Bagnan College

P.O.: Bagnan * District: Howrah

Department of Bengali

PO, PSO & CO for B.A. (Bengali Honours) Course

Session: 2016-17

PROGRAM OUTCOMES (PO)

[PO.1] Students are exposed the different genre of literature and they are taught to analyze different texts.

[PO.2] The learners are provided a strong linguistic grip necessary for analyzing literary texts.

[PO.3] Students are exposed to different types of Literary terms and theory.

[PO.4] The learners are exposed to regional and international literature other than Bengali literature.

[PO.5] Historical events and incidents serving as watermarks for chronological arrangement of the syllabi induce into students a sense of History as inseparable from literature.

[PO.6] Students learn to think about the empowerment of women in different spheres of life as part of existential struggle of mankind.

PROGRAM SPECIFIC OUTCOMES (PSO)

[PSO.1] Students learn to locate texts against the historical currents and cross-currents of their production and reception.

[PSO.2] Students learn to interpret texts from various viewpoints.

[PSO.3] The learners' creativity is promoted.

[PSO.4] Students develop writing and communicative skills.

[PSO.5] Students learn to consider the complexity of modern existence, the conflict between the self and the other, the environmental question and man's struggle for survival in multi-dimensional forms.

COURSE OUTCOME (CO)

[CO.1]: HISTORY OF BENGALI LANGUAGE AND LITERATURE

The paper provides an overview of the growth and structure of Bengali language and literature, especially, the trends of the formative influences and currents that have shaped it into its modern form. A necessary backdrop for Bengali Honours Course, the paper includes both literary and linguistic aspects for analytical study of different genres.

[CO.2]: PROSODY, RHETORIC, PROOF READING AND MEDIAEVEL LITERATURE (SELECTION)

Rhetoric, Prosody, proof reading and mediaeval literature (selection) introduces technicalities essential for reading of literature as well as the socio-cultural-religious ethos of Bengal in the middle ages and its evolution.

[CO.3]: TERMS OF LITERATURE AND BENGALI NOVEL

Students are exposed to different specimens of these prose, genres and relevant literary terms.

[CO.4]: TERMS OF DRAMA, HISTORY OF BENGALI THEATRE AND SELECTED TEXTS OF BENGALI DRAMA.

Literary terms related to Drama, History of Proscenium Theatre in Bengal up to 1876 and plays of Madhusudan Dutta, Tagore, and Utpal Dutta, map out the emergence of Drama as a literary performative genre of Bengal and a realistic representation of the culture that bred it.

[CO.5]: TERMS OF POETRY AND VARIOUS TEXTS OF BENGALI POETRY.

Students are exposed to Bengali Poetry and its evolution through contact with colonial modernism. Stylistic analysis of poetry sharpens understanding and interpretative capacity.

[CO.6]: NOVEL AND SHORT STORY

Select fictional texts and short stories of Tagore and short stories written before and after Independence of India exposes high realistic often even bitter scenario as reflected in Bengali Literature.

[CO.7]: BENGALI ESSAY

Students are exposed to the growth of Bengali Essays and essayists from mid-nineteenth century and their extra-ordinary variety, depth and sharpness so far as themes, styles and visions are concerned. The Chinnopotro of Tagore stands apart in its unique philosophical flavour.

[CO.8]: HISTORY OF LITERATURE (ENGLISH, SANSKRIT, HINDI) AND AESTHETICS

Aesthetics and glimpse from English, Sanskrit and Hindi literature introduces the essential cultural connections behind the growth of Bengali Literature.

PO, PSO & CO for B.A. (Bengali General) Course

Session: 2016-17

PROGRAM OUTCOMES (PO)

[PO.1] Students are exposed the different genre of literature and they are taught to analyze different texts.

[PO.2] The learners are exposed to different types of Literary terms and theory.

[PO.3] Students are exposed to Bengali Rhetoric and Prosody.

PROGRAM SPECIFIC OUTCOMES (PSO)

[PSO.1] Students learn to study the social conditions and their reflection in the literature.

[PSO.2] Students learn to interpret texts from various viewpoints.

[PSO.3] The learners' creativity is promoted.

[PSO.4] Students develop writing and communicative skills.

COURSE OUTCOME (CO)

[CO.1]: HISTORY OF BENGALI LITERATURE: The paper provides an overview of the growth and structure of Modern Bengali language and literature. The paper also includes the study of Bengali rhetoric and different literary terms.

[CO.2]: MEDIAEVAL AND MODERN BENGALI POETRY AND BENGALI PROSODY: Students are exposed to different specimens of mediaeval Bengali literature (like Vaisnava Padabali) and selection of texts from Nineteenth and twentieth century Bengali Poetry. They are also introduced with Bengali prosody for better understanding of poetry.

[CO.3]: BENGALI NOVEL, SHORT STORY, DRAMA AND ESSAY: Students are exposed to different literary texts like Drama, novel, short story, essay.

[CO.4]: DIFFERENT SKILL ENHANCEMENT TOPIC: This paper includes basic knowledge about terminology, IPA, proof reading, Bengali grammar, translation, letter writing, newspaper report writing etc. these will help them to enhance their practical skill.

Bagnan College

P.O.: Bagnan * District: Howrah

Department of English

PO, PSO & CO for B.A. (English Honours) Course

Session: 2016-17

PROGRAM OUTCOMES (PO)

[PO.1] Students are exposed to different genres of literature.

[PO.2] The learners are able to analyze different texts.

[PO.3] Students get flavour of various technical aspects of Literature.

[PO.4] The learners are exposed to different Types of Literary Terms and Theory.

[PO.5] Students are exposed to literature other than British literature.

PROGRAM SPECIFIC OUTCOMES (PSO)

[PSO.1] Students learn to study the social conditions and their ramifications in the development of literature.

[PSO.2] Students develop different language skills.

[PSO.3] The learners' creativity is promoted.

[PSO.4] Students learn to appreciate the development of English literature in different areas of the world.

[PSO.5] Students develop writing and communicative skills.

COURSE OUTCOME (CO)

[CO.1]: *History of English Literature and Philology*: The paper provides an overview of the growth and structure of both English language and literature as a necessary backdrop for English Honours Course.

[CO.2]: *Poetry from Elizabethan to Romantic Revival*: The paper introduces the students to the poetry of the period. They are taught to study and analyze various poetic genres and relevant literary terms.

[CO.3]: *British Drama*: Students are exposed to the dramatic works of eminent authors from the Elizabethan to the 18th Century and relevant literary terms.

[CO.4]: *Novels, Essays and Short Stories*: Students are exposed to different specimens of these prose genres and relevant literary terms.

[CO.5]: *Victorian and 20th Century Poetry, Rhetoric and Prosody*: Students are exposed to different types of poetry of the period and relevant literary terms. They are taught to analyze the technical aspects of Rhetoric and Prosody.

[CO.6]: *Novel, Essay and Writing*: The students are exposed to Victorian novels. They are taught to write Essays, Report, Book Review and Film Review and Dialogue writing.

[CO.7]: *Drama and Literary Types*: Students are exposed to Victorian and Modern Drama. They are also taught aspects of literary types like Epic, Tragedy, Comedy and Novel.

[CO.8]: *Optional Paper*: Students are allowed to choose from Indian Writing in English, American Literature and Post-colonial Literature. They are exposed to different genres of any one of these three options.

PO, PSO & CO for B.A. (English General) Course

Session: 2016-17

PROGRAM OUTCOMES (PO)

[PO.1] Students learn to appreciate the basics of different forms of literature.

[PO.2] Students learn different technical aspects of literature.

[PO.3] Students are exposed to English literature other than British literature.

PROGRAM SPECIFIC OUTCOMES (PSO)

[PSO.1] Students learn to study the social conditions and their ramifications in the development of literature.

[PSO.2] Students develop different language skills.

[PSO.3] The learners' creativity is promoted.

[PSO.4] Students learn to appreciate the development of English literature in different areas of the world.

[PSO.5] Students develop writing and communicative skills.

COURSE OUTCOME (CO)

[CO.1]: *Poetry and Figures of Speech*: Students are exposed to poetry from different ages. They are also taught punctuation and figures of Speech.

[CO.2]: *Fiction, Short Story and Essay*: Students are exposed to Fiction and Short Stories.

[CO.3]: *Drama*: Students are exposed to Drama and Proof Reading.

[CO.4]: *Indian Writing in English*: Students are exposed to different types of Indian Writing in English, Substance Writing and Dialogue Writing.

Bagnan College

P.O.: Bagnan * District: Howrah

Department of Sanskrit

PO, PSO & CO for B.A. (Sanskrit Honours) Course

Session: 2016-17

PROGRAM OUTCOMES (PO)

[PO.1] The Programme has enabled UG level students of Sanskrit to be introduced with Indian age-old heritage, accumulating in the last forty centuries, exercising inexpressible impact on the life and culture of the Indian with the explicit aim of inspiring as well as uplifting qualitatively each and everyone, directly or otherwise concerned with.

[PO.2] These papers are designed to introduce students with Vedic concept of god partially. It also introduces students with Pratyaksha, a Pramana of the Indian Nyaya-Vaisheshika Philosophy.

[PO.3] This course has enhanced the inquisitiveness of the students for knowing the historical background of the classical Sanskrit literature. It is designed also for making the students familiar to the Siddhantakaumudi, a commentarial write-up on Panini's Ashtadhyayi. Moreover, fundamental topics of Sanskrit grammar at large are also aimed to be taught. Various part of Sanskrit grammar has also been introduced which is supposed to enrich the grammatical base of the students.

[PO.4] The course also incorporates the famous Drama of Bhasa Svapnavasavadattam and Kalidasa's Abhijnanashakuntalam with the view to giving knowledge of ancient Indian dramatic System. It is introducing the readers with those immortal creations of the concerned literature.

[PO.5] The course is intended for making the students acquainted with the two highly adored Mahakavyas namely, the Ramayana and the Mahabharata.

[PO.6] The outcome of this course is to introduce the students with the keynote essentials of the rhetorical work Sahityadarpana of Viswanatha Kaviraja and kavyalankarasutravritti of Vamana.

[PO.7] The course is intended for imparting knowledge as to philosophical speculation expected to increase the level of students' outlook on Sanskrit linguistics.

[PO.8] The course aims at helping the students to be introduced to the Rigvedic, the Atharvanic and the Brahmanical texts which may be inspire-giving for the students to be in pursuit of knowledge of excellence.

[PO.9] Through this course the students to peep into a specific area of the History of philosophical systems. It is meant also for helping students in knowing Indian philosophical systems in common perspective. It also helps learning Indian logic to same extent.

[PO.10] The course is designed to introduce students with the masterly piece of Sanskrit prose romance, the Kadambari, composed by Banabhatta. The course is designed to acquaint the students with Kiratarjuniyam and Bhattikavya; of the verses with highly ethical value. It also aims to introduce with the inscriptional works, Dharmashastra and Arthashastra to understand ancient Indian historical, Political and legal tradition.

[PO.11] The course aims at imparting knowledge on Upanisadic knowledge revealed through the Brihadaranyakopanisad. Moreover through the Vedic study, students acquire knowledge on history of Vedic literature, Vedic words and Vedic grammar.

[PO.12] The course intends to impart knowledge of Astika and Nastika Philosophy with special reference to the Tarkasamgraha of Annambhatta.

PROGRAM SPECIFIC OUTCOMES (PSO)

[PSO.1] Students are expected to have advanced knowledge about Sanskrit verse, language, literature, history and application of Sanskrit language. A student pursuing this course has command over Devanagari script which provides them Palaeographical knowledge to read out the script of modern languages like Hindi and Marathi.

Sanskrit is the pathway which connects the dimmed past of ancient India to the present India of 2020. In fact, historically, Indian society and culture are unique; and Indian social realities could be grasped through Sanskrit texts. The academic programme, enables the students not only to acquire the professional skills but also develop a deep understanding of rich heritage and dynamic prevalent scenario of India through various texts in different disciplines of ancient Pedagogy, composed in Sanskrit.

[PSO.2] They should learn about pedagogical aspects of Sanskrit teaching.

[PSO.3] They should connect Sanskrit to ancient Indian history, geography, Science, Indian Philosophy, Socio-political and Regio-cultural tradition.

[PSO.4] They are taught different technical aspects, terms and different types of theory related to Sanskritic Studies and they are expect to practice Sanskrit language as a part of daily life. This course will help them to speak and write in Sanskrit.

[PSO.5] They should have Scientific knowledge about ancient Indian technical literature and science which open the rich past tradition of Sanskritic knowledge and rational thinking.

[PSO.6] Exploring new ideas and thoughts which have lead to the formation of the current and past society and applying the knowledge for understanding the complex relationship shared by the human beings over the ages.

