasing the sports equipment.

5. Design the layouts of sports facilities. Course 1

Sports Training

After successfully completing this course, the student will be able to:

1. Physical fitness is the basic requirement of any game and sports. There is a specific requirement of each component of physical fitness according to the specific sport. Sports training helps in building a fine physique and ensures good health.

2. Sports training helps in incorporating a sense of discipline in a person's life.

3. Sports training teaches a sports person about teamwork, sense of belonging and unselfish play. It also encourages to play for team rather than for one's personal accomplishment.

4. It boosts the morale of a person when he performs and also when he excels towards a particular game. It improves self-esteem as well as body posture, which makes one feel more confident and determined.

5. Counsellors and mental trainers help in identifying those areas which are causing the sportsman to become distracted on the field and enhance focus on the field.

Sports Psychology and Sociology

After successfully completing this course, the student will be able to:

1. Describe basic aspects of sports Psychology and sociology.

2. Understand the role of sports psychology in performance and behaviour of Sports person and Society

3. Identify and solve basic psychological and Sociological problems of students and players. Course

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Asst. Prof in
Physical Education

Test Measurement Evaluation in Physical Education

After successfully completing this course, the student will be able to:

1. Define the concept of Test, Measurement, Evaluation and Assessment Procedure in Physical Education and give examples of each

2. Understand and differentiate between formative and summative evaluation, Process and Product evaluation

3. Administer psychomotor tests using standard protocols and guidelines.

4. Select appropriate Evaluation tools according to purpose and age groups

5. Collect and analyse fitness test data of school students

6. Construct or design rubrics, question paper and teacher made test for evaluation Course

Game Specialization(SEC)

After successfully completing this course, the student will be able to:

1. Understand the different types and classification of sports & games

2. Understand the Values and Ethics of sports and sportsmanship

3. Demonstrate the basic understanding of rules, equipment and terminologies in various sports and Games 4. Categorise different State and National Level Awards and explain their nature

5. Recognize different technologies used in Sports and Games Course

6. Knowledge about the different sports and their rules.

7 Learn about the ground layout.

8. Knowledge about the different equipment of game and sports.

Principal
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Asst. Prof in
Physical Education
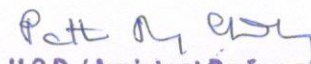
(2) <u>B. Sc. Honours in Physics (CBCS)</u>

Programme Specific Outcome (PSO)

After completing the program B. Sc. Honours in Physics, the students may acquire the following skills and knowledge:

- ✓ Demonstrate in-depth knowledge in one of the foundational areas of the physical science.

- ✓ Communicate physical concepts using numerical, graphical, and symbolic representations.

- ✓ Analyse, test, and interpret technical arguments, and form independent judgments.

- ✓ Solve complex problems by identifying different concepts.

- ✓ Gather and organize relevant qualitative and quantitative information such as related problems, examples, and daily life problems.

- ✓ To improve their performance in physics competitions (like IIT-JAM, TIFR, JEST, CSIR-NET), as well as their general physical concepts if competitions are not their main goal their higher studies

Course Outcome (CO) of B.Sc. Honours in Physics

(i) PHSH CC-1: Mathematical Physics

Outcome:

Calculus: • Students will be able to productively discuss mathematics in a group setting • Students will be able to write detailed solutions using appropriate mathematical language • Students will be able to identify areas in mathematics and other fields where Calculus is useful • Students will be able to generate solutions to unfamiliar problems

Vector Calculus: • Knowledge: The student has knowledge of central concepts in multivariable analysis, including space curves; directional derivative; gradient; multiple integrals; line and surface integrals; vector fields; divergence, curl and flux; the theorems of Green and Stokes, and the divergence theorem.

• Skills: The student is able to apply techniques from multivariable analysis to set up and solve mathematical models, to deduce simple mathematical results, and to calculate integrals. The student is able to set up and solve simple optimization problems, including problems with constraints.

Orthogonal Curvilinear Coordinates: • Student will be able to write detailed solution using Orthogonal Curvilinear Coordinates. • Student will be able to identify divergence and gradient.

• Student will be able other identify Curl and Laplacian cartesian.

Probability: • Student will be able to identify of random variables • Student will be able to write details probability of distribution function • Student will be able learning to recognize binomial, Gaussian and Poisson function

Dirac Delta Function: • Student will be able to identify Dirac Delta function: • Student will be able to Dirac Delta function as action as a localization operator • Student can view two dimensional and three-dimensional problems as independent concept rather than one being a special case of other

Principal,
Chandrakona Vidyasagar Mahavidyalaya
na :: Paschim Medinipur

H.O.D./ Assistant Professor
Dept. of Physics
Chandrakona Vidyasagar Mahavidyalaya

(ii) PHSHCC-02: Mechanics

Outcomes: **Fundamentals of Dynamics** • Students will know about Reference frames. Inertial frames; Newton's Laws of Motion. • Students will learn about Galilean transformations; Galilean invariance. • Students will learn about Momentum of variable-mass system: motion of rocket. • Students will able to calculate Motion of a projectile in Uniform gravitational field. • Students will learn about Dynamics of a system of particles. Centre of Mass. Principle of conservation of momentum and able to solve problem related to this.

Work and Energy • Students will learn about Work and Kinetic Energy Theorem. • Students will learn about Conservative and non- conservative forces. Potential Energy. • Students will be able to find Stable and unstable equilibrium condition. • Students will able to calculate Elastic potential energy, Force as gradient of potential energy. • Students will learn about Work & Potential energy. Work done by non-conservative forces. Law of conservation of Energy.

Collisions • Students will learn about Elastic and inelastic collisions between particles. Centre of Mass and Laboratory frames

Rotational Dynamics • Students will learn about Angular momentum of a particle and system of particles. • Students will able to calculate Torque. • Students will learn about Principle of conservation of angular momentum. • Students will learn about Rotation about a fixed axis. Moment of Inertia. • Students will able to Calculate the moment of inertia for rectangular, cylindrical and spherical bodies. • Students will learn about Kinetic energy of rotation. Motion involving both translation and rotation

Elasticity • Students will learn about Relation between Elastic constants. Twisting torque on a Cylinder or Wire.

Fluid Motion • Students will learn about Kinematics of Moving Fluids: Poiseuille's Equation for Flow of a Liquid through a Capillary

Gravitation and Central Force Motion • Students will learn about Law of gravitation. Gravitational potential energy. • Students will be able to solve problems related to gravitation

Oscillations • Students will learn about Simple Harmonic Oscillations. Differential equation of SHM and its solution. • Students will be able to calculate Kinetic energy, potential energy, total energy and their time-average values. • Students will learn about Damped oscillation. Forced oscillations: Transient and steady states; Resonance, sharpness of resonance; power dissipation and Quality Factor

Non-Inertial Systems • Students will learn about non-inertial frames and fictitious forces. • Students will learn about Uniformly rotating frame. Laws of Physics in rotating coordinate systems. • Students will able to solve problems related to relativity.

(iii) PHSHCC-03: Electricity and Magnetism Outcomes: • Students will know about Electric Field and Electric Potential and able to solve problems related to this • Students will know about Dielectric Properties of Matter. • Students will learn about Magnetic Properties of Matter • Students will learn about Thevenin theorem, Norton theorem, Superposition theorem, Reciprocity theorem, Maximum Power Transfer theorem • Student will able to solve problems related to magnetism.

(iv) PHSHCC-04 - Waves and Optics Outcomes: • Students will learn about concept What is the superposition of Collinear Harmonic oscillations and also the Superposition Principle. What will be its outcomes in two collinear oscillations having (1) equal frequencies and (2) different frequencies (Beats). • They will learn about Graphical and Analytical Methods in Lissajous Figures with equal and unequal frequency and their uses and by these Lissajous Figures they can solve various numerical problems. • Students can learn about the Plane and Spherical Waves and also learn what will be Longitudinal, Transverse Waves and Plane Progressive (Travelling) Waves. • Students can find out the differential Equation of plane Progressive (Travelling) Waves. • They can find out the Particle and Wave Velocities by this Differential Equation. • Pressure of a Longitudinal Wave. Energy Transport. Intensity of Wave. Water Waves.

(v) PHSHCC-05: Mathematical Physics Outcomes: Fourier Series: • Student will be able to understand and concept Periodic Function. • Student can calculate the sine and cosine function. • Student can relate about Dirichlet condition. • Student can estimate even and odd function and their Fourier expansion. • Student will able to term by term differentiation and integration of Fourier series. Special Function: - • Student will be able to singular point of second order linear differential equation. • Student can understand Legendre, Bessel, Hermite and Lagrangian differential equation. • Student can able to check orthogonality, generating function and Rodrigues formula. • Student can explain Bessel function ($J0(x)$ and ($J1(x)$ and orthogonality. Special Integrals: • Student can able to beta and Gamma function and relation between them. • Student can estimate expressions of integral in terms of Gamma function. • Student can calculate of error function of probability integral. Variational

Calculus: • Student can understand basic idea of functional. • Student will obtain basic principle of mechanics. • Student will be able to canonical equation of motion and Legendre transformation. Partial Differential Equation: • Student can calculate partial differential equation using separation of variables. • Student will be able to understand Laplace's equation in problems of rectangular, cylindrical and spherical symmetry. • Student will be able to understand diffusion equation.

(vi) PHSHCC-06: Thermal Physics Outcomes: • Students will know about First Law of Thermodynamics and 2nd law of thermodynamics and able to solve problems based on this. • Students will know about the Concept of Entropy. • Students will learn about Thermodynamic Potentials: Internal Energy, Enthalpy, Helmholtz Free Energy, Gibb's Free Energy. • Students will learn about Maxwell-Boltzmann Law of Distribution and able to calculate problems based on this. • Student will learn about Behaviour of Real Gases and Deviations from the Ideal Gas Equation.

(vii) PHSHCC-07: Digital Systems and Applications Outcomes: • Students will know about Integrated Circuits and different type of gates. • Students will know about De Morgan's Theorems. Boolean Laws and Simplification of Logic Circuit using Boolean Algebra. • Students will learn about Half and Full Adders. Half & Full Subtractors, 4-bit binary Adder/Subtractor. Sequential Circuits. • Students will learn about Computer memory. Memory organization & addressing. Memory Interfacing. • Students will learn about Serial-in-Serial-out, Serial-in-Parallel-out, Parallel-in-Serial-out and Parallel-in-Parallel-out Shift Registers.

(viii) PHSHCC-08: Mathematical Physics III Outcomes:
Complex Analysis: • Student will able to derive Euler's formula, De Moivre's theorem, Roots of Complex Numbers. Functions of Complex Variables. Analyticity and Cauchy-Riemann Conditions • Student will learn about analytic functions, Singular functions then they can find poles and branch points, order of singularity, branch cuts. Integration of a function of a complex variable. • Student will able to derive Cauchy's Integral formula. Simply and multiply connected region. Laurent and Taylor's expansion. Residues and Residue Theorem. Application in solving Definite Integrals. Integrals Transforms: • Student will learn the basic concept of Fourier Transforms: Fourier Integral theorem. Fourier Transform. Examples. Fourier transform of trigonometric, Gaussian, finite wave train & other functions. Representation of Dirac delta function as a Fourier Integral. • Student can derive Inverse
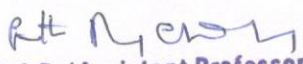
Fourier transform, Convolution theorem. • Student can apply Fourier Transforms to differential equations: One dimensional Wave and Diffusion/Heat Flow Equations. Matrices: • Student can add and multiply of Matrices. • Student will learn about Null Matrices. Diagonal. Transpose of a Matrix. Symmetric and Skew-Symmetric Matrices. Hermitian and Skew Hermitian Matrices. Singular and Non-Singular matrices. Orthogonal and Unitary Matrices. Trace of a Matrix. Inner Product • Student can calculate Eigenvalue and Eigen function of matrices. Mathematical Physics III Lab: • Student can solve differential equations. • Student can solve Dirac Delta Function. • Student can calculate error for each data point of observations recorded in experiments done in previous semesters. • Student can calculate least square fitting manually without giving weightage to error. Confirmation of least square fitting of data through computer program.

(ix) PHSHCC09: Elements of Modern Physics Outcomes:

Planck's quantum: • Student will be able to understand the concept of photon. • Student will be able to explain photoelectric effect, Compton scattering. • Student will know the concept of De Broglie wavelength and matter waves. • Student will be able to explain Davisson-Germer experiment. Problems with Rutherford model: • Student will be able to understand Bohr's quantization rule and atomic stability; • Student can calculate the energy levels for hydrogen like atoms and their spectra. • Student can observe Instability of atoms and observation of discrete atomic spectra. Position measurement: • Student can understand about Gamma ray microscope thought experiment. • Student can relate about Wave-particle duality and Heisenberg uncertainty principle. • Student can estimate minimum energy of a confined particle using uncertainty principle and Energy-time uncertainty principle. Two slit interference experiment: • Student will obtain a basic concept about linear superposition principle as a consequence; Matter waves and wave amplitude. • Student can solve Schrodinger equation for non-relativistic particle. • Student will know the relation about Momentum and Energy operator. • Student will obtain the basic concept stationary states; physical interpretation of wave function. • Student can normalize any wave function. • Student can calculate probabilities and probability current densities in one dimension of any given wave function. One Dimensional infinitely Rigid Box: • Student can calculate energy eigenvalues and Eigen functions, normalization constant. • Student can understand Quantum mechanical scattering and tunnelling in one dimension - across a step potential and across a rectangular potential barrier. Size and structure of atomic nucleus and its relation with atomic weigh: • Student can under the nature of nuclear force, NZ graph, • Student will be able to

calculate semi-empirical mass formula and binding energy. Radioactivity: • Student will be able to calculate Law of radioactive decay. • Student can calculate Mean life and half-life; decay. • Student will be able to explain decay - energy released, spectrum and Pauli's prediction of neutrino; -ray emission. Fission and fusion: • Student can calculate Mass deficit, relativity and generation of energy; • Student will understand Fission - nature of fragments and emission of neutrons. • Student will know about nuclear reactor: slow neutrons interacting with Uranium 235; Fusion and thermonuclear reactions. Elements of Modern Physics Lab: • Student can measure of Planck's constant using black body radiation and photo-detector. • Student can determine work function of material of filament of directly heated vacuum diode. • Student can determine the Planck's constant using LEDs of at least 4 different colours. • Student can determine the wavelength of H-alpha emission line of Hydrogen atom. 6. To determine the ionization potential of mercury. • Student can determine the absorption lines in the rotational spectrum of Iodine vapour.

(x) PHSHCC-10: Analog Systems and Applications Outcomes: • Students will know about Conductivity and Mobility, Concept of Drift velocity, PN Junction Fabrication etc. • Students will know about the principle and structures of (1) LEDs, (2) Photodiode and (3) Solar Cell. • Students will learn about n-p-n and p-n-p Transistors. Characteristics of CB, CE and CC Configurations. • Students will learn about Transistor as 2-port Network. h-parameter Equivalent Circuit. Analysis of a single-stage CE amplifier using Hybrid Model. and Output Impedance. Current, Voltage and Power Gains. Classification of Class A, B & C Amplifiers. • Student will learn about Op-Amps applications as (1) Inverting and non-inverting amplifiers, (2) Adder, (3) Subtractor (4) Differentiator, (5) Integrator, (6) Log amplifier, (7) Zero crossing detector (8) Wein bridge oscillator.

(xi) PHSHCC-11: Quantum Mechanics and Applications Outcomes:
Schrodinger equation: • Students will learn about concepts about Time dependent Schrodinger equation and dynamical evolution of a quantum state and also Properties Of Wave Function. • Students will take idea about Interpretation of Wave Function Probability and probability current densities in three dimensions. • Students will know the Conditions for Physical Acceptability of Wave Functions. • Students will take ideas about Normalization. • Students will know the Linearity and Superposition Principles. Eigenvalues and Eigenfunctions. Position, momentum and Energy Operators; commutator of position and momentum operators • Students will know about Expectation values of position and

momentum. • Students can learn about the Wave Function of a Free Particle and Time independent Schrodinger equation-Hamiltonian in stationary states and also energy eigenvalues. • Students will know about Application to spread of Gaussian wave packet for a free particle in one dimension; wave and Fourier transforms and also momentum space wave function; • Students can learn about Position-momentum uncertainty principle. General discussion of bound states in an arbitrary potential: • Students will know about Continuity of wave function, boundary condition and emergence of discrete energy levels; application to one dimensional problem-square well potential. • Students can learn about Quantum mechanics of simple harmonic oscillator-energy levels and energy eigenfunctions using Frobenius method Hermite Polynomials ground state and zero-point energy and also uncertainty principle. • Students will know Quantum theory of hydrogen-like atoms and it's Radial wave functions from Frobenius method; shapes of the probability densities for ground & first excited states • Students can learn about Orbital angular momentum quantum numbers I and m;s,p,d,..shells. • Students will know Atomic Electric & Magnetic Fields. • Students can learn about Space quantization. • Students will know Electron Spin And Spin Angular Momentum and it's Spin Magnetic Moment. • Students can learn about the Stern-Gerlach Experiment. • Students will know the Zeeman Effect Electron and Gyromagnetic Ratio and Bohr Magneton and also Normal and Anomalous Zeeman Effect. • Students can learn about Paschen Back and Stark Effect. Many electron atoms: • Students will know Pauli's Exclusion Principle and Symmetric & Antisymmetric Wave Functions. • Students can learn about Fine structure and Spin Orbit coupling. Spectral Notations for Atomic States and also Total angular momentum. • Students will know about Vector Model. Spin-orbit coupling in atoms - L- S and J-J couplings and Hund's Rule. Term symbols. • Students will know about Spectra of Hydrogen and Alkali Atoms

(xii) PHSHCC-12: Solid State Physics Outcomes: • Students will know about Amorphous and Crystalline Materials. • Students will know about Lattice Vibrations and Phonons. • Students will learn about Dia-, Para-, Ferri- and Ferromagnetic Materials. • Students will learn about Dielectric Properties of Materials. • Students will learn about superconducting behaviour of materials. • Students will learn about Kronig Penny model. Band Gap. Conductor, Semiconductor (P and N type) and insulator.

(xiii) PHSHCC-13: Electromagnetic Theory Outcomes: • Students will learn about Maxwell's equations and Displacement Current and also Vector and Scalar Potentials. • Students will

know the Gauge Transformations and their classes (Lorentz and Coulomb Gauge) • Students will learn about Boundary Conditions at Interface between Different Media and Wave Equations and also Plane Waves in Dielectric Media. • Students will know Poynting Theorem and Poynting Vectors and Physical Concept of Electromagnetic Field Energy Density, Momentum Density and Angular Momentum Density. EM Wave Propagation in Unbounded Media • Students will learn about Plane EM waves through vacuum and isotropic dielectric medium, transverse nature of plane EM waves, refractive index and dielectric constant, wave impedance. Propagation through conducting media, relaxation time, skin depth. • Students will know Wave propagation through dilute plasma, electrical conductivity of ionized gases, plasma frequency, refractive index, skin depth, application to propagation through ionosphere. EM Wave in Bounded Media • Students will learn Boundary conditions at a plane interface between two media. Reflection & Refraction of plane waves at plane interface between two dielectric media-Laws of Reflection & Refraction. • Students will know Fresnel's Formulae for perpendicular & parallel polarization cases, • Students will learn Brewster's law. Reflection & Transmission coefficients and Total internal reflection, evanescent waves. Metallic reflection (normal Incidence). Polarization of Electromagnetic Waves • Students will know Description of Linear, Circular and Elliptical Polarization. Propagation of E.M. Waves in Anisotropic Media. • Students will learn about Symmetric Nature of Dielectric Tensor. Fresnel's Formula. Uniaxial and Biaxial Crystals. Light Propagation in Uniaxial Crystal. Double Refraction. Polarization by Double Refraction. • Students will know Nicol Prism. Ordinary & extraordinary refractive indices. Production & detection of Plane, Circularly and Elliptically Polarized Light. • Students will learn about Quarter-Wave and Half-Wave Plates. Babinet Compensator and its Uses. Analysis of Polarized Light • Students will know about Rotatory Polarization: Optical Rotation. Biot's Laws for Rotatory Polarization. Fresnel's Theory of • Students will learn optical rotation. Calculation of angle of rotation. Experimental verification of Fresnel's theory. • Students will know about Specific rotation. Laurent's half-shade polarimeter. Wave guides • Students will learn Planar optical waveguides. Planar dielectric waveguide. Condition of continuity at interface. Phase • Students will know about shifts in total reflection. Eigenvalue equations. Phase and group velocity of guided waves. Field • Students will learn about energy and Power transmission. Optical Fibres • Students will know about the Numerical Aperture. Step and Graded Indices

(xiv) PHSHCC14: Statistical Mechanics Outcomes: Classical Statistical Mechanics: • Student will be able to identify macrostate and microstate, elementary particle • Student can

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

H.O.D./ Assistant Professor
Dept. of Physics
Chandrakona Vidyasagar Mahavidyalaya

understand phase space, entropy and thermodynamic probability. • Student can obtain law of equipartition of energy. Classical Theory Of Radiation: • Student can understand black body radiation, Kirchhoff's law , Stefan Boltzmann law . • Student will be able to Wien's displacement law, Wien's distribution law • Student can understand Saha-ionization formula. Quantum Theory of radiation: • Student will be able black body radiation Planck's quantum postulates, Planck's law • Student can estimate Wien's distribution law , Rayleigh jeans law . Bose Einstein Statistics: • Student will able to B.E distribution law . • Student can explain radiation as a photon gas and thermodynamics function of photo gas. • Student can understand Bose derivation of Planck's law. Fermi Dirac Statistics • student will be able to F.D distribution law. • Student can explain thermodynamic function of a completely and strongly degenerate Fermi gas, fermi energy • Student can understand specific hit of metals.

