

## **PROGRAMME OUTCOMES & PROGRAMME SPECIFIC OUTCOME**

### **DEPARTMENT OF BOTANY**

#### **PROGRAMME OUTCOMES**

1. Promotion of self study which enhance the ability to observe accurately and objectively.
2. The course medium is in english. interaction with the students is also effective.
3. Student interact with the social activist in relation with maximum usefulness of biofertilizers.
4. Student are made aware of pollution problems and waste management and the importance of green environment.
5. Apply ethical principles and count to environmental ethics and responsibilities and norms of the biodiversity conservation.
6. The course highlighted to conserve and study the suitable development.
7. Acquiring knowledge and develop the ability to work hard.

#### **PROGRAMME SPECIFIC OUTCOME**

Import knowledge of science as basic objective of education.

A Scientific attitude to make students create open minded and curiosity.

To have knowledge about various plant groups from lower to higher groups.

To make the students aware about biodiversity conservation and sustainable use of plants.

Apply the knowledge of basic science, life sciences and fundamental process of plant to study and analyse plant form.

Develop skills in practical work experiments, equipments and laboratory use along with collection and interpretation of biological materials and data.

## DEPARTMENT OF BCA

### **PROGRAM SPECIFIC OUTCOME (PSO)**

- Computer application graduates will apply their knowledge and skills to succeed in their career/ professional development and/or postgraduate education to pursue flexible career paths amidst future technological changes.
- Our graduates will apply basic principles and practices of computing grounded in mathematics and science to successfully complete hardware and/or software related engineering projects to meet customer business objectives and/or productively engage in research.
- Our graduates will demonstrate a sense of societal and ethical responsibility in their professional endeavors, and will remain informed and involved as full participants in our profession and our society.
- Our graduates will demonstrate strong communication skills and the ability to function effectively in multi-disciplinary teams.
- Our graduates will demonstrate strong bonding in team and display distinct leadership traits.
- Our graduates will be prepared for civil service as well as public service examination.

### **PROGRAM OUTCOME (PO)**

- Students to have knowledge and expertise in at least one procedure-oriented and object-oriented programming language.
- Students to have a wide perspective on software development including web based applications as well as graphic applications.
- Students to have the familiarity with Desktop Publishing system.
- Students to have the ability to design and implement optimal databases using current technologies.
- Students to have understanding of design and working principles of the digital electronics.
- Students will be able to design and analyze algorithms as per need by relating the data structure and algorithms.
- Students will be able to identify and describe the communication networks technologies in local area networks and the Internet and countermeasures for security threats.
- Students will be aware of the design principles of Operating Systems specializing on at least one popular Operating System.
- Students will have understanding of various legislative acts and articles related to information technologies and international initiative in the field of IT laws.
- Students will be able to solve simple computational problems involving mathematical structures and processes.
- Students will have the concepts regarding the architecture and organization of a computer system.
- Development of good communication skills in both written and verbal.
- Students will understand contemporary issues and provide engineering solutions for solving social problems.
- Students will acquire skills and ability for life-long learning.

## DEPARTMENT OF CHEMISTRY

### **PROGRAMME OUTCOMES OF UNDERGRADUATE COURSE IN CHEMISTRY**

- (i) The students after completing course at graduation level in chemistry will develop an understanding of major concepts, theoretical principles and experimental findings in chemistry.
- (ii) They will have an ability to work effectively in diverse teams in both classroom and laboratory.
- (iii) They are able to employ critical thinking and efficient problem solving skills in the four basic areas of chemistry (analytical, inorganic, organic, and physical).
- (iv) They are able to conduct experiments, analyze data, and interpret results, while observing responsible and ethical scientific conduct.
- (v) The students have effective written and oral communication skills, especially the ability to transmit complex technical information in a clear and concise manner.
- (vi) They are able to use modern library searching and retrieval methods to obtain information about a topic, chemical, chemical technique, or an issue relating to chemistry.
- (vii) They know the proper procedures and regulations for safe handling and use of chemicals and can follow the proper procedures and regulations for safe handling when using chemicals.
- (viii) They are able to understand the ethical, historic, philosophical, and environmental dimensions of problems and issues facing chemists.
- (ix) They find employment in industry or government or find employment in school systems as instructors or administrators.
- (x) They are able to understand the chemical basis for biological phenomena and cellular structure and how physiological conditions influence the structures and reactivities of biomolecules.
- (xi) They have an idea of the chemical properties of amino acids, cofactors, sugars and the basic principles of protein and polysaccharide structure.
- (xii) Academic and Professional Integrity-students will demonstrate awareness and understanding of the ethical standards of their academic discipline and/or profession.
- (xiii) They are familiar with application of safety and chemical hygiene regulations and practices.