[PSO.7] It is Demonstrating thinking skills by analyzing, synthesizing, evaluating factual and conceptual historical information from multiple sources, differentiating between fact and fiction also.

[PSO.8] Practice of textual analysis of Sanskrit and Vedic Sanskrit texts endows them to develop a critical perspective to assess existing research through careful reading, analysis and discussion.

[PSO.9] Sanskritic knowledge helps the student to gain ability to apply relevant theoretical perspectives in Sanskrit Philosophical and literary works to contemporary topics and also to develop a scientific approach towards analysis of modern texts.

[PSO.10] Students will be able to identify topics and formulate questions for productive inquiry. They will demonstrate the skills needed to participate in conversation that builds knowledge collaboratively.

[PSO.11] Sanskrit is recognized as 'mother of all languages' throughout the greater portion of the world. Even students aiming for a bright career, Sanskrit can provide it. You should able to secure a faculty post in some highly ranked Universities. If someone does not know Sanskrit, she/he is not able to understand our past. They cannot get the clear perspective of Vedas, Gita, Upanisads, Ramayana, Mahabharata, Arthashastra and many other books, which are still regarded as the finest piece by a large portion of indigenous and Western scholars.

[PSO.12] Learners should get the path towards spiritual upliftment and mental peace. Sanskrit literature can enlightens a student with moral and ethical values. They need to keep it mind that this language has a perfect grammar and nicely built structure.

COURSE OUTCOME (CO)

[CO.1]: Paper I:

1. Basic introduction to Sanskrit syntax, Morphological generation, and Semantics.
2. Textual analysis of Sanskrit prose literature and different composing styles (i.e. Kādambarī and Daśakumāracarita)
3. Textual and literary criticism of Kālidāsa's Abhijñānaśakuntala (act 1-3)
4. Basic introduction to Sanskrit Poetics with the help of Kāvyālaṅkārasūtravṛtti

[CO.2]: Paper II:

1. Study of Sanskrit Metres (i.e. Chandomañjarī)
2. Textual and literary analysis of drama from pre-kālidāsa era (i.e. Svapnavāsavadatta)
3. Textual and literary criticism of Kālidāsa's Abhijñānaśakuntala (act 4-7)
4. Textual and literary analysis of Mahākāvya from post-kālidāsa era (i.e. Kirātārjunīya)

[CO.3]: Paper III:

1. General Introduction of Indian Poetology (Poetological Text in Sanskrit: Sāhityadarpaṅa of Viśvanātha-Kavirāja; chapter 6-10)
2. Introduction and basics of Vedic, scientific and Technical Sanskrit Literature

[CO.4]: Paper IV:

1. Essay in Sanskrit; on topics of Indic culture, idols, ideals, social values, current sensibility and the like.
2. Post-Kālidāsa Sanskrit Mahākāvya: Bhaṭṭikāvya (or Rāvaṇavadha) of Bhaṭṭi (Canto 2)
3. History of classical Sanskrit Literature including Inscriptional and Historical Works.

[CO.5]: Paper V:

1. Vedic texts and Vedic grammar (Vedic texts: Hymns of Ṛgveda -- 1.1. Agnisūkta, 10.121. Hiraṇyagarbhasūkta, 10.125. Devīsūkta,10.34. Akṣasūkta, 10.191.Saṃjñānasūkta)
2. Vedic Grammar: Padapāṭha and general outline of Vedic grammar.
3. Vedic texts; Yajurveda; Atharvaveda and Brāhmaṇa, Upaniṣad (Rudrādhyāya (Śukla-Yajurveda,16.1-14), Atharvaveda (12.1.1-10), Maumatsyakathā (śatapathabrahmaṇam), śunaḥśepopakhyānam (Aitareyabrāhmaṇam, 3.3.3), Bṛhadāraṇyakopaniṣad (4.4. and 4.5.)

[CO.6]: Paper VI:

1. Texts on Dharmaśāstra and Arthaśāstra

a) Basic introduction to ancient Indian legal system

b) Comparison with Modern Indian legal system (specially with Indian Penal Code) (Yājñavalkya-saṃhitā - Chapter 2 Vyavahārādhyāya)

c) Different perspectives on ancient Indian polity (i.e. rājadharmaprakaraṇā of Manu and Arthaśāstra of kauṭilya)

d) History of Indian Dharmaśāstra, Arthaśāstra and Nītiśāstra

[CO.7]: Paper VII:

1. Sanskrit Grammatical text :Siddhāntakaumudī of Bhaṭṭojidīkṣīta – Kāraka.
2. General Acquaintance with Phonetic Tendencies (The following topics -- Assimilation, dissimilation, epenthesis, prosthesis, metathesis, anaptyxis, haplology, syncope, apocope, aphaeresis, cerebralisation, analogy).
3. Siddhāntakaumudī of Bhaṭṭojidīkṣita -- Samāsaprakaraṇa; excluding Samāsāntavidhāna
4. Elementary knowledge about "Science of Language", the IE family of language and the phonetic laws, history of the concept of IE language, divisions of IE. (Amongphonetic laws the following are important – Grimm's law, Verner's law, Grassmann's law, Bartholomae's law, Collitz's law, Fortunatov's law)

[CO.8]: Paper VIII:

1. General Acquaintance with the Indian philosophical systems.
2. Elementary knowledge about the subject of Annaṃbhaṭṭa's Tarkasaṃgraha.

PO, PSO & CO for B.A. (Sanskrit General) Course

Session: 2016-17

PROGRAM OUTCOMES (PO)

[PO.1] Students learn to appreciate the basics of different forms of literature.

[PO.2] Students learn different technical aspects of grammar and learn to read and write the Devanagari Script.

[PO.3] Students are exposed to the History of Classical Sanskrit Literature.

PROGRAM SPECIFIC OUTCOMES (PSO)

[PSO.1] Students learn to study the social conditions and their ramifications in the development of Sanskrit literature.

[PSO.2] Students develop different language skills.

[PSO.3] The learners' creativity is promoted.

[PSO.4] Students learn to appreciate the development of Sanskrit literature in different areas of the world.

[PSO.5] Students develop writing and communicative skills.

COURSE OUTCOME (CO)

[CO.1] *Prose and Grammar*: Students are exposed to a Sanskrit Prose text dealing with the duties of a king. They are also taught rules of Sanskrit grammar.

[CO.2] *Drama and Grammar*: Students are exposed to Sanskrit Drama and Grammar.

[CO.3] *History of Classical Sanskrit Literature and Ramayana and Manusanhita*: Students are exposed to Epics and History of Classical Sanskrit Literature.

[CO.4] *Alankarashastra and Mahabharata*: Students are exposed to Sanskrit alankarashastra and Mahabharata.

Bagnan College

P.O.: Bagnan * District: Howrah

Department of History

PO, PSO & CO for B.A. (History Honours) Course

Session: 2016-17

Our college is committed to its students learning and success. Educational process and outcomes are aimed at transformational learning that support students all round and holistic development. At the college level concern teachers go through the syllabus and frames some outcomes/ objectives and communicate to the students.

PROGRAM OUTCOMES (PO)

[PO.1] Student will be able to learn a basic narrative of historical events in different regions.
[PO.2] Student can distinguish primary and secondary sources.
[PO.3] Understand and evaluate historical ideas, arguments, and points of view.
[PO.4] Evaluate competing interpretations and multiple narratives of the past.
[PO.5] Student will be able to assess primary historical evidence.
[PO. 6] Student will be able to compile a bibliography.
[PO.7] Student can present clear and compelling arguments, based on critical analysis of diverse historical sources.
[PO.8] To develop a research question and complete a well-supported piece of historical writing.

PROGRAM SPECIFIC OUTCOMES (PSO)

[PSO.1] Analyze relationship between the past and the present.
[PSO.2] To develop practical skills helpful in the study and activities to the historical events.
[PSO.3] Understanding backgrounds of religion and administration.
[PSO.4] Understanding existing social, political, religious and economic conditions of the people.
[PSO.5] To develop interest in the study of history and activities related to history.

COURSE OUTCOME (CO)

Paper I

History of India from the earliest Times to 600 CE

(a) Student will be well acquainted with the Historical Sources and understand the importance of these sources in Historical Research.

(b) Student will understand and know about the Indus Valley Civilization.

(c) Student will understand and get information about the Vedic Culture.

(d) Student will understand, Compare and Contrast the philosophy of Jainism, Buddhism, Upnishada, Shaddarshan and Philosophy of Charwak.

(e) Student will get the information about Janpada, Mahajanpadas, Magadha and Mauryan Empire – especially about Chadragupta Maurya &Ashoka.

PAPER II

History of India from C 600 to C1500

(a) Student will get know about various sources and historiography of Early-Medieval and Medieval Indian History

(b) Student will know about the Political Changes in the Early-Medieval and Medieval History and develop their historical perspective.

(c) Student will know socio economic life, religious life and development of arts and architecture, language and literature in Early-Medieval and Medieval Indian History.

PAPER III

Transformation of Europe (15th – 17th Centuries)

(a) Student will understand the various landmarks in the history of Modern World.

(b) Student will understand and explain the renaissance and reformation in various fields.

(c) Student will understand and explain growth of Commercial Revolution.

PAPER-IV

History of India from C1500 to C1800

(a) Student will know about recent approaches of Medieval Indian History by Modern Historians.

(b) Student will understand the Political History and Administration of Mughal Empire

(c) Student will know and explain the characteristics of Administration in Medieval Indian History. Especially trade, commerce, art & architecture and religious policy of Mughal Empire.

Paper V

History of East Asia from 1839 to 1950

(a) Student will know about recent approaches of pre modern China and Modern China.

(b) Student will understand the Political History of Japan.

PAPER VI

History of India from C1800 to 1964

(a) Student will understand the nature, policies and administration of British Rule in India.

(b) Student will be able to explain the causes and development of Nationalism.

(c) Student will know about the Indian National Movement and role of National Congress, especially under the leadership of Mahatama Gandhi in the national movement.

(d) Student will understand the history of partition and the historical events of the independence of India.

(e) The course paper dills with the history of post independence India where in emphasize will be laid on making students built an argument to perspective about the history of post colonial theories and historical development.

PAPER VII

History of Europe from 1789 to 1919

(a) Student will know the importance of, French Revolution and Russian Revolution in the development of Modern Society and State.

(b) Evolution different social classes (bourgeoisie, proletariat, land owning classes, peasantry intellectuals etc) unification of Italy and Germany.

(c) Student will know growth of imperialism, militarism, power blocks and alliances before First World War 1914 to 1918 and the causes and effects of the Word War I.

PAPER VIII

World Politics in the 20th Century from 1919 to 2000

(a) Student will know the post war economic crises, great depression and recovery, rise of totalitarianism in form of Nazism, fascism, militarism and Stalinism, world war II, cultural and intellectual developments in Europe.

(b) Student will know about the Decolonization process and Emergence of Cold War.

(c) Student will understand the history of fall of Soviet Russia and Consequences.

Department of History

PO, PSO & CO for B.A. (History General) Course

Session: 2016-17

Our college is committed to its students learning and success. Educational process and outcomes are aimed at transformational learning that support students all round and holistic development. At the college level concern teachers go through the syllabus and frames some outcomes/ objectives and communicate to the students.

PROGRAM OUTCOMES (PO)

[PO.1] Student will be able to learn a basic narrative of historical events in a specific region of the world.
[PO.2] Student can distinguish primary and secondary sources.
[PO.3] Understand and evaluate historical ideas, arguments, and points of view.
[PO.4] Evaluate competing interpretations and multiple narratives of the past.
[PO.5] Student will be able to assess primary historical evidence.

PROGRAM SPECIFIC OUTCOMES (PSO)

[PSO.1] Analyze relationship between the past and the present.
[PSO.2] To develop skills helpful in the study and activities related to the historical events.
[PSO.3] Understanding existing political, religious and economic conditions of the people.
[PSO.4] To develop interest in the study of history and activities related to history.

COURSE OUTCOME (CO)

Paper I

Ancient & Medieval Indian History upto 1556

I. Understand the salient features of Indus valley civilization

II. Evaluate the features of Buddhism and Jainism

III. Visualize the administration of Mauryas and the art and architecture of Mauryas

IV. Identify the administration of Guptas and their contribution to Nalanda University
V. Examine the Arab conquest of Sindu and the battle of Tarain.\
VI. Understand the foundation of the Delhi sultanate and the Sultanate administration.