(xv) PHSH SEC-01: Electrical Circuits and Network Skills Outcomes: • Students will know about Basic Electricity Principles • Students will learn about Single-phase and three-phase alternating current sources. • Students will learn about Ladder diagrams, Electrical Schematics, Power circuits, Control circuits. • Students will learn about DC Power sources. AC/DC generators. Inductance, capacitance, and impedance. • Student will learn about Basics of wiring-Star and delta connection. Voltage drop and losses across cables and conductors.

(xvi) PHSH SEC-02: Applied Optics Outcomes: Sources and Detectors: • Students will learn fundamental idea on Lasers, Spontaneous and stimulated emissions, Theory of laser action, Einstein's coefficients, light amplification, Characterization of laser beam, He-Ne laser, and Semiconductor lasers. Fourier Optics: • Students will able to understand concept of spatial frequency filtering, Fourier transforming property of a thin lens Fourier Transform Spectroscopy (FTS) is a powerful method for measuring emission and absorption spectra, with wide application in atmospheric remote sensing, NMR spectrometry. Holography: • Students will get a brief idea on basic principle and theory: coherence, resolution, Types of holograms, white light reflection hologram, application of holography in microscopy, interferometry, and character recognition. Photonics: Fibre Optics: • Students will learn about optical fibers and their properties, Principal of light propagation through a fibre, The numerical aperture, Attenuation in optical fibre and attenuation limit, Single mode and multimode fibres, Fibre optic sensors: Fibre Bragg Grating

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

H.O.D./ Assistant Professor
Dept. of Physics
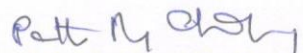Chandrakona Vidyasagar Mahavidyalaya

(xvii) PHSH DSE-1: -CLASSICAL DYNAMICS Outcomes: • Students will know about Lagrangian and Hamiltonian mechanics. • Students will learn about motion of particle in uniform electric field, magnetic field- gyro radius and gyro frequency, motion in crossed electric and magnetic fields. • Students will able to solve problems on Small Amplitude Oscillations. • Students will learn about relativity and know about Time – dilation, length contraction and twin paradox. Four-vectors: space-like, time-like and light-like. Four-velocity and acceleration. • Student will learn about viscosity, stream-lined motion, laminar flow, Poiseuille's equation for flow of a liquid through a pipe.

(xviii) PHSH DSE-2: Nuclear & Particle Physics Outcomes:

General Properties of Nuclei: • Student will able to mass, radii, charge, density, binding energy, average energy. • Student will obtain of binding energy versus mass number curve. • Student can understand angular momentum parity, magnetic moment, electric moment, nuclear excites states. Nuclear Models: • Student will be able to liquid drop model approach • Student can calculate two nucleon separation energies. • Student can understand concept of mean field, residual intersection, concept to nuclear force.

Radioactivity Decay: • Student will be able to explain type of Alpha decay, Beta decay and Gamma decay. • Student will be able to understand basics of Alpha decay process. • Student will be able to understand energy kinematics for Beta decay • Student will be able to understand Gamma ray emission and kinematics, internal conversion.

Nuclear Reaction: • Student will know the concept of conservation law Student can calculate Q value, reaction rate, reaction cross section • Student will be able to know about resonance reaction, coulomb scattering. Intersection of Nuclear Radiation with Matter: • Student may find the energy loss of an electron. • Student will be able to know the Gamma ray interaction through matter. • Student can understand photoelectric effect, Compton scattering, pair production, neutron interaction with matter. Detector for nuclear radiations :- • Student will be able to mobility of particle for ionization chamber. • Student can understand GM counter . • Student will be able to semiconductor detectors for charge particle and photon detection , neutron detection . Particle accelerators: • Student will be able to cyclotron . • Student can understand Van De Graaff generator. Particle Physics:- • Student can basic concept of basic features . • Student can explain of types of particle. • Student can obtain of conservations of laws.

(xix) PHSH DSE-3: Communication Electronics Outcomes: • Students will know about Amplitude Modulation, Frequency Modulation (FM) and Phase Modulation (PM). • Students

will know about the Concept of Amplitude Shift Keying (ASK), Frequency Shift Keying (FSK), Phase Shift Keying (PSK), and Binary Phase Shift Keying (BPSK). • Students will learn about geosynchronous satellite orbits geostationary satellite advantages of geostationary satellites. • Students will learn about Basic concept of mobile communication. • Student will learn about communication network, idea of GSM, CDMA, TDMA and FDMA technologies, simplified block diagram of mobile phone handset, 2G, 3G and 4G concepts.

(xx) PHSH DSE-4: Experimental Techniques Outcomes: • Students will know about types of errors: Gross error, systematic error, random error. • Students will know about curve fitting. • Students will learn about S/N ratio and Noise figure. • Students will learn about Methods of safety grounding. Energy coupling. Grounding, Electrostatic shielding. • Students will know about digital multimeter, vacuum system, Q-meter. • Students will learn about Static and dynamic characteristics of measurement Systems. • Students will learn about RTD, Thermistor, Thermocouples, Semiconductor type temperature sensors, LVDT.

(xxi) PHSH GE-01: Elements of Modern Physics Outcomes: Planck's quantum: • Student will be able to understand the concept of photon. • Student will be able to explain photoelectric effect, Compton scattering. • Student will know the concept of De Broglie wavelength and matter waves. • Student will be able to explain Davisson-Germer experiment. Problems with Rutherford model: • Student will be able to understand Bohr's quantization rule and atomic stability; • Student can calculate the energy levels for hydrogen like atoms and their spectra. • Student can observe Instability of atoms and observation of discrete atomic spectra. Position measurement: • Student can understand about Gamma ray microscope thought experiment. • Student can relate about Wave-particle duality and Heisenberg uncertainty principle. • Student can estimate minimum energy of a confined particle using uncertainty principle and Energy-time uncertainty principle. Two slit interference experiment: • Student will obtain a basic concept about linear superposition principle as a consequence; Matter waves and wave amplitude. • Student can solve Schrodinger equation for non-relativistic particle. • Student will know the relation about Momentum and Energy operator. • Student will obtain the basic concept stationary states; physical interpretation of wave function. • Student can normalize any wave function. • Student can calculate probabilities and probability current densities in one dimension of any given wave function. One Dimensional infinitely Rigid Box: • Student can calculate energy eigenvalues and Eigen functions, normalization constant. • Student can understand Quantum mechanical scattering and

tunnelling in one dimension - across a step potential and across a rectangular potential barrier. Size and structure of atomic nucleus and its relation with atomic weigh: • Student can under the nature of nuclear force, NZ graph, • Student will be able to calculate semi-empirical mass formula and binding energy. Radioactivity: • Student will be able to calculate Law of radioactive decay. • Student can calculate Mean life and half-life; decay. • Student will be able to explain decay - energy released, spectrum and Pauli's prediction of neutrino; -ray emission. Fission and fusion: • Student can calculate Mass deficit, relativity and generation of energy; • Student will understand Fission - nature of fragments and emission of neutrons. • Student will know about nuclear reactor: slow neutrons interacting with Uranium 235; Fusion and thermonuclear reactions. Practical: • Student will able to determine value of Boltzmann constant using V-I characteristic of PN diode. • Student can determine work function of material of filament of directly heated vacuum diode. • Student can determine value of Planck's constant using LEDs of at least 4 different colours. • Student can determine the ionization potential of mercury. • Student can study the diffraction patterns of single and double slits using laser source and measure its intensity variation using Photo-sensor and compare with incoherent source – Na light.

(xxii) PHSH GE-02: Thermal Physics and Statistical Mechanics Outcomes: • Students will know about First Law of Thermodynamics and 2nd law of thermodynamics and able to solve problems based on this. • Students will know about the Concept of Entropy. • Students will learn about Thermodynamic Potentials: Internal Energy, Enthalpy, Helmholtz Free Energy, Gibb's Free Energy. • Students will learn about Maxwell-Boltzmann Law of Distribution and able to calculate problems based on this. • Students will know about Maxwell-Boltzmann law , distribution of velocity , Quantum statistics - Fermi- dirac distribution law, Bose Einstein distribution law, comparison of three statistics. • Student will learn about Behaviour of Real Gases and Deviations from the Ideal Gas Equation.

(xxiii) PHSH GE-03: Solid State Physics Outcomes: • Students will know about Amorphous and Crystalline Materials. • Students will know about Lattice Vibrations and Phonons. • Students will learn about Dia-, Para-, Ferri- and Ferromagnetic Materials. • Students will learn about Dielectric Properties of Materials. • Students will learn about superconducting behaviour of materials. • Students will learn about Kronig Penny model. Band Gap. Conductor, Semiconductor (P and N type) and insulator.

(xxiv) PHSH GE-04: Digital and analog circuits and instrumentation Outcomes: • Students will know about Integrated Circuits and different type of gates. • Students will know about De Morgan's Theorems. Boolean Laws and Simplification of Logic Circuit using Boolean Algebra. • Students will learn about Half and Full Adders. Half & Full Subtractors, 4-bit binary Adder/Subtractor. Sequential Circuits. • Students will learn about Computer memory. Memory organization & addressing. Memory Interfacing. • Students will learn about Serial-in-Serial-out, Serial-in-Parallel-out, Parallel-in-Serial-out and Parallel-in-Parallel-out Shift Registers.

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona :: Paschim Medinipur

H.O.D./ Assistant Professor
Dept. of Physics
Chandrakona Vidyasagar Mahavidyalaya

(1) B. Sc. General in Physics (CBCS)

Programme Specific Outcome (PSO)

After completing the program B. Sc. General in Physics, the students may acquire the following skills and knowledge:

- ✓ Students should be able to formulate, analyze and solve complex and diverse problems through analytical and computational techniques and apply them to other disciplines when appropriate.
- ✓ Recognize the need for the preparation and ability to engage in independent and lifelong learning in the broadest context of technological challenges.
- ✓ Analyses, test, and interpret technical arguments, and form independent judgments.
- ✓ Gather and organize relevant qualitative and quantitative information such as related problems, examples, and counterexamples.
- ✓ The graduates will be able to communicate physical ideas via extended, clear, and well-organized way using power point, google meet and various virtual platforms.
- ✓ The degree with physics can orient the students for careers in the corporate sector, Tech industry, and government agencies.

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona :: Paschim Medinipur

H.O.D./ Assistant Professor
Dept. of Physics
Chandrakona Vidyasagar Mahavidyalaya

Course Outcome (CO) of B.Sc. General in Physics

(i) PHSG DSC-1A: <u>Mechanics</u>
Outcomes:
Fundamentals of Dynamics

• Students will know about Reference frames. Inertial frames; Newton's Laws of Motion.

• Students will learn about Galilean transformations; Galilean invariance.

• Students will learn about Momentum of variable- mass system: motion of rocket.

• Students will able to calculate Motion of a projectile in Uniform gravitational field.

• Students will learn about Dynamics of a system of particles. Centre of Mass. Principle of conservation of momentum and able to solve problem related to this.

Work and Energy

• Students will learn about Work and Kinetic Energy Theorem.

• Students will learn about Conservative and non- conservative forces. Potential Energy.

• Students will be able to find Stable and unstable equilibrium condition.

• Students will able to calculate Elastic potential energy, Force as gradient of potential energy.

• Students will learn about Work & Potential energy. Work done by non-conservative forces. Law of conservation of Energy.

Collisions

• Students will learn about Elastic and inelastic collisions between particles. Centre of Mass and Laboratory frames

Rotational Dynamics

• Students will learn about Angular momentum of a particle and system of particles.

• Students will able to calculate Torque.

• Students will learn about Principle of conservation of angular momentum.

• Students will learn about Rotation about a fixed axis. Moment of Inertia.

• Students will able to Calculate the moment of inertia for rectangular, cylindrical and spherical bodies.

• Students will learn about Kinetic energy of rotation. Motion involving both translation and rotation

Elasticity

• Students will learn about Relation between Elastic constants. Twisting torque on a Cylinder or Wire.

Fluid Motion

• Students will learn about Kinematics of Moving Fluids: Poiseuille's Equation for Flow of a Liquid through a Capillary

Gravitation and Central Force Motion

• Students will learn about Law of gravitation. Gravitational potential energy.
• Students will be able to solve problems related to gravitation

Oscillations

• Students will learn about Simple Harmonic Oscillations. Differential equation of SHM and its solution.
• Students will be able to calculate Kinetic energy, potential energy, total energy and their time-average values.
• Students will learn about Damped oscillation. Forced oscillations: Transient and steady states; Resonance, sharpness of resonance; power dissipation and Quality FactorLaw of gravitation.

Non-Inertial Systems
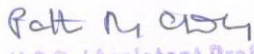
• Students will learn about Non-inertial frames and fictitious forces.
• Students will learn about Uniformly rotating frame. Laws of Physics in rotating coordinate systems.
• Students will able to solve problems related to relativity.

(ii) PHSG DSC-1B: Electricity and Magnetism

Outcomes:

• Students will know about Electric Field and Electric Potential and able to solve problems related to this
• Students will know about Dielectric Properties of Matter.
• Students will learn about Magnetic Properties of Matter

- Students will learn about Thevenin theorem, Norton theorem, Superposition theorem, Reciprocity theorem, Maximum Power Transfer theorem
- Student will able to solve problems related to magnetism.

(iii) PHSG DSC-1C: <u>Thermal Physics and Statistical Mechanics</u>

Outcomes:

- Students will know about First Law of Thermodynamics and 2nd law of thermodynamics and able to solve problems based on this.
- Students will know about the Concept of Entropy.
- Students will learn about Thermodynamic Potentials: Internal Energy, Enthalpy, Helmholtz Free Energy, Gibb's Free Energy.
- Students will learn about Maxwell-Boltzmann Law of Distribution and able to calculate problems based on this.
- Students will know about Maxwell-Boltzmann law, distribution of velocity, Quantum statistics - Fermi- Dirac distribution law, Bose-Einstein distribution law, comparison of three statistics.
- Student will learn about Behaviour of Real Gases and Deviations from the Ideal Gas Equation.

(iv) PHSG DSC-1D: <u>Waves and Optics</u>

Outcomes:

- Students will know about definition Linearity and Superposition Principle and this principle in Oscillations having equal frequencies and (2) Oscillations having different frequencies (Beats).
- Students will know Graphical and Analytical Methods and Lissajous Figures with equal and unequal frequency and their uses.
- Students will learn about transverse waves on a string. Travelling and standing waves on a string and Normal Modes of a string and also Group velocity, Phase velocity.
- Students will know the Plane waves. Spherical waves and Wave intensity.
- Students will learn about Surface Tension of Synclastic and anticlastic surface - Excess of pressure - and its application to spherical and cylindrical drops and bubbles - variation of surface tension
- Students will know about the Viscosity and Rate flow of liquid in capillary tube and also Poiseuille's formula by which they can determinant of coefficient of viscosity of a liquid

• Students will learn about the simple harmonic motion - forced vibrations and resonance.

• Students will know the Electromagnetic nature of light. Definition and Properties of wave front.

• Students will learn about Interference and their classes (Division of amplitude and division of wavefront.

• Students will learn Fraunhofer diffraction: Single slit; Double Slit. Multiple slits & Diffraction grating and their classes.

• Students will know the Transverse nature of light waves. Plane polarized light – production and analysis. Circular and elliptical polarization

(v) PHSG SEC-1: Computational Physics

Outcomes:

Algorithms and Flowcharts:

• Students will be able to learn about Concept of flowchart, symbols, guidelines, types. Examples: Cartesian to Spherical Polar Coordinates,

• Students will able to calculate roots of Quadratic Equation, Sum of two matrices, Sum and Product of a finite series.

• Students can calculate of sin (x) as a series, algorithm for plotting (1) lissajous figures and (2) trajectory of a projectile thrown at an angle with the horizontal.

Scientific Programming:

• Students can understand about basic elements of FORTRAN: Character Set, Constants and their types, Variables and their types, Keywords, Variable Declaration and concept of instruction and program. Operators: Arithmetic, Relational, Logical and assignment Operators. Expressions: Arithmetic, Relational, Logical, Character and Assignment Expressions

• Students can make Fortran Statements: I/O Statements (unformatted/formatted) Executable and Non-Executable Statements

• Students can layout of Fortran Program and they can write Program and concept of coding, Initialization and Replacement Logic. Examples from physics problems.

Control Statements

• Students can write looping Statements (DO-CONTINUE, DO-ENDDO, DOWHILE, Implied and Nested DO Loops), Jumping Statements (Unconditional GOTO, Computed GOTO, Assigned GOTO)

- Students will get a clear idea about subscripted Variables (Arrays: Types of Arrays, DIMENSION Statement, Reading and Writing Arrays), Functions and Subroutines (Arithmetic Statement Function, Function Subprogram and Subroutine), RETURN, CALL, COMMON and EQUIVALENCE Statements)
- Students can structure disk I/O Statements, open a file, writing in a file, reading from a file. Examples from physics problems

(vi) PHSG SEC-2: Basic Instrumentation Skills

Outcomes:

Basic of Measurement: • Students will learn principles of measurement of dc voltage and dc current, ac voltage, ac current and resistance. Specifications of a multimeter and their significance.

Cathode Ray Oscilloscope: • Students can make block diagram of basic CRO. Construction of CRT, Electron gun, electrostatic focusing and acceleration (Explanation only– no mathematical treatment),

- Students will get clear idea on screen phosphor, visual persistence & chemical composition. Time base operation, synchronization.

- Students can use CRO for the measurement of voltage (dc and ac frequency, time period. Special features of dual trace.

- Students can make Digital storage Oscilloscope Block diagram and explain principle of working.

Signal Generators and Analysis Instruments: • Students can make block diagram, of low frequency signal generators. Pulse generator, and function generator.
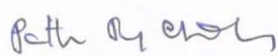
- Students will get brief idea for testing, specifications. Distortion factor meter, wave analysis.

Impedance Bridges & Q-Meters: • Students will able to make block diagram of bridge and then they can understand working principles of basic (balancing type) RLC bridge.

- Students will learn about specifications of RLC bridge, block diagram & working principles of a Q- Meter. Digital LCR bridges.

Digital Multimeter: • Students will understand about block diagram and working of a digital multimeter. • Students will learn working principle of time interval, frequency and period measurement using universal counter/ frequency counter, time- base stability, accuracy and resolution.

(vii) PHSG SEC-3: <u>Renewable Energy and Energy Harvesting</u>

Outcomes: • Students will learn about Fossil fuels and Nuclear Energy, their limitation, need of renewable energy, non-conventional energy sources.

• Students will learn about Solar energy, its importance, storage of solar energy, solar pond, non-convective solar pond, applications of solar pond and solar energy, solar water heater, flat plate collector, solar distillation, solar cooker, solar green houses, solar cell, absorption air conditioning.