## DEPARTMENT OF ECONOMICS

### **PROGRAMME OUTCOME:**

1. The students after completion of B.A. programme in Economics will develop understanding of the major concepts and principles in Economics.
2. Students will be able to think critically following the economic way of thinking.
3. They will be able to analyse economic behavior in practice.
4. They have effective oral communication and writing skills for clearly expressing economic point of view.
5. They will have an ability to work efficiently in diverse field of Statistics, Economics and banking.
6. The students are able to use modern library, searching and retrieval methods to obtain information about topics/subjects relating to Economics from various sources.
7. They secure employment in various services of Economics, Statistics and Banking.

### **PROGRAMME SPECIFIC OUTCOME:**

1. Economics students in general will be able to pinpoint and understand the past, present economic conditions of the country. They will also be able to forecast the future course of changes and development through their knowledge of policies and programmes set by the governments and other development agencies. They are equipped with the techniques to find solution of the problems like mobilization of manpower and materials available in the country. Students will be able to analyse historical and current events from an economic perspective.
2. As the Under Graduate Course (UGC) contains the fields like statistics, mathematics and economics principles, it enhances them to compute and assess the real situation of the economy including the size and changes of population, income pattern, nature of an extend of employment, rate of development with pattern of investments and savings, policies in relation to other countries.
3. Basically, economic graduates are familiar with the knowledge and application of microeconomics and macroeconomics for the formulation of policies and planning. They are equipped with all the relevant tools/ knowledge based on economic principles including market functions and structures, efficiency in manpower and resources management, need of credit/finance for initiating and accelerating projects.
4. Students have the knowledge of Financial Institutions and Markets, and understand the structure and functions of banking.

## DEPARTMENT OF EDUCATION

### **PROGRAMME OUTCOME:**

The work put into establishing the vision, purpose, and goals of the program should help provide direction for creating program outcomes. Basically, it is necessary to take those goals and translate them into tangible, 'measurable' outcome statements. Biggs and Tang (8) describe an outcome as...a statement of how we would recognize if or how well students have learned what is intended they should learn...[it] tells us what, and how well, students are able to do something that they were unable, or only partially able, to do before teaching. Good teachers have always had some idea of that...in outcomes-based teaching and learning, we are simply making that as explicit as we can – always allowing for unintended but desirable outcomes.

- (1) The students after completing course at Graduation level in Education will develop an understanding of major concepts, theoretical principals in Education.
- (2) They will have an ability to work effectively in diverse field of Teaching – Learning process.
- (3) They are able to employ critical thinking and efficiency in problems solving ability in Education.
- (4) The students have effective writing and oral communication skills especially the ability to transmit complex information in a clear and concise manner.
- (5) It enable the students to use modern library, searching and retrieval methods to obtain information about a topic, or an issue relating to Education.
- (6) They have the ability to understand the Ethical, historic, philosophic and environmental dimensions of problems and issues facing Education.
- (7) They find employment in Private, industry or government school as Teacher or administrator.