Paper II

Indian History From 1556 to 1947

I. Identify the condition of India under the Mughal Empire.

II. Explain the Administration and art and architecture of Mughals.

III- Discuss the advent of Britain and their administration

IV. Understand about the Socio-religious reform movements in 19th century.

V. State the role of moderates and extremists in the freedom movement.

Paper III

Modern Europe From 1789 to 1939

I. Describe the Renaissance movement in Europe.
II. Student will know the importance of, French Revolution and Russian Revolution in the development of Modern Society and State.
III. Evolution different social classes and unification of Italy and Germany.
IV. Student will know growth of imperialism, militarism, power blocks and alliances before First World War 1914 to 1918 and the causes and effects of the Word War I.

Paper IV

India and the World

I. The course dills with the history of post independence India.
II. Student will know about the Decolonization process and Emergence of Cold War.
III. Student will understand the history of fall of Soviet Russia and Consequences.

Bagnan College

P.O.: Bagnan * District: Howrah

Department of Philosophy

PO, PSO & CO for B.A. (Philosophy Honours) Course

Session: 2016-17

PROGRAM OUTCOMES (PO)

[PO.1] Critical Thinking: Take informed actions after identifying the assumptions that frame our thinking and actions,checking out the degree to which these assumptions areaccurate and valid, and looking at our ideas and decisions(intellectual, organizational, and personal) from differentperspectives.

[PO.2] Effective Communication: Speak, read, write and listenclearly in person and through electronic media in Englishand in one Indian language, and make meaning of theworld by connecting people, ideas, books, media andtechnology.

[PO.3] Social Interaction: Elicit views of others, mediatedisagreements and help reach conclusions in group settings.

[PO.4] Effective Citizenship: Demonstrate empathetic socialconcern and equity-centred national development, and theability to act with an informed awareness of issues andparticipate in civic life through volunteering.

[PO.5] Ethics: Recognize different value systems including yourown, understand the moral dimensions of your decisions,and accept responsibility for them.

[PO.6] Environment and Sustainability: Understand the issues of environmental contexts and sustainable development.

[PO.7] Self-directed and Life-long Learning: Acquire the abilityto engage in independent and life-long learning in thebroadest context socio-technological changes.

PROGRAM SPECIFIC OUTCOMES (PSO)

[PSO.1] Basic conception and critical thinking. The undergraduate students be able to grasp the basic feature and conception of Indian philosophy and also be able to think critically of metaphysics and epistemology of Indian philosophy.

[PSO.2] Development of thinking of Human mind and nature. The students be able to know how the human psychology and mind work and influence in the development of personality and understanding of social and political philosophy. The students will know the origin of society feature, social changes, castes, class and political philosophy of some thinkers.

[PSO.3] Basic conception of history of western philosophy. The undergraduate students be able to know and understand of history of western philosophy basically pre- Socratic philosophy and modern rationalistic philosophers and their contribution into philosophy.

[PSO.4] Logical and Reasoning development. The student be able to understand the western logic, features of logic, validity of argument and reasoning development.

[PSO.5] Logic and epistemology of Indian philosophy. The students be able to critically think and understand Nayya logical and epistemological problems and their solution.

[PSO.6] Epistemological and metaphysical development. The students be able to understand the relationship, between epistemology and metaphysics and some philosophical problems, causal relation and linguistic philosophy.

[PSO.7] The students be able to understand ethical conception, inter-relations, presupposition, postulation of ethics and the students also be able to know the philosophy of religion, origin of some religion and their rituals, way to achieve the ultimate end (liberation).

COURSE OUTCOME (CO)

[CO.1]: Indian Philosophy: Enablement of the students to understand the range, basic concepts, feature, significance and theories of Carvaca, Buddhism, Jaina, Nyaya, Baiseshika Sankhya, Yoga, Mimansa and Vedanta and their importance.

[CO.2]: Psychology and Social - Political Philosophy: Understanding to be enablement to students of Psychology: Definition, Nature and Scope. Methods of Psychology, Methods, variables, Controls in experiment, Limitations of experimental method and the Nature and Scope of Social Philosophy and Political Philosophy, Relation between Social and Political Philosophy. Primary concepts: Social Class and Caste, Theories regarding the relation between individual and society, Secularism—its nature, Secularism in India. Social Change Political Ideals, Socialism:

[CO.3]: History of Western Philosophy: To understand the students the basic concepts, feature, significance and theories, criticism of Plato**,** Aristotle**,** Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume and Kant.

[CO.4]: Logic: Empowerment of the students to logical thinking and critically understanding of Logic and Arguments, Deductive and Inductive Arguments, Argument, forms and arguments, Statement forms and statement, Truth and Validity, Categorical propositions and classes, Immediate inferences: Conversion, Obversion and Contraposition, Traditional square of opposition and Immediate Inferences based thereon, Existential Import, symbolism and Diagrams for categorical propositions, Categorical Syllogism: Standard Form categorical Syllogism; The Formal nature of Syllogistic Argument, Rules and Fallacies, General Rules, To test Syllogistic Arguments for validity (by applying general rules for syllogism); To solve problems and

prove theorems concerning syllogism. Boolean Interpretation of categorical propositions; syllogism; Venn Diagram Technique for Testing Syllogisms, Hypothetical and Disjunctive Syllogisms, Enthymeme, The Dilemma. Induction: Causal Connections: Induction by Simple Enumeration; Mill's Method of Experimental Inquiry; Science and Hypothesis, Investigation; Crucial Experiments and Ad Hoc Hypotheses. Probability:

[CO.5]: Indian Logic and Epistemology: To be understand, learn and critically thinking to the students of the Definition of buddhi or jñāna (cognition), its two kinds; Definition of smṛti; Two kinds of smṛti (memory); Definition of anubhava, its division into veridical (yathārtha) and non-veridical (ayathārtha); Three kinds of non-veridical anubhava; Definitions clarified in Tarkasaṁgraha Dīpikā. b) Four-fold division of pramā and pramāṇa. Definition of "Karaṇa"(special causal condition) and "kāraṇa" (general causal condition). The concept of anyathāsiddhi (irrelevance) and its varieties. The definition of kārya (effect). Kinds of cause: samavāyi, a-samavāyi and nimitta kāraṇa (definitions and analysis). c) Definition of pratyakṣa and its two-fold division: nirvikalpaka and savikalpaka jñāna. Evidence for the actuality of nirvikalpaka. d) Sannikarṣa and its six varieties. Problem of transmission of sound; The claim of "anupalabdhi" as a distinctive pramāṇa examined.

[CO.6]: Philosophy of language, Epistemology and Metaphysics (Western): To be understand and learn to the students of the Concepts, Truth, Sources of Knowledge, Some Principal uses of the verb "To know", Conditions of Propositional, Knowledge, Strong and weak senses of "know" Analytic truth and logical possibility, The apriori, linguistic philosophy, The Problem of Induction, Cause and Causal Principles, Realism, Idealism, Phenomenalism, Substance and Universal.

[CO.7]: Ethics and Philosophy of Religion: Enablement of the students to understand morality theoretical as well as practical of ethics . A. Nature and Scope of Ethics, Classification of Ethics B. Moral and Non-moral actions, Object of Moral Judgement—Motive and Intention C. Moral Theories: D. Standards of Morality: Hedonism—Ethical, Psychological. Utilitarianism: Act-utilitarianism, Rule-utilitarianism. Deontological Theories: Act-Deontological Theories, Rule-Deontological Theories—Kant's Theory E. Theories of Punishment: and understandinf Religion as well

A. Introduction: Concerns and Presuppositions, Concept of Sthitaprañjna, Karmayoga: (Gīta) Purusārthas and their inter-relations. B. Meaning of Dharma, Concept of Rita and Rina. Classification of Dharma: Sāmānya dharma, viśeùadharma, sādhāraõadharma, C. Pancaśīla, Brahmavihārabhāvanā (Bauddha) Anuvrata, Mahāvrata, Ahimsā. (Jaina) and the Nature and scope of Philosophy of Religion, The Philosophical teachings of the Holy Quran, Some basic tenets of Christianity, Religious Pluralism, Inter-religious dialogue and Possibility of Universal Religion, Arguments for the existence of God, Grounds for Disbelief in God, The Peculiarity of Religious Language.

PO, PSO & CO for B.A. (Philosophy General) Course

Session: 2016-17

PROGRAM OUTCOMES (PO)

[PO.1] Critical Thinking: Take informed actions after identifying the assumptions that frame our thinking and actions,checking out the degree to which these assumptions areaccurate and valid, and looking at our ideas and decisions(intellectual, organizational, and personal) from differentperspectives.

[PO.2] Effective Communication: Speak, read, write and listenclearly in person and through electronic media in Englishand in one Indian language, and make meaning of theworld by connecting people, ideas, books, media andtechnology.

[PO.3] Social Interaction: Elicit views of others, mediatedisagreements and help reach conclusions in group settings.

[PO.4] Effective Citizenship: Demonstrate empathetic socialconcern and equity-centred national development, and theability to act with an informed awareness of issues andparticipate in civic life through volunteering.

[PO.5] Ethics: Recognize different value systems including yourown, understand the moral dimensions of your decisions,and accept responsibility for them.

[PO.6] Environment and Sustainability: Understand the issues of environmental contexts and sustainable development.

[PO.7] Self-directed and Life-long Learning: Acquire the abilityto engage in independent and life-long learning in thebroadest context socio-technological changes.

PROGRAM SPECIFIC OUTCOMES (PSO)

[PSO.1] Basic conception and critical thinking. The undergraduate students be able to grasp the basic feature and conception of Indian philosophy and also be able to think critically of metaphysics and epistemology of Indian philosophy.

[PSO.2] Development of thinking of Human mind and nature. The students be able to know how the human psychology and mind work and influence in the development of personality and understanding of social and political philosophy. The students will know the origin of society feature, social changes, castes, class and political philosophy of some thinkers.

[PSO.3] Logical and Reasoning development. The student be able to understand the western logic, features of logic, validity of argument and reasoning development.

[PSO.4] Epistemological and metaphysical development. The students be able to understand the relationship, between epistemology and metaphysics and some philosophical problems, causal relation and linguistic philosophy.

[PSO.5] The students be able to understand ethical conception, inter-relations, presupposition, postulation of ethics and the students also be able to know the philosophy of religion, origin of some religion and their rituals, way to achieve the ultimate end (liberation).

COURSE OUTCOME (CO)

[CO.1]: Epistemology and Metaphysics Indian & Western: Enablement of the students to understand the range, basic concepts, feature, significance and theories of A. Cārvāka Epistemology: B. Nyāya Epistemology: C. Vaiśeṣika Metaphysics: D. Advaita Metaphysics
and A. Different senses of 'Know'. Conditions of Propositional Knowledge, Origin of Concepts. Concept Rationalism-Views of Descartes and Leibniz, Concept Empiricism –Views of Locke, Berkeley and Hume.B. Theories of the origin of Knowledge: Rationalism, Empiricism, Kant's Critical Theory.C. Realism: Naive Realism, Locke's Representative, Realism, Subjective Idealism (Berkeley).D. Causality: Entailment Theory, Regularity Theory. E. Mind- Body Problem: Interactionism, Parallelism and the Identity Theory.

[CO.2]: Western Logic & Psychology: Empowerment of the students to logical thinking and critically understanding of A. the Introductory topics: Sentence, proposition, argument, truth and validity. B. Aristotelian classification of categorical propositions, distribution of terms. Existential Import, Boolean interpretation of categorical propositions. Immediate inference. Immediate inference based on the square of opposition, conversion, obversion and contraposition. C. Categorical syllogism: Figure, mood, rules for validity, Venn Diagram method of testing validity, fallacies. D. Symbolic Logic: Use of symbols, Truth-functions: Negation, Conjunction, disjunction, implication, equivalence. E. Tautology, Contradiction, Contingent statement forms. Construction of truth-table, using truth-tables for testing the validity of arguments and statement forms. F. Mill's methods of experimental inquiry.
A. Sensation: What is sensation? Attributes of sensation. Perception: What is perception? Relation between sensation and perception, Gestalt theory of perception, illusion and hallucination. B. Consciousness: Conscious, Subconscious, Unconscious, Evidence for the existence of the Unconscious, Freud's theory of dream. C. Memory: Factors of memory, Laws of association, Forgetfulness.
Learning: The trial and error theory, Pavlov's Conditioned Response theory, Gestalt theory. D. Intelligence: Measurement of Intelligence, I.Q., Test of Intelligence, Binnet-Simon test

[CO.3]: ETHICS AND PHILOSOPHY OF RELIGION: Enablement of the students to understand morally theoretical as well as practical of A. Four Purusārthas- Dharma, artha, kāma and moksha and their interrelation, Karma (Sakāma & Niskāma), Cārvāka Ethics. B. Buddhist Ethics: The Four Noble Truths and the Eight-fold Path
Ethics (Western) A. Moral and Non-moral Actions Object of Moral Judgement B. Teleological Ethics: Utilitarianism (Bentham and Mill) Deontological Ethics: Kant's Moral Theory C. Theories of Punishment **&** A. Concept of Applied Ethics. B. Killing: Suicide, Euthanasia. C. Famine, Affluence and Morality.
D. Environmental Ethics: Value Beyond Sentient Beings, Reverence for life, Deep Ecology
& A. Nature & Concerns of Philosophy of Religion. Argument for the existence of God: Cosmological argument, Ontological argument and Teleological argument.

