



# BOTANY for B.Sc. STUDENTS

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**Dr. Vinod Kumar Jain** completed his Ph.D. from University of Rajasthan, India. He has more than 20 years teaching and research experience. He received awards in oral and poster presentation in various conferences. He has published various research papers and review articles in national and international journals. He also published national and international books, book chapters and Patents and participate and organized international and National Conferences, Seminars, Workshops and Webinars. He also engaged in research project. He has contributed in editorial boards of many prestigious journals. He is members of various national societies and organizations. Presently he is working as Associate Professor and Head, Department of Botany, Public International College Jaipur.



**Dr. Poonam Dhawan** holds Ph.D. Degree in Botany and having specializations in Plant Tissue Culture from University of Rajasthan. She has worked as JRF in "Studies on growth, morphogenesis and multiplication of woody dicotyledonous trees through tissue culture" at University of Rajasthan, Jaipur. She is having work experience of more than 14 years as a researcher as well as in research. She has contributed chapters on Biotechnological Approach for saving plant species in book entitled "Plant Molecular Physiology, Current Scenario and Future Prospects" (Sharma, P.C. (Ed.)) She has been successful various Research Projects funded by ICMR and ICMR, Govt. of India. She has been reviewer of "Science Journal". She has mentored about 12 Ph.D. students in their research projects during Science Research Training Program (SRTM) organized by CSIR. She has more than 20 publications in international and national journals. She has attended more than 50 National and International Conferences. She has chaired the session in International Conference on "Role of Molecular Plants in Boosting up the Sustainable System to Human Being during Covid-19".



**Dr. Sakshi Singh** is an enthusiastic and passionate biotechnologist working as an Assistant Professor in the Department of Biotechnology in Central P.D. Multiple Multidisciplinary, Jaipur, Rajasthan, India. She holds a Ph.D. degree with over 3 years of teaching and research experience. Well-versed with interdisciplinary science with the ability to perform his operations dynamically and enthusiastically effectively with teams to generate new insights. She always looks forward to learn about the emerging trends and techniques in the field.

#### About the Book :

Botany can include the three main branches of morphology/physiology, ecology, and systematics. Plant morphology/physiology study plant structure and how they relate to function. Ecologists study how plants interact with their environment. Plant systematics study plant taxonomy and evolution. Botany is the study of plants within the field of biology. It can be subdivided into the fields of morphology and physiology, ecology, and systematics. Botany is important because it provides the basis for our understanding of how to produce crops which provide food and fabrics. Botany branch of biology that deals with the study of plants, including their structure, properties, and biochemical processes. Also included are plant classification and the study of plant disease and of interactions with the environment. The principles and findings of botany have provided the basis for such applied sciences as agriculture, horticulture, and forestry. Plants, years of permanent experience in early research, who described more than six orders of leaf, flower, fruit, seed, medicinal, economic, health, and weight. Today it is known that, in addition to their practical and economic uses, green plants are indispensable to all life on earth. Through the process of photosynthesis, plants transform energy from the Sun into the chemical energy of food, which makes it possible. A second unique and important capacity of green plants is the formation and release of oxygen as a by-product of photosynthesis.

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- Plant Cell Study in Botany
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