### **PROGRAMME SPECIFIC OUTCOME:**

- (1) Students have an ability of understanding human Psychology, from childhood to adulthood.
- (2) They developed an ability to know the philosophical foundations of various theories of Education, and perceive the society meaningfully.
- (3) They have the ability to understand the historical development of Indian Education through the ages.
- (4) They have the knowledge about major Issue faced by Indian Education at various level and stages of Education and the trends of Indian Education.
- (5) They are acquainted with the knowledge of basics of research, how to undertake different researches.
- (6) Students are equipped with the fundamental of statistics – how to calculate means, median and standard deviation.
- (7) They understand the technique of different measuring tools and Technique involved in Measurement and Evaluation.
- (8) They have the ability to apply various teaching- learning aids in classroom situation.

- (9) They have the ability to construct and develop curriculum in accordance with the society's requirement.
- (10) They are well acquainted with dealing problems relating to implementing, executing of certain innovations happened in the organisation as they are quite aware of Management.
- (11) They have a thorough knowledge of the Educational history of the world.
- (12) They can undertake project work at ease, in case of recruitment to teacher they can easily adapt to the situation as they have the pre-requisite knowledge of art of Teaching.

### **DEPARTMENT OF ENGLISH**

#### **PROGRAMME OUTCOME**

Student graduating with a Bachelor of Arts degree in English will have demonstrated an ability to :

- (1) read, interpret and write about a diverse range of texts in English
- (2) understand those texts analytically and critically
- (3) understand those texts on the basis of careful close reading
- (4) understand those texts through past and current literary theory
- (5) understand that those text are culturally constructed in time, place and tradition
- (6) understand how those texts inform culture
- (7) participate in the critical and cultural discourses of English
- (8) participate appropriately through multiple spoken and written forms
- (9) analyze instances of the variety of literary forms closely in terms of style, figurative language and convention.

### **DEPARTMENT OF MATHEMATICS**

#### **PROGRAMME OUTCOMES**

**At the graduation in Science faculty with mathematics students should have**

- (1) Acquired the knowledge with facts and figures related to Mathematics, Physics and Chemistry
- (2) Understand the basic concepts, fundamental principles and scientific theories related to various scientific phenomena and their relevance in the day-to-day life.
- (3) Understand application mathematics in different fields
- (4) Analyze given data and draw the conclusion
- (5) Been able to think creatively to propose novel ideas in explaining facts and figures or providing new solutions to the problems

(6) Been able to pursue higher studies in Mathematics and Computer Application

(7) Been able to work in different Scientific Institution

### **PROGRAMME SPECIFIC OUTCOMES**

#### **Students of B.Sc. with major in mathematics should**

- (1) Understand the limit of functions, use to prove properties of continuous functions and derivative of functions
- (2) Expound upon the concept of Reimann integrability
- (3) Demonstrate when a binary algebraic structure forms Group and Group properties
- (4) Treat special types of Rings such as Euclidean domain and Principal ideal domain
- (5) Solve linear and nonlinear equations
- (6) Calculate definite integral using an appropriate numerical method
- (7) Derive methods for various mathematical operations and tasks such as interpolation, differentiation and integration
- (8) Be able to use the facility with mathematical and computational modeling of real decision making
- (9) Use the methods to design experiments, analysis and interpretation of data and synthesize the information to provide valid conclusion

## **DEPARTMENT OF PUBLIC ADMINISTRATION**

### **PROGRAMME OUTCOME:**

The B.A in Public Administration provides students with the knowledge and experience needed to begin careers in the not-for-profit and public service sectors.

The Public Administration Department is dedicated to provide a programme that will:

1. Develop the conceptual foundation requisite for success in public administration careers.
2. Establish the ability to function effectively in complex, culturally diverse organisational structures.
3. Promote student commitment to ethical standards of managerial practice.

The programme is dedicated to maintaining an educational environment in which diversity can flourish and an atmosphere in which mutual respect characterizes relations among members of a pluralist community.