B. Problem of Evil and Suffering.
C. Grounds for disbelief in God: Sociological theory of Durkheim, Freudian Theory, Carvaka View.

[CO.4]: SOCIAL-POLITICAL PHILOSOPHYAND CONTEMPORARY INDIAN THOUGHT: The students understand and learn the Nature and Scope of A. Primary Concepts: Society, Community, Association, Institution.

B. Social Groups: Its Different Forms. Family: Its Different Forms. C. Social class and Caste: Principles of Class and Caste; Marxist conception of class; Class Attitudes and Class consciousness. A. Social Codes: Religious and Moral Codes; Custom and Law; Culture and Civilization. B. Political Ideals: Democracy: Its Different Forms. Socialism: Utopian and Scientific Socialism. And the view point of

(Contemporary Indian Thought: Swami Vivekananda, M.K.Gandhi and B.R.Ambedkar)

A. Swami Vivekananda: Nature of man, nature of religion. B. The ideal of a universal religion, Practical Vedānta. A. Gandhi: Nature of man, non-violence, satyāgraha, theory of trusteeship. B. Ambedkar: Critique of social evils, Dalit movement.

Bagnan College

P.O.: Bagnan * District: Howrah

Department of Political Science

PO, PSO & CO for B.A. (Political Science Honours) Course

Session: 2016-17

PROGRAM OUTCOMES (PO)

[PO.1] The program provides an overview of politics and students are taught the meaning and evolution of the subject.

[PO.2] The program provides basic ideas to students on the Indian Constitution, its importance and functioning of Indian polity.

[PO.3] The students are exposed to ancient Indian thought and got awareness about the Indian national movement and contribution freedom fighters.

[PO.4] Students are exposed to different political system of the world and their functioning.

[PO.5] The program introduces the students to the evolution of international relations as an academic disciple and also provides general ideas on global politics and its importance.

[PO.6] Students are exposed to political sociology, political culture and political participation. They are also taught political socialization and different perspective of religion and society.

[PO.7] Students are exposed to western political theory, philosophy and contributions of eminent political thinkers of the west.

[PO.8] The program underlines the development of public administration as a subject, its concept and proved ideas to students about policy making process.

PROGRAM SPECIFIC OUTCOMES (PSO)

[PSO.1] Political science being a dynamic discipline provides ample ideas to students on state, politics and deals extensively with the political systems

[PSO.2] Students learns political behaviour and its theoretical and practical applications also.

[PSO.3] The study of political science carries enough importance across the globe as students get opportunities to know about global politics.

[PSO.4] The subject of political science is inter-disciplinary in nature hence students of this subject can purse higher studies in International Relation, Public Administration, Public Policy, Management, Journalism and Mass Communication and Legal studies.

[PSO.5] The subject develops analytical thinking skills, moral and philosophical analysis ability among students.

[PSO.6] The subject is very helpful for any career and different competitive examination held across the country.

COURSE OUTCOME (CO)

PART I: 200 marks

Paper I: POLITICS: CONCEPTS AND APPROACHES 100 Marks (25 x 4 Modules)

Paper II: CONSTITUTION AND POLITICS IN INDIA 100 Marks (25 x 4 Modules)

PART II: 200 marks

Paper III: INDIAN POLITICAL THOUGHT AND MOVEMENT 100 Marks (25 x 4 Modules)

Paper IV: COMPARATIVE GOVERNMENT AND POLITICS 100 Marks (25 x 4 Modules)

PART III: 400 marks

Paper V: INTERNATIONAL RELATIONS AND GLOBAL POLITICS 100 Marks (25 x 4 Modules

Paper VI: POLITICAL SOCIOLOGY 100 Marks (25 x 4 Modules)

Paper VII: WESTERN POLITICAL THOUGHT AND THEORY 100 Marks (25 x 4 Modules)

Paper VIII: PUBLIC ADMINISTRATION 100 Marks (25 x 4 Modules)

[CO.1]: Politics: Concepts and Approaches: The paper mainly focused on the conceptualization politics, its meaning and evolution of the subject as an academic discipline with well established and widely accepted theories and approaches.

[CO.2]: Constitution and Politics in India: This paper of the discipline underlines the making of the Indian Constitution and it's functioning, making India a largest parliamentary democracy of the world, interrelations between three organs and the role of the Indian Judiciary.

[CO.3]: Indian Political Thought and Movements: The paper mainly outlines on ancient Indian political thoughts, and major contributions of Rabindranath Tagore, Vivekananda, Mahatma Gandhi, Subhash Chandra Bose and Dr.Ambedkar and Indian national movements from 1885 to 1947.

[CO.4]: Comparative Government and Politics: It underlines distinction between comparative government and politics with different approaches. This paper also elaborately discussed about the functioning of different political system of the world (UK, USA,PRC, France, Russia Switzerland and Bangladesh).

[CO.5]: International Relations and Global Politics: This paper outlines the evolution of International Relations as an independent academic discipline with major representative theories. The main focus of this paper is to give basic ideas of making of foreign policy, Indian foreign policy, India and her neighbors. Students are further able to get ample ideas on the UN and its major organs, its role and contributions in peace-keeping, human rights and Sustainable Development Goals.

[CO.6]: Political Sociology: In this paper student outlines social base of politics and emergence of political sociology, political culture and participation and political socialization as well. The paper also gives importance on different perspectives of religion, society and politics.

[CO.7]: Western Political Thought and Theory: The discipline mainly focused on western political thoughts, and contributions of Greek political thinkers like Aristotle and Plato and major contributions of great political thinkers and emergence of Marxism and underlines varieties of non-Marxist socialism.

[CO.8]: Public Administration: outlines evolution of public administration as a discipline, some major concepts, policy making and implementations. Continuity and change in Indian administration with brief historical overview.

PO, PSO & CO for B.A. (Political Science General) Course

Session: 2016-17

PROGRAM OUTCOMES (PO)

[PO.1] Students learn political science as a academic discipline, its meaning and contemporary relevancies'.

[PO.2] Student exposed to some important political system and constitution of the world.

[PO.3] Students are exposed to Indian Constitution and its functioning, parliamentary democracy and role of judiciary.

[PO.4] Students learn contemporary political issues along with UNO and its role and relevance in contemporary world, globalization and foreign policy of India.

PROGRAM SPECIFIC OUTCOMES (PSO)

[PSO.1] The subject provides basic ideas on concept of political science.

[PSO.2] Students exposed to international organizations, major constitutions of the World, and world politics.

[PSO.3] The Subject helps student in developing analytical skills.

[PSO.4] The subject is very helpful for students sitting for different competitive examinations held across India.

COURSE OUTCOME (CO)

[CO.1]: Political Theory: Students learn political science meaning, its nature and different approaches, and different political concepts, theories as well.

[CO.2]: Comparative Politics and Governments: Students are exposed to comparative politics and governments of UK, USA, PRC, France, Russia and Switzerland.

[CO.3]: Government and Politics in India: Students are exposed to Indian Constitution and they gathered knowledge about Preamble, Fundamental Rights and Fundamental Duties; and get awareness about major issues in Indian Politics.

[CO.4]: Contemporary Political and Administrative Issues in India: Students are exposed to different contemporary political issues, UNO and its role, foreign policy, human rights and globalization.

Bagnan College

P.O.: Bagnan * District: Howrah

Department of Economics

PO, PSO & CO for B.Sc. (Economics Honours) Course

Session: 2016-17

PROGRAM OUTCOMES (PO)

[PO.1] Critical Thinking: Take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, looking at our ideas and decisions (intellectual, organizational and personal) from different perspectives.

[PO.2] Rational Outlook: Understand and can analyse the different social and economic changes with a rational and logical frame of mind.

[PO.3] Effective communication : Speak, read, write and listen clearly in person and through electronic media in English and in one Indian language, and make meaning of the world by connecting people, ideas, books, media and technology.

[PO.4] Social Interaction: Elicit views of other, mediate disagreements and help reach conclusions in group settings.

[PO.5] Effective Citizenship: Demonstrate empathetic social concern and equity centred national development, and the ability to act with an informed awareness of issues and participate in civic life through volunteering.

[PO.6] Ethics: Recognize different value systems including your own, understand the moral dimensions of your decisions, and accept responsibility for them.

[PO.7] Environment and Sustainability: Understand the issues of environmental contexts and sustainable development

[PO.8] Self-directed and Life- long Learning: Acquire the ability to engage in independent and life-long learning in the broadest context socio-technological and socio-economic changes.

PROGRAM SPECIFIC OUTCOMES (PSO)

[PSO.1] Understand the economic way of thinking and the nature and scope of Microeconomics and Macroeconomics.

[PSO.2] Analyse and apply statistical methods in Economic problems.

[PSO.3] Understand the nature of Indian Economy in pre-reform and post-reform periods with its problems and prospects along with a special reference to West Bengal economy.

[PSO.4] Understand the concept and measures of economic development in global perspective with special reference to the development experiences of China, Africa and Argentina.

[PSO.5] Understand the policies of International Trade.

[PSO.6] Understand the nature and scope of Public Economics.

[PSO.7] Application of Econometrics and Mathematical techniques in Economics.

[PSO.8] Preparing and writing term paper on a selected economic topic.

COURSE OUTCOME (CO)

[CO.1A] Microeconomic Principles: An understanding of the Economic way of thinking, the concepts of Markets, market sensitivity and adjustments, elasticity, markets and welfare, the economic role of the Government with respect to market and market failure, externalities and Public goods.

[CO.1B] Macroeconomic Principles: Learning the nature and scope of Macroeconomics, methods of accounting Output and Income, concepts of Consumption and Investment, Production and Growth, Unemployment, Money and Monetary Institutions, Inflation.

[CO.2A] Statistics for Economics: Learning the concepts and applications of Data Presentation, Central Tendency, Dispersions, Skewness and Kurtosis, Probability theory, Random variables and Probability Distributions, Bivariate Analysis and Population statistics.

[CO.2B] Mathematics for Economics: An understanding of Functions and Graphs, Linear Algebra, Matrix Algebra, Linear Programming, Optimisation, Difference Equations, Differential Equations and Game Theory.

[CO.3A] Microeconomics: An indepth understanding of Consumer Theory, Production and Costs, Market Structure, Input Markets and other issues related to Market.

[CO.3B] Macroeconomics: Understanding the concepts of the Economy in the Long Run and Short Run., Foreign Trade and Exchange Rate, Theories of Consumption and Investment, Demand for Money and Economic Growth.

[CO.4A] Development Theory: Learning the Concepts and measures of Development, Theoretical perspectives of the Process of Development, Development strategies, Population and Development, the relation of Inequality and Poverty in Development, an overview and basic issues of Development and Environment.

[CO.4B] Indian Economy since Independence: Understanding the nature of Indian Economy at the time of Independence, Planning and related issues, Land and Agriculture, Industrial Development, Trade and Policy, Employment, Wages and Inflation.

[CO.5A] International Economics: Learning the basic models of Trade, Resources, Comparative Advantage and Income Distribution, the Standard Trade Model and Trade Policy, Accounting, Income Determination and Exchange Rates.

[CO.5B] Public Economics: Introducing Public Economics, Forms and Functions of Government, Federal Finance, Public Goods and Public Sector, Government Budget and Policy, Revenue Resources, Tax Structure, Distribution and Stabilization.

[CO.6A] Comparative Development Experience: Understanding International comparisons of Development, Genesis of Capitalism, Industrialization Experiences in Early Part of 20th Century, Post Second World War Development Scenario, Development and Underdevelopment as historical processes, Evolution of New Economic Order, Development policies and role of the State and some recent Development Experiences.

[CO.6B] Contemporary Economic Issues: India and West Bengal: Understanding Economic Reforms in India Since 1991, Agriculture, Poverty and Social Security, Post-reform performance of Indian Economy, Economy of West Bengal with its Growth and Development.

[CO.7A] Statistics & Basic Econometrics: Learning Joint Probability Distribution, Sampling Distribution, Classical Statistical Inference, Elementary Econometrics and Time Series Data.