• Students will learn about Fundamentals of Wind energy, Wind Turbines and different electrical machines in wind turbines, Power electronic interfaces, and grid interconnection topologies.

• Students will know the Plane waves. Spherical waves and Wave intensity.

• Students will learn about Surface Tension of Synclastic and anticlastic surface - Excess of pressure - and its application to spherical and cylindrical drops and bubbles - variation of surface tension.

• Students will learn about the Hydropower resources, hydropower technologies, environmental impact of hydro power sources. Students will learn about the simple harmonic motion - forced vibrations and resonance.

• Students will know about Introduction, Physics and characteristics of piezoelectric effect, materials and mathematical description of piezoelectricity and also Piezoelectric parameters and modelling piezoelectric generators, Piezoelectric energy harvesting applications.

• Students will know about Electromagnetic Energy Harvesting: Linear generators, physics mathematical models, recent applications. Carbon captured technologies, cell, batteries, power consumption.

(viii) PHSG SEC-4: <u>Weather Forecasting</u>

Outcomes: • Students will learn about elementary idea of atmosphere and physical structure and composition; compositional layering of the atmosphere.

• Students will learn about Wind; forces acting to produce wind; wind speed direction: units, its direction; measuring wind speed and direction; humidity, clouds and rainfall.

• Students will know the Global wind systems; air masses and fronts: classifications; jet streams; local thunderstorms; tropical cyclones: classification; tornadoes; hurricanes.

• Students will learn Climate: its classification; causes of climate change.

• Students will learn about Weather forecasting: analysis and its historical background; need of measuring weather and types of weather forecasting; weather forecasting.

(ix) PHSG DSE-1: <u>Elements of Modern Physics</u>

Outcomes:

Planck's quantum: • Student will be able to understand the concept of photon. • Student will be able to explain photoelectric effect, Compton scattering. • Student will know the concept of De Broglie wavelength and matter waves. • Student will be able to explain Davisson-Germer experiment.

Problems with Rutherford model: • Student will be able to understand Bohr's quantization rule and atomic stability; • Student can calculate the energy levels for hydrogen like atoms and their spectra. • Student can observe Instability of atoms and observation of discrete atomic spectra.

Position measurement: • Student can understand about Gamma ray microscope thought experiment. • Student can relate about Wave-particle duality and Heisenberg uncertainty principle. • Student can estimate minimum energy of a confined particle using uncertainty principle and Energy-time uncertainty principle.

Two slit interference experiment: • Student will obtain a basic concept about linear superposition principle as a consequence; Matter waves and wave amplitude. • Student can solve Schrodinger equation for non-relativistic particle. • Student will know the relation about Momentum and Energy operator. • Student will obtain the basic concept stationary states; physical interpretation of wave function. • Student can normalize any wave function.

• Student can calculate probabilities and probability current densities in one dimension of any given wave function.

One Dimensional infinitely Rigid Box: • Student can calculate energy eigenvalues and Eigen functions, normalization constant. • Student can understand Quantum mechanical scattering and tunnelling in one dimension - across a step potential and across a rectangular potential barrier.

Size and structure of atomic nucleus and its relation with atomic weigh: • Student can under the nature of nuclear force, NZ graph, • Student will be able to calculate semi-empirical mass formula and binding energy.

Radioactivity: • Student will be able to calculate Law of radioactive decay. • Student can calculate Mean life and half-life; decay. • Student will be able to explain decay - energy released, spectrum and Pauli's prediction of neutrino; -ray emission.

Fission and fusion: • Student can calculate Mass deficit, relativity and generation of energy; • Student will understand Fission - nature of fragments and emission of neutrons. • Student

will know about nuclear reactor: slow neutrons interacting with Uranium 235; Fusion and thermonuclear reactions.

(x) PHSG DSE-2: Digital and analog circuits and instrumentation

Outcomes: • Students will know about Integrated Circuits and different type of gates.

• Students will know about De Morgan's Theorems. Boolean Laws and Simplification of Logic Circuit using Boolean Algebra.

• Students will learn about Half and Full Adders. Half & Full Subtractors, 4-bit binary Adder/Subtractor. Sequential Circuits.

• Students will learn about Computer memory. Memory organization & addressing. Memory Interfacing.

• Students will learn about Serial-in-Serial-out, Serial-in-Parallel-out, Parallel-inSerial-out and Parallel-in-Parallel-out Shift Registers.

• Students will know about Conductivity and Mobility, Concept of Drift velocity, PN Junction Fabrication etc.

• Students will know about the principle and structures of (1) LEDs, (2) Photodiode and (3) Solar Cell.

• Students will learn about n-p-n and p-n-p Transistors. Characteristics of CB, CE and CC Configurations.

• Students will learn about Transistor as 2-port Network. h-parameter Equivalent Circuit. Analysis of a single-stage CE amplifier using Hybrid Model. and Output Impedance. Current, Voltage and Power Gains. Classification of Class A, B & C Amplifiers.

• Student will learn about Op-Amps applications as (1) Inverting and non-inverting amplifiers, (2) Adder, (3) Subtractor (4) Differentiator, (5) Integrator, (6) Log amplifier, (7) Zero crossing detector (8) Wein bridge oscillator.

B. A. (Hons. Generic) in Political Science Programme Specific Outcome (PSO)

At the end of the entire UG course in Political Science, a successfully passed out student will be able to

- Pursue higher studies in Political Science or Related disciplines.

- students will also be able to pursue higher studies in the field of Law, Public Relations, Public Administration, political scientist etc.

- students will be able to compete in Government Service exams like WBCS, IAS, IPS, UPSC,IFS,etc.

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Assistant Professor
Dept. of Pol. Science

Course Outcome (CO)

PLSHGE03: Gandhi and the Contemporary World.

Course Content:

- Students will learn Gandhian concepts on modern Civilization and Alternative Modernity, Critique of Development: Narmada Bachao Andolan
- They will learn Gandhian Thought: Theory of Satyagraha, Satyagraha in Action. Most importantly, they will have wide knowledge regarding Peasant Satyagraha: Kheda and the Idea of Trusteeship, Temple Entry and Critique of Caste, Social Harmony: 1947 and Communal Unity.
- Students will also knowledge Gandhi's Legacy. Basically; Tolerance: Anti - Racism Movements (Anti - Apartheid and Martin Luther ling), The Pacifist Movement and Women's Movements. And importance of Gandhi Giri: Perceptions in Popular Culture.
- They will learn Gandhi's views on Swaraj and Swadeshi.

PLSHGE04: United Nations and Global Conflicts

Course Content:

Students will acquire significant knowledge on

- (a) The United Nations, its An Historical Overview (b) Principles and Objectives (c) Structures and Functions: General Assembly; Security Council, and Economic and Social Council; the International Court of Justice.

- They will be informed about the specialised agencies like International Labour Organisation [ILO], United Nations Educational, Scientific and Cultural Organisation [UNESCO], World Health Organisation [WHO], and UN programmes and funds: United Nations Children's Fund [UNICEF], United Nations Development Programme [UNDP], United Nations Environment Programme [UNEP], United Nations High Commissioner for Refugees [UNHCR])

HOD / Assistant Professor
Chandrakona Vidyasagar
Mahavidyalaya

- Peace Keeping, Peace Making and Enforcement, Peace Building and Responsibility to Protect, Millennium Development Goals

- Major Global Conflicts since the Second World War (a) Korean War (b) Vietnam War (c) Afghanistan Wars (d) Balkans: Serbia and Bosnia

- They will be able to Assess the United Nations as an International Organisation, they will also be able to recommend necessary reforms to the UNO.

B. A. General in Political Science

Programme Specific Outcome (PSO)

At the end of the entire UG course in Political Science, a successfully passed out student will be able to

- Pursue higher studies in Political Science or Related disciplines.

- students will also be able to pursue higher studies in the field of Law, Public Relations, Public Administration, political scientist etc.

- students will be able to compete in Government Service exams like WBCS, IAS, IPS, UPSC, IFS, etc.

HOD / Assistan Professor

Chandrakona Vidyasagar Mahavidy

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Course Outcome (CO)

PLSGCC01: Introduction to Political Theory:

- Students will learn what is Politics and how to Theorize the 'Political'.

- They will acquire knowledge of different ideas like Liberty, Equality, Justice, Rights, Gender, Citizenship, Civil Society and State.

- Students will be aware of the history of Democracy.

- They will learn different types of democracy

- . They will be acquainted with the Debates in Political Theory.

- They will learn how much democracy is compatible with economic growth.

- They will learn the grounds of censorship and what are its limits.

- They will learn if protective discrimination violates principles of fairness or not.

- They will learn whether State intervention in the institution of the family is justified or not,

PLSGCC02: - Indian Government and Politics:

❖ To enable the student to understand the importance of constitution.

❖ To understand the structure of executive, legislature and judiciary

❖ To understand philosophy of fundamental rights and duties

❖ To understand the autonomous nature of constitutional bodies like Supreme Court and high court, controller and auditor general of India and election commission of India.

Outcomes:

- Able to understand historical background of the constitutional making and its importance for building a democratic India, the structure of Indian government, the structure of state government, the local Administration.

HOD / Assistant Professor

Chandrakona Vidyasagar Mahavi

- Able to apply the knowledge on directive principle of state policy, the knowledge in strengthening of the constitutional institutions like CAG, Election Commission and UPSC for sustaining democracy.
- Able to analyze the History, features of Indian constitution, the role of Governor and Chief Minister, role of state election commission, the decentralization of power between central, state and local self-government.
- Able to evaluate Preamble, Fundamental Rights and Duties, Zilla Panchayat, block level organization, various commissions of viz SC/ST/OBC and women.

PLSGCC03: Comparative Government and Politics Course Content:

To understand the comparative politics- Parliamentary and Presidential. U.K.: (a) Basic features with major focus on Conventions and rule of Law. (b) Legislature: composition and functions with major focus on the concept of parliamentary sovereignty. (c) Executive: composition and functions of the Cabinet with major focus on the role of the Prime Minister the concept of Cabinet Dictatorship; (d) Role of the Crown; (e) Party system role of the Opposition. U.S.A.: ,Salient features of the Constitutions of Bangladesh, France, Switzerland.

Objectives:
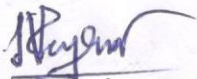
- To know the evolution of Comparative Politics.
- To understand the major approaches to the study of comparative politics---Institutional approach (dominant schools: Systems approach and Structural Functional approach etc.)
- To know the classification of political systems. Nature of liberal and socialist political systems;
- To know the distinguishing features--- conventions, rule of law (UK), separation of powers, checks and balances, judicial review (USA), democratic centralism (PRC), referendum, initiative (Switzerland).

Outcomes:

- ❖ Define and apply key concepts in comparative politics, including but not limited to nation-states, political regimes, political identity, gender and politics, and political violence
- ❖ Explain and evaluate the importance of specific historical events in the context of the political and economic development of the countries studied
- ❖ Compare and contrast the political systems of the countries explored in the course, paying particular attention to historical, political, economic, geographical, and moral aspects of governance in a variety of countries.
- ❖ Use the comparative method to analyze contemporary political issues.
- ❖ Demonstrate an ability to communicate in writing your knowledge and beliefs about the institutions and forces shaping the political systems of several countries. Particular emphasis will be placed on how each country resolves the conflicts associated with it.

PLSGCC04: Introduction to International Relations Course Content:

Objectives:

- To understand International Relations: outline of its evolution as academic discipline.
- To know the major theories: (a) Classical Realism and Neo-Realism (b) Dependency (c) World Systems theory.
- Examining the issues of Underdevelopment, Terrorism, Regionalism and Integration that characterizes the Post second world war order.
- To build concepts of foreign policy and understanding Indian foreign policy: major phases: 1947-1962; 1962-1991; 1991-till date, Sino-Indian relations; Indo-US relations

Outcomes :

- ❖ To be able for creative thinking about pressing global problems and to equip students with the analytic tools, language expertise, and cross-cultural understanding to guide them in that process. Students will learn how to comprehend, critically analyze, and evaluate trends in international politics .
- ❖ Able to explain the approaches and methods to study the discipline through Political realism, Pluralism and Worlds system's Model.
- ❖ Able to explain the issues of Underdevelopment, Terrorism, Regionalism and Integration that characterizes the Post second world war order.
- ❖ Able to analyse Studying the role of Diplomacy, Propaganda and Military capabilities in the making of foreign policy.
- ❖ Able to explain Indian Foreign Policy: Basic Principles, Evolution and Bilateral Relations.
- ❖ Able to analyse the Foreign Policy of India and China
- ❖ Able to analyse the Foreign Policy of India and US.

PLSGDSE01A: Themes in Comparative Political Theory

- Students will learn about contributions of different western and Indian political thinkers towards a few political values like Aristotle to Citizenship, Locke to Rights, Rousseau to inequality, J. S. Mill to liberty and democracy, Marx and Bakunin to State, Kautilya to State, Tilak and Gandhi to Swaraj, Ambedkar and Lohia to Social Justice, Nehru and Jayaprakash Narayan to Democracy, Pandita Ramabai to Patriarchy.

PLSGDSE01B: Administration and Public Policy: Concepts and Theories

1. The department teaches its students, different theoretical and practical aspects of Public Administration Public administration as a discipline Meaning, Dimensions and Significance of the Discipline Public and Private Administration, Evolution of Public Administration.

HOD/ Assistant Professor
Chandrakona Vidyasagar Mahavidyalaya

2. Administrative Theories: They are informed about different Theories of Public Administration like Scientific management (F.W.Taylor) Administrative Management (Gullick, Urwick and Fayol) Ideal-type bureaucracy (Max Weber) Neo-classical theories.

3. Understanding public policy: They will learn public policy, its Concept, relevance and approaches Formulation, implementation and evaluation.

4. They will learn Major approaches in public administration like New Public Administration, New Public Management, New Public Service Approach, Good Governance, Feminist Perspectives.

PLSGSEC01: Legislative Support

• Students will be able to enhance their skill with the knowledge regarding Powers and functions of people's representatives at different tiers of governance, Members of Parliament, State Legislative Assemblies, functionaries of rural and urban local self-government from Zila Parishads/Municipal Corporation to Panchayat/Ward.

• Supporting the legislative process:

They will learn how a Bill becomes a Law, Role of the Standing Committee in reviewing a Bill, Legislative Consultations, amendments to a Bill, the Training of Rules and Regulations.

• Supporting the legislative committees: They will be aware of different Types of committees, Role of committees in reviewing government finances, policy,

programmes, and legislation.

• Reading the budget document: students will enhance their skill in public affairs with the knowledge of Budget Process, Role of Parliament in reviewing the Union Budget, Railway Budget, Examination of Demands for Grants of Ministries, Working of Ministries.

• Support in media monitoring and communication: students will enhance their skill with their knowledge of the role of different types of media and their significance for legislators. They will also learn the basics of communication in print and electronic media.

HOD/ Assistant Professor

Chandrakona Vidyasagar Mahavidyal

PLSGSEC02: Public Opinion and Survey Research:

I. Introduction to the course
    - Students will be able to sharpen their skills in the public domain with their knowledge of public opinion, its conceptions and characteristics, its role in a democratic political system, uses for opinion poll.

II. Measuring Public Opinion with Surveys:
    - They will learn
    a. What is sampling? Why do we need to sample? Sample design.
    b. Sampling error and non-response
    c. Types of sampling: Non random sampling (quota, purposive and snowball Sampling); random sampling: simple and stratified

III. Survey Research:
    - They will learn different techniques of survey Research like
    a. Interviewing: Interview techniques pitfalls, different types of and forms of Interview
    b. Questionnaire: Question wording; fairness and clarity.

IV. Quantitative Data Analysis
    - Students will learn to use Quantitative Data Analysis, co relational research, causation and prediction, descriptive and Inferential Statistics

V. Interpreting polls: they will learn to interpret polls
    - They will acquire skills for Prediction in polling research and also the possibilities and pitfalls associated with it. They will learn the Politics of interpreting polling.

PLSGSEC03: Democratic Awareness with Legal Literacy

Objectives:

- To know the Legal Issues of Criminal Jurisdiction: History, Definition and Concept, Major Processes- Detention, Arrest, Bail, Search and Seizure.
- To build concepts of Indian Penal Code: History, Definition. Major Aspects- Protection of HR.

HOD/ Assistan Professor
Chandrakona Vidyasagar Mahavi
-yalaya

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

- To understand laws relating to Criminal jurisdiction-provisions relating to filing an FIR, arrest, bail, search and seizure and some understanding of the questions of evidence and procedure in the Criminal Procedure.
- To know the Offences under IPC, India: Personal laws, Customary Laws, Laws relating to Dowry, sexual harassment and violence against women.

Outcomes:

❖ To gain knowledge on the Legal Issues and apply in real life situation.

❖ To analyze the Criminal Jurisdiction: History, Definition and Concept, Major Processes Detention, Arrest, Bail, Search and Seizure. To be able to explain the concepts of Indian Penal Code: History, Definition. Major Aspects Protection of HR.

❖ Able to apply the knowledge in real life relating to Criminal jurisdiction- provisions relating to filing an FIR, arrest, bail, search and seizure and some understanding of the questions of evidence and procedure in the Criminal Procedure.

❖ Able to explain the Offences under IPC, India: Personal laws.

❖ Able to grow an awareness about Customary Laws, Laws relating to Dowry, sexual harassment and violence against women.

PLSGSEC04: Conflict and Peace Building

Unit I. Concepts
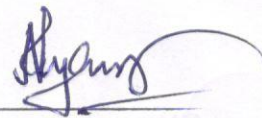
- Students will learn different aspects of Conflict and Peace Building Including Conflict Management, Conflict Resolution and Conflict Transformation

and Peace Building

Unit II:

- They will learn different Dimensions of Conflict like Ideology

, Economic/Resource Sharing Conflicts, Socio- Cultural Conflicts (Ethnic, Religious, Gender- based)

Unit III:

HOD / Assistant Professor

Chandrakona Vidyasagar Mahavidyalaya

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona. Paschim Medinipur

- They will be able to identify the Sites of Conflict i.e:Local , Sub- National, International.

Unit IV: Conflict Responses:

- Students will enhance their Skills and Techniques for conflict responses by using Negotiations for Trust Building, Mediation for Skill Building; Active Listening

- They will learn the use of Track I, Track II & Multi Track Diplomacy And also learn the Gandhian Methods of conflict resolution

PLSGGE01: Reading Gandhi:

- Students will learn Gandhian textual and contextual concepts.

- They will also acquire knowledge about Gandhian concepts on Hind Swaraj and commentaries on Hind Swaraj and his thought.

- Students will learn about Gandhian views on Nationalism, Communal Unity, Women's Question and Untouchability.

PLSGGE02: United Nations and Global Conflicts Course Content:

Students will acquire significant knowledge on

- (a) The United Nations, its An Historical Overview (b) Principles and Objectives (c) Structures and Functions: General Assembly; Security Council, and Economic and Social Council; the International Court of Justice.

- They will be informed about the specialised agencies like International Labour Organisation [ILO], United Nations Educational, Scientific and Cultural Organisation [UNESCO], World Health Organisation [WHO], and UN programmes and funds: United Nations Children's Fund [UNICEF], United Nations Development Programme [UNDP], United Nations Environment Programme [UNEP], United Nations High Commissioner for Refugees [UNHCR])

- Peace Keeping, Peace Making and Enforcement, Peace Building and Responsibility to Protect, Millennium Development Goals

- Major Global Conflicts since the Second World War (a) Korean War (b) Vietnam War (c) Afghanistan Wars (d) Balkans: Serbia and Bosnia

- They will be able to Assess the United Nations as an International Organisation, they will also be able to recommend necessary reforms to the UNO.
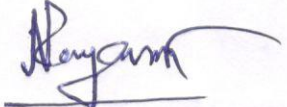
Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

HOD Assistant Professor
Chandrakona Vidyasagar Mahavidy-
-alaya

B.A. Honours in Sanskrit

Programme Specific Outcome (PSO)

By the end of the program UG in Sanskrit, the student will be:

- Learn Sanskrit verse, prose, and application of Sanskrit Language .
- Appreciation on ancient Indian traditions and culture.
- Learning about the pedagogical aspects of Sanskrit Teaching.
- Connect Sanskrit learning to other subjects and disciplines.
- Implement Sanskrit Language in real-life situations.
- Learn about Yoga, Astrology, and make a mark in the mentioned field and promote it.

Course Outcome (CO)

SANHCC01: Classical Sanskrit Literature (Poetry)

Students will read Raghuvamsam by Kalidasa and be aware of the dignity and qualities expected of the ancient Kings. They will know the metaphysical aspects of ancient philosophy by reading Nitishatakam and the moral knowledge embedded in that book will uplift the character of the learners. Kiratarjuniyam will show to the students the political awareness of the ancient Indian woman exemplified in the character of Draupadi. Chapter-5 of Kumarasambhava informs the learners about the path to salvation.

SANHCC02: Classical Sanskrit Literature (Prose)

The description of Lakshmi's interest, blasphemy and the alities of a King will show the students the enthralling impact of Sanskrit prose in Sukanasopadesha. we can see a very captivating description of Lakshmi's interest and interest blasphemy and the qualities of the King. Visrutacharita informs the students about the social and cultural knowledge of ancient India.

SANHCC03: Critical Survey of Sanskrit Literature

Learners will be able to appreciate Sanskrit literature critically and also develop an analytical outlook on ancient Indian literature. They will form ideas about the origin and development of various genres of Sanskrit literature.

SANHCC04: Self-management in the Gita

Students will read Gita critically and know about the and know about the sacred path of salvation, peace, devotion and the way of self-management.

SANHCC05: Classical Sanskrit Literature (Drama)

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Sourav Man
SACT-11
Dept. of Sanskrit
H.O.D. / Assistant Professor
Dept. of Sanskrit
Chandrakona Vidyasagar Mahavidyalaya

Sanskrit plays are the mirror of the social, cultural, religious and political aspects of ancient India. Through these dramas, students can know the wisdom of Chanakya, the qualities of Dushyanta, the sacred advice of Kanva, and the dignity of Vasavadatta.

SANHCC06: Poetics and literary criticism.

Learners will know the definitions, forms and structures of poems, stories, dramas. They mostly learn a set pattern prescribed in Natyaśāstra by Bharata.

They are informed about the power of words (sabdasakti) as the most important element of a 'uttamakavya' (Composition of the highest standard) in Sanskrit literature. They are taught about the Rasa Sutra (different genres of composition).

SANHCC07: Indian Social Institution

Students will know the basic functions of social institutions. The science of polity, known by several names like Rajadharma, Rajyasastra, Dandaniti, Nitisastra, and Arthasastra, is dealt with by the students. They will read pieces from Manusmriti, Arthashastra, Yajnabalkyasmriti, Shanti Parva from Mahabharata, etc.

SANHSE01: Acting and Script Writing.

The course enables students to understand the different forms of ancient Indian drama and dance. They will be able to appreciate a performance of ancient drama and dance. The course will also prepare them to compose creative scripts in Sanskrit.

SANHCC08: Indian Epigraphy, Paleography and Chronology.

Students will have a rudimentary knowledge of Indian epigraphy. They will learn the process of the decipherment of ancient scripts. Learners will form ideas about the social, cultural, economic and political aspects of ancient India as gleaned from the inscriptions.

SANHCC09: Modern Sanskrit Literature

Students will learn to compare the early works of Sanskrit literature with some recently published works. They will be taught the usage of Sanskrit in the modern context.

SANHCC10: Sanskrit and World Literature

Students will know the importance of the Gita, India and abroad.

SANHSE02: Sanskrit Metre and Music

Students will learn the chanting rhythm of the Vedic Mantras and other Sanskrit shlokas. The metrical repertoire in Sanskrit Prosody will enrich the students' understanding of various metres and rhythms of ancient Indian shlokas and verses.

Sourav
SACT-II
Dept. of Sanskrit
H.O.D. / Assistant Professor
Dept. of Sanskrit
Chandrakona Vidyasagar Mahavidyalaya

Principal,
Chandrakona Vidyasagar Mahavidyalava
Chandrakona, Paschim Medinipur

SANHCC11: Vedic literature

Students will be acquainted with the ancient Indian History and culture through this oldest Indo-Aryan body of literature.

SANHCC12: Sanskrit Grammar.

Learners will be able to get hold of the concepts of the Sajna sutra and Paribhasha sutra. They will be able to differentiate between the Sajna and Paribhasa sutras with special reference to Laghusidhhantakoumudi.

SANHDSE1: Art of Balanced living.

Learners will know the methods of self-presentation, restraint of sense organs and mind. They will be able to understand the importance of practised control over physical and mental abilities. Mental purity and improved behaviour are the goals to attain to lead a balanced living.

SANHDSE2: Theatre and Dramaturgy in Sanskrit.

Students will know the types of theatre, types and the lities of Hero and Heroine. They will come to grasp the subject matter of dramas and appreciate various types of Rasas.

SANHCC13: Ontology & Epistemology

Students will be acquainted with the metaphysical aspects of ancient Indian traditional knowledge. They will note the various Padarthas, and come to understand the multi-dimensional aspects of Pramanas. They will have an understanding of the ancient Indian cosmology.

SANHCC14: Sanskrit Composition & Communication

The course will enable the students to construct Sanskrit sentences with Declension, Conjunction, Suffix, and other genres,

SANHDSE3: Sanskrit Linguistics.

Students will be acquainted with the history and process of development of Sanskrit as an Indo-Iranian branch of the language of the family of Indo- European languages. They will have an understanding of the differences and similarities between Vedic and Classical Sanskrit. They will be acquainted with the various types of phonetic laws.

SANHDSE4: Fundamentals of Ayurveda.

Students will understand the key to living healthily in accordance with the Indian traditional knowledge system.

SANHGE1: Basic Sanskrit

The course will enable the students to construct Sanskrit sentences with declension,conjunction, suffix and other generes.

SANHGE02: Sanskrit and other Modern Indian Languages

Students will have an understanding of Sanskrit as a fountainhead of modern North Indian languages.

SANHGE03: Fundamentals of Indian Philosophy

Students will have an understanding of ancient Indian philosophy and its six schools.

SANHGE04: Basic Principles of the Indian Medicine System (Ayurveda)

Students will understand the key to living healthily in accordance with the key Indian traditional knowledge system.

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona. Paschim Medinipur

Sourav Mai
SACT-II Sanskrit
Dept. of Sanskrit
H.O.U. / Assistant Professor
Dept. of Sanskrit
Chandrakona Vidyasagar Mahavidyalaya

B. A. Sanskrit

Programme Specific Outcome (PSO)

UG programme in Sanskrit After the completion of the UG programme in Sanskrit, the students will be:

- Learn Sanskrit verse, prose, and application of Sanskrit Language.

- Appreciation of ancient Indian traditions and culture.

- Learning pedagogical aspects of Sanskrit Teaching,

- Implement Sanskrit Language in a real-life situations.

- Learn about our ancient knowledge systems on Yoga and Astrology and promote it.

Course Outcome (CO)

SANGCC01: Sanskrit Poetry

- Students will read Canto-I (Verses 1-25) from Raghuvamsam, Canto II, Verses 26-37 and SisupalavadhamVerses 42-56 and Nitishatakam Verses (1-20).

- They will be able to explain the verses from the said texts.

- They will be able to appreciate the poetic excellence of the said texts.

- They will learn about the social contexts of the said texts. They will learn about the history of Sanskrit poetry.

SANGCC02: Sanskrit Prose

- They will be to explain the texts and note the textual grammar.
- They will understand the social context and political thought depicted in Shukonasopodesa.

- They will learn about the origin and development of Sanskrit prose.

SANGCC03: Sanskrit Dramas

- Students will be taught Pratimanatakam: Act I & III Bhasa, Abhijiianasakuntalam Act IV by Kalidasa.

- They will be acquainted with the technical terms I from Sanskrit Dramaturgy.
- They will learn about the history of Sanskrit Drama.

- They will be introduced to the Principles of Sanskrit) ,

SANGSE01:Indian Architecture System

- Students will learn about the teaching aspects of Vastusaukhyam of Todaramala.

SANGCC04: Sanskrit Grammar

- Students will be taught grammar from Laghusiddhantakoumudi.

SANGSE02: Basic Elements of Ayurveda

Students will understand the key to living healthily in accordance with the Indian traditional knowledge system.

SANGDS01: Indian Perspectives in Personality Development

- Students will learn about the concept of a person and personality types with special reference to Chandogya Upanishad and Brihadaranyakupanishad and Gita.
- They will learn about the measures of self reflection and behavioural improvement with
  special reference to Gita.

SANGSE03: Basic Elements of Jyotisha

- Students will learn about the origins, development and branches of Jyotisha with special reference to Jyotisha Chandrika .

SANGGE01: Political Thoughts in Sanskrit

- They will be acquainted with the chief political thinkers of ancient India and their theories.
- Students will learn about the basic features of ancient Indian political thought.
- They will be able to trace the origins of ancient Indian political thought and its development.

SANGDS02: Literary Criticism

- Students will learn about literary criticism with special reference to Kavya Prakasha.

SANGSE04: Indian Theatre

- Students will learn about the tradition and history of ancient Indian theatre

- They will learn about the types and construction of ancient Indian theatre.
- They will be acquainted with the treatment of the matter and styles of acting.

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Souram Man
SACT-II
Dept. of Sanskrit
H.O.D. / Assistant Professor
Dept. of Sanskrit
Chandrakona Vidyasagar Mahavidyalaya

SANGGE02: Sanskrit Meter and Music

- Students will learn the chanting rhythm of the Vedic Mantras and other Sanskrit shlokas.

- The metrical repertoire in Sanskrit Prosody will enrich the students' understanding of various metres and rhythms of ancient Indian shlokas and verses.

Principal,
Chandrakona Vidyasagar Mahavidyalaya
Chandrakona, Paschim Medinipur

Sourav Mani
SDCT-II
Deptt. of Sanskrit
H.O.D. / Assistant Professor
Dept. of Sanskrit
Chandrakona Vidyasagar Mahavidyalaya

B.A. Honours in Santali

Programme Specific Outcome (PSO)

In the UG courses offered under the Santali programme students acquire knowledge on Santali literature, are acquainted with the nuances of Santali language and Santali grammar. The programme provides the students with the opportunity to critically engage with Santali language and literature. It provides a platform to master the language in both spoken and written format and encourages young learners to think in Santali language while engaging with the rich cultural legacy and practices of adivasi community.

After successful completion of the course students may persue B.ED, M.A, Ph.D and may appear for exams like SSC, NET, SET, WBCS, WBPSC, JPSC, JSSC, OPSC to name a few.

> ᱞᱟᱦᱟ ᱮᱜᱜᱮᱫᱟᱣ ᱚᱟᱯᱟᱚᱺ ᱛᱟ.ᱦᱟᱵᱣᱟ. ᱵᱹ ᱠᱟᱞᱚᱝᱟᱭ ᱛᱟ.ᱫᱠᱟ ᱜᱹ ᱠᱟᱯᱣᱺᱯ ᱺᱽᱚᱟᱞ ᱞᱟᱦ ᱩᱵᱦᱟᱞ. ᱠᱟ.ᱣᱪᱟᱣ ᱜᱽᱺᱪᱟᱞ ᱵᱹ ᱟᱪᱣᱟᱵᱣᱟ ।

> ᱞᱟᱦᱟ ᱛᱟᱜᱜᱮᱫᱟᱣ ᱚᱟᱯᱟᱚᱺ ᱟ.ᱯᱟᱣᱟ.ᱠᱟ ᱵᱟᱣᱟᱜ ᱛᱟ.ᱫᱠᱟ ᱫᱺᱺᱟᱜ ᱵᱪᱟᱵᱩ ᱩᱟᱚᱟᱚ ᱵᱹ ᱩᱟᱦᱟᱜ ᱯᱟᱣ ᱯᱟᱺᱺᱺᱟᱜ—ᱟ ।

> ᱞᱟᱦᱟ ᱛᱟᱜᱜᱮᱫᱟᱣ ᱚᱟᱯᱟᱚᱺ ᱠᱟᱞᱚᱝᱟᱭ ᱛᱟ.ᱫᱠᱟ ᱫᱺᱺᱟᱜ ᱟ.ᱺ—ᱟ.ᱫᱟ ᱠᱟ ᱺᱚᱺᱚᱺ ᱺᱯᱟ ᱵᱪᱟᱺᱺ ᱵᱦᱟ ᱵᱦᱟ ᱵᱟᱚᱟᱪᱟ ᱵᱹ ᱩᱟᱦᱟᱜ ᱯᱟᱣ ᱯᱟᱺᱺᱺᱟᱜ—ᱟ ।

> ᱞᱟᱦᱟ ᱛᱟᱜᱜᱮᱫᱟᱣ ᱚᱟᱯᱟᱚᱺ ᱛᱟ.ᱦᱟᱵᱣᱟ. ᱵᱟᱣᱟᱜ ᱠᱟᱣᱽᱺᱯ ᱠᱟᱺᱺᱟᱚ ᱵᱟ.ᱩᱟ ᱠᱟᱺᱣᱟ.ᱚᱟᱜ ᱚᱟᱵᱟᱣᱟ ।

> ᱞᱟᱦᱟ ᱛᱟᱜᱜᱮᱫᱟᱣ ᱚᱟᱯᱟᱚᱺ ᱛᱟ.ᱦᱟᱵᱣᱟ. ᱵᱟᱣᱟᱜ ᱩᱟᱞᱟ.ᱛ ᱩᱟᱠᱯᱽᱠᱺᱯ ᱫᱺᱺᱟᱜ ᱯᱟᱺᱽ ᱩᱟᱺᱟ ᱩᱵᱺᱺᱜ ᱚᱟᱵᱟᱣᱟ ।

> ᱞᱟᱦᱟ ᱛᱟᱜᱜᱮᱫᱟᱣ ᱚᱟᱯᱟᱚᱺ ᱛᱟ.ᱦᱟᱵᱣᱟ. ᱵᱟᱣᱟᱜ ᱫᱟᱺ, ᱟᱯ ᱜᱹ ᱛᱟᱺᱽᱣᱟᱽ ᱫᱺᱺᱟᱜ ᱯᱟᱺᱽ ᱩᱟᱺᱟᱜ ᱚᱟᱵᱟᱣᱟ ᱠᱽ ᱯᱟᱣᱽᱺᱚᱺᱜ ᱚᱟᱵᱟᱣᱟ ।

> ᱞᱟᱦᱟ ᱠᱽᱟᱺᱯ ᱛᱟᱜᱜᱮᱫᱟᱣ ᱛᱵᱟᱺ.ᱽ ᱚᱟᱜᱜᱟᱣ B.ED, M.A. , M.PHIL, Ph.D. ,SSC , SET, NET, WBCS, WBPSC, ᱜᱩᱺᱺ ᱩᱺᱽᱺᱣ ᱵᱺᱫᱽ ᱛᱟᱠ ᱵᱟᱺᱚ ᱺᱟᱵᱵᱟᱺ ᱞᱺᱜᱽᱺ ᱫᱽᱵᱺ ᱺᱺᱽᱺᱟᱣ ᱯᱟᱺᱽᱺᱺᱟᱜ—ᱟ ।

Principal
Chandrakona Vidyasagar Mahavidyalaya
PO- Chandrakona, Dt.-Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of Santali
Chandrakona Vidyasagar Mahavidyalaya

COURSE OUTCOME (CO)

SNTHCC01: History of Santali Ancient Literature

Outcomes:

➢ ᱮᱚᱹᱟ ᱞᱟᱚᱫᱟᱩ ᱯᱟᱡᱽᱟᱹ ᱳᱟᱨᱮᱟᱩ ᱯᱟ.ᱦᱟᱵᱮᱟ. ᱵᱟ ᱞᱨᱮᱟᱜ ᱞᱟᱞᱳᱟᱯᱟ ᱝᱟᱹ ᱞᱟᱠᱶᱯᱹ ᱵᱟᱳᱮᱟ ᱵᱟ ᱴᱟᱴᱟᱜ ᱜᱟᱩᱟ ।

➢ ᱮᱜᱟ ᱞᱨᱟᱩᱟ ᱩᱟᱜᱟᱜ ᱡᱨᱮᱟᱜ ᱞᱟᱹᱶᱯᱹ ᱩᱮᱜᱟᱩ ᱵᱟᱳᱮᱟ ᱵᱟ ᱴᱟᱴᱟᱜ ᱜᱟᱩ ᱯᱟᱡᱮᱛᱵᱟᱜ—ᱟ ।

➢ ᱞᱟᱞᱳᱟᱡ ᱮᱚᱹᱟ ᱳᱟᱯᱟᱳᱮ ᱯᱟ.ᱦᱟᱵᱮᱟ. ᱵᱟ ᱞᱟᱩᱟᱩ ᱡᱨᱮᱟᱜ ᱯᱟᱛᱟᱯ ᱴᱵᱟᱞ.ᱞ ᱵᱟᱳᱮᱟ ᱵᱟ ᱴᱟᱴᱟᱜ ᱜᱟᱩᱟ ।

➢ ᱮᱚᱹᱟ ᱞᱟᱚᱟᱩ ᱳᱟᱯᱟᱳᱮ ᱯᱟ.ᱦᱟᱵᱮᱟ. ᱵᱟ ᱴᱟᱴᱟᱜ ᱜᱟᱩᱟ ᱩ᱒, ᱟᱵᱟ ᱯᱻᱵᱟ ᱵᱟᱳᱵ ᱞᱨᱮᱟᱜ ᱴᱟᱴᱟᱜᱟᱩ ᱞᱟᱞᱶᱯᱹ ᱴᱵᱱ.ᱴ ᱡᱨᱮᱟᱜ ᱴᱮᱞᱞ ᱴᱟᱞᱟᱞᱟ—ᱴᱟᱞᱟᱴ ᱳᱶᱵᱟ ᱴᱟᱴᱟᱡᱟᱹ ᱷ.ᱜᱵ ᱯᱻᱵᱟ । ᱡᱮᱟ ᱵᱟ ᱵᱟᱳᱮᱟ ᱟᱴᱟ ᱟᱴᱟᱟᱹ ᱵᱟ ᱴᱟᱴᱟᱜ ᱜᱟᱩᱟ ।

SNTHCC02: Austric Language Family & Santali

Outcomes:

➢ ᱮᱚᱹᱟ ᱞᱟᱚᱟᱩ ᱯᱟᱡᱽᱟᱹ ᱳᱟᱨᱮᱟᱩ ᱯᱟ.ᱦᱟᱵᱮᱟ. ᱵᱟ ᱞᱟᱞᱳᱟᱯᱹ ᱴᱟᱟᱹᱞᱟ ᱴᱟᱴᱟᱳ ᱮᱚᱮᱟᱜ ᱵᱟ ᱚᱟᱟᱟᱹ—ᱟ ।

➢ ᱮᱚᱹᱟ ᱞᱟᱚᱟᱩ ᱳᱟᱯᱟᱳᱮ ᱯᱟ.ᱦᱟᱵᱮᱟ. ᱵᱟ ᱞᱟᱞᱳᱟᱡᱟ ᱴᱟᱟᱹᱞᱟ ᱟᱵᱟ ᱯᱻᱵᱟ ᱵᱟᱳᱮ ᱟᱩᱟᱮ ᱟᱵᱟᱞᱟ ᱟᱮᱟ ᱴᱟᱟᱟᱳ ᱵᱟᱳᱮᱟ ᱵᱟ ᱴᱟᱴᱟᱜ ᱜᱟᱩ ᱯᱟᱡᱟᱛᱵᱟᱜ—ᱟ ।

➢ ᱮᱚᱹᱟ ᱞᱟᱚᱟᱩ ᱳᱟᱯᱟᱳᱮ ᱞᱟᱞᱳᱟᱡᱟ ᱴᱟᱹᱞᱟ ᱴᱡᱟᱡᱮ ᱟᱵᱟ ᱯᱻᱵᱟ ᱡᱷᱟᱜ ᱴᱵᱹᱞᱨ ᱴᱟᱹᱞᱟ ᱡᱨᱮᱟᱜ ᱞᱨᱞᱞ ᱜᱟᱵ ᱟᱵᱟᱞᱟ ᱟᱮᱟ ᱴᱟᱟᱟᱳ ᱵᱟᱳᱮᱟ ᱯᱟ.ᱦᱟᱵᱮᱟ. ᱵᱟ ᱴᱟᱴᱟᱜ ᱜᱟᱩ ᱯᱟᱡᱟᱛᱵᱟᱜ—ᱟ ।