### **PROGRAMME SPECIFIC OUTCOME:**

Students who graduate with a B.A in Public Administration will

1. Understand the basic concepts of public administration.
  - a) General concept of public administration and bureaucracy.
  - b) Understanding knowledge of human resource management.
  - c) Understanding knowledge of public budgeting and finance.
  - d) Understanding knowledge of policy analysis.
  - e) Understanding knowledge of information management and technology.
  - f) Understanding how administrative responsibility , accountability, efficiency, diversity, and teamwork within the context of government and non-profit public service programs.
2. Have the research skills to critically analyze public administration issues and analyse managerial issues and policy recommendations.
3. Have the ability to communicate and interact productively with a diverse and changing workforce and citizenry.
4. Be able to develop/formulate a public policy response to social or economic problem.

## DEPARTMENT OF GEOGRAPHY

### **PROGRAM OUTCOMES**

- Students will have a general understanding of physical geographic processes, the global distribution of landforms and ecosystems, and the role of the physical environment on human populations.
- Students will have a general understanding of global human population patterns, factors influencing the distribution and mobility of human populations including settlement and economic activities and networks, and human impacts on the physical environment.
- Students will be able to think in spatial terms to explain what has occurred in the past as well as using geographic principles to understand the present and plan for the future.
- Students will have a general understanding of how the physical environment, human societies, and local and global economic systems are integral to the principles of sustainable development.
- Students will have a general understanding of the various theoretical and methodological approaches in both physical and human geography and be able to develop research questions and critically analyze both qualitative and quantitative data to answer those questions.

### **PROGRAM SPECIFIC OUTCOMES**

- 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 understand the key concepts in physical geography of environmental systems, process linkages, variable scale, and "cause and effect" and how they relate to the influence of climate, geology, and human activities in shaping the earth surface.
- Students will be able to use accepted field, laboratory, geospatial, and statistical techniques to quantify the quantity, characteristics, and history of physical phenomena for geographic research and natural resources management.
- Students will be able to use the scientific method including critical thinking, sampling, hypothesis formulation and testing, and controlled experimentation to assess environmental problems, and be able to effectively communicate research objectives, methodology, results, interpretations, and conclusions in oral and written formats.

## DEPARTMENT OF HISTORY

### **PROGRAMME SPECIFIC OUTCOME (PSO)**

1. Students will have the ability to apply historical methods to evaluate critically the past and how historians and others have interpreted it.
2. Students will be able to acquire basic historical research skills, including the effective use of libraries, archives and data bases.
3. Students will be able to organise and express their thoughts clearly and coherently both in writing and orally.
4. Students will be able to demonstrate broad knowledge of historical events and periods and their significance
5. Students will be able to recognise how different individuals, groups, organisations, societies, cultures, countries and nations have affected history. History gave the students wisdom and foresight for the future.

### **PROGRAMME OUTCOME (PO)**

1. After the completion of BA, history scholars will be able to distinguish between primary and secondary sources and identify and evaluate evidence
2. Students will demonstrate in discussion and written work their understanding of different peoples and cultures in past environments and of how those cultures changed over the centuries.
3. They will be able to produce their own historical analysis of documents and develop the ability to think critically and historically when discussing the past
4. The study of history will give them the ability to compare and contrast different processes, modes of thoughts and modes of expression from different historical time periods and in different geographical areas.
5. Students will offer multi-causal explanations of major historical developments based on a contextualized analysis of interrelated political, social, economic, cultural and intellectual processes
6. Students will be able to write an original research paper that locates and synthesizes relevant primary and secondary sources and has a clear, coherent and plausible argument, logical structure, proper references.
7. Students will present orally their research or a summary of another's research in an organized, coherent and compelling fashion.

## **DEPARTMENT OF PHYSICS**

### **PROGRAMME OUTCOME:**

Physics deals with a wide variety of systems, certain theories are used by all physicists. Each of these theories were experimentally tested numerous times and found to be an adequate approximation of nature. Physics uses mathematics to organize and formulate experimental results. From those results, precise or estimated solutions, quantitative results from which new predictions can be made and experimentally confirmed or negated. The results from physics experiments are numerical measurements. Technologies based on mathematics, like computations have made computational physics an active area of research.