[CO.7B] Applied Economics: Two Optional Courses: 1. Application of Economics to Managerial Issues: Understanding Nature and Scope of Managerial Economics, Demand, Cost and Profit Analysis, Pricing Policies and Practices, Capital Budgeting, Cost of Capital, Inventory Management and Corporate Governance. 2. Mathematical Economics: Understanding the theory of the Consumer, the Firm, Games and Decisions, Inter-temporal Choice Theory, Behaviour under uncertainty, Comparative Statics, application of Difference and Differential Equations.

[CO.8A] Indian Economic History: Studying the Economic condition in India on the eve of British rule, Aspects of Economic Policies under British India, Impact of British rule on India, early Economic planning initiatives during British rule.

[CO.8B] Term Paper: Preparing a term paper by selecting a topic from the above mentioned courses within 5000 words.

PO, PSO & CO for B.A. (Economics General) Course

Session: 2016-17

PROGRAM OUTCOMES (PO)

[PO.1] Critical Thinking: Take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, looking at our ideas and decisions (intellectual, organizational and personal) from different perspectives.

[PO.2] Rational Outlook: Understand and can analyse the different social and economic changes with a rational and logical frame of mind.

[PO.3] Effective communication : Speak, read, write and listen clearly in person and through electronic media in English and in one Indian language, and make meaning of the world by connecting people, ideas, books, media and technology.

[PO.4] Social Interaction: Elicit views of other, mediate disagreements and help reach conclusions in group settings.

[PO.5] Effective Citizenship: Demonstrate empathetic social concern and equity centred national development, and the ability to act with an informed awareness of issues and participate in civic life through volunteering.

[PO.6] Ethics: Recognize different value systems including your own, understand the moral dimensions of your decisions, and accept responsibility for them.

[PO.7] Environment and Sustainability: Understand the issues of environmental contexts and sustainable development

[PO.8] Self-directed and Life- long Learning: Acquire the ability to engage in independent and life-long learning in the broadest context socio-technological and socio-economic changes.

PROGRAM SPECIFIC OUTCOMES (PSO)

[PSO.1] Understand the basic nature of Microeconomics and Macroeconomics.

[PSO.2] Analyse microeconomic behaviours of consumers, sellers and the markets; analyse macroeconomic policies including fiscal and monetary policies.

[PSO.3] Understand the behaviour of Indian Economy and its different aspects.

[PSO.4] Understand the process of economic development and International economic scenario.

[PSO.5] Understand the basic concepts and application of statistical methods.

COURSE OUTCOME (CO)

[CO.1] To understand the basic concepts of Microeconomics and Macroeconomics involving basic knowledge of Consumer and Producer's Behaviours under Microeconomics and knowledge of National Income, Money and Banking, Government Sector under Macroeconomics.

[CO.2] To understand theory of Markets and theory of Distribution under Microeconomics. To understand the theories of Income, Employment, Inflation and idea of External Sector under Macroeconomics.

[CO.3] To study the different aspects of Indian Economy including Agriculture, Industry, Demography, Planning and Foreign Trade.

[CO.4] To study the basic ideas regarding Development Economics, International Economics and also to learn some basic concepts of Statistics.

Bagnan College

P.O.: Bagnan * District: Howrah

Department of Chemistry

PO, PSO & CO for B.Sc. (Chemistry Honours) Course

Session: 2016-17

PROGRAM OUTCOMES (PO)

PO.1	To understand basic facts and concepts in Chemistry while retaining the interesting aspects of Chemistry so as to develop interest in the study of chemistry as a discipline
PO.2	To develop the ability to apply the principles of Chemistry
PO.3	To appreciate the achievements in Chemistry and to know the role of Chemistry in nature and in society.
PO.4	To develop problem solving skills.
PO.5	To be familiarized with the emerging areas of Chemistry and their applications in various spheres of Chemical sciences and to apprise the students of its relevance in future studies
PO.6	To develop skills in the proper handling of apparatus and chemicals.
PO.7	To be exposed to the different processes used in industries and their applications.

PROGRAM SPECIFIC OUTCOMES (PSO)

PSO.1	The main objective of this course is to increase the employability of the students by preparing them with the technical and theoretical aspects of this continuously emerging subject.
PSO.2	The students will get introduced with all the instrumental procedures used to analyze both quantitatively and qualitatively the chemical components of an unknown compound. The basic techniques which will be used includes titration, salt analysis along with pHmetry, potentiometry, conductometry, polarimetry and spectrophotometry .
PSO.3	Knowledge of periodic table will be beneficial for understanding the material world

PSO.4	Knowledge of green chemistry and ecologically sustainable chemical procedures will make as a student more aware environmentally as well as socially
PSO.5	Students will gain knowledge about fundamental organic chemistry and can apply it in synthetic field
PSO.6	Knowledge in the field of synthetic organic chemistry as well as stereochemistry can be used to design various organic compounds of industrial utility
PSO.7	Students will have understanding about the chemical and molecular processes that take place in organic chemical reactions.
PSO.8	Students become able to use spectroscopic methods in identification of complicated molecules
PSO.9	Understanding of biomolecules like amino acid and carbohydrates will be beneficial in the field of research as well as industry.
PSO.10	Knowledge of basic principles of physical chemistry and how to apply it in experimental procedures of general chemistry will be understood after the end of the three years course.
PSO.11	To develop skills in the proper handling of apparatus and chemicals.

Course Outcome (CO) for B.Sc. (Chemistry Hons.) Programme

Paper IA

CO.1	CHT 12a Acyclic stereochemistry • Introduction to stereochemistry, representation of molecules in saw horse, Newman, Flying wedge and Zig-zag • Configuration • Conformation Bonding and physical properties • VBT, MO • Concept of bond angles, bond distance, mp/bp
CO.2	CHT 12b General Treatment of reaction mechanism • Concept of reaction intermediates • Concept of acid bases • Reaction kinetics Nucleophilic substitution reactions • Students will get understanding of reactivity and stability of an organic molecule based on structure, including conformation and stereochemistry • an understanding of nucleophiles, electrophiles, electronegativity, and resonance • Students will be able to predict the mechanisms for nucleophilic substitution reactions

Paper IB

CO.1	CHT 13a • Reaction kinetics and gaseous state • Thermodynamics I: Basic concepts including first law
CO.2	**CHT 13b** Thermodynamics II • Second law of thermodynamics – need for a Second law. Concept of heat reservoirs and heat engines. Kelvin – Planck and Clausius statements and equivalence of the two statements with entropic formulation. Carnot cycle and refrigerator. Carnot's theorem; thermodynamic scale of temperature. Chemical kinetics

Paper IIA

CO.1	CHT 11a • To impart essential theoretical knowledge on atomic structure, periodic properties • Detailed idea about periodic table, chemical periodicity effective nuclear charge, groups trends and periodic properties
CO.2	CHT 11b Chemical Bonding and Structure • Detailed idea about chemical properties, various types of bonding and structure Acid-Base Reactions • Acid-Base concept: Arrhenius concept, theory of solvent system (in H_2O, NH_3, SO_2 and HF), Bronsted-Lowry's concept, relative strength of acids, Pauling rules. Amphoterism. Lux-Flood concept, Lewis concept. Superacids, HSAB principle. Acid base equilibria in aqueous solution and pH. Acid-base neutralisation curves; indicator, choice of indicators

Paper IIB

CO.1	CHP 14a+14b To impart skill to students in the systematic qualitative analysis of mixtures containing two acid and two basic radicals with one interfering radical by • Preliminary tests for acid and basic radicals in given samples • Wet tests for acid and basic radicals in given samples • Confirmatory tests

Year 2

Paper IIIA

CO.1	CHT 22a Addition reactions • Electrophilic addition to C=C: Mechanism, reactivity, regioselectivity and stereoselectivity. • Reactions: halogenations, hydrohalogenation, hydration, hydrogenation, epoxidation, hydroxylation, ozonolysis, electrophiilic addition to diene (conjugated dienes and allenes). • Radical addition: HBr addition. • Dissolving metal reduction of alkynes and bezenoid aromatics (Birch). • Pericyclic addition: Diels-Alder reaction. Elimination and aromatic substitution • Elimination - Mechanisms: E1, E2 and E1cB; reactivity, • Orientation (Saytzeff/ Hofmann) • stereoselectivity; substitution vs elimination • Addition of singlet and triplet carbenes
CO.2	CHT 22b • Nitrogenous compounds and organometallics • Rearrangements reactions

Paper IIIB:

CO.1	CHT 23a • To provide an insight into the thermodynamic and kinetic aspects of chemical reactions and phase equilibria. • To derive some thermochemical equations and kinetic equations. To study phase diagrams and elementary idea of catalysis. • Liquid state and viscosity of liquids
CO.2	CHT 23b • To study the basic postulates of quantum mechanics • · To enable the students to solve the simple quantum mechanical models such as simple harmonic oscillator, particle in a 1D- box, rigid rotor, H atom etc. • · To understand the quantum mechanical aspect of angular momentum and spin. • · Enable the students to predict the point group of important molecules and to know how they are classified • · To understand the idea of space groups and to learn the theory of molecular symmetry. • · To gain skill to apply group theory to vibrational and electronic spectroscopy • Electrochemistry

Paper IVA

CO.1	CHT 21a • Chemical periodicity which includes electronic configuration,elemental forms, catalytic properties, magnetic properties etc. • MO theory • Co-ordination chemistry • Hydrogen bonding, metallic bonding
CO.2	CHT 21b • Chemistry of s- and p- block elements • Precipitation and redox reactions

Paper IVB

CO.1	CHP 24a Analytical Estimations • The students will get skill in the quantitative analysis by doing titrations in the different branches of volumetric analysis.
CO.2	CHP 24b Instrumental Estimations • Spectrophotometry • Conductometry • Potentiometry • pH-metry

Year 3

Paper V

CO.1	CHT 31a • To give the students a thorough knowledge of the different theories to explain the bonding in coordination compounds. • To understand the general characteristics of the d and f block elements.
CO.2	CHT31b • Organometallics • Bioinorganic chemistry
CO.3	CHT31c • Electrochemical and spectral analysis, analytical separation • Statistical methods in chemical analysis and environmental analysis
CO.4	CHT 31d • The students will get training in the quantitative analysis of metal ions and anions using gravimetric method • Thermodynamics of dissolution

Paper VIA

CO.1	CHT 32a • Carbanion chemistry and cyclic stereochemistry • Spectroscopy UV, IR, NMR
CO.2	CHT 32b • Synthesis of organic reaction is itself involves a large part of organic chemistry. This is called synthetic organic chemistry. This is discussed in a simple way for some simple molecule to the students. This includes fragmentation and retrosynthetic analysis and also finding synthon or reactive starting molecule of a target molecule. • Carbohydrates, starch etc. are different class of macromolecules consisting of preliminary units like glucose, mannose etc. Their structure are also a matter of constant study due to their uniqueness. They are available in different foods like potato and recently they are being used in medicinal sciences also. This course deals with determination of structure of these class of chemicals and also their preliminary units. Inter-conversion of one preliminary unit to other is also discussed here.
CO.3	CHT 32c • Heterocyclic chemistry gives the quantitative ideas about the synthesis, properties and uses of heterocyclic compounds like pyrole, pyridine quinolene, thiophene, furan etc. • To impart the students thorough idea in in the chemistry of carbohydrates, amino acids, proteins and nucleic acids.

Paper VIIA

CO.1	CHT 33a • Properties of solids, interfaces and dielectrics • Quantum chemistry--II
CO.2	CHT 33b • Phase equilibrium and colligative properties • Statistical thermodynamics and third law: To know the basic concepts in classical thermodynamics and to learn the thermodynamic aspects of various processes and reactions. To understand the different aspects of statistical thermodynamics and its applications.
CO.3	CHT 33c • Kinetics and photochemistry • Spectroscopy

Paper VIIIA

CO.1	CHP 34b • Qualitative analysis of single organic compounds which includes detection of special elements and functional groups • Organic preparations

Paper VIIIB

CO.1	CHP 35b • Instrumental experiments

Paper VIB+ VIIB

CO.1	CHP 34a • Spectroscopic analysis of organic compounds
CO.2	CHP 35a • Viscosity • Surface tension • Solubility product • Rate constant determination • Determination of partition coefficient

PO, PSO & CO for B.Sc. (Chemistry General) Course

Session: 2016-17

PROGRAM OUTCOMES (PO)

PO.1	To understand basic facts and concepts in Chemistry while retaining the interesting aspects of Chemistry so as to develop interest in the study of chemistry as a discipline
PO.2	To appreciate the achievements in Chemistry and to know the role of Chemistry in nature and in society.
PO.3	To develop problem solving skills.
PO.4	To be familiarized with the emerging areas of Chemistry and their applications in various spheres of Chemical sciences and to apprise the students of its relevance in future studies
PO.5	To develop skills in the proper handling of apparatus and chemicals.
PO.6	To be exposed to the different processes used in industries and their applications.

