

**Department of Botany
Bankura Christian College**

Program Outcomes:

Name of the Programme: (B.Sc.) Bachelor of Science

P.O. 1: To produce a science graduate student who is liberal, logical, punctual, discipline, optimistic, free from any type of superstitions and has the ability to stand against any form of social inequality and injustice respecting the law of the land.

P.O. 2: To assess the existing knowledge, concepts, techniques, and methodology appropriate to the graduate's chosen discipline.

P.O. 3: On successful completion of the program students will have: In-depth knowledge and ability appropriate to undertake further study and research in a field of science.

P.O. 4: Ability to develop, conduct and manage a field based research project. Apply discipline-based and/or cross-discipline-based knowledge to design a problem-solving strategy.

P.O. 5: Ability to communicate a convincing and reasoned scientific argument to report scientific findings in front of audience during their presentation in seminar.

P.O. 6: To prepare the students for several competitive examinations such as Entrance test of other reputed Universities and Institutions.

P.O. 7: To generate skills, theoretical knowledge, and specialized practical skills to either gain employment in their relevant discipline or to succeed in further study such as Higher Degrees or Research.

Programme Specific Outcomes:

Objectives:

P.S.O. 1: The opportunity to develop a knowledge about the taxonomy and classification of plants and understanding of living organisms at several levels of botanical and biological organization from the molecular, through to cells and whole organisms and ecosystems from an evolutionary perspective.

P.S. O. 2: An understanding of environment, limiting factors, relationship among plants and measurement of diversity in ecosystem.

P.S.O. 3: An opportunity to develop a range of transferable skills (information and communication technology, team working, written and oral communication, time management, planning, data collection and presentation) and the capacity to give a clear and accurate account of the subject; working as a group in the excursion and field based projects.

P.S.O. 4: An education and training suitable for a wide variety of careers and to prepare you for higher degrees and careers in Life sciences research;

Knowledge and Understanding

1. Students will be able to identify the major groups of organisms (Both Cryptogams and Phanerogams) with an emphasis on plants and be able to classify them.
2. Students will be able to compare and contrast the characteristics of plants that differentiate them from other forms of life. Students will also be able to know the distinguishing features of different classes of plants.
3. Students will be able to know their environment, demography, ecosystem and biodiversity in the plant kingdom.
4. Students will be able to use the evidence of histology, comparative biology to explain the diversity of life on earth.
5. Students will be able to explain how organisms function at the level of the gene, genome, cell, tissue, organ to molecular level. Drawing upon this knowledge, they will be able to give specific examples of the physiological adaptations, development, reproduction and behavior of different forms of life.
6. Students will be able to demonstrate proficiency in the experimental techniques and methods of qualitative and quantitative analysis of major macromolecules.
7. Students will be able to know about different diseases, causative organisms, fungi, bacteria, hosts, vectors and their management.

8. Students will be able to gather knowledge about the plant physiology, biochemistry and metabolism.
9. Students will be able to gather information about economic botany such as pharmacognosy, mushroom production, floriculture and agriculture and may select it as their future career.

Course Outcome:

Course	Papers	Title	Course out come
Semester I	CT-1	Phycology and Microbiology	Paper consists of seven units through which students will be able to gather information on algae, virus, bacteria and other microorganisms.
	CT-2	Biomolecules, Biochemistry and Cell Biology	Paper consists of seven units through which students will be able to gather information on biochemistry and different cell organelles of plants.
	CP-1	Practical of Phycology and Microbiology	Students will be able to identify some algae and bacteria and their distinguishing features.
	CP-2	Practical of Biomolecules, Biochemistry and Cell Biology	Students will be able to study the parameters of biochemical analysis of fat, carbohydrate etc and also different stages of mitosis and meiosis.
Semester II	CT-3	Mycology and Plant Pathology	Students will be able to gather information on fungi and plants diseases and their management
	CT-4	Archegoniate and Palaeobotany	Students will be able to gather information on bryophyte, pteridophyta, gymnosperms and plant fossils.
	CP-3	Practical of Mycology and Plant Pathology	Students will be able to identify some fungi and their distinguishing features and also identify some plant diseases.
	CP-4	Practical of Archegoniate and Palaeobotany	Students will be able to identify bryophyte, pteridophyta, gymnosperms and plant fossils.