### **PROGRAMME SPECIFIC OUTCOME**

The theory of classical mechanics(it is a branch of physics) accurately describes the motion of objects, provided they are much larger than atoms and moving at much less than the speed of light. These theories continue to be areas of active research today. Solid State Physics develop a basis for future learning and work experience. Nuclear Physics develop familiarity with nuclear and particle physics, facilitating informed decisions as students pursue research projects, internships, careers, and graduate study. Quantum mechanics develop problem solving methods that will include mathematical as well as numerical computations and solutions. Material science is a very wide branch where extensive research is going on. Thermal, electrical, optical and magnetic properties of matter provide a strong foundation in that direction. Thermal and Statistical Physics explore various applications related to topics in material science and the physics of condensed matter. The course of Electronics will make the students to identify the electronic components and their working principles.

## **DEPARTMENT OF POLITICAL SCIENCE**

### **PROGRAM OUTCOMES**

Students completing the requirements for a B.A. degree in Political Science will be able to:

1. Students write clearly and with purpose on issues of international and domestic politics(India & Mizoram) and public policy;
2. Students participate as a civically engaged member of society(NGO);
3. Students analyze political and policy problems and formulate policy options;
4. Students use internet and College library resources to research key local, state, national and international policy issues and present results;

5. College students demonstrate competency with basic tools underlying modern social science research including competency in statistics and qualitative analysis
6. They demonstrate critical thinking, including the ability to form an argument, detect fallacies, and martial evidence, about key issues of public policy and politics;
7. Students discuss the major theories and concepts of political science and its subfields; and
8. Students deliver thoughtful and well articulated presentations of research findings.
9. Understand the US, UK, Switzerland & Chinese government.
10. Distinguish between Unitary and Federal Systems.
11. Recognize key theories in International Relations (Liberal Idealist and Realist).
12. Differentiate Presidential from Parliamentary systems.
13. Identify key Political Philosophers.

### **DEPARTMENT OF ZOOLOGY**

#### **PROGRAM OUTCOME**

- PO 1. Apply the knowledge of various branches of Zoology and General biology meant both for a graduate terminal course and for higher studies.
- PO 2. Develop positive attitude towards sustainable development.
- PO 3. Understand the unity of life with the rich diversity of organisms and their ecological and Evolutionary significance
- PO 4. Acquire basic skills in the observation and study of nature, biological techniques, experimental skills and scientific investigation

#### **PROGRAM SPECIFIC OUTCOMES**

- PSO1. Identify and list out common animals
- PSO2. Explain various physical changes in our bodies
- PSO3. Analyze the impact of environment on our bodies
- PSO4. Understand various genetic abnormalities
- PSO5. Develop respect for nature
- PSO6. Explain the role and impact of different environment conservation programs
- PSO7. Identify animals beneficial to humans
- PSO8. Identify various potential risk factors to health of humans
- PSO9. Explain the importance of genetic engineering
- PSO10. Use tools of information technology for all activities related to zoology

## DEPARTMENT OF MIZO

### **PROGRAM SPECIFIC OUTCOMES**

PSO1. Students will become accomplished, active readers who appreciate ambiguity and complexity, and who can articulate their own interpretations with an awareness and curiosity for other perspectives.

PSO2. Students will be able to write effectively for a variety of professional and social settings. They will practice writing as a process of motivated inquiry, engaging other writers' ideas as they explore and develop their own. They will demonstrate an ability to revise for content and edit for grammatical and stylistic clarity.

PSO3. Students will gain knowledge of the history and development of Mizo literatures as well as Mizo history and culture. They will develop an ability to read texts in relation to their historical and cultural contexts, in order to gain a richer understanding of both text and context, and to become more aware of themselves as situated historically and culturally.

PSO4. Students will develop a passion for literature and language. They will appreciate literature's ability to elicit feeling, cultivate the imagination, and call us to account as humans.

PSO5. Students will have a critical mind while reading literary text, and deploy ideas from these texts in their own reading and writing.