PROGRAM SPECIFIC OUTCOMES (PSO)

PSO1:	The main objective of this course is to increase the employability of the students by preparing them with the technical and theoretical aspects of this continuously emerging subject.
PSO2:	The students will get introduced with all the instrumental procedures used to analyze both quantitatively and qualitatively the chemical components of an unknown compound. The basic techniques which will be used includes titration.
PSO3:	Knowledge of periodic table will be beneficial for understanding the material world
PSO4:	Students will gain knowledge about fundamental organic chemistry and can apply it in synthetic field
PSO5:	Knowledge in the field of synthetic organic chemistry as well as stereochemistry can be used to design various organic compounds of industrial utility
PSO6:	Understanding of bio-molecules like amino acid and carbohydrates will be beneficial in the field of research as well as industry.
PSO7:	Knowledge of basic principles of physical chemistry and how to apply it in experimental procedures of general chemistry will be understood after the end of the three years course.
PSO8:	To develop skills in the proper handling of apparatus and chemicals.

COURSE OUTCOME (CO)

Year 1:

Paper I

CO.1	CGT 11a • To impart essential theoretical knowledge on atomic structure, periodic properties • Detailed idea about periodic table, chemical periodicity effective nuclear charge, groups trends and periodic properties • Detailed idea about the principles of organic qualitative analysis
CO.2	CGT 11b Basic organic chemistry • Detailed idea about electronic effects in organic molecules • Stereochemistry • Detailed idea about alkanes, alkenes and alkynes • Aromatic hydrocarbons and aldehyde ketones
CO.3	CGT 12a • Basic idea about inorganic chemistry which includes various types of bonding • Idea about carboxylic acids, phenols, organometallic compounds and carbohydrates amino acids

Year 2:

CO.1 (Paper IIA)	CGT 22a • To get basic ideas about thermodynamics, chemical equilibrium and colloids
CO.2 (Paper IIB)	CGT 22b • Detailed Idea about Acids, bases, solutions of electrolytes, electrode potential
CO.3 (Paper IIIA)	CGP 23 To impart skill to students in the systematic qualitative analysis of single organic compound by • Detection of special elements • Detection of functional groups and solubility classification
CO.4 (Paper IIIB)	CGP 24 To impart skill to students in the systematic qualitative analysis of acompound containing one acid and one basic radicals with one interfering radical by • Preliminary tests for acid and basic radicals in given samples • Wet tests for acid and basic radicals in given samples • Confirmatory tests

Year 3

Paper IVA

CO.1	CGT 31a To get detailed idea about • Chemical Analysis which includes gravimetric and volumetric estimations • Error analysis and computer applications
CO.2	CGT 31b General concepts and idea about various fields of industrial chemistry which includes • Fuels • Fertilizers • Glass and ceramics • Polymers • Paint industry • Drugs
CO.3	CGT 31c Detailed idea about environmental chemistry and also industrial applications in the field of fats-oil-detergent6s, pesticides and food additives

Paper IVB

CO.1	CGP 32 • To develop skill in various types of titrations

Bagnan College

P.O.: Bagnan * District: Howrah

Department of Mathematics

PO, PSO & CO for B.Sc. (Mathematics Honours) Course

Session: 2016-17

PROGRAM OUTCOMES (PO)

[PO.1] Problem Analysis : Students gain the ability to deal with various problems in different streams of science with the help of mathematics.

[PO.2] Individual and team work : The beauty of Mathematics is that there are several methods to solve one single problem. Students share their ideas and this helps them to enrich their capability to analyze any problem.

[PO.3] Ethics: Students apply ethical principles and commit to professional ethics, responsibilities and norms in the society.

PROGRAM SPECIFIC OUTCOMES (PSO)

[PSO.1] Human civilization depends on numbers. Mathematics is the main tool to handle the engineering models.

[PSO.2] Mathematics is helpful to think analytically in every aspects of life.

[PSO.3] Students can choose higher education that is research by studying Mathematics. Also they become eligible for various competitive examinations.

COURSE OUTCOME (CO)

	Course name		Course outcome
CO.1	Module I	Classical Algebra	This course contains elementary notion of Number Theory, Complex Numbers, Theory of Equations and Inequalities.
		Modern Algebra I	This is an introductory course of Group theory.
	Module II	Analytical geometry of 2D	This course includes Transformation of rectangular axes, General Equation of 2^{nd} degree in two variables, Straight lines, Circle, Parabola, Ellipse, Hyperbola.
		Analytical geometry of 3D I	The content of this course are Rectangular Cartesian co-ordinates in space, Planes and Straight lines in space.
		Vector Algebra	This is a preliminary course on Vector Algebra.
CO.2	Module III	Analysis I	In this course students will learn about Real Number System, Concept of Countability, Topology of R, Sequences in R, Continuity and Uniform Continuity of function defined from R to R.
		Evaluation of Integrals	In this course students learn to solve definite and indefinite integrals of given functions.
	Module IV	Linear Algebra	Linear Algebra course contains the study of Determinants and Elementary Operations of Matrices. Students will be introduced the Concept of Vector Spaces, Systems of Linear Equations and Inner Product Spaces through this course.
		Vector Calculus I	This course includes Vector calculus and its applications.
CO.3	Module V	Modern Algebra II	This course is a continuation of the earlier course Modern Algebra I. This course contains the concept of Rings and Fields.

		LPP and Game Theory	The course on LPP includes formation of LPP and different methods of solving LPP.
	Module VI	Analysis II	Students learn Infinite Series of real numbers and the concept of differentiability of real functions in this course.
		Differential Equation I	In this course students learn the formation as well as solution of differential equations. This course contains first order first degree and first order but not first degree differential equation. Higher order linear equations with constant co-efficients , Second order linear equations with variable co-efficients, Eigen value problems, simultaneous linear differential equations are included in this course. The concept of formation of PDE and the solution by Lagrange's and Charpit's method are also contained in this course.
CO.4	Module VII	Real-valued functions of several variables	This course contains the topology of R^2 and R^3, concept of limit, continuity and differentiability of functions of two and three variables.
		Application of calculus	This course includes the application of calculus in real life problems by introducing the concepts of tangents, normal, asymptotes, curvature, envelopes. The students learn to solve area bounded by curves and finding the C.G of various solids.
	Module VIII	Analytical Geometry of 3D II	This course contains Sphere, Cone, Cylinder, Ellipsoid, Surface of revolution.
		Analytical Statics I	Friction and Astatic Equilibrium are included in this course.
		Analytical Dynamics of a particle I	This course includes fundamental concepts of dynamics and connected systems, concept of work, power, energy, Motion in a plane.

CO.5	Module IX	Analysis III	This course contains the concepts of Compactness in R, Functions of Bounded variations, Riemann Integration, Sequence and Series of functions of real variables.
	Module X	Linear algebra II and Modern algebra III	Linear Algebra course includes detailed study of Linear Transformations. Modern Algebra III contains Normal subgroups, Quotient groups, Homomorphism and Isomorphism of groups.
		Tensor Calculus	This is an elementary course on tensor calculus.
		Differential Equation II OR Graph Theory	Students will learn about Laplace Transformation and Power series solution of ODE. OR Students will study basic properties of graphs, and different types of graphs for example Euler graph, Planar Graph, Tree.
CO.6	Module XI	Vector Calculus II	This is a continuation of earlier course on Vector Calculus I.
		Analytical Statics II	This course contains Centre of Gravity, Virtual Work, Stable and Unstable equilibrium, Forces in three dimensions.
		Analytical Dynamics of a particle II	In this course students will learn Central Force and Central Orbits, Planetary motion and Keplar's Law Motion of a varying mass and Linear dynamical system.
	Module XII	Hydrostatics	This course contains fundamental concepts of fluid dynamics, density and specific gravity, pressure of heavy fluids, equilibrium of fluids in given field of forces, thrusts on plane surface, centre of pressure, equilibrium of floating bodies, the stability of equilibrium of floating bodies, gases.
		Rigid dynamics	

	Module XIII	Analysis IV	This course contains Improper integrals, Fourier series, Multiple integrals.
		Metric Spaces	This is a preliminary course on metric spaces which includes the concepts of open sets, closed sets, sequences in metric spaces, the concept of completeness of metric spaces and various examples of metric spaces.
		Complex analysis	Students will study extended complex plane, Steriographic projections, the concept of limit, continuity, differentiability of complex functions.
	Module XIV	Probability Statistics	
CO.8	Module XV	Numerical Analysis	Basics of Numerical Analysis, Interpolation, Numerical Differentiation, Numerical Integration, Numerical solution of non-linear equations, Numerical solution of a system of linear equations, Eigen value problems, Numerical solution of ODE
		Computer Programming	Fundamentals of Computer science and computer programming, Programming with FORTRAM 77/90 or Introduction to ANSI C
	Module XVI	Practical	Practical of Numerical Analysis by using calculator and on computer.

Bagnan College

P.O.: Bagnan * District: Howrah

Department of Physics

PO, PSO & CO for B.Sc. (Physics Honours) Course

Session: 2016-17

PROGRAM OUTCOMES (PO)

[PO.1] Critical Thinking: Take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking at our ideas and decisions (intellectual, organizational, and personal) from differentperspectives.

[PO.2] Effective Communication: Speak, read, write and listenclearly in person and through electronic media in Englishand in one Indian language, and make meaning of theworld by connecting people, ideas, books, media andtechnology.

[PO.3] Social Interaction: Elicit views of others, mediatedisagreements and help reach conclusions in group settings.

[PO.4] Effective Citizenship: Demonstrate empathetic socialconcern and equity-centred national development, and theability to act with an informed awareness of issues andparticipate in civic life through volunteering.

[PO.5] Ethics: Recognize different value systems including yourown, understand the moral dimensions of your decisions,and accept responsibility for them.

[PO.6] Environment and Sustainability: Understand the issues of environmental contexts and sustainable development.

[PO.7] Self-directed and Life-long Learning: Acquire the abilityto engage in independent and life-long learning in thebroadest context socio-technological changes.

PROGRAM SPECIFIC OUTCOMES (PSO)

[PSO.1] Students can apply fundamental principles of Physics and knowledge of mathematics both in ordinary, day to day settings and in more complex problems of advanced Physics, Science and Technology.

[PSO.2] The learner will develop creative thinking and the power of imagination in simple exercises as well as analyse more complex problems in advanced Physics.

[PSO.3] Students have wide exposure in research, academia and industry for broader applications of Physics.

[PSO.4] The program will create an ability to describe the physical world, selecting appropriate equations, constructing models, interpreting mathematical results and critically comparing them with experiments and observations.

COURSE OUTCOME (CO)

Courses	CO
Mathematical Methods I & II	Students will be able to (a) Understand and apply the concept/application of mathematical tools in different branches of physics. (b) Solve problems involving infinite sequence and series, multiple integrals, Probability. (c) Understand the basic concept of vector algebra and vector calculus involving differentiation and integration of vectors, use of curvilinear co-ordinates. (d) Identify various types of matrices, learns matrix algebra and solve Eigen value/vector problems. (e) Solve ordinary differential equation by Frobenius' method and know special functions (Legendre and Hermite polynomial). (f) Understand the method ofseparation of variable to solve partial differential equations. (g) Do analysis of simple waveforms with Fourier series, understand Fourier transform.
Waves and Optics I & Electronics I	Students will be able to (a) Understand the free, damped and forced vibrations. (b) Explain progressive wave motion and its equations. (c) Have a good foundation in geometrical optics. (d) Understands Fermat's principle. (e) Have a thorough knowledge of matrix methods and optical systems (lens). (f) Understands network analysis (Thevenin theorem and Norton theorem). (g) Acquire detailed knowledge of semiconductor diode, transistor, FET. (h) Understands preliminary of digital electronics involving Boolean arithmetic, basic gates and Karnaugh map.

Classical Mechanics I & Thermal Physics I	Students will be able to (a) Understand particle kinematics in different coordinate systems. (b) Interpret and illustrate different types of conservation laws of motion. (c) Describe the translational and rotational motion of systems of particles. (d) Understand rotational motion – moment of inertia along with its calculation for different objects. (e) Analyse the motion of objects in rotating frame of reference. (f) Develop an understanding of kinetic theory of gases. (g) Understand transport phenomena (Viscosity, thermal conduction and diffusion in gases. Brownian Motion). (h) Analyze thermal properties of real gases. (i) Understand conduction and radiation of heat.
Laboratory Paper IIB	Students will be able to (a) Use slide callipers, screw guage, voltmeter, ammeter, Wheat stone bridge, potentiometer. (b) Do the practical of finding moment of inertia of symmetric objects. (c) Do conversion of voltmeter into ammeter and vice versa. (d) Fabricate of logic gates and do experiments with them. (e) Use spectrometer and find the refractive index of glass, dispersive power of glass prism. (f) Find the horizontal component of earth's magnetic field. (g) Study the regulation characteristics of zener diode, bridge rectifier. (h) Fabricate and test half adder and full adder.

