



A TEXTBOOK OF PHARMACEUTICAL BIOTECHNOLOGY



**Dr. Vijay Sharma | Dr. Gyanendra Kumar Sharma
Dr. Alankar Shrivastav | Mr. Tribhuvan Kumar Vashishtha
Dr. Navneet Verma**

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Pharmaceutical Biotechnology

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To write book of this magnitude, it required lot of patience, skill and expertise over the subject, which I have gain through various opportunities got in the field of teaching and academia. I would like to dedicate this book to my Almighty and My Family.

We would like to thank Shri. Rajiv Kothival, Honorable Chancellor, IFTM University, Moradabad, for motivating us to strive for greatness. Our sincere thanks to Mr. Abhinav Kothival, Honorable Pro Chancellor, IFTM University, Moradabad, for their constant support and guidance. We also want to express our gratitude to Prof. M.P. Pandey, Honorable Vice Chancellor, IFTM University, Moradabad, Prof. Sanjeev Agarwal, Registrar, IFTM University for their continuous motivations for hard work and Prof. Navneet Verma, Dean & Director of Pharmacy Academy, IFTM University for their constant support, guidance and motivation for hard works. We also thanks to our Prof. Arun Kumar Mishra, Director, SOS-School of Pharmacy, IFTM University, Moradabad for their guidance and support.

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All Authors

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UNIT 1

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UNIT 1

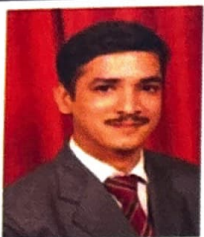
The first part of the course is devoted to the study of the history and development of pharmaceutical biotechnology. It covers the discovery of antibiotics, the development of vaccines, and the use of biotechnology in the production of drugs. The second part of the course is devoted to the study of the principles of biotechnology, including the use of microorganisms, cell culture, and fermentation. The third part of the course is devoted to the study of the application of biotechnology in the pharmaceutical industry, including the production of vaccines, antibiