

Programme: B.Sc.

Program Outcomes

Bachelor of Science (B.Sc.) offers theoretical as well as practical knowledge about different subject areas. These subject areas include Physics, Chemistry, Mathematics and Biology, Zoology and other fields depending on the specialization a student opts. This programme course is most beneficial for students who have a strong interest and background in Science and Mathematics. The course is also beneficial for students who wish to pursue multi and inter-disciplinary science careers in future. Following are the various programme outcomes:

1. This course forms the basis of science and comprises of the subjects like physics, chemistry, biology, zoology and mathematics.
2. It helps to develop scientific temper and thus can prove to be more beneficial for the society as the scientific developments can make a nation or society to grow at a rapid pace.
3. After the completion of this course students have the option to go for higher studies i.e. M. Sc and then do some research for the welfare of mankind.
4. After higher studies students can join as scientist and can even look for professional job oriented courses.
5. This course also offers opportunities for serving in Indian Army, Indian Navy, Indian Air Force as officers.
6. Students after this course have the option to join Indian Civil Services as IAS, IFS etc..
7. Science graduates can go to serve in industries or may opt for establishing their own industrial unit.
8. After the completion of the B.Sc. degree there are various other options available for the science students. Often, in some reputed universities or colleges in India and abroad the students are recruited directly by big MNC's after their completion of the course.
9. Apart from the research jobs, students can also work or get jobs in Marketing, Business & Other technical fields. Science graduates also recruited in the bank sector to work as customer service executives. Students can also find employment in government sectors.

Programme Specific Outcomes Botany

- ❖ Students acquire fundamental Botanical knowledge through theory and practical's.
- ❖ To explain basis plant of life, reproduction and their survival in nature.
- ❖ Helped to understand role of living and fossil plants in our life.
- ❖ Understand good laboratory practices and safety.
- ❖ To create awareness about cultivation, conservation and sustainable utilization of biodiversity.
- ❖ To know advance techniques in plant sciences like tissue culture, Phytoremediation, plant disease management, formulation of new herbal drugs etc.
- ❖ Students able to start nursery, mushroom cultivation, biofertilizer production, fruit preservation and horticultural practices.

Course Outcomes Botany

Topic	Outcome
CRYPTOGAMIC BOTANY.	<ul style="list-style-type: none"> • Study of cryptogams to understand their Diversity. • Know the systematics, morphology and structure of algae, fungi , • bryophytes, and Pteredophytes. • Know life cycle pattern of cryptogams. • Know economic importance of cryptogams. • Know evolution of algae, fungi, bryophytes and Pteredophytes
CELL & MOLECULAR BIOLOGY	<ul style="list-style-type: none"> • Gain knowledge about cell and its function. • Learn the scope and importance of molecular biology. • Understand ultra structure of cell wall, plasma membrane and cell • organelles • Understand the biochemistry of cell. • Understand the biochemical nature of nucleic acid and their role in • living systems.
GENETICS AND EVOLUTION	<ul style="list-style-type: none"> • Understand the Mendelian and neo Mendelian genetics. • Know about interaction of genes, multiple alleles and linkage and • Crossing over. • Know about sex linked inheritance, chromosomal aberrations. • Know the evolutionary sequence of various groups of plants.
HORTICULTURE & FLORICULTURE	<ul style="list-style-type: none"> • Understand economic importance of plant and plant product. • Know the methods of plant propagation. • Understand the fruit & vegetables production technology. • Understand the scope & importance of floriculture. • Understand the methods of cultivation of different flowering plants.
PLANT PHYSIOLOGY & BIOCHEMISTRY.	<ul style="list-style-type: none"> • Know scope and importance of plant physiology. • Understand plant & water relation. • Understand process of photosynthesis, C3, C4, CAM pathways. • Understand the process of respiration, growth and developmental process in plant.

	<ul style="list-style-type: none"> • Understand the biochemistry of cell. • Understand the different biochemical reaction of bimolecular in plant cell.
MEDICAL AND ECONOMIC BOTANY	<ul style="list-style-type: none"> • Understand scope and importance of pharmacognosy. • Know the cultivation, collection, processing & importance of various herbal drugs. • Understand the scope of economic botany. • Know the botanical resources like non wood forest products. • Understand the concept of Ayurvedic pharmacy.
PLANT BREEDING & SEED TECHNOLOGY	<ul style="list-style-type: none"> • Understand the scope & importance of plant breeding. • Know the technique of production of new superior crop varieties. • Know the about heterosis, hybrid vigor etc. • Know the process of hybrid variety, development & their release. • Know about seed germination, processing , production etc