Electronics II & Electricity and Magnetism	Students will be able to (a) Dodetailed analysis of amplifiers and oscillators. (b) Have an understanding of basic theory of operational amplifierand its various applications. (c) Get knowledgeof combinational and sequential logic circuits. (d) Have basic understanding of communication principles. (e) Understand the magnetic effect of steady current in details. (f) Get knowledge of magnetic field in media and properties of magnetic materials. (g) Have detailed knowledge of electromagnetic induction, get basic understanding of alternating current and its circuits.
Electrostatics & Waves and Optics II	Students will be able to (a) Get a solid foundation of electrostatics. (b) Have an understanding of Gauss's law and multipole expansion. (c) Know the physics of dielectric materials in presence of electrostatic fields. (d) Solve electrostatic problems by method of electrical images. (e) Have a basic understanding of physical optics. (f) Know the basic theories of interference, diffraction and polarisation of light waves.
Quantum Mechanics I & Thermal Physics II	Students will be able to (a) Understand the differences between classical and quantum mechanics, have basic ideas behind the progress of quantum mechanics. (b) Understand the idea of wave function, solve Schrödinger equation for simple potentials. (c) Know the basic postulates of quantum mechanics. (d) Have an understanding of the first law of thermodynamics and its applications. (e) Know the theory and applications of second law of thermodynamics, understands the principles of Carnot engine and refrigerator. (f) Have an idea of entropy and solve related problems. (g) Understand the thermodynamic functions and their relationship. (h) Have a mathematical idea of change of state of materials.

Laboratory Paper IVB	Students will be able to (a) Find the wavelength of light by Newton's ring. (b) Experiment with double slit. (c) Calibrate and use polarimeter to measure specific rotation. (d) Find the boiling point of liquid by platinum resistance thermometer. (e) Calibrate and use thermocouple in measuring unknown temperature. (f) Experiment with ballistic galvanometer. (g) Experiment with alternating current in LCR circuit. (h) Verify network theorems (Thevenin's and Norton's theorem). (i) Find the band gap of semiconductor by four-probe method. (j) Find the hybrid parameters of CE Transistor. (k) Study the implementation of JFET amplifier.

Classical Mechanics II & Special Theory of Relativity	Students will be able to (a) Gain basic knowledge of central force motion. (b) Have basic knowledge of fluid mechanics. (c) Identify mechanical problems with different constraints. (d) Write and solve the Lagrangian for various kinds of systems of particles. (e) Have understanding of Hamiltonian formulation. (f) Gain basic knowledge of special theory of relativity. (g) Understand tensor formulation – metric tensor, four vectors and invariant intervals.
Quantum Mechanics II & Atomic Physics	Students will be able to (a) Have basic understanding of orthonormality. (b) Solve Schrödinger equation for simple potentials: one dimensional potential well and barrier. (c) Analyse the physical implications: bound states and unbound states. (d) Have basic understanding of the eigenvalue problems for energy, momentum, angular momentum. (e) Solve the problem of linear harmonic oscillator. (f) Have basic understanding of hydrogen atom problem. (g) Know the physics of atom and molecules. (h) Understand atomic spectrum, vector atom model and many electron model. (i) Know about the molecular spectroscopy, laser physics.

Nuclear and Particle Physics I & II	Students will be able to (a) Know the bulk properties of nuclei, structure of nucleus. (b) Have basic understanding of alpha decay, beta decay, gamma decay. (c) Know the physics of nuclear reactions and analyze the energy released during nuclear fission and fusion process. (d) Have basic understanding elementary particles and nuclear astrophysics. (e) Motivate the students about instruments - particle accelerator and detector.
Solid State Physics I & II	Students will be able to (a) Have basic understanding of crystal structure and structure of solids. (b) Know the dielectric properties, magnetic properties of materials. (c) Further know lattice vibrations and superconductivity.

Statistical Mechanics & Electromagnetic Theory	Students will be able to (a) Know about microstates and macrostates. (b) Have basic understanding of classical statistical mechanics and thereon derive thermodynamic variables. (c) Understand the basics of quantum statistical mechanics. (d) Derive Maxwell's field equations, set up and solve differential equations. (e) Analyse electromagnetic (em) waves in isotropic dielectric materials. (f) Have basic understanding of em waves in conducting medium. (g) Comprehend the various aspects of polarization of em waves. (h) Understand the propagation of em waves through optical fibers.
Laboratory Paper VIIB	Students will be able to (a) Find the wavelength of light by biprism. (b) Verify Fresnel's equation of electromagnetic theory. (c) Experiment with transmission grating. (d) Draw the B-H loop of anchor ring. (e) Find the inductances of coils and coefficient of coupling. (f) Find inductance with Anderson's bridge. (g) Use CRO and study Fourier spectrum of waveforms.

Laboratory Paper VIIIA	Students will be able to (a) Construct regulated power supply. (b) Fabricate astable multivibrator using transistors. (c) Construct and study the frequency response of CE voltage amplifier. (d) Design and study different OPAMP based circuits. (e) Construct and calibrate Wien Bridge amplifier. (f) Design and study temperature controllerof heat bath. (g) Verify following digital circuits: Flip-flops, multiplexers and de-multiplexers.
Laboratory Paper VIIIB	Students will be able to (a) Learn FORTRAN/C language. (b) Learn to write algorithm and programming code for different problems and execute them in a computer: • Finding the mean, median and mode of N numbers. • Summing different types of series. • Simple Matrix operations. • Using Gauss-Seidal method for solving linear equations. • Least square fit of data to straight line. • Root-finding by bisection and Newton-Raphson method. • Interpolation by Lagrange's method. • Integration by trapezoidal and Simpson's rule.
Compulsory Paper (Environment Studies)	Imparting basic knowledge about the environment and ecology, creating awareness about environmental pollution, developing responsibility for clean and green environment and maintenance of bio-diversity.

PO, PSO & CO for B.Sc. (Physics General) Course

Session: 2016-17

PROGRAM OUTCOMES (PO)

[PO.1] Critical Thinking: Take informed actions after identifyingthe assumptions that frame our thinking and actions, checking out the degree to which these assumptions areaccurate and valid, and looking at our ideas and decisions(intellectual, organizational, and personal) from differentperspectives.

[PO.2] Effective Communication: Speak, read, write and listenclearly in person and through electronic media in Englishand in one Indian language, and make meaning of theworld by connecting people, ideas, books, media andtechnology.

[PO.3] Social Interaction: Elicit views of others, mediatedisagreements and help reach conclusions in group settings.

[PO.4] Effective Citizenship: Demonstrate empathetic socialconcern and equity-centred national development, and theability to act with an informed awareness of issues andparticipate in civic life through volunteering.

[PO.5] Ethics: Recognize different value systems including yourown, understand the moral dimensions of your decisions,and accept responsibility for them.

[PO.6] Environment and Sustainability: Understand the issuesof environmental contexts and sustainable development.

[PO.7] Self-directed and Life-long Learning: Acquire the abilityto engage in independent and life-long learning in thebroadest context socio-technological changes.

PROGRAM SPECIFIC OUTCOMES (PSO)

[PSO.1] Students can apply fundamental principles of Physics and knowledge of mathematics both in ordinary, day to day settings and in more complex problems ofadvanced Physics, Science and Technology.

[PSO.2] The learner will develop creative thinking and the power of imagination in simple exercises as well as to analyse more complex problems in advanced Physics.

[PSO.3] Students have wide exposure in research, academia and industry for broader applications of Physics.

[PSO.4] The program will create an ability to describe the physical world, selecting appropriate equations, constructing models, interpreting mathematical results and critically comparing them with experiments and observations.

COURSE OUTCOME (CO)

Courses	CO
Classical Mechanics and Gravitation, Heat and Thermodynamics	Students will be able to (a) Know the preliminaries of vectors. (b) Have basic understanding of particle kinematics and rotational motion. (c) Derive dynamics of rigid bodies – moment of inertia along with its calculation for different objects. (d) Have knowledge about Gravitation and calculate gravitational field in spherical objects. (e) Develop an understanding of kinetic theory of gases. (f) Have knowledge about conduction and radiation of heat. (g) Develop basic understanding about various topics in thermodynamics.
General Properties of Matter, Waves and Vibrations & Geometrical Optics	Students will be able to (a) Have basic understanding of general properties of matter – elasticity, viscosity and tension tension. (b) Understand the free, damped and forced vibrations, superposition of simple harmonic motion. (c) Explain progressive wave motion and its equations. (d) Have a good foundation in geometrical optics. (e) Understands Fermat's principle and refraction through lens. (f) Have a thorough knowledge of different optical instruments.

Laboratory –Paper IIA	Students will be able to (a) Use slide callipers, screw guage, spherometer. (b) Do the practical of finding moment of inertia, modulus of rigidity. (c) Find the coefficient of linear expansion of a metal rod. (d) Find the refractive index of glass, liquid. (e) Use galvanometer, voltmeter,ammeter. (f) Compare the characteristics of resistor and diode. (g) Experiment with Wheatstone bridge, potentiometer.
Electricity and Magnetism	Students will be able to (a) Have an understanding of Gauss's law and its applications. (b) Get a good foundation of electric dipole. (c) Know the physics of dielectric materials in presence of electrostatic fields. (d) Have an understanding of steady current, thermoelectricity. (e) Understand the magnetic effect of steady current, derive Lorentz force. (f) Get knowledge of magnetic field in media and properties of magnetic materials. (g) Have detailed knowledge of electromagnetic induction. (h) Get basic understanding of varying currents and alternating current.
Physical Optics, Electronics & Modern Physics	Students will be able to (a) Understand Huygen's principle. (b) Know the basic theories of interference, diffraction and polarisation of light waves. (c) Have basic understanding about diodes and transistors. (d) Understand Boolean algebra and logic gates. (e) Have basic knowledge of special theory of relativity,Solid state Physics. Nuclear Physics. (f) Have a knowledge of quantum theory of radiation, basic quantum mechanics.

Laboratory – Paper IIIB	Students will be able to (a) Find the Young's modulus of iron beam, the coefficient of viscosity of water, the surface of water. (b) Use spectrometer and find the refractive index of glass prism. (c) Find the wavelength of light by Newton's ring method. (d) Calibrate and use polarimeter to determine the specific rotation of sugar solution. (e) Study the regulation characteristics of zener diode, bridge rectifier. Study the output characteristics of CE transistor. (f) Fabricate of logic gates and do experiment. (g) Experiment with series LCR circuit using ac voltage.

Application of Thermodynamics, Energy Sources, Electronics, Communications	Students will be able to (a) Know the production and measurement of high vacuum. (b) Have a knowledge of different engines, know the conventional energy sources like thermal power plant and hydel power plant. (c) Have an introduction to non-conventional energy sources like solar power, wind power, biogas plant etc. (d) Get basic understanding of the positive and negative feedback, Oscillator, OPAMP and its use, LED, SCR, diac, triac, 7-segment display. (e) Know combinational circuits and sequential circuits. (f) Get a knowledge of the instruments: CRO, digital multimeter, L and C measurement. (g) Understand the propagation of em waves in atmosphere. (h) Get an introduction to the transmission of em waves: AM, FM. Have basic idea of transmission of em waves through media: coaxial cables, optical fibres, satellite communications, microwave, internet.
Laboratory – Paper IVB	Students will be able to (a) Get familiarised with the hardware and the operating system of a computer. (b) Learn to solve simple problems by programming in C or Fortran as per the syllabus. (c) To use database package and word processor. (d) Convert voltmeter into ammeter and vice versa, its calibration. (e) Design and study OPAMP based circuits (inverting amplifier, non-inverting amplifier, differential amplifier, adder). (f) Construct regulated power supply using IC and study regulation. (g) Calibrate temperature sensor and its use in controlling temperature of heat bath. (h) Develop photo-sensor circuit and to use it to control the switching of a bulb.
Compulsory Paper (Environment Studies)	Imparting basic knowledge about the environment and ecology, creating awareness about environmental pollution, developing responsibility for clean and green environment and maintenance of bio-diversity.

Bagnan College

P.O.: Bagnan * District: Howrah

Department of Botany

PO, PSO & CO for B.Sc. (Botany General) Course

Session: 2016-17

PROGRAM OUTCOMES (PO)

[PO.1] Apply the knowledge of Plant science to make scientific queries and enhance the comprehension potential after completion of a general degree course.