➢ ᱮᱚᱹᱟ ᱳᱟᱯᱟᱳᱮ ᱞᱟᱞᱳᱟᱡᱟ ᱴᱟᱹᱞᱟ ᱟᱵᱟ ᱩᱟᱹ ᱯᱟ.ᱟᱞᱨ ᱜᱮᱮᱟᱟᱹᱹ ᱵᱟᱟᱮ ᱴᱟᱟᱟᱹ—ᱴᱶᱟᱵ ᱟᱵᱟᱞᱟ ᱟᱮᱟ ᱴᱟᱴᱟᱳ ᱵᱟᱳᱮᱟ ᱵᱟ ᱴᱟᱴᱟᱜ ᱜᱟᱩ ᱯᱟᱡᱟᱛᱵᱟᱜ—ᱟ ।

SNTHCC03: Santali Folk literature – 1

Outcomes:

➢ ᱮᱚᱹᱟ ᱞᱟᱚᱟᱩ ᱯᱟᱡᱽᱟᱹ ᱵᱟᱳᱮ ᱯᱟ.ᱦᱟᱵᱮᱟ. ᱵᱟ ᱚᱟᱹ ᱞᱟᱞᱶᱯᱹ ᱡᱨᱮᱟᱜ ᱵᱟᱹ.ᱞ ᱵᱟ ᱴᱟᱟᱟᱹ—ᱴᱶᱟᱵ ᱴᱟᱟᱟᱳ ᱵᱟᱳᱮᱟ ᱵᱟ ᱴᱟᱴᱟᱜ ᱜᱟᱩ ᱯᱟᱡᱟᱛᱵᱟᱜ—ᱟ ।

Principal
Chandrakona Vidyasagar Mahavidyalaya
PO- Chandrakona, Dt.-Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of Santali
Chandrakona Vidyasagar Mahavidyalaya

➢ ᱦᱚᱥᱟ ᱠᱟᱚᱜᱩ ᱚᱟᱯᱟᱳᱱ ᱠᱹᱴᱟᱜ ᱣᱟᱲ ᱵᱟ.ᱣᱮᱴ ᱟᱚ ᱠᱟᱣᱟᱜ ᱵᱟ.ᱣᱮᱴ ᱟᱽᱜᱟᱜ ᱯᱟᱹᱚᱟᱜ ᱳᱽᱯ ᱚᱵᱟ ᱯᱽᱵᱟᱠᱟ ? ᱟᱠᱟ ᱣᱟᱣᱟᱳ ᱵᱟᱚᱟᱣᱟ ᱯᱟ.ᱦᱟᱵᱟᱽᱟ. ᱵᱟ ᱚᱽᱣᱟᱜ ᱯᱟᱪᱟ ᱯᱚᱽᱽᱠᱟᱜ—ᱟ ।

➢ ᱦᱚᱥᱟ ᱠᱟᱚᱜᱩ ᱚᱟᱯᱟᱳᱱ ᱠᱹᱴᱟᱜ ᱣᱟᱲ ᱵᱟᱚᱟᱟ ᱠᱟᱣᱟᱜ ᱚᱵᱟ ᱯᱽᱵᱟ ᱠᱟᱠᱣᱴᱟ ᱣᱟᱹᱽ ᱚᱽ ᱯᱽᱵᱟᱟ ᱟᱵᱟᱟᱟ ᱟᱠᱟ ᱟᱽᱜᱟᱜ ᱪᱟᱣᱟᱚᱚᱟ ᱵᱟᱚᱟᱟ ᱯᱟ.ᱦᱟᱵᱟᱽᱟ. ᱵᱟ ᱣᱟᱣᱟᱽᱟ ᱯᱟᱪᱟ ᱯᱚᱽᱽᱠᱟᱜ—ᱟ ।

➢ ᱦᱚᱥᱟ ᱠᱟᱚᱜᱩ ᱚᱟᱯᱟᱳᱱ ᱯᱟ.ᱦᱟᱵᱟᱽᱟ. ᱵᱟ ᱠᱹᱴᱟᱜ ᱣᱟᱚᱽᱟᱽᱟ ᱵᱟᱣᱟᱜ ᱵᱟᱣᱟᱹ.ᱟ.ᱜᱽ ᱠᱟᱽᱽᱠᱟᱴ ᱣᱟᱹᱽ ᱵᱟ ᱣᱟᱣᱟᱽᱟ ᱯᱟᱪᱟᱣ ।

SNTHCC04: History of Santali Literature (Medieval period: 1845 – 1947)

Outcomes:

➢ ᱦᱚᱥᱟ ᱠᱟᱚᱜᱩ ᱚᱟᱯᱟᱳᱱ ᱯᱟ.ᱦᱟᱵᱟᱽᱟ. ᱵᱟ ᱠᱟᱽᱚᱟᱽᱽ ᱠᱟᱽᱽᱠᱟᱴ ᱯᱽᱽᱽᱠᱟ ᱤᱪᱮᱪᱽ-ᱤᱪᱮᱽ ᱟᱽᱜᱟᱜ ᱠᱟᱽᱽᱠᱟᱴ ᱚᱟᱝᱟᱽ ᱵᱟᱚᱟᱟ ᱵᱟ ᱣᱟᱣᱟᱽᱟ ᱯᱟᱪᱟ ᱯᱚᱽᱽᱠᱟᱜ—ᱟ ।

➢ ᱦᱚᱥᱟ ᱚᱟᱯᱟᱳᱱ ᱯᱟ.ᱦᱟᱵᱟᱽᱟ. ᱵᱟ ᱠᱟᱽᱚᱟᱽᱽ ᱠᱟᱽᱽᱠᱟᱴ ᱟᱽᱜᱟᱜ ᱠᱟᱽᱚᱟᱝ ᱟᱚ ᱠᱟᱽᱽᱠᱟᱴ ᱟᱽᱜᱟᱜ ᱵᱟᱹ ᱣᱟ.ᱦᱟᱽᱟ ᱚᱽᱠᱽᱟ.ᱽ ᱠᱟ.ᱣᱟᱽ ᱵᱟ ᱣᱟᱣᱟᱽᱟ ᱯᱟᱪᱟᱣ ।

➢ ᱦᱚᱥᱟ ᱠᱟᱚᱜᱩ ᱚᱟᱯᱟᱳᱱ ᱠᱟᱽᱚᱟᱽᱽ ᱠᱟᱽᱽᱠᱟᱴ ᱟᱽᱽ ᱚᱚᱣᱟᱽ ᱠᱟᱽᱽᱟ.ᱽᱟᱽ. ᱵᱟᱽᱟᱜ ᱵᱟᱚᱟᱟ ᱯᱟ.ᱦᱟᱵᱟᱽᱟ. ᱵᱟ ᱣᱟᱣᱟᱽᱟ ᱯᱟᱪᱟ ᱯᱚᱽᱽᱠᱟᱜ—ᱟ ।

➢ ᱦᱚᱥᱟ ᱠᱟᱚᱜᱩ ᱚᱟᱯᱟᱳᱱ ᱠᱟᱽᱚᱟᱽᱽ ᱠᱟᱽᱽᱠᱟᱴ ᱣᱟᱽᱽᱟ-ᱣᱵᱽᱚ ᱵᱟ.ᱚᱽᱽ ᱣᱽᱠᱟᱚᱟᱽᱽ ᱵᱟ ᱚᱵᱟ ᱯᱽᱵᱟᱠᱟᱽᱜ ᱠᱟᱽᱽᱠᱟᱴ ᱣᱟᱹᱽ ᱠᱟᱚᱜᱩ ᱵᱟ ᱟᱽ ᱯᱟᱽᱽ-ᱟ ᱟᱽᱟ ᱣᱟᱣᱟᱳ ᱵᱟᱚᱟᱟ ᱚᱽᱽᱠᱟ.ᱽ ᱠᱟ.ᱣᱟᱽ ᱯᱟ.ᱦᱟᱵᱟᱽᱟ. ᱵᱟ ᱣᱟᱣᱟᱽᱟ ᱯᱟᱪᱟ ᱯᱚᱽᱽᱠᱟᱜ—ᱟ ।

SNTHCC05: Functional Grammar of Santali Language

Outcomes:

➢ ᱦᱚᱥᱟ ᱠᱟᱚᱜᱩ ᱚᱟᱯᱟᱳᱱ ᱯᱟ.ᱦᱟᱵᱟᱽᱟ. ᱵᱟ ᱠᱟᱽᱚᱟᱽᱽ ᱟᱽᱟᱚᱟ ᱠᱽ ᱣᱽᱵᱟᱽᱟᱜ ᱣᱟᱣᱟᱳ ᱵᱟᱽᱟᱚᱟ ᱵᱟ ᱣᱟᱣᱟᱽᱟ ᱯᱟᱪᱟᱣ ।

➢ ᱠᱟᱽᱚᱟᱽᱽ ᱵᱟᱚᱟᱟ ᱵᱟ ᱚᱵᱟ ᱯᱽᱵᱟ ᱵᱟᱚᱽ ᱣᱽᱵᱟᱽᱟᱜ ᱚᱟᱯᱟᱳᱱ ᱟᱽᱟᱽᱟᱽᱽ ᱵᱟᱽᱟᱟ ᱟᱚ ᱠᱟᱽᱚᱟᱽᱽ ᱟᱽᱜᱟᱜ ᱪᱟᱽᱟᱣᱟᱽ ᱵᱟᱽᱟ ᱟᱽᱟ ᱵᱟ ᱵᱟᱽᱟᱟ ᱟᱽᱟ ᱣᱟᱣᱟᱳ ᱵᱟᱚᱟᱟ ᱵᱟ ᱣᱟᱣᱟᱽᱟ ᱯᱟᱪᱟᱣ ।

➢ ᱠᱟᱽᱚᱟᱽᱽ ᱪᱟᱽᱟᱣᱟᱽ ᱟᱽᱜᱟᱜ ᱣᱵᱟᱽ.ᱽ ᱵᱟᱽᱟ ᱟᱽᱟ ᱵᱟ ᱵᱟᱽᱟᱟ ᱟᱽᱟ ᱣᱟᱣᱟᱳ ᱵᱟᱚᱟᱟ ᱯᱟ.ᱦᱟᱵᱟᱽᱟ. ᱵᱟ ᱣᱟᱣᱟᱽᱟ ᱯᱟᱪᱟᱣ ।

Principal
Chandrakona Vidyasagar Mahavidyalaya
PO- Chandrakona, Dt.-Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of Santali
Chandrakona Vidyasagar Mahavidyalaya

SNTHCC06: Santali Folk Literature & Culture-2

Outcomes:

- ᱞᱮᱭᱟ ᱠᱟᱚᱝᱩ ᱚᱟᱯᱟ 02 ᱫᱟ.ᱬᱟᱵᱟᱬ. ᱵᱟ ᱠᱟᱞᱚᱝ᱿ ᱵᱟᱣᱟ ᱯᱟᱜ‑ᱯᱟᱵᱜᱟᱬᱜ, ᱟ.ᱫᱭ‑ᱜᱟ.ᱯᱭ ᱣᱟᱣᱟᱚ ᱵᱟᱚᱟᱬ ᱫᱟ.ᱬᱟᱵᱟᱬ. ᱵᱟ ᱣᱟᱣᱟᱬ ᱯᱟᱣᱟ ।

- ᱠᱟᱞᱚᱝᱟ᱿ᱜ ᱬᱟᱞᱟᱬ ᱵᱟᱝᱮ ᱝᱷᱦᱡᱦ ᱯᱟᱟ.ᱣᱟᱬ ᱠᱟᱞᱟᱬ ᱯᱯᱷᱟᱞᱟᱬᱜ ᱟ.ᱫᱭ‑ᱜᱟ.ᱯᱭ ᱵᱟᱚᱟᱬ ᱵᱟ ᱣᱟᱣᱟᱬ ᱯᱟᱣ ᱯᱟᱯ᱾ᱝᱟᱜ‑ᱟ ।

- ᱞᱮᱭᱟ ᱠᱟᱯᱳᱭᱯ ᱠᱟᱚᱟᱩ ᱚᱟᱯᱟᱳ2 ᱠᱟᱞᱚᱝᱟ᱿ᱜ ᱯᱟᱜᱯᱟᱬᱬ ᱟᱵᱟ ᱯᱽᱵᱟ ᱟ.ᱬᱦ ᱯᱟᱽᱟᱬᱟ ᱭᱯᱭᱜ ᱵᱟᱞᱟ ᱟᱜ ᱟᱯᱟ ᱯᱽᱵᱟ ᱨᱬᱟᱜ ᱯᱟᱜᱯᱟᱬᱬ ᱾ᱽᱞᱟᱬᱜ ᱽᱠᱽᱯ ᱯᱽᱦᱡᱦ ᱵᱟᱞᱟ ᱟᱞᱟ ᱣᱟᱣᱟᱚ ᱵᱟᱚᱟᱬ ᱫᱟ.ᱬᱟᱵᱟᱬ. ᱵᱟ ᱣᱟᱣᱟᱬ ᱯᱟᱣ ᱯᱟᱯ᱾ᱝᱟᱜ‑ᱟ ।

SNTHCC07: History of Santali Modern Literature

Outcomes:

- ᱞᱮᱭᱟ ᱠᱟᱚᱟᱩ ᱚᱟᱯᱟᱳ2 ᱫᱟ.ᱬᱟᱵᱟᱬ. ᱵᱟ ᱞᱟᱣᱟᱜ ᱠᱟᱞᱚᱝᱟ᱿ ᱠᱟᱯᱳᱭᱯ ᱟᱽᱮ ᱠᱟᱞᱟᱬᱚᱣᱟᱬ. ᱵᱟᱣᱟᱜ ᱵᱟᱚᱟᱬ ᱵᱟ ᱣᱟᱣᱟᱬ ᱯᱟᱣ ᱯᱟᱯ᱾ᱝᱟᱜ‑ᱟ ।

- ᱞᱮᱭᱟ ᱠᱟᱚᱟᱩ ᱚᱟᱯᱟᱳ2 ᱫᱟ.ᱬᱟᱵᱟᱬ. ᱵᱟ ᱞᱟᱣᱟᱜ ᱠᱟᱯᱳᱭᱯ ᱟᱽᱮᱬᱜ ᱥᱵᱚᱟᱯ ᱯᱵᱚᱟᱬ ᱣᱟᱣᱟᱚ ᱵᱟᱚᱟᱬ ᱵᱟ ᱣᱟᱣᱟᱬ ᱯᱟᱣ ᱯᱟᱯ᱾ᱝᱟᱜ‑ᱟ ।

- ᱞᱮᱭᱟ ᱠᱟᱚᱟᱩ ᱚᱟᱯᱟᱳ2 ᱞᱟᱣᱟᱜ ᱟᱵᱟ ᱥᱵᱚᱟᱯ ᱯᱵᱚᱟᱬᱩ ᱵᱟ ᱠᱟᱞᱟᱬ.ᱜ ᱯᱟᱣ ᱟᱵᱟᱯᱟ ᱟᱞᱟ ᱣᱟᱣᱟᱚ ᱵᱟᱚᱟᱬ ᱫᱟ.ᱬᱟᱵᱟᱬ. ᱵᱟ ᱣᱟᱣᱟᱬ ᱯᱟᱣᱟ ।

SNTHCC08: Language & Santali Linguistic

Outcomes:

- ᱞᱮᱭᱟ ᱠᱟᱚᱟᱩ ᱚᱟᱯᱟᱳ2 ᱠᱟᱞᱚᱝᱯ ᱣᱟᱟᱠᱟ ᱟᱬ ᱣᱟᱟᱠᱟ ᱜᱟᱚᱟ ᱟᱥᱜᱟᱜ ᱜᱟᱟᱣᱟᱜ ᱣᱟᱣᱟᱚ ᱵᱟᱚᱟᱬ ᱫᱟ.ᱬᱟᱵᱟᱬ. ᱵᱟ ᱣᱟᱣᱟᱬ ᱯᱟᱣᱟᱬᱜ‑ᱟ ।

- ᱞᱮᱭᱟ ᱠᱟᱚᱟᱩ ᱚᱟᱯᱟᱳ2 ᱫᱟ.ᱬᱟᱵᱟᱬ. ᱵᱟ ᱠᱟᱞᱚᱝᱟ᱿ ᱫᱟ.ᱽᱠᱭ ᱟᱬ ᱫᱟ.ᱽᱠᱭ ᱠᱟᱞᱽᱠ ᱟᱥᱜᱟᱜ ᱵᱟᱚᱟᱬ ᱵᱟ ᱣᱟᱣᱟᱬ ᱯᱟᱣᱟᱬᱜ‑ᱟ ।

- ᱞᱮᱭᱟ ᱠᱟᱚᱟᱩ ᱚᱟᱯᱟᱳ2 ᱠᱟᱞᱚᱝᱯ ᱫᱟ.ᱽᱠᱭ ᱟᱥᱜᱟᱜ ᱣᱟᱽᱽᱠᱽᱣᱟᱚᱬ ᱽᱽ ᱝᱷᱦᱟᱝᱷᱦ ᱣᱟᱣᱟᱚ ᱵᱟᱚᱟᱬ ᱵᱟ ᱣᱟᱣᱟᱬ ᱯᱟᱣᱟᱬᱜ‑ᱟ ।

SNTHCC09: Comparative Study Tribal Literature & Others

Outcomes:

- ᱮᱝᱜᱟ ᱠᱟᱳᱫᱟᱩ ᱳᱟᱯᱟᱳᱶ ᱶᱟᱩᱟᱜ ᱤᱚᱩᱟᱜᱟ—ᱟ ᱫᱱ, ᱟ.ᱯᱟᱳᱟ.ᱠᱟ ᱳᱟᱯᱟᱳᱬ ᱳᱟᱨᱟᱜ.ᱜ ᱜᱟᱤ ᱫᱟ.ᱮᱠᱟ ᱩᱬᱟᱜᱟᱜ—ᱟ ᱥᱟᱜ ᱶᱟᱩᱟᱳᱚ ᱵᱟᱚᱥᱟ ᱵᱟ ᱶᱟᱩᱟᱜ ᱤᱚᱩ ᱯᱟᱲᱞᱟᱜᱟ—ᱟ ᱾

- ᱮᱝᱜᱟ ᱠᱟᱳᱫᱟᱩ ᱳᱟᱯᱟᱳᱶ ᱫᱟ.ᱦᱟᱵᱬᱟ. ᱟ.ᱯᱟᱳᱟ.ᱠᱟ ᱫᱟ.ᱮᱠᱟ ᱵᱟ ᱥᱤᱞᱟᱜ ᱠᱟᱩᱩᱥᱟ ᱶᱟᱩᱟᱳᱚ ᱵᱟᱚᱥᱟ ᱵᱟ ᱚᱪᱟᱜ ᱤᱚᱩ ᱯᱟᱲᱞᱟᱜᱟ—ᱟ ᱾

- ᱮᱝᱜᱟ ᱳᱟᱯᱟ ᱚᱵᱚᱟ ᱠᱟᱳᱳᱟᱞ ᱫᱟ.ᱮᱠᱟ ᱟᱵᱟ ᱯᱪᱵᱟ ᱟ.ᱯᱟᱳᱟ.ᱠᱟ ᱟᱧ ᱥᱦᱟᱞ ᱫᱟ.ᱮᱠᱟ ᱠᱟᱩ ᱚᱵᱵᱚ ᱟᱵᱟᱞᱟ ᱥᱤᱞᱟ ᱶᱟᱩᱟᱳᱚ ᱵᱟᱚᱥᱟ ᱵᱟ ᱶᱟᱩᱟᱜ ᱤᱚᱩᱟ ᱾

SNTHCC10: Theory of Literature

Outcomes:

- ᱮᱝᱜᱟ ᱚᱪᱟᱜ ᱫᱟ.ᱦᱟᱵᱬᱟ. ᱵᱟ ᱠᱟᱳᱳᱟᱞ ᱠᱟᱩᱩᱥᱟ ᱩᱪᱟᱜ ᱠᱟᱩᱟᱳᱚᱚ ᱳᱟᱚᱚ ᱥᱤᱞᱟᱜ ᱠᱟᱳᱟᱩ ᱶᱶ.ᱶᱟ. ᱵᱟᱚᱥᱟ ᱵᱟ ᱶᱟᱩᱟᱜ ᱤᱚᱩᱟ ᱾

