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**PROGRAM OUTCOMES, PROGRAM SPECIFIC OUTCOMES AND COURSE OUTCOMES
FOR ALL THE PROGRAMS OFFERED BY THE INSTITUTION**

PROGRAMME OUTCOME (PO)

- To impart English based undergraduate level education i.e. **Bachelor Degree in Science and Arts courses** in accordance with University (WBSU) and UGC guidelines.
- Understanding and Correlating between **Theory and Experimental aspects** of the subjects. Highly essential for Laboratory based subjects.
- Developing concepts in **Pure Subjects** along with **Applied and Interdisciplinary subject Areas** for **real life applications**.
- Identify various **Academic and Professional areas**.
- Catering to the needs of **present day problem thrust areas** and **service to human race**.

PROGRAMME SPECIFIC OUTCOMES (PSO) – [ARTS FACULTIES]

- Bengali – Courses offered – Bachelor and Master Degree. Develop proficiency acumen, language skills in reading, writing, interpreting, communication, journalism, etc..
- English – Courses offered – Bachelor and Master Degree. Develop command in reading, writing, interpreting, public speaking, linguist, etc..
- History –. Socio – Cultural National and International background knowledge, Phases of cultural heritage and dynasty in India, evolution of sources and arguments.
- Sanskrit – Gain knowledge in Vedic and Classical Sanskrit, Culture and Heritage. Developing aspects in Meditation and its application for better and balanced lifestyle.
- Philosophy – Study of this course helps to develop the ability of thought synthesis as well as analytical and abstract thought processing skills become enhanced. Curriculum of this course is designed in such a way that primarily aims at society development and human resource development. This course orients pupils into two newly designed professional ethics namely Media Ethics and Business Ethics thereby inspiring them to pursue these ethical teachings in their future professional life.
- Political Science – Role of politics and respective public political systems in different spheres in our society (National and International), their influence to improve upon discipline specific activities and future career goals.

- Botany: –
 1. To make the student understand plant biodiversity for the benefit of human society.
 2. To aware about environmental threat and influence on human population
 3. To Identify and categorize the plant community with their potentiality and economic importance
 4. To enrich the students with the knowledge about the building blocks of organisms and biomolecules
 5. To acquaint the students about the microbial world with their influence and application.
 6. To develop knowledge about plant diseases caused by various pathogens and their implications and control.
 7. To generate overall ideas about the fungal world and their beneficial and ill effects.
- Chemistry:– The purpose of the undergraduate chemistry program (under the affiliation of WBSU) is to provide the key knowledge base and laboratory resources to prepare students for careers as professionals in the field of chemistry. The course offers Choice Based Credit System that enable students a firm foundation in the fundamentals and application of current chemical and scientific theories including those in Analytical, Inorganic, Organic and Physical Chemistry including the synthesis of organic compounds and ability to determine kinetic and thermodynamic phenomena of reactions with the help of modern instrumental techniques. Practical skill development for quantitative and qualitative analysis of a sample enables the students to expertise in problem solving, critical thinking and analytical reasoning as applied to scientific problems and will be able to function as a member of an interdisciplinary problem solving team.
- Economics:– Students will learn how scarcity causes individuals and groups to evaluate opportunity costs. Students will learn to evaluate how changes in supply and demand affect markets. Students will be able to distinguish between effective and ineffective government interventions. Students will learn the three basic macroeconomic problems: recession, unemployment and inflation. Students will be able to recognize the importance of national economic growth. Students will be able to understand and analyse the trend in Indian and World Economy.
- Geography:– Principles of physical and human geography, Geospatial Tools – Computer based GIS and Remote Sensing, Applied Geography, Cartographers – National Atlas and Thematic Mapping Organizations, Study of Geomorphology, processes of Landform development, Geomorphic Disasters – Floods, Landslides, River bank erosion – their Mapping and Mitigation measures, Economic and Urban geography, and Biogeography (Soil and Zoo Geography).
- Mathematics – Fundamental Skills in Pure and Applied Mathematics, Statistical Mathematics, Mathematical Modelling, Mathematical Reasoning, Geometrical and Topological address system to shape global structure and Computational Methods.
- Physics –. Development of Theory and Experimental knowledge, Mathematical Concepts along with different aspects of Physics, Real-time and Practical Problems, Modern Opto-Electronic and Instrumentation Applications, Astronomy and Space Science, Telecommunication, Automatic Control Systems, Nano-science and technology, Future introduction to Interdisciplinary areas – Biophysics and Geophysics.
- Zoology –
 1. Introduce the students to the world of Non-Chordates and Ecosystem where they acquire the knowledge of population, community and various aspects of wild life.
 2. In the second program, the students continue to study Non-Chordates as well gets exposure to the world of cell biology, learning the basic concepts of cell organelles and, cell division and how cell signalling.

3. Through this program, the students learn about various aspects Chordate biology. Simultaneously they are provided with the knowledge of physiology, endocrinology and biochemistry.

4. Here, the students are introduced to anatomy of the body, comparative analysis of various systems and their physiology. Further, they learn how the body's immune system functions.

5. Genetics of life and molecular biology are taught in this program. They are also introduced to various techniques of experimental biology.

