

Department of Botany

Program Name : B.Sc. (Medical)

Subject: Botany

Program Outcome:

1. Knowledge and understanding of the range of plant diversity in terms of structure, function and environmental relationships.

The evaluation of plant diversity, plant classification and the Flora and Fauna of Haryana and National Capital Region(NCR). The role of plants in the functioning of the global ecosystem.

2. Intellectual skills to think logically and organise tasks into a structured form. Assimilate knowledge and ideas based on wide reading and through the internet. Transfer of appropriate knowledge and methods from one topic to another within the subject. Understand the evolving state of knowledge in a rapidly developing field.

3. Practical skills: Students learn to carry out practical work, in the field and in the laboratory, with minimal risk. They gain introductory experience in applying each of the following skills and gain greater proficiency in a selection of them depending on their choice of optional modules.

- Interpreting plant morphology and anatomy.

- Plant identification.

- Vegetation analysis techniques.

- A range of physiochemical analyses of plant materials in the context of plant physiology and biochemistry.

- Hands on Training will help students learn use of microscope, mounting, section-cutting and staining techniques for the study of plant materials.

- Making Drawings in Practical Records will enhance understanding morphological and structural details and related functional aspects in diverse plant groups.

- Use of Illustrations, Photographs, Charts, Permanent Slides, Museum and Herbarium Specimens along with ICT Methods will provide an interesting insight into the beautiful world of microbes and plants.

4. Transferable skills:

- Communication of scientific ideas in writing and orally.

- Ability to work as part of a team.

- Ability to use library resources.

- Time management.

- Career planning.

5. Scientific Knowledge:

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

6. Problem analysis:

Identify the taxonomic position of plants using principles and methods of nomenclature and classification in Botany.

7. Plants as solution to Health problems:

To have brief idea of medicinal plants for health problems, disorders and disease of human beings and phytochemical present in plants.

8. The Botanist and Society:

Apply reasoning informed by the contextual knowledge to assess plant diversity, its importance for society, health, safety and environmental issues and the consequent responsibilities relevant to the biodiversity conservation practices.

9. Environment and Sustainability:

Understand the impact of the plant diversity in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

10. Ethical principles:

Apply ethical principles and commit to environmental ethics and responsibilities and norms of the biodiversity conservation.

11. Individual and Team work:

Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

12. Communication:

Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

13. Life-long learning:

Recognise the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.