- ᱮᱝᱜᱟ ᱠᱟᱳᱫᱟᱩ ᱳᱟᱯᱟᱳᱶ ᱠᱟᱩᱩᱥᱟ ᱠᱟᱳᱟᱳᱮ ᱥᱤᱞᱟᱜ ᱠᱟᱳᱟᱩ ᱶᱶ.ᱶᱟ. ᱶᱟᱩᱟᱳᱚ ᱵᱟᱚᱥᱟ ᱫᱟ.ᱦᱟᱵᱬᱟ. ᱵᱟ ᱶᱟᱩᱟᱜ ᱤᱚᱩ ᱯᱟᱲᱞᱟᱜᱟ—ᱟ ᱾

- ᱮᱝᱜᱟ ᱠᱟᱳᱫᱟᱩ ᱳᱟᱯᱟᱳᱶ ᱠᱟᱳᱳᱟᱞ ᱠᱟᱩᱩᱥᱟ ᱠᱟᱳᱳᱟ ᱫᱟ.ᱜᱟᱳ ᱟᱵᱟ ᱟᱵᱟ ᱚᱯᱯᱟᱞᱟ ᱵᱟ ᱶᱟᱵᱵᱜ—ᱟ ᱥᱤᱞᱟ ᱶᱟᱩᱟᱳᱚ ᱵᱟᱚᱥᱟ ᱫᱟ.ᱦᱟᱵᱬᱟ. ᱵᱟ ᱶᱟᱩᱟᱜ ᱤᱚᱩᱟ ᱾

SNTHCC11: Novel & Short Story

Outcomes:

- ᱮᱝᱜᱟ ᱠᱟᱳᱫᱟᱩ ᱳᱟᱯᱟ ᱚᱳ ᱠᱟᱳᱳᱟᱞ ᱠᱟᱩᱩᱥᱟ ᱥᱤᱞᱟᱜ ᱶᱟᱯᱟᱜ ᱜᱟᱩᱟᱳ ᱟᱵᱟ ᱯᱪᱵᱟᱞᱟᱜ ᱵᱟᱳᱟ ᱥᱤᱞᱟ ᱶᱟᱩᱟᱳᱚ ᱵᱟᱚᱥᱟ ᱵᱟ ᱶᱟᱩᱟᱜ ᱤᱚᱩᱟ ᱾

- ᱮᱝᱜᱟ ᱠᱟᱳᱫᱟᱩ ᱳᱟᱯᱟᱳᱶ ᱵᱟᱟᱦᱟ ᱵᱟ.ᱪᱟ ᱵᱟ ᱟᱵᱟ ᱯᱪᱵᱟᱞᱟᱜ ᱵᱟᱳᱟ ᱥᱤᱞᱟ ᱶᱟᱩᱟᱳᱚ ᱵᱟᱚᱥᱟ ᱵᱟ ᱶᱟᱩᱟᱜ ᱤᱚᱩᱟᱜ—ᱟ ᱾

- ᱵᱟ.ᱪᱟ ᱟᱧ ᱜᱟᱩᱟᱳᱩ ᱳᱟᱯᱟᱳᱶ ᱠᱟᱳᱳᱟ ᱠᱟᱳᱚᱳᱬ ᱟᱵᱟ ᱯᱪᱵᱟ ᱜᱟᱟᱦᱟᱳ ᱵᱟ ᱜᱟᱟᱦᱟᱜ ᱵᱟᱳᱟ ᱥᱤᱞᱟ ᱶᱟᱩᱟᱳᱚ ᱵᱟᱚᱥᱟ ᱫᱟ.ᱦᱟᱵᱬᱟ. ᱵᱟ ᱶᱟᱩᱟᱜ ᱤᱚᱩ ᱯᱟᱲᱞᱟᱜᱟ—ᱟ ᱾

Principal
Chandrakona Vidyasagar Mahavidyalaya
PO- Chandrakona, Dt.-Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of Santali
Chandrakona Vidyasagar Mahavidyalaya

SNTHCC12: Poetry Literature

Outcomes:

> ᱞᱚᱭᱟ ᱠᱟᱣᱟᱩ ᱚᱟᱯᱟ ᱚᱛᱮᱚ ᱟᱵᱟᱴ ᱫᱟ.ᱮᱴᱞ ᱵᱟᱚᱟᱹ ᱵᱟ ᱟᱵᱟ ᱯᱺᱵᱟ ᱵᱟᱚᱱ ᱟᱢᱟᱲᱣᱽ. ᱚᱟᱯᱟᱚ ᱜᱟᱟᱟᱮ ᱟᱵᱟᱮᱟ ᱟᱮᱟ ᱵᱟᱚᱟᱟ ᱵᱟ ᱣᱟᱣᱟᱨ ᱞᱺᱩᱟ ᱾

> ᱞᱚᱭᱟ ᱠᱟᱣᱟᱩ ᱚᱟᱯᱟᱚᱴ ᱠᱟᱭᱚᱟᱲᱴ ᱜᱟᱟᱟᱟᱜ ᱵᱟᱮ ᱜᱟᱟᱟᱮ ᱵᱟ ᱵᱟ ᱣᱟᱣᱟᱚ ᱵᱟᱚᱟᱟ ᱟᱮᱟᱲᱣᱽ. ᱚᱟᱯᱟᱚᱴ ᱾ᱮ.ᱦᱟᱵᱟᱟ. ᱵᱟ ᱣᱟᱣᱟᱨ ᱞᱺᱩ ᱞᱟᱟᱮᱱᱜᱟᱜ ᱵᱟᱮᱟᱹ ᱾

SNTHCC13: Drama & Essay Literature

Outcomes:

> ᱞᱚᱭᱟ ᱠᱟᱣᱟᱩ ᱚᱟᱯᱟ ᱚᱛᱮᱚ ᱠᱟᱣᱟᱟᱞᱟᱵ ᱜᱟᱟᱟᱮ ᱵᱟ ᱟᱵᱟ ᱯᱺᱵᱟ ᱵᱟᱚᱴ ᱜᱟᱞᱟᱮ ᱟᱟ ᱟᱮᱟᱯ ᱚᱟᱯᱟᱚᱴ ᱟᱯ ᱞᱟᱵᱟᱟᱣ ᱟᱵᱟᱮᱟ ᱟᱮᱟ ᱵᱟᱚᱟᱟ ᱾ᱮ.ᱦᱟᱵᱟᱟ. ᱵᱟ ᱣᱟᱣᱟᱨ ᱞᱺᱩᱟ ᱾

> ᱞᱚᱭᱟ ᱠᱟᱣᱟᱩ ᱚᱟᱯᱟᱚᱴ ᱜᱟᱞᱟᱮ ᱟᱴ ᱟᱵᱟ ᱯᱺᱵᱟᱮ ᱣᱟᱮᱟᱵ ᱟᱟ ᱞᱟᱟᱮᱠᱮ ᱵᱟ ᱟᱯ ᱞᱟᱵᱟᱟᱣ—ᱟ' ᱟᱮᱟ ᱣᱟᱣᱟᱚ ᱵᱟᱚᱟᱟ ᱾ᱮ.ᱦᱟᱵᱟᱟ. ᱵᱟ ᱣᱟᱣᱟᱨ ᱞᱺᱩ ᱞᱟᱟᱮᱱᱜᱟᱜ—ᱟ ᱾ ᱞᱚᱭᱟ ᱠᱟᱣᱟᱩ ᱚᱟᱯᱟᱚᱴ ᱟᱮᱟᱯᱮ ᱟᱵᱟ ᱯᱺᱵᱟᱮ ᱞᱟᱟᱚᱴ ᱞᱟᱟᱮ.ᱮ ᱵᱟ ᱚᱟᱣᱵᱺᱮᱟ ᱟᱮᱟ ᱵᱟ ᱵᱟᱚᱣᱟ ᱵᱟᱣᱟᱹ ᱾ᱮ.ᱦᱟᱵᱟᱟ. ᱵᱟ ᱣᱟᱣᱟᱨ ᱞᱺᱩ ᱞᱟᱟᱮᱱᱜᱟᱜ—ᱟ ᱾

SNTHCC14: Santali Magazine & Journal, Bengali Literature

Outcomes:

> ᱞᱚᱭᱟ ᱠᱟᱣᱟᱩ ᱚᱟᱯᱟᱚᱴ ᱠᱟᱵᱚᱟᱲᱟ ᱰᱟᱚᱟᱟᱩ ᱠᱟᱲᱣᱺᱮ ᱞᱟᱜᱟᱩ ᱵᱟᱚᱟᱟ ᱠᱟᱲᱚᱴ ᱣᱟᱮᱟᱯᱟ ᱠᱟᱲᱣᱺᱮ ᱞᱟᱜᱟᱩ ᱵᱟᱚᱟᱟ ᱵᱟ ᱣᱟᱣᱟᱨ ᱞᱺᱩ ᱞᱟᱟᱮᱱᱜᱟᱜ—ᱟ ᱾

> ᱞᱚᱭᱟ ᱠᱟᱣᱟᱩ ᱚᱟᱯᱟᱚᱴ ᱠᱟᱵᱚᱟᱲᱟ ᱠᱟᱲᱣᱺᱮ ᱰᱟᱚᱟᱟᱩ ᱟᱵᱟ ᱟᱵᱟ ᱾ᱺᱠ ᱵᱟᱚᱮᱟ ᱞᱟᱟᱴᱟᱜ ᱵᱟᱮ ᱚᱟᱣᱺ.ᱴ ᱟᱮᱟ ᱣᱟᱣᱟᱯ ᱵᱟᱚᱟᱟ ᱵᱟ ᱣᱟᱣᱟᱨ ᱞᱺᱩᱟ ᱾

> ᱞᱚᱭᱟ ᱠᱟᱣᱟᱩ ᱚᱟᱯᱟᱚᱴ ᱠᱟᱵᱚᱟᱲᱟ ᱠᱟᱲᱣᱺᱮ ᱢᱚᱚᱣᱟᱩ ᱰᱟᱚᱟᱟᱩ ᱵᱟ ᱟᱵᱟ ᱟᱵᱟ ᱾ᱮ.ᱯᱟᱠᱟ ᱚ ᱞᱟᱟᱟᱟ ᱰᱟᱚᱺᱟᱯᱟᱜ ᱵᱟᱮ ᱚᱟᱣᱺ.ᱴ ᱟᱮᱟ' ᱣᱟᱣᱟᱚ ᱵᱟᱚᱟᱟ ᱾ᱮ.ᱦᱟᱵᱟᱟ. ᱵᱟ ᱣᱟᱣᱟᱨ ᱞᱺᱩ ᱞᱟᱟᱮᱱᱜᱟᱜ—ᱟ ᱾

SNTHSEC01: Art of Translation

Outcomes:

- ᱮᱚᱽᱟ ᱚᱟᱯᱟᱳᱷ ᱯᱟ ᱠᱟᱮᱳᱷᱟᱷ ᱴᱟ.ᱻᱠᱟ ᱟᱷᱟ ᱯᱽᱽᱷᱟ ᱷᱟᱳᱷ ᱩᱟᱯ ᱴᱟ.ᱻᱠᱟ ᱷᱟᱷᱮ ᱾ᱷᱟᱹᱺ ᱴᱟ.ᱻᱠᱟ ᱳᱽ ᱚᱯ ᱷᱟᱷᱟ.ᱽ ᱺᱟᱽᱺᱺ᱘—ᱷ ᱷᱺᱟ ᱶᱟᱷᱟᱷ ᱷᱟᱳᱷᱟ ᱷᱟ ᱶᱟᱷᱟᱷ ᱯᱟᱹᱩᱟᱺ—ᱷ ᱾

- ᱾ᱷᱟᱹᱺ ᱴᱟ.ᱻᱠᱟ ᱷᱟᱹᱺ ᱠᱟᱮᱳᱷᱟᱷ ᱴᱟ.ᱻᱠᱟᱷᱽ ᱟᱷᱟ ᱯᱽᱷᱟ ᱷᱟᱳᱷ ᱚᱯ ᱷᱟᱷᱟ.ᱽ ᱺᱟᱽᱺᱺ᱘—ᱷ ᱷᱺᱟ ᱷᱟᱳᱷᱟ ᱷᱟ ᱶᱟᱷᱟᱷ ᱯᱟᱹᱩᱟ ᱾

- ᱩᱟᱯ ᱴᱟ.ᱻᱠᱟ ᱷᱟᱹᱺ ᱯᱟᱠᱟᱷ ᱴᱟ.ᱻᱠᱟᱷᱽ ᱚᱯ ᱷᱟᱷᱟ.ᱽ ᱴᱟ.ᱺᱟᱯ ᱠᱟᱺᱺᱹ ᱴᱟ.ᱻᱠᱟ ᱟᱽᱩ ᱯᱟᱶᱟ ᱚᱽᱺᱟᱷ ᱴᱟ.ᱺᱟᱷ ᱩᱽᱺᱟ᱘—ᱷ ᱾ ᱷᱺᱟ ᱶᱟᱷᱟᱷ ᱷᱟᱷᱟᱷᱟ ᱴᱟ.ᱷᱟᱹᱽᱟᱷ. ᱷᱟ ᱶᱟᱷᱟᱷ ᱯᱟᱹᱩᱟᱺ ᱾

SNTHSEC02: Santali Language Teaching

Outcomes:

- ᱮᱚᱽᱟ ᱠᱟᱮᱳᱷᱩ ᱚᱟᱯᱟ ᱚᱹᱺᱟ ᱟᱷᱟ ᱯᱽᱷᱟ ᱷᱟᱳᱷ ᱠᱟᱮᱳᱟᱷᱟ ᱶᱟᱟᱠᱟ ᱟᱹᱺ ᱺᱟᱽᱺᱺ᱘—ᱷ ᱷᱺᱟ ᱶᱟᱷᱟᱷ ᱷᱟᱳᱷᱟ ᱶᱟᱷᱟᱷᱷ ᱯᱟᱹᱩᱟᱺ᱘—ᱷ ᱾

- ᱟᱷᱟ ᱯᱽᱷᱟ ᱷᱟᱳᱷ ᱺᱟᱽᱺᱷᱟᱷ. ᱠᱺᱟᱹᱺ ᱷᱟ ᱶᱷᱺᱺ᱘—ᱷ ᱠᱟᱮᱳᱷᱳ ᱩᱟᱷᱟᱺᱺ ᱷᱟᱽᱟᱷ ᱟᱹᱺ ᱟᱹᱺ ᱶᱺᱷᱷᱟ ᱺᱷᱟ ᱷᱟ ᱚᱟᱽᱺᱟ.ᱽ ᱴᱟ.ᱺᱳᱷ ᱷᱟᱷᱟ ᱷᱺᱟ ᱶᱟᱷᱳᱷ ᱷᱟᱳᱷᱟ ᱴᱟ.ᱷᱟᱹᱽᱟᱷ. ᱷᱟ ᱶᱟᱷᱟᱷ ᱯᱟᱹᱩᱟ ᱾

- ᱠᱟᱮᱳᱷᱟᱷ ᱶᱟᱟᱠᱟ ᱟᱹᱺᱟᱷ ᱴᱟ.ᱺᱟᱯ ᱠᱟᱮᱳᱷᱟᱷ ᱟᱷᱟᱷᱟᱷ, ᱠᱟᱮᱳᱷᱟᱷ ᱚᱽᱺᱟᱺᱟᱺ ᱟᱹᱺᱟᱷ ᱺᱷᱺᱟᱷ ᱴᱟ.ᱺᱳᱷ ᱩᱽᱺᱟᱷᱺ—ᱷ ᱷᱺᱟ ᱶᱟᱷᱳᱷ ᱷᱟᱳᱷᱟ ᱷᱟ ᱶᱟᱷᱟᱷ ᱯᱟᱹᱩᱟ ᱾

SNTHDSE01: Decretive study of Santali Language

Outcomes:

- ᱮᱚᱽᱟ ᱚᱟᱯᱟ ᱚᱹᱺᱟ ᱠᱟᱮᱳᱟᱷᱟ ᱶᱟᱟᱠᱟ ᱺᱟᱽᱶᱟᱺ ᱺᱷᱺᱟᱷ ᱟᱹᱺ ᱟᱹᱺ ᱟᱷᱺ ᱟᱷᱺᱟ ᱷᱟ ᱩᱽᱺᱟ᱘—ᱷ ᱷᱺᱟ ᱶᱟᱷᱳᱷ ᱚᱺᱺ—ᱟᱹᱴᱷᱟᱷ ᱷᱟᱳᱷᱟ ᱴᱟ.ᱷᱟᱹᱽᱟᱷ. ᱷᱟ ᱶᱟᱷᱟᱷ ᱯᱟᱹᱩᱟ ᱾

- ᱮᱚᱽᱟ ᱠᱟᱮᱳᱷᱩ ᱚᱟᱯᱟᱳᱷ ᱴᱟ.ᱷᱟᱹᱽᱟᱷ. ᱷᱟ ᱠᱟᱮᱳᱷᱟᱷ ᱴᱟ.ᱻᱠᱟ ᱟᱷ ᱴᱟ.ᱻᱠᱟ ᱠᱟᱹᱟᱹᱠ ᱟᱹᱺᱺᱷ ᱷᱟᱳᱷᱟ ᱷᱟ ᱶᱟᱷᱟᱷ ᱯᱟᱹᱩᱟᱺ᱘—ᱷ ᱾

- ᱮᱚᱽᱟ ᱠᱟᱮᱳᱷᱩ ᱚᱟᱯᱟᱳᱷ ᱠᱟᱮᱳᱟᱷᱟ ᱴᱟ.ᱻᱠᱟ ᱟᱹᱺᱺᱷ ᱶᱟᱹᱻᱠᱠᱳᱷᱷ ᱠᱽ ᱺᱷᱺᱟᱹᱺᱷᱷ ᱶᱟᱷᱳᱷ ᱷᱟᱳᱷᱟ ᱷᱟ ᱶᱟᱷᱟᱷ ᱯᱟᱹᱩᱟᱺ᱘—ᱷ ᱾

SNTHDSE02: Poem & Poetry of Missionary period, starting period Poem & Poetry

<u>Outcomes:</u>

➢ ᱮᱞᱮᱜ ᱠᱟᱳᱟᱣ ᱳᱟᱯᱟ ᱳᱫᱮᱚ ᱩᱱᱠᱚᱮᱟᱯ ᱟᱵᱚᱜ ᱫᱯᱮᱟᱜ ᱠᱟᱺᱣᱟᱴ ᱠᱟᱴᱯᱟᱢ ᱵᱮᱚᱺᱟ ᱛᱮ.ᱦᱟᱵᱳᱟ. ᱵᱟ ᱣᱟᱠᱟᱨ ᱜᱟᱩᱚ ।

➢ ᱮᱞᱶᱟᱜ ᱟᱵᱚᱜ ᱫᱯᱮᱟᱜ ᱠᱟᱞᱚᱺᱟᱯ ᱟᱮᱟᱺᱯᱜ ᱠᱟᱺᱣᱟᱴ ᱠᱟᱴᱯᱟᱢ ᱫᱯᱮᱟᱜ ᱸᱵᱦᱟ. ᱵᱮᱚᱺᱟ ᱛᱮ.ᱦᱟᱵᱳᱟ. ᱵᱟ ᱣᱟᱠᱟᱨ ᱜᱟᱩᱚ ।

➢ ᱠᱟᱞᱚᱺᱟᱯ ᱠᱟᱺᱣᱟᱴ ᱞᱟᱺᱞᱟᱺ ᱫᱯᱮ ᱛᱚᱺᱶᱟᱺ ᱺᱦᱺᱵ ᱟᱺ ᱮᱞᱶᱟᱜ ᱠᱟᱺᱣᱟᱴᱯ ᱞᱟᱺᱞᱟᱺ ᱫᱯᱮ ᱟᱮᱯᱺᱜᱟ. ᱵᱮᱟᱟ ᱵᱮᱚᱺᱟ ᱛᱮ.ᱦᱟᱵᱳᱟ. ᱵᱟ ᱣᱟᱠᱟᱨ ᱜᱟᱩ ᱯᱟᱺᱛᱮᱟᱜ—ᱟ ।