[PO.2] The students will have the overview and understanding about the structure and relationship of various forms of cryptogams and phanerogams.

[PO.3] The students get to understand the basic concepts of phytogeography and ecology.

[PO.4] The students are made aware about the ecosystem so as to bring awareness on different aspects of Biodiversity and conservation of Biodiversity.

PROGRAM SPECIFIC OUTCOMES (PSO)

[PSO.1] Able to identify common cryptogams and phanerogams of surrounding area.

[PSO.2] Gain the knowledge of the basic anatomy of different group of plants.

[PSO.3] Understand the evolution of plant life on earth.

[PSO.4] Understand the basics of genetic inheritance.

[PSO.5] Develop basic idea about different phytogeographical area of the world.

[PSO.6] Explain the necessity of biodiversity conservation.

[PSO.7] Able to identify different plant pathogen of economically important crops and their control measure.

COURSE OUTCOME (CO)

[CO.1] The syllabus prescribed by the University of Calcutta for Botany General will help to understand various Angiosperm plant habits. The students will learn about various Angiosperm families and its economic value.

[CO.2] The learners develop better understanding about the various components of stem and wood during its secondary growth.

[CO.3] The students will be enlightened about the mechanism of pollination and basic structure of the embryo.

[CO.4] The students will be able to understand the structure and reproduction of certain selected algae, fungi, bryophytes, Pteridophytes and Gymnosperms.

[CO.5] The students will understand the relationship of complementary metabolic pathways such as photosynthesis in energy acquisition.

[CO.6] The students will get to know about the basic principles of plant function, principles of growth & development.

[CO.7] The students will comprehend the basic concepts of Mendelian genetics and familiarize with the concepts of evolution.

[CO.8] The students will understand the basic information on mushroom culture.

[CO.9] The course enhances the knowledge about the basic concepts of molecular biology, plant tissue culture and its applications.

[CO.10] The students will understand the importance of ecology and conservation.

[CO.11] The students will have the knowledge of the importance of microorganisms.

[CO.12] The students will understand the fundamental aspects of plant breeding.

Bagnan College

P.O.: Bagnan * District: Howrah

Department of Zoology

PO, PSO & CO for B.Sc. (Zoology General) Course

Session: 2016-17

PROGRAM OUTCOMES (PO)

[PO.1] Relates to the knowledge of different branches of Zoology and intend to complete the basic idea for completion of a general degree course.

[PO.2] Helps to better understand the diversity of organisms with their ecological and evolutionary significance.

[PO.3] Intends to develop positive attitude towards sustainable development.

[PO.4] Helps to acquire required skills in the study of nature, about the basic ecological experiments etc.

PROGRAM SPECIFIC OUTCOMES (PSO)

[PSO.1] Able to identify common animals.

[PSO.2] Aware of the basic organs of animal body.

[PSO.3] Understand the physiological and biochemical system of animal body.

[PSO.4] Understand the basic developmental processes of animals.

[PSO.5] Understand the basics of genetic inheritance.

[PSO.6] Develop basic idea about different ecosystems of the world.

[PSO.7] Explain the necessity of biodiversity conservation.

[PSO.8] Able to identify economically important animals around us.

COURSE OUTCOME (CO)

[CO.1] The syllabus prescribed by the University of Calcutta for the Zoology General Course helps to become familiar with the non-chordate and chordate world around us.

[CO.2] Create awareness about the taxonomical identification system of non-chordate and chordate fauna among students.

[CO.3] Develop better understanding about cellular biology.

[CO.4] Enhance the knowledge about Classical genetics and Molecular genetics.

[CO.5] Develop better understanding about parasitology, immunology, and helps to understand the importance of immune system.

[CO.6] Develop better understanding about various physiological and biochemical system of our body.

[CO.7] Enhance the knowledge about the basic developmental process of *Amphioxus*, frog and chick, helps to become familiar with the types of extra embryonic membranes, placenta etc.

[CO.8] Enhance the knowledge the different levels of ecosystem surrounding us. Create awareness about the conservation of biodiversity.

[CO.9] Enhance the knowledge about the basic techniques of Apiculture, Sericulture, Aquaculture, Lac culture, Poultry etc. Create awareness about the pest and pest management.

[CO.10] Develop better understanding about evolutionary processes, adaptation etc.

Bagnan College

P.O.: Bagnan * District: Howrah

Department of Computer Science

PO, PSO & CO for B.Sc. (Computer Science General) Course

Session: 2016-17

Computer Science as a General course has been studied at our College for the last 10 years. The contents of the course are very effective for all Under Graduate Science students to get insights into Computer Science and Applications. This course contains topics like computer language (C, C++, Java, Python, SQL, HTML and PHP) to communicate with machines and to design websites or other application programs. These help the students for mathematical computing, research operations, simulation design and scientific computing, data analysis, reporting in further higher studies or in the workplace. After completion of the course, a student can be a software developer, programmer, system architect, Web-designer, data analyst, data scientist, network engineer, hardware engineer, system developer, database administrator can work for any software support assistant.

PROGRAM OUTCOMES (PO)

[PO.1] Students are exposed to different parts and tools of the computer.

[PO.2] Students are exposed to a different type of data structure in computer memory and how these data can be accessed by computer programs. Here students are taught about the terms used in software engineering and how software is developed in a systematic manner.

[PO.3] Students are exposed to different tools for official work. They are taught the computer program to develop software and to handle the database.

[PO.4] Students are taught the different devices and software tools to make a communication system. They are exposed to write the shell program to handle UNIX operating system.

PROGRAM SPECIFIC OUTCOMES (PSO)

[PSO.1] Students develop their knowledge about the computers and terms associated with it

[PSO.2] Students develop their programming skills.

[PSO.3] Students learn to design a database for a particular organization.

[PSO.4] Students learn to design different electronic logic circuit.

[PSO.5] Students develop their knowledge in computer networks and communication technology.

COURSE OUTCOME (CO)

[CO.1] Computer Fundamentals and Digital Logic Circuit: The paper provides an overview of the computer structure, parts, and functions of each part. This paper also provides information about computer languages and other tools used in a computer. The paper includes the topic related to digital circuits like an adder, subtractor, multiplexer, flip-flops, registers, and counters.

[CO.2] Algorithm & Data Structure, Software Engineering & Database Management System: The paper provides the logic to write the computer program and how the data are stored in computer memory. It provides the steps to develop software. It also provides information about the database in different organizations.

[CO.3] MS Office, Programming in C, SQL: It provides software tools generally used in all types of official work. It provides computer languages C to communicate with the machine. It also provides the language SQL to design and access the database.

[CO.4] Communication and Computer Networks: It provides a basic overview of the devices used in communication technology and how these devices are connected to make communication between computers. The practical course provides the basic idea of UNIX and the commands to operate it.

Bagnan College

P.O.: Bagnan * District: Howrah

Department of Commerce

PO, PSO & CO for B.Com. (Honours) Course

Session: 2016-17

PROGRAM OUTCOMES (PO)

Such courses help to communicate effectively on commercial aspects with the society at large.

PROGRAM SPECIFIC OUTCOMES (PSO)

The students are acquainted with and understand the fundamentals of Commerce and Finance. Build the aptitude of the learner to become a successful entrepreneur, prepare a business plan, set up and handle own business enterprise. Maintain books of accounts; develop skills of working out of income, submission of Income Tax Returns, acquire various costing techniques and do the Cost Audit. Equip the learner to face the modern day challenges in commerce and industry, meet the requirements of corporate sector. Apply ethical principles and commit to the professional ethics and norms. To understand the impact of responsibility of pursuing the environment and demonstrate the need for sustainable development. Function effectively as an individual and as member or leader in diverse teams in multi –disciplinary settings. Speak, read, write and listen clearly in person and through electronic media in English and Hindi.

COURSE OUTCOME (CO)

[CO.1] Language: Language are specifically designed to promote students' language development through all four language domains: reading, writing, speaking and listening

[CO. 2] Financial Accounting: Students will learn systematically record transactions, sort and analyzing them, prepare financial statements, assessing financial position, and aid in decision making with financial data and information about the business.

[CO.3] Business Regulatory Framework: Business law include maintaining order, protecting rights and liberties, establishing standards, and resolving disputes, make better decisions, legal help when it comes to businesses and their interactions with individuals, government agencies, and other businesses.

[CO.4] Principles & Practice of Management and Business Communication:
Principles & Practice of Management: Examination of management theory and provide opportunities for application of these ideas in real world situations. This examination focuses on the managerial functions of Assessing, Planning, Organizing, and Controlling. Both traditional and cutting-edge approaches are introduced and applied. Specific attention is paid throughout the course to the ethical implications of managerial action and inaction.

Business Communication: To understand and appropriately apply modes of expression, i.e., descriptive, expositive, narrative, scientific, and self-expressive, in written, visual, and oral communication.

[CO.5] Economics: Students will learn how markets and other governance structures organize core economic activities, such as production, distribution, and consumption, and the growth of productive resources and macroeconomic policies is to maximise the level of national income, providing economic growth to raise the utility and standard of living of participants in the economy.

[CO.6] Business Mathematics & Statistics: This course is to teach the mathematical concepts and principles of multivariate calculus, vector and matrix algebra, differential equations and their applications in business and economics. The course involves concept understanding, problem formulation and solution.

This subject provide a basic knowledge of the application of mathematics and statistics to business disciplines; develop the ability to analyse and interpret data to provide meaningful information to assist in making management decisions; and develop an ability to apply modern

[CO.7] Information Technology & Its Application in Business: Analyse and model the flow of information through business processes. Formulate plans and architectures for the capture, storage and retrieval of data. Develop computer programs to support or automate business processes. Apply networking concepts and technologies to support business needs.

[CO. 8] Principle of Marketing Management & e-Commerce: To introduce the marketing concept and how we identify, understand and satisfy the needs of customers and markets. To analyse companies and competitors and to introduce **marketing** strategy to increase awareness of the strategic and tactical decisions behind today's top performing brands.

[CO. 9] Direct and Indirect Taxation: To acquaint the students with basic principles underlying the provisions of direct and indirect tax laws and to develop a broad understanding of the tax laws and accepted tax practices. To give an understanding of the relevant provisions of Direct Tax Code. To introduce practical aspects of tax planning as an important managerial decision-making process. Expose the participants to real life situations involving taxation and to equip them with techniques for taking tax-sensitive decisions.

[CO.10] Cost and Management Accounting: To understand the basic concepts and processes used to determine product costs, to interpret cost accounting statements, to analyze and evaluate information for cost ascertainment, planning, control and decision making.

[CO.11 Auditing: Checking the authenticity and validity of transactions which is done. Examining arithmetical accuracy of books of accounts, costing, balancing etc. It help to provide an independent opinion to the shareholders on the truth and fairness of the financial statements, whether they have been properly prepared in accordance with the Companies Act and to report by exception to the shareholders on the other requirements of company law.

[CO.12] Indian Financial System & Financial Market Operations: the fundamental concepts and tools of finance, investment decisions, financing decisions and dividend decisions, operations of capital markets: the equity market, the bond market and the derivatives market, and the financial assets traded in each of these markets. Explain the global financial environment and the globalization process experienced by multinational corporations.

[CO.13] Financial Management: It provides students with the opportunity to apply foundation of business knowledge and skills to develop competent decisions in the areas of accounting, economics, finance, information systems, management and marketing.

[CO.14] Project Work: This course is designed for entrepreneurship development and project planning in order to motivate the students to take up self-employment and research work in future.

[CO.15] Environmental Studies: Creating the awareness about environmental problems among people. Imparting basic knowledge about the environment and its allied problems. Developing an attitude of concern for the environment. Motivating public to participate in environment protection and environment improvement.

PO, PSO & CO for B.Com. (General) Course

Session: 2016-17

PROGRAM OUTCOMES (PO)

Such courses help to communicate effectively on commercial aspects with the society at large.

PROGRAM SPECIFIC OUTCOMES (PSO)

The students are acquainted with and understand the fundamentals of Commerce and Finance. Build the aptitude of the learner to become a successful entrepreneur, prepare a business plan, set up and handle own business enterprise. Maintain books of accounts; develop skills of working out of income, submission of Income Tax Returns, acquire various costing techniques and do the Cost Audit. Equip the learner to face the modern day challenges in commerce and industry, meet the requirements of corporate sector. Apply ethical principles and commit to the professional ethics and norms. To understand the impact of responsibility of pursuing the environment and demonstrate the need for sustainable development. Function effectively as an individual and as member or leader in diverse teams in multi –disciplinary settings. Speak, read, write and listen clearly in person and through electronic media in English and Hindi.

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attested

Principal
Bagnan College, Bagnan, Howrah

27/8/22