



**DPG DEGREE COLLEGE**  
**(Affiliated to MDU Rohtak)**

**Sector-34, Near Marble Market, Gurugram 122001**

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**B.Sc -Botany**

**Program outcomes listed as follows:**

**Paper code: 1.1- DIVERSITY OF MICROBES**

**COURSE OUTCOMES (COs):**

Students will be able to Understand the diversity among Algae and also Know the systematic, morphology and structure, of Algae. Students will be able to Understand the life cycle pattern of Algae and also Understand the useful and harmful activities of Algae

Students will learn to evaluate the biodiversity of Fungi and also know the Economic Importance of Fungi, lichens. Students know about the various types of virus and their general characters.

**Paper code: 1.2, CELL BIOLOGY**

**COURSE OUTCOMES (COs):**

Students will learn the main components of cells and summarize the structure and function of the different components. Students will understand cellular components are used to generate and utilize energy in cells. Students will compare and contrast DNA replication machinery and mechanisms in prokaryotes and eukaryotes. Students will understand the molecular machinery and mechanism of information transfer processes—transcription in prokaryotes and eukaryotes; Students will understand the post-transcriptional modification mechanisms for the processing of eukaryotic RNAs. Students will gain insight into the most significant molecular and cell-based methods used today and students will learn the structure-function relationships of nucleic acids and proteins

**Paper code: BOT 2.1 DIVERSITY OF CRYPTOGAMS**

**COURSE OUTCOMES (COs):**

Students will be able to Understand the diversity among Bryophytes and also Know the systematic, morphology and structure, of Bryophytes. Students learn to evaluate the life cycle pattern of Bryophytes, pteridophytes. Students know about the importance to identify, bryophytes and pteridophytes. Present around them.

**Paper code: BOT 2.2: Plant Genetics**

**COURSE OUTCOMES (COs):**

Students will be able to Understand. The Structure and organization of genetic material, Mendelian and Neo-mendelian genetics. Students will be able to learn the phenomenon of dominance, laws of segregation, independent assortment of genes. Students will know about the different types of genetic interaction, incomplete dominance, codominance, inter allelic genetic interactions, multiple alleles and quantitative inheritance etc.

**Paper code: BOT 3.1**

**DIVERSITY OF SEED PLANT 1**

**COURSE OUTCOMES (COs):**

At the end of the course student will be able to understand the basic concepts of plant anatomy. Students will be able to analyse the differences of gymnosperms and angiosperms through general characteristics, evolution, diversity and their classification. Students will become able to identify the different types of fossils, its making process and its role in plant evolution. They will be studied different fossil families and orders of gymnosperms. Students will be able to compare morphology, anatomy and reproductive feature of different plant gymnosperm classes.

**Paper code: BOT 3.2**

**PLANT ANATOMY:**

**COURSE OUTCOMES (COs):**

At the end of the course, the student will be able to understand about tissue, tissue system. to understand how plant stem increase in girth. Will also know about structure types and phyllotaxy of leaf and can state different types of root and secondary growth in dicot root.

**Paper code: BOT 4.1. BIOLOGY AND DIVERSITY OF SEED PLANT 2**

**COURSE OUTCOMES (Cos)**

Students will be able to understand different aspect of angiosperms. Also understand the classification, floral terms and inflorescence. understand diversity of different families of Angio spermic plants and also able to identify different economic importance of plant families.

**Paper code: BOT 4.2. PLANT EMBRYOLOGY**

**COURSE OUTCOMES (Cos):**

At the end of the course: The student will be able to develop broad understanding of different aspects of plant reproduction i.e microsporogenesis. will also know the micro gametogenesis, pollen pistil interection and pollination. Also know about female gamete of plant i.e, fertilization. microsporogenesis, introduce the embryogenesis in monocot and dicot plants.

**Paper code: BOT 5.1 PLANT PHYSIOLOGY**

**COURSE OUTCOMES (Cos):**

At the end of the course: The student will be able to explain structure and functions of cell organelles involved in diverse cellular processes. The student will be able understand how cells grow, divide, survive, die and regulate these important processes. The student will be able have an insight of how defects in functioning of cell organelles and regulation of cellular processes can develop into diseases. Learn the advances made in the field of cell biology and their applications

**Paper code: BOT 5.2 PLANT ECOLOGY**

**COURSE OUTCOMES (Cos):**

At the end of the course: Students will be able to understand Advanced topics in plant Life history and reproduction strategies (incl. seed and population ecology) Students learn to evaluate Functional traits on population, community and landscape level Interactions between plants and the abiotic and biotic environment. Students learn to evaluate Restoration of plant communities. Students learn to evaluate Conservation of plants and plant communities and climate change.

**Paper code: BOT 6.2, PLANT BIOCHEMISTRY AND BIOTECHNOLOGY**

**COURSE OUTCOMES (Cos):**

At the end of the course: Student will be able to understand the characteristics, nature, structure and regulation of enzymes. Students will also learn the structure, properties and roles of lipids in biological system. Students will learn about several tools and techniques for recombinant DNA technology and cloning vector. Students will know about the importance of energy rich compound in biological system.

**Paper code: BOT 6.2, ECONOMIC BOTANY**

**COURSE OUTCOMES (Cos):**

At the end of the course: Students will able to understand a basic knowledge of food plants and vegetables. Students will know about economic importance of fiber and oil. Students will able to learn the cultivation and economic uses of spices, medicinal plants and beverages.