SNTHDSE03: Prose Literature (from 1981 to till now)

<u>Outcomes:</u>

➢ ᱮᱞᱮᱜ ᱠᱟᱳᱟᱣ ᱳᱟᱯᱟ ᱳᱫᱮᱚ ᱠᱟᱞᱚᱺᱟᱯ ᱠᱟᱺᱣᱟᱴ ᱫᱯᱮᱟᱜ ᱩᱫᱮ ᱵᱟ ᱞᱜᱮᱮ ᱵᱮᱟᱺ ᱮᱛᱚ ᱯᱶᱮ.ᱣᱟᱵ ᱺᱮᱚᱯᱮ ᱠᱟᱺᱣᱟᱴᱯ ᱫᱯᱮᱟᱜ ᱵᱮᱚᱺᱟ ᱵᱟ ᱣᱟᱠᱟᱨ ᱜᱟᱩᱚ ।

➢ ᱮᱞᱮᱜ ᱠᱟᱳᱟᱣ ᱳᱟᱯᱟᱚᱽ ᱵᱟᱟᱦᱟ ᱵᱟ.ᱣᱮᱺ ᱵᱟ ᱟᱵᱟ ᱯᱺᱵᱟᱮᱟᱜ ᱵᱟᱮᱟ ᱟᱮᱟ ᱣᱟᱠᱟᱚ ᱵᱮᱚᱺᱟ ᱵᱟ ᱣᱟᱠᱟᱨ ᱜᱟᱩᱟᱜ—ᱟ ।

➢ ᱵᱟ.ᱣᱮᱺ ᱟᱺ ᱺᱮᱚᱩᱺᱟᱣ ᱳᱟᱯᱟᱚᱽ ᱠᱟᱞᱚᱺᱟ ᱠᱟᱺᱚᱺᱟᱴ ᱟᱵᱟ ᱯᱺᱵᱟᱮ ᱺᱮᱚᱺᱟᱴ ᱵᱟ ᱺᱮᱚᱺᱟᱜ ᱵᱟᱮᱟ ᱟᱮᱟ ᱣᱟᱠᱟᱳ ᱵᱮᱚᱺᱟ ᱛᱮ.ᱦᱟᱵᱳᱟ. ᱵᱟ ᱣᱟᱠᱟᱨ ᱜᱟᱩ ᱯᱟᱺᱛᱮᱟᱜ—ᱟ ।

SNTHDSE04: Drama Literature (from 1981 to till now)

<u>Outcomes:</u>

➢ ᱮᱞᱮᱜ ᱠᱟᱳᱟᱣ ᱳᱟᱯᱟ ᱳᱫᱮᱚ ᱠᱟᱞᱚᱺᱟᱯ ᱠᱟᱺᱣᱟᱴ ᱫᱯᱮᱟᱜ ᱩᱫᱮ ᱵᱟ ᱞᱜᱮᱮ ᱵᱟᱟᱺ ᱮᱛᱚ ᱯᱶᱮ.ᱣᱟᱵ ᱺᱮᱚᱯᱮ ᱠᱟᱺᱣᱟᱴᱯ ᱫᱯᱮᱟᱜ ᱵᱮᱚᱺᱟ ᱵᱟ ᱣᱟᱠᱟᱨ ᱜᱟᱩᱚ ।

➢ ᱮᱞᱮᱜ ᱠᱟᱳᱟᱣ ᱳᱟᱯᱟᱚᱽ ᱺᱮᱚᱺᱟ ᱫᱽ ᱟᱵᱟ ᱯᱺᱵᱟᱮ ᱣᱟᱠᱟᱚ ᱟᱺ ᱯᱺᱠᱠᱚ ᱵᱟ ᱟᱯ ᱫᱟᱵᱟᱴ—ᱟ ᱟᱮᱟ ᱣᱟᱠᱟᱚ ᱵᱮᱚᱺᱟ ᱛᱮ.ᱦᱟᱵᱳᱟ. ᱵᱟ ᱣᱟᱠᱟᱨ ᱜᱟᱩ ᱯᱟᱺᱛᱮᱟᱜ—ᱟ ।

Principal
Chandrakona Vidyasagar Mahavidyalaya
PO- Chandrakona, Dt.-Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of Santali
Chandrakona Vidyasagar Mahavidyalaya

SNTHGE01: History of Santali Literature

Outcomes:

- ᱪᱟᱹᱞᱟᱜ ᱠᱟᱛᱷᱟᱭ ᱚᱛᱮᱱ ᱚᱛᱮᱜ ᱠᱟᱱᱟᱣ ᱠᱟᱱᱚᱱᱟᱨ ᱠᱟᱭᱣᱡᱮ, ᱚᱛᱷᱟ, ᱠᱟᱱᱚᱱᱟᱨ ᱠᱟᱭᱣᱡᱮ ᱟᱨ ᱮᱟᱣᱟᱜ ᱠᱟᱱᱚᱱᱟᱨ ᱠᱟᱭᱣᱡᱮ ᱟᱱᱮᱟᱜ ᱞᱟᱜᱟᱱ ᱱᱮᱦᱚᱨ ᱵᱟ ᱣᱟᱝᱟᱨ ᱜᱟᱢᱟᱜ ᱾

- ᱪᱟᱹᱞᱟᱜ ᱠᱟᱛᱷᱟᱭ ᱚᱛᱷᱟᱚᱛ ᱠᱟᱱᱚᱱᱟᱨ ᱠᱟᱭᱣᱡᱮ ᱟᱨᱮ ᱛᱚᱣᱟᱱ ᱠᱟᱱᱚᱣ.ᱮᱟᱚᱟ. ᱵᱟᱱᱟᱜ ᱵᱟᱚᱟᱱ ᱱᱟᱹᱱᱟᱜᱟᱹ. ᱵᱟ ᱣᱟᱝᱟᱨ ᱜᱟᱱ ᱯᱟᱹᱨᱡᱮᱜᱟᱜ-ᱟ ᱾

- ᱪᱟᱹᱞᱟᱜ ᱠᱟᱛᱷᱟᱭ ᱚᱛᱷᱟᱚᱛ ᱱᱟᱹᱱᱟᱜᱟᱹ. ᱵᱟ ᱣᱟᱝᱟᱨ ᱜᱟᱱᱟᱜ ᱨᱮ, ᱟᱵᱟ ᱯᱚᱵᱟ ᱵᱟᱚᱛ ᱠᱟᱛᱷᱟᱨ ᱣᱟᱱᱟᱜᱟᱱ ᱠᱟᱭᱣᱡᱚ ᱢᱷᱟᱹᱦᱟᱹ. ᱟᱹᱱᱟᱜ ᱢᱟᱹᱠ ᱩᱚᱟᱞᱟ-ᱩᱚᱟᱞᱟ ᱚᱛᱵᱟ ᱣᱟᱝᱟᱨᱟᱞ ᱟ.ᱚᱵ ᱯᱚᱛᱷᱟ ᱚᱟᱜᱟᱢ ᱯᱟᱹᱱᱮᱜ ᱩᱟᱛᱟ ᱠᱟᱛᱷᱟᱭ ᱢᱟᱹᱠ ᱵᱟᱜᱮ ᱟᱯ ᱣᱟᱹᱯ ᱚᱛᱷᱟᱚᱛ ᱠᱟᱭᱣᱡᱚᱠᱮᱢ ᱠᱟᱱᱟᱱᱟᱜ ᱯᱮᱟ ᱾ ᱯᱮᱟ ᱵᱟ ᱵᱟᱚᱟᱱ ᱯᱟᱛ ᱯᱟᱹᱢᱟᱞ ᱵᱟ ᱣᱟᱝᱟᱨ ᱜᱟᱱᱟᱜ ᱾

SNTHGE02: Santali Poetry Literature, Folk Song

Outcomes:

- ᱪᱟᱹᱞᱟᱜ ᱠᱟᱛᱷᱟᱭ ᱚᱛᱷᱟ ᱚᱛᱮᱜ ᱟᱵᱚᱟ ᱱᱟᱹ.ᱮᱹᱱ ᱵᱟᱚᱟᱱ ᱵᱟ ᱟᱵᱟ ᱯᱚᱵᱟ ᱵᱟᱚᱛ ᱟᱞᱟᱟᱣᱡᱮ. ᱟᱨ ᱠᱟᱛᱟᱠᱟ ᱚᱛᱷᱟᱚᱛ ᱜᱚᱝᱟᱨ ᱢᱟᱹᱱ ᱟ.ᱚᱵ ᱟᱵᱟᱞᱚ ᱟᱮᱟ ᱵᱟᱚᱟᱱ ᱵᱟ ᱣᱟᱝᱟᱨ ᱜᱟᱱᱟᱜ ᱾

- ᱪᱟᱹᱞᱟᱜ ᱠᱟᱛᱷᱟᱭ ᱚᱛᱷᱟᱚᱛ ᱠᱟᱱᱚᱟᱱᱚ ᱜᱚᱝᱟᱜ ᱵᱟᱮ ᱜᱚᱝᱟᱱᱮ ᱵᱟ ᱣᱟᱝᱟᱵ ᱵᱟᱚᱟᱱ ᱟᱮᱟᱟᱣᱡᱮ. ᱚᱛᱷᱟᱚᱛ ᱱᱟᱹ.ᱦᱟᱹᱵᱟᱹ. ᱵᱟ ᱣᱟᱝᱟᱨ ᱜᱟᱱ ᱯᱟᱹᱨᱡᱮᱜᱟᱜ ᱵᱟᱞᱟ ᱾

SNTHGE03: Drama Literature

Outcomes:

- ᱪᱟᱹᱞᱟᱜ ᱠᱟᱛᱷᱟᱭ ᱚᱛᱷᱟ ᱚᱛᱮᱜ ᱠᱟᱱᱟᱱᱟᱹᱵ ᱜᱚᱝᱟᱱᱮ ᱵᱟ ᱟᱵᱟ ᱯᱚᱵᱟ ᱵᱟᱚᱛ ᱜᱚᱝᱟᱮ ᱚᱛᱷᱟᱚᱛ ᱟᱯ ᱱᱟᱵᱟᱱ ᱟᱵᱟᱞᱚ ᱟᱮᱟ ᱵᱟᱚᱟᱱ ᱱᱟᱹ.ᱦᱟᱹᱵᱟᱹ. ᱵᱟ ᱣᱟᱝᱟᱨ ᱜᱟᱱᱟᱜ ᱾

- ᱪᱟᱹᱞᱟᱜ ᱠᱟᱛᱷᱟᱭ ᱚᱛᱷᱟᱚᱛ ᱜᱚᱝᱟᱮ ᱟᱹ ᱟᱵᱟ ᱯᱚᱵᱟᱹ ᱣᱟᱹᱠᱟᱨ ᱟᱨ ᱯᱟᱹᱯᱹᱠᱠᱟ ᱵᱟ ᱟᱯ ᱱᱟᱵᱟᱱ-ᱟ ᱟᱮᱟ ᱣᱟᱝᱟᱚ ᱵᱟᱚᱟᱱ ᱱᱟᱹ.ᱦᱟᱹᱵᱟᱹ. ᱵᱟ ᱣᱟᱝᱟᱨ ᱜᱟᱱ ᱯᱟᱹᱨᱡᱮᱜᱟᱜ-ᱟ ᱾

Principal
Chandrakona Vidyasagar Mahavidyalaya
PO- Chandrakona, Dt.-Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of Santali
Chandrakona Vidyasagar Mahavidyalaya

SNTHGE04: Santali Novel & Short Story

Outcomes:

➢ ᱪᱚᱭᱚ ᱠᱟᱣᱲᱩ ᱚᱞᱯᱟ ᱚᱛᱚ ᱠᱟᱞᱚ᱘ᱟ ᱠᱟᱞᱡᱣᱛᱮ ᱲᱮᱞᱟᱜ ᱪᱟᱦᱟᱞᱟ ᱟᱲ ᱞᱟᱯᱟᱜ ᱜᱮᱞᱮ ᱚᱵᱟ ᱯᱪᱵᱟᱞᱟᱜ ᱵᱟᱞᱟ ᱟᱛᱟ ᱣᱟᱣᱟᱚ ᱵᱟ ᱣᱟᱣᱟᱱ ᱯᱟᱣᱟ ।

➢ ᱵᱟ.ᱣᱮᱛ ᱟᱲ ᱜᱮᱣᱟᱣᱩ ᱚᱟᱯᱟᱚᱛ ᱠᱟᱞᱞᱟᱨ ᱠᱟᱡᱚᱟᱲᱛ ᱚᱵᱟ ᱯᱪᱵᱟᱞ ᱜᱮᱟᱦᱟᱞᱮ ᱵᱟ ᱜᱮᱟᱦᱟᱜ ᱵᱟᱞᱟ ᱟᱛᱟ ᱣᱟᱣᱟᱚ ᱵᱟᱚᱟᱟ ᱯᱟ.ᱦᱚᱵᱟᱟ. ᱵᱟ ᱣᱟᱣᱟᱱ ᱯᱟᱣ ᱯᱟᱟᱲᱮᱟ—ᱟ ।

Principal
Chandrakona Vidyasagar Mahavidyalaya
PO- Chandrakona, Dt.-Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of Santali
Chandrakona Vidyasagar Mahavidyalaya

B.A. General in Santali

Programme Specific Outcome (PSO)

By the end of the program B.A. General in Santali, the student will be able to:

Get a taste of Santali literature and in the process helps them gain master of Santali language. The engagement with adivasi knowledge systems as well as with Santali language and literature.

The programme grooms young learners to persue B.ED, M.A, Ph.D as future endeavors and appear for exams like NET, SET, SSC .

- ᱪᱟᱹᱣᱟᱹ ᱯᱟ�6ᱜᱮᱫᱟᱹᱩ ᱚᱟᱯᱟᱳᱽ ᱥᱟᱹ.ᱦᱟᱵᱤᱟᱹ. ᱵᱟ ᱠᱟᱹᱪᱚᱱᱟᱡᱟ ᱥᱟᱹ.ᱫᱠᱟ ᱟᱹ ᱠᱟᱹᱵᱽᱣᱪᱯ ᱟᱞᱚᱟᱹ ᱪᱟᱹᱱ ᱩᱵᱽᱦᱟᱹ. ᱠᱟᱹ.ᱣᱟᱹᱱ ᱜᱮᱜᱟᱹᱪ ᱵᱟ ᱟᱱᱟᱵᱟᱣᱟᱹ ।
- ᱪᱟᱹᱣᱟᱹ ᱯᱟᱜᱮᱫᱟᱹᱩ ᱚᱟᱯᱟᱳᱽ ᱟᱹ.ᱯᱟᱹᱳᱣᱟᱹ.ᱠᱟ ᱵᱟᱣᱟᱹᱜ ᱥᱟᱹ.ᱫᱠᱟ ᱫᱢᱜᱟᱹᱜ ᱵᱯᱫᱽᱩ ᱩᱟᱱᱟᱵᱳ ᱵᱟ ᱩᱟᱱᱟᱹᱜ ᱪᱟᱹᱩ ᱯᱟᱣᱟᱹᱪᱜᱟᱜ−ᱟᱹ ।
- ᱪᱟᱹᱣᱟᱹ ᱯᱟᱜᱮᱫᱟᱹᱩ ᱚᱟᱯᱟᱳᱽ ᱠᱟᱹᱪᱚᱱᱟᱡᱟ ᱥᱟᱹ.ᱫᱠᱟ ᱫᱢᱜᱟᱹᱜ ᱟᱹ.ᱪ−ᱟᱹ.ᱫᱟᱹ ᱠᱜ ᱚᱟᱪᱟᱹᱯ ᱱᱯᱟ ᱵᱟᱳᱽ ᱵᱷᱱᱟ ᱵᱷᱱᱟ ᱵᱟᱳᱟᱹᱣ ᱵᱟ ᱩᱟᱱᱟᱹᱜ ᱪᱟᱹᱩ ᱯᱟᱣᱟᱹᱪᱜᱟᱜ−ᱟᱹ ।
- ᱪᱟᱹᱣᱟᱹ ᱯᱟᱜᱮᱫᱟᱹᱩ ᱚᱟᱯᱟᱳᱽ ᱥᱟᱹ.ᱦᱟᱵᱤᱟᱹ. ᱵᱟᱣᱟᱹᱜ ᱠᱟᱹᱵᱽᱣᱪᱯ ᱠᱟᱹᱵᱟᱹᱣᱪ ᱵᱟᱹ.ᱩᱠ ᱠᱟᱹᱳᱵᱟᱹ.ᱩᱟᱹᱜ ᱚᱟᱵᱟᱣᱟᱹ ।
- ᱪᱟᱹᱣᱟᱹ ᱯᱟᱜᱮᱫᱟᱹᱩ ᱚᱟᱯᱟᱳᱽ ᱥᱟᱹ.ᱦᱟᱵᱤᱟᱹ. ᱵᱟᱣᱟᱹᱜ ᱩᱠᱟᱹᱵᱟᱹ.ᱫ ᱩᱪᱠᱯᱪᱠᱟᱳᱽ ᱫᱢᱜᱟᱹᱜ ᱯᱟᱹᱩᱟ ᱣᱟᱳᱟᱹᱱ ᱩᱵᱽᱵᱽᱜ ᱚᱟᱵᱟᱣᱟᱹ ।
- ᱪᱟᱹᱣᱟᱹ ᱯᱟᱜᱮᱫᱟᱹᱩ ᱚᱟᱯᱟᱳᱽ ᱥᱟᱹ.ᱦᱟᱵᱤᱟᱹ. ᱵᱟᱣᱟᱹᱜ ᱫᱟᱹᱩᱟ, ᱟᱯ ᱟᱹ ᱩᱟᱹᱟᱣᱟᱹᱱ ᱫᱢᱜᱟᱹᱜ ᱯᱟᱹᱩᱟ ᱣᱟᱹᱫᱟᱹᱜ ᱚᱟᱵᱟᱣᱟᱹ ᱠᱩ ᱯᱟᱣᱟᱳᱪᱚᱹᱜ ᱚᱟᱵᱟᱣᱟᱹ ।
- ᱪᱟᱹᱣᱟᱹ ᱠᱚᱟᱪᱯ ᱯᱟᱜᱮᱫᱟᱹᱩ ᱩᱵᱟᱹ.ᱮ ᱚᱟᱪᱟᱩ B.ED, M.A. , SSC, SET, NET ᱩᱩᱟᱹᱪ ᱩᱟᱹᱪᱟᱹᱩ ᱵᱟᱳᱽᱨ ᱫᱟᱹᱠ ᱵᱟᱳᱽᱽ ᱜᱟᱵᱽᱫᱟᱹ ᱝᱟᱜᱟᱪ ᱫᱤᱵᱷ ᱱᱟᱵᱟᱣᱟᱹ ᱯᱟᱣᱟᱹᱪᱜᱟᱜ−ᱟᱹ ।

Principal
Chandrakona Vidyasagar Mahavidyalaya
PO- Chandrakona, Dt.-Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of Santali
Chandrakona Vidyasagar Mahavidyalaya

Course Outcome (CO)

SNTGCC01: History of Santali Literature

Outcomes:

- ᱠᱟᱹᱴᱷᱤᱡᱟᱹ ᱠᱟᱯᱩᱡᱟᱹ ... (Santali / Ol Chiki text)
- ᱠᱟᱹᱴᱷᱤᱡᱟᱹ ᱠᱟᱯᱩᱡᱟᱹ ... (Santali / Ol Chiki text)
- ᱠᱟᱹᱴᱷᱤᱡᱟᱹ ᱠᱟᱯᱩᱡᱟᱹ ... (Santali / Ol Chiki text)
- ᱠᱟᱹᱴᱷᱤᱡᱟᱹ ᱠᱟᱯᱩᱡᱟᱹ ... (Santali / Ol Chiki text)

SNTGCC02: Santali Poetry Literature, Folk Song

Outcomes:

- ᱠᱟᱹᱴᱷᱤᱡᱟᱹ ... (Santali / Ol Chiki text)
- ᱠᱟᱹᱴᱷᱤᱡᱟᱹ ... (Santali / Ol Chiki text)
- ᱠᱟᱹᱴᱷᱤᱡᱟᱹ ... (Santali / Ol Chiki text)