6. Basic concepts of Developmental biology and Evolutionary biology are provided to the students in this program.

COURSE OUTCOME (CO)

Course Outcomes are statements clearly describing the meaningful, observable and measurable knowledge, skills and/or dispositions students will learn in this course.

BENGALI

- Students will have acquire knowledge and understanding of basic Bengali grammar and vocabulary
- Students will have the knowledge and understanding of the appropriateness of basic Bengali structures and expressions in a given context
- Students will have the ability to produce short passages in written Bengali on everyday topics.

ENGLISH

- Students will develop the ability to write well—critically and creatively.
- They will be able to demonstrate the ability to think critically about the ways in which various aspects of identity, subject positions, and affiliations function.
- Students will acquire the demonstrable ability to use the terms, categories, and concepts of critical or “close” reading.

SANSKRIT

- Students will develop an increased ability to read and understand Sanskrit texts & vedic text & literature.
- Students will have an increased knowledge and understanding of Sanskrit grammar
- Students will learn basic familiarity of the history of Sanskrit literature
- Students will understand basic familiarity of Sanskrit culture and religious background.

HISTORY

- Students will demonstrate in discussion and written work their understanding of different peoples and cultures of the past and will demonstrate ethical use of sources and provide accurate and properly formatted citations in formal papers.
- Students will demonstrate in written work and class discussions the ability to recognize and articulate the diversity of human experience.

POLITICAL SCIENCE

Students graduating in Political Science

- Will be able to formulate and construct logical arguments about political phenomena and an ability to evaluate these through empirical and theoretical methods
- Will have the understanding of how political institutions emerge, how they operate, how they interact with their external environment, and how they shape individual and collective behaviour.

PHILOSOPHY

Students graduating in Philosophy will be able to

- Define key ethical concepts, including concepts such as good, Students graduating in Philosophy will be able to
- Identify and explain the main ethical or moral issues that arise in everyday life, right, free will, determinism, relativism, absolutism, obligation, virtue, prima facie, duty, action, intension, etc.
- including friendship, trust, love, fidelity, promises, dignity, honor, respect,
- Recognize, analyze, and evaluate art and beauty in relation to other sources of tolerance, acceptance, vulnerability, intimacy, etc
- Apply philosophical methods through logical principles and abstract thought to examine, assess and address any issue. value, including ethical, epistemic, social/political, and personal value.

GEOGRAPHY

- Students will develop a solid understanding of the concepts of “space,” “place” and “region” and their importance in explaining world affairs.
- Students will understand general demographic principles and their patterns at regional and global scales.
- Students will be able to locate on a map major physical features, cultural regions, and individual states and urban centers.
- Students will understand global and regional patterns of cultural, political and economic institutions, and their effects on the preservation, use and exploitation of natural resources and landscapes.
- Students will be able to understand RS and GIS-useful for mapping resources and analyzing data.

ECONOMICS

- Understand the basic concepts and principles in economics.
- Critically analyze the current trends and problems of world and Indian economy.
- Learn to apply quantitative and qualitative methods and theories of economics to contemporary issues.

PHYSICS

- Students will demonstrate knowledge of selected topics from classical mechanics, quantum mechanics, statistical mechanics, electrodynamics and thermal physics, and be able to apply this knowledge to analyze a broad range of physical phenomena theoretically as well as experimentally.
- Students will be capable of oral and written scientific communication, and will prove that they can think critically and work independently.

CHEMISTRY

Students graduating in Chemistry will be able to understand

- The fundamentals of acid/base equilibria, including pH calculations, buffer behavior, acid/base titrations, and their relationship to electrophiles and nucleophiles
- The thermodynamic and kinetic forces involved in chemical reactions which determine how much and how soon products are formed
- Current bonding models for simple inorganic and organic molecules in order to predict structures and important bonding parameters
- General periodicity patterns of (organic/inorganic) molecules, and the ability to design synthetic approaches to such species.
- How to design and perform experiments to determine the rate, order, and activation energy of chemical reactions by varying concentrations and/or temperature
- Methods to measure equilibrium concentrations and equilibrium constants for acid-base, solubility, and complexation reactions given initial concentrations of reactant and quantitative and qualitative analysis of samples.

MATHEMATICS

Students graduating in Mathematics will be able

- To apply mathematical concepts and principles to perform computations.
- To use and analyze graphical representations of mathematical relationships.
- To communicate mathematical knowledge and understanding.
- To apply technology tools to solve problems.
- To use expertise in programming.

BOTANY

- Students will learn the plant diversity and classification of plants.
- Students will understand the interrelationships of plants and their environment.
- Students will be able to identify local botanical species.
- Students will develop enhanced environmental understanding and awareness
- Students will be able to identify local plants by local name in the field
- Students will learn about different life processes in plants.

ZOOLOGY

- Students learn to identify the major groups of organisms within a phylogenetic framework.
- Students will learn the evolutionary phenomenon with scientific evidences and appreciate the unity and diversity of life on earth. They acquire the knowledge about modification has shaped animal morphology, physiology, life history, and behavior.
- Students will learn the level of the gene, genome, cell, tissue, organ and organ-system, physiological adaptations, development, reproduction and behavior of different forms of life.