



KHALISANI MAHAVIDYALAYA

AISHE CODE – C44706

Khalisani, Chandannagar, Hooghly, Pin-712138

Ph. No. (033)-2682-5530/9517/8856

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Enlightenment through Education

Program Outcome (PO) of the department of Botany

- Overall concept and knowledge about prokaryotes, Algae, Fungi & plant diversity starting from unicellular microbes to Gymnospermic & Angiospermic plants in term of their classification, habitat, morphological & anatomical structures, functions and relationship with the environments including their economic values.
 - Student learn in hand practical knowledge both in laboratory and also in the fields in those fields: plant characterization, identification; plant anatomy study skill, wide range of physio-chemical analysis of plant material in context of plant physiology & biochemistry, plant pathological observation, Mendelian genetics & its derivatives, analyze data using appropriate statistical methods, pharmacognosy analysis, bacterial isolation & staining procedures, fossil study & analysis, ecological adaptability study.
 - Students able to think logically and scientifically into structural outline, gather appropriate knowledge and skill for their future career, planning & conduction independent project proposal and made appropriate report on it.
 - Apply the knowledge of basic science, life sciences and fundamental process of plants to study and analyze any plant form.
 - Analyze the problems design proper procedures for solution for any experimental studies.
 - Able to know about and apply appropriate techniques, resources, and modern instruments and equipments for Biochemical estimation, Molecular Biology, Biotechnology, Plant Tissue culture experiments, cellular and physiological activities of plants with an understanding of the application and limitations.
 - Understand the valuable impact of the plant diversity in social and environmental aspects and demonstrate the knowledge and need of sustainable development.
- Concern about the ethical principles and commit to environmental & research ethics and responsibilities and norms of the biodiversity conservation.

Program Specific Outcome (PSO) of the department of Botany

- Phycology & Microbiology, Biomolecules & Cell Biology, Morphology & Anatomy of Angiosperms, Mycology & Plant Pathology, Molecular Biology, Reproductive Biology, Plant Metabolism, Natural Resource Management, Plant Breeding, Genetics.
- Basic concept of research and handling common practices and equipments in biological laboratory.
- Methods of data collection and maintenance in laboratory.
- Process of Reporting, Presentation and Publication of the scientific outcomes and to grow knowledge about Research Ethics.
- Application of knowledge to overcome environmental pollution and destruction of environment.
- Significance of crop improvement through genetic engineering in the present context of growing population.



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Mapping/Co-relation Program Outcome (PO) & Course Outcome (CO)

Department: Botany

Sl. No.	Course Outcome	P01 Overall concept and knowledge about prokaryots, Algae, Fungi & plant diversity	P02 In hand practical knowledge both in laboratory and also in the fields	P03 Acquire appropriate knowledge and skill for their future career, planning & conduction independent project proposal	P04 Knowledge of basic science, life sciences and fundamental process of plants	P05 Analyze the problems design proper procedures for solution for any experimental studies.	P06 Appropriate knowledge about techniques, resources, and modern instruments and equipments	P07 Understand the valuable impact of the plant diversity in social and environmental aspects
1	CC-1A	√	√	√	√		√	√
2	CC-1B	√	√	√	√		√	√
3	CC1C	√	√	√	√		√	
4	SEC-1		√	√	√	√		√
5	CC-1D	√	√	√	√		√	
6	SEC-2		√	√	√	√		√
7	DSE-1A	√	√	√	√		√	
8	SEC-3		√	√	√	√		
9	DSE-1B	√	√	√	√		√	√
10	SEC-4		√	√	√	√		√



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Course Outcome (CO) of the department of Botany

Sl. No.	Name of the Programme	Semester	Course Code	Course Title	Number of Credit	Course Outcome
1	B.Sc General	1st	CC-1A	Biodiversity (Microbes, Algae, Fungi and Archegoniate)	6 (Th:4; Pr:2)	This topic helps student about the overall plant diversity of this planet. Starting from unicellular and cellular or acellular virus, bacteria, unicellular to multicellular algae, heterotrophic fungi, thalloid bryophyte & mosses, primitive vascular land plant Pteridophyte & ferns and seeded gymnosperms.
2	B.Sc General	2nd	CC-1B	Plant Ecology and Taxonomy	6 (Th:4; Pr:2)	This course comprises two topics. Plant Ecology enrich students about the relevance of mother nature and ecosystem of environment, its importance and conservation of nature and natural resources. On the other hand Plant Taxonomy deals with the classification of angiospermic plants and its nomenclature. It also help students to identify and characterize plant species.
3	B.Sc General	3rd	CC1C	Plant Anatomy and Embryology	6 (Th:4; Pr:2)	This course comprises two topics. Plant Anatomy illustrates students about the basic knowledge of internal organization of plant body, their composition, constituents and functions. Studying Embryology students can understand the process of embryo formation, its growth and its types. It helps students to understand how a small seed can grow into a tree.
4	B.Sc General	3rd	SEC-1	Biofertilizers	2	This topic deals with the benefit of the using biofertilizer over the chemical fertilizer. It helps student to know about the basic process of manufacturing the biofertilizer, their nature and the micro-organisms which can best suited to use as biofertilizer.
5	B.Sc General	4th	CC-1D	Plant Physiology and Metabolism	6 (Th:4; Pr:2)	This is one of the most important topic of this programme. Here students can easily understand the biochemical and physiological processes continuously happening inside the body of plants, their mechanism, their reactions, factors affecting the pace of those reactions, their limitations, site



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						of the reactions etc. which is mostly required to forming a living being alive.
6	B.Sc General	4th	SEC-2	Floriculture	6	This topic helps the students to types and parts of plants which is beneficial in terms of economy. The importance of flower and its used in various ways. The way of flower cultivation, the gardens and nurseries where flowers can be grown, its proper packaging and transporting.
7	B.Sc General	5th	DSE-1A	Economic Botany and Biotechnology	6 (Th:4; Pr:2)	This course comprises two topics. Economic botany deals with the study of economically beneficial plants and plant parts, their uses, active components etc. Biotechnology helps students to know about the modification of economically valuable plants to grow more yield or resistant to pest and diseases.
8	B.Sc General	5th	SEC-3	Nursery and Gardening	6	This topic illustrate about the importance and scopes of gardening and nursery, their types, nature, types of flower grown, process of gardening and its maintenance.
9	B.Sc General	6th	DSE-1B	Cell Biology, Genetics and Molecular Biology	6 (Th:4; Pr:2)	This topic illustrates about the strutures, types and compositions in the plant cell. It also help to understand the chemical composition of the cell as well as the plant body. Student can know about the gene concept of the nucleus of the cell, their expression and genetic diseases.
10	B.Sc General	6th	SEC-4	Mushroom Culture Technology	6	This topic help to know about the nutritional and medicinal value of edible ad poisonas mushrooms, their characters and nature, their cultivation procedures, their nutritions, storage and marketing.