SNTGCC03: Drama Literature

Outcomes:

- ... (Santali / Ol Chiki text)
- ᱠᱟᱹᱴᱷᱤᱡᱟᱹ ... (Santali / Ol Chiki text)
- ᱠᱟᱹᱴᱷᱤᱡᱟᱹ ... (Santali / Ol Chiki text)
- ᱠᱟᱹᱴᱷᱤᱡᱟᱹ ... (Santali / Ol Chiki text)

SNTGCC04 : Santali Novel and Short Story

Outcomes:

- ᱠᱟᱹᱴᱷᱤᱡᱟᱹ ... (Santali / Ol Chiki text)
- ᱠᱟᱹᱴᱷᱤᱡᱟᱹ ... (Santali / Ol Chiki text)

Principal
Chandrakona Vidyasagar Mahavidyalaya
PO- Chandrakona, Dt.-Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of Santali
Chandrakona Vidyasagar Mahavidyalaya

> ᱠᱟᱛᱚᱜᱟᱨ ᱜᱮᱧᱟᱱ ᱟᱱᱟ ᱬᱚᱛᱨᱜ ᱵᱟᱹᱪᱮᱨ ᱠᱟᱜᱚᱪ ᱬᱟᱠᱯᱟ ᱠᱟᱜᱟᱶᱯ ᱫᱨᱜᱟᱜ ᱜᱮᱧᱟᱱ ᱟᱱᱟ ᱬᱚᱛᱨᱜ ᱵᱟᱹᱪᱮᱨ ᱫᱨᱜᱟᱜ ᱚᱵᱯᱟᱹ ᱸᱟᱵᱧᱟ ᱹᱟᱱᱟᱡ ᱴᱟᱱᱟᱱᱚ ᱴᱟᱹᱧᱟᱵᱧᱟᱹ ᱵᱟ ᱜᱽᱜᱮᱜᱮ ᱹᱡᱱ ᱸᱵᱟᱧᱟ ।

SNTGSEC01: Art of Translation

Outcomes:

> ᱹᱮᱟᱵᱟ ᱚᱟᱵᱨᱟᱵᱟ ᱫᱨᱜᱟᱜ ᱵᱟᱹᱪᱨ ᱚᱟᱯᱟᱚᱡ ᱴᱟᱹᱧᱟᱵᱧᱟᱹ ᱵᱟ ᱚᱟᱵᱨᱟᱵᱟ ᱫᱨᱜᱟᱜ ᱯᱟᱹᱜᱚᱴ ᱠᱟ ᱶᱟᱵᱟᱚ ᱸᱮᱨ ᱵᱟᱚᱡ ᱴᱚᱠᱨᱧᱟᱹᱜ ᱠᱟᱹᱬᱟᱱ ᱵᱟ ᱴᱟᱵᱟᱜ ᱸᱟᱶᱮᱝ ।

> ᱴᱟᱹᱧᱟᱵᱧᱟᱹ ᱵᱟ ᱲᱟᱵᱜ ᱴᱟᱹᱪᱠᱟ ᱵᱟᱵᱮᱚᱡ ᱠᱟᱛᱚᱜᱟᱨ ᱴᱟᱹᱪᱠᱟ ᱚᱟ ᱠᱟᱹᱮᱟ ᱚᱟᱵᱨᱟᱵᱟ ᱫᱨᱜᱟᱜ ᱸᱮᱵᱟᱜ ᱶᱟᱴᱟᱜ ᱚᱸᱵᱧᱟᱹ ।

> ᱴᱟᱹᱧᱟᱵᱧᱟᱹ ᱵᱟ ᱚᱟᱵᱨᱟᱵᱟ ᱫᱨᱜᱟᱜ ᱶᱟᱴᱟᱜ ᱸᱮᱨ ᱵᱟᱚᱡ ᱵᱟ ᱴᱟᱶᱟᱜ ᱯᱟᱵᱪᱽᱜᱮᱜ—ᱟ ।

SNTGSEC02 : Santali Language Teaching

Outcomes:

> ᱹᱮᱟᱵᱟ ᱠᱟᱚᱵᱟᱶ ᱚᱟᱯᱟᱚᱡ ᱴᱟᱹᱧᱟᱵᱧᱟᱹ ᱵᱟ ᱠᱟᱛᱚᱜᱟᱨ ᱴᱟᱹᱪᱠᱟᱚᱡ ᱴᱟᱵᱟᱶᱟᱝ ᱫᱨᱜᱟᱜ ᱶᱟᱴᱟ ᱵᱟ ᱴᱟᱶᱟᱜ ᱹᱟᱱᱟᱜ ।

> ᱠᱟᱛᱚᱜᱟᱨ ᱴᱟᱹᱪᱠᱟ ᱚᱟᱯᱟᱚᱡ ᱵᱵᱟ ᱯᱪᱵᱟᱚᱡ ᱹᱟᱵᱟᱜ ᱠᱟᱹᱶᱟᱜ ᱴᱟᱵᱟᱶᱟᱝ ᱜᱽᱜᱮᱜ—ᱟ ᱴᱟᱹᱧᱟᱵᱧᱟᱹ ᱵᱡᱟ ᱵᱟ ᱴᱟᱶᱟᱜ ᱯᱟᱵᱪᱽᱜᱮᱜ—ᱟ ।

SNTGSE03: Language in Advertisement

Outcomes:

> ᱯᱵᱟᱵᱟᱛᱵᱟᱵᱨᱪᱮᱸ ᱫᱨᱜᱟᱜ ᱴᱟᱹᱵᱟᱹᱪᱠᱟ ᱸᱮᱨ ᱵᱟᱚᱡ ᱴᱟᱹᱧᱟᱵᱧᱟᱹ ᱵᱟ

> ᱴᱟᱶᱟᱜ ᱹᱟᱵᱟ ᱯᱟᱵᱪᱽᱜᱮᱜ—ᱟ ।

> ᱯᱵᱟᱵᱟᱛᱵᱟᱵᱨᱪᱮᱸ ᱫᱨᱜᱟᱜ ᱚᱟᱹᱵᱵ ᱸᱮᱨ ᱵᱟᱚᱡ ᱴᱟᱹᱧᱟᱵᱧᱟᱹ ᱵᱟ ᱵᱟᱡ—ᱯᱮᱵ ᱵᱟ ᱴᱟᱶᱟᱜ ᱹᱟᱱᱟᱜ ।

> ᱯᱵᱟᱵᱟᱛᱵᱟᱵᱨᱪᱮᱸ ᱫᱨᱜᱟᱜ ᱶᱟᱹᱠ ᱸᱮᱨ ᱵᱟᱚᱡ ᱟᱹᱵᱟᱵ ᱜᱽᱜᱮᱜ ᱶᱽᱵᱽᱜᱮ—ᱟ ।

SNTGSE04 : Writing Skill

Outcomes:

> ᱹᱮᱟᱵᱟ ᱠᱟᱚᱵᱟᱶ ᱚᱟᱯᱟᱚᱡ ᱴᱟᱹᱧᱟᱵᱧᱟᱹ ᱵᱟ ᱟᱹ ᱫᱨᱜᱟᱜ ᱯᱵᱟᱹᱫ ᱠᱟᱹᱪᱠᱟᱜ ᱚᱸᱵᱧᱟᱹ ।

> ᱹᱮᱟᱵᱟ ᱠᱟᱚᱵᱟᱶ ᱚᱟᱯᱟᱚᱡ ᱴᱟᱹᱧᱟᱵᱧᱟᱹ ᱵᱟ ᱶᱮᱟᱵᱟ ᱠᱟᱵᱟᱶ ᱟᱹ, ᱹᱟᱶᱟᱵ ᱠᱟᱵᱟᱶ ᱟᱹ ᱵᱟᱟᱶᱟᱵ ᱵᱟᱵᱟᱶᱟ ᱪᱽᱸᱮ ᱟᱹ ᱫᱨᱜᱟᱜ ᱟᱹ—ᱟᱹᱪᱠᱟ ᱵᱟ ᱜᱟᱹᱶᱟᱶ ᱠᱟᱵᱟᱜ ᱵᱟ ᱴᱟᱶᱟᱜ ᱹᱟᱱᱟ ᱯᱟᱵᱪᱽᱜᱮᱜ—ᱟ ।

Principal
Chandrakona Vidyasagar Mahavidyalaya
PO- Chandrakona, Dt.-Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of Santali
Chandrakona Vidyasagar Mahavidyalaya

SNTGDSE01: Functional Grammar of Santali Language & Linguistic

Outcomes:

- ᱮᱭᱟ ᱠᱟᱣᱟᱩ ᱳᱟᱯᱟᱳᱦ ᱛᱟ.ᱦᱟᱵᱟᱢ. ᱵᱟ ᱠᱟᱴᱳᱟᱤᱟ ᱛᱟ.ᱽᱠᱠ ᱳᱲ ᱮᱟᱴᱟᱞᱮ ᱠᱱ ᱧᱵᱳ ᱠᱟ.ᱣᱟᱣ ᱟᱯ, ᱽᱟᱽ ᱛᱟ ᱵᱟᱽᱣᱟᱩ ᱽᱽᱴᱟᱞᱮ ᱛ.ᱽᱠ ᱵᱟ ᱴᱽᱽ-ᱽᱽᱴᱟᱳ ᱵᱟ ᱣᱟᱳᱟᱞ ᱧᱟᱣᱟ ।
- ᱮᱭᱟ ᱠᱟᱳᱟᱩ ᱳᱟᱯᱟᱳᱦ ᱠᱟᱴᱳᱟᱤᱟ ᱛᱟ.ᱽᱠᱠ ᱽᱽᱴᱟᱞᱮ ᱠᱟᱽᱽᱽᱠ ᱽᱵᱽ ᱵᱟᱳᱦ ᱛᱟ.ᱦᱟᱵᱟᱢ. ᱵᱟ ᱴᱽᱠᱽᱽ ᱠᱟ.ᱣᱟᱣ ᱣᱟᱳᱟᱞ ᱧᱟᱣᱟ ।
- ᱮᱭᱟ ᱳᱟᱯᱟᱳᱦ ᱠᱟᱴᱳᱟᱤᱟ ᱽᱽᱴᱟᱽ ᱽᱵᱽ ᱵᱟᱳᱦ ᱛᱟ.ᱦᱟᱵᱟᱢ. ᱵᱟ ᱣᱟᱳᱟᱞ ᱧᱟᱣᱟ ।
- ᱮᱭᱟ ᱳᱟᱯᱟᱳᱦ ᱠᱟᱴᱳᱟᱤᱟ ᱛᱟ.ᱽᱠᱠ ᱽᱽᱴᱟᱞᱮ ᱛ.ᱽᱽ. ᱠᱟᱴᱟᱽ ᱵᱽᱽᱽ.ᱽ ᱛᱟ.ᱦᱟᱵᱟ. ᱵᱟ ᱣᱟᱳᱟᱞ ᱧᱟᱣᱟ ।

SNTGDSE02 : Essay & Magazine literature

Outcomes:

- ᱮᱭᱟ ᱠᱟᱣᱟᱩ ᱳᱟᱯᱟᱳᱦ ᱛᱟ.ᱦᱟᱵᱟᱢ. ᱵᱟ ᱠᱟᱴᱳᱟᱤᱟ ᱠᱟᱽᱽᱽᱦ ᱠᱟᱽ ᱽᱽᱠ-ᱽᱽᱠᱟᱩ ᱽᱽᱴᱟᱞᱮ ᱵᱟᱳᱽᱟ ᱵᱟ ᱣᱟᱳᱟᱞ ᱧᱟᱣᱟ ।
- ᱮᱭᱟ ᱠᱟᱳᱟᱩ ᱳᱟᱯᱟᱳᱦ ᱽᱽᱟᱯ ᱟᱽ ᱴᱽᱽᱽᱟᱩ ᱠᱟᱽᱽᱽᱦ ᱽᱽᱽ ᱵᱟᱳᱦ ᱞᱽᱽᱟᱽ. ᱵᱟ ᱣᱟᱳᱟᱞ ᱧᱟᱣᱟ ।
- ᱠᱟᱴᱳᱟᱤᱟ ᱛᱟ.ᱽᱠᱠ ᱳᱽ ᱽᱽᱟᱯ ᱟᱽ ᱴᱽᱽᱽᱟᱩ ᱠᱟᱽᱽᱽᱦ ᱽᱽᱴᱟᱞᱮ ᱠᱟᱳᱟᱩ ᱣᱟᱳᱟᱳ ᱛᱟᱦᱟᱵᱟᱽ. ᱵᱟ ᱣᱟᱳᱟᱞ ᱧᱟᱣᱟ ।
- ᱮᱭᱟ ᱠᱟᱳᱟᱩ ᱳᱟᱯᱟᱳᱦ ᱛᱟᱦᱟᱵᱟᱽ. ᱵᱟ ᱽᱽᱟᱯ ᱟᱯ ᱽᱽᱴᱟᱞᱮ ᱵᱟ.ᱣᱽ ᱵᱟ ᱵᱟ ᱽᱽᱽ ᱽᱽᱟᱽᱽᱞᱮ-ᱽ ।

SNTGGE01: History of Santali Rebellion

Outcomes:
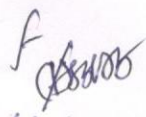
- ᱮᱭᱟ ᱠᱟᱳᱟᱩ ᱳᱟᱯᱟᱳᱦ ᱠᱟᱴᱳᱟᱽ ᱣᱽᱯ ᱽᱽᱴᱟᱞᱮ ᱽᱽᱽ ᱽᱽᱽᱽ ᱽᱽᱽ ᱵᱟᱳᱦ ᱛᱟᱦᱟᱵᱟᱽ. ᱵᱟ ᱽᱽᱽ ᱽᱽᱽ ᱵᱟ ᱣᱟᱳᱟᱞ ᱧᱟᱣ ᱽᱽᱟᱽᱽᱞᱮ-ᱽ ।
- ᱠᱟᱴᱳᱟᱽ ᱣᱽᱯ ᱽᱽᱽ ᱽᱽᱵᱽᱽᱽ ᱵᱽᱽᱟᱽ ᱽᱽᱽᱽᱽ ᱽᱽᱽᱽ ᱽᱽᱽ ᱵᱟᱳᱦ ᱛᱟᱦᱟᱵᱟᱽ.ᱵᱟ ᱽᱽ ᱽᱽᱽᱽ ᱵᱟ ᱣᱟᱳᱟᱞ ᱧᱟᱣ ᱽᱽᱟᱽᱽᱞᱮ-ᱽ ।
- ᱠᱟᱴᱳᱟᱽ ᱣᱽᱯ ᱽᱽᱽ ᱣᱽᱯ ᱞᱽᱽᱽᱟ. ᱵᱟᱽᱟᱽ ᱵᱽᱽᱵᱽ ᱽᱽᱽ ᱵᱟᱳᱦ ᱽᱽᱽᱟ.ᱽ ᱠᱟᱣᱟᱣ ᱛᱟᱦᱟᱵᱟᱽ. ᱵᱟ ᱣᱟᱳᱟᱞ ᱧᱟᱣ ᱽᱽᱟᱽᱽᱞᱮ-ᱽ ।

SNTGGE02: Santali Language & Linguistic

Outcomes:

- ᱮᱭᱟ ᱠᱟᱳᱟᱩ ᱳᱟᱯᱟᱳᱦ ᱛᱟ.ᱦᱟᱵᱟ. ᱵᱟ ᱽᱽᱟᱽᱟᱠᱟ ᱛᱟ.ᱽᱠ ᱞᱽᱽᱽᱟᱽ ᱽᱽᱽ ᱵᱟᱳᱦ ᱽᱽᱽᱟ.ᱽ ᱠᱟᱣᱟᱣ ᱵᱟ ᱣᱟᱳᱟᱞ ᱧᱟᱣᱟ ।
- ᱠᱟᱴᱳᱟᱤᱟ ᱛᱟ.ᱽᱠᱠ ᱠᱟᱽᱽᱽᱦ ᱽᱽᱽ ᱵᱟᱳᱦ ᱛᱟᱦᱟᱵᱟᱽ. ᱵᱟᱽᱟᱽ ᱽ.ᱵᱽᱯ .ᱽᱽᱴᱟᱞᱮ ᱠᱟᱽᱟᱽᱞᱮ-ᱽ ।
- ᱛᱟ.ᱽᱠᱠ ᱽᱽᱴᱟᱞᱮ ᱵᱟ.ᱽᱽ.ᱽ ᱽᱽᱽ ᱵᱟᱳᱦ ᱛᱟ.ᱦᱟᱵᱟᱽ. ᱵᱟ ᱵᱟ.ᱣᱽᱽ ᱠᱟ.ᱣᱟᱣ ᱵᱟ ᱣᱟᱳᱟᱞ ᱧᱟᱣᱟ ।

Principal
Chandrakona Vidyasagar Mahavidyalaya
PO- Chandrakona, Dt.-Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of Santali
Chandrakona Vidyasagar Mahavidyalaya

➤ ᱪᱟᱹᱞᱩ ᱠᱟᱣᱰᱤ ᱚᱠᱛᱚᱨ ᱠᱟᱹᱞᱪᱟᱹᱨ ᱯᱟᱹᱟᱹᱨᱤᱠ ᱟᱹᱨ ᱟᱹᱨᱟᱹ ᱟᱢᱪᱟᱹᱜ ᱜᱚᱵᱩᱜᱟᱹᱢ
ᱟᱹᱨᱟᱹ ᱪᱟᱹᱞᱩ ᱯᱟᱹ.ᱧᱟᱹᱵᱟᱹᱞ. ᱵᱟ ᱪᱚᱠᱟᱹᱟᱹ.ᱡ ᱠᱟᱹ.ᱣᱟᱹᱯ ᱵᱟ ᱵᱟᱜᱟᱹᱨ ᱨᱟᱹᱣᱟᱹ ।

Principal
Chandrakona Vidyasagar Mahavidyalaya
PO- Chandrakona, Dt.-Paschim Medinipur

H.O.D. / Assistant Professor
Dept. of Santali
Chandrakona Vidyasagar Mahavidyalaya

B. A. GENERAL

Programme-Specific Outcome (PSO)

1. Learners will demonstrate a comprehensive understanding of various disciplines within the arts, including literature, history, philosophy and social sciences.
2. Will be able to critically analyze and interpret cultural, historical and social phenomena.
3. Will develop effective communication skills, both written and oral, to articulate complex ideas and concepts related to the arts and humanities.
4. Will demonstrate an understanding of the social, economic and political issues affecting our world and be able to engage in constructive dialogue and problem-solving within these contexts.
5. Will learn about the nuances of Indian history, tradition, culture, philosophy and knowledge systems before the completion of course.
6. Will be prepared to pursue further studies in the arts, humanities or related fields, or to enter careers in education, research, cultural preservation, community development, or other relevant areas.
7. Will learn about environment and sustainable development.
8. Students would be able to develop strong foundation in research methodologies and critical thinking, enabling them to contribute to the academic and intellectual discourse surrounding rural Bengal and its cultural heritage.

Principal
Chandrakona Vidyasagar Mahavidyalaya
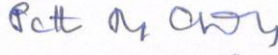Paschim Medinipur

Programme Outcome (PO)

THE OUTCOME OF THE B.SC.PROGRAMME

UG programme in sciences enables the students to develop their aptitude for Physical science, Chemical and Material sciences, Science of Nature, Environmental issues, the science of changing Earth as well as mathematical analysis. The programme helps our students to secure jobs as researchers and scientists, teachers, administrators in government jobs as well as in private companies, personnel in industries, naturalists, etc. From the programme, the learners develop their aptitude for individual planning, a habit of working in groups, field survey, literature reviews and other skills which fit them in various spheres of life. The programme outcome is as follows:

• This programme helps in understanding the basic concepts, fundamental principles, and the scientific theories related to various scientific phenomena and their relevance in day-to-day life.

• Students pursuing B.Sc. can acquire the skills in handling scientific instruments, planning and performing laboratory experiments and this helps in developing scientific temper among them

• During this programme, students develop the skills of observation and drawing logical inferences from scientific experiments. They can also analyze the given scientific data critically and systematically

• After completing the degree, our students can seek employment in industry, hospitality, health sector, education as well as administration and army. A broad-spectrum study of various subjects helps the students to compete in various examinations for employment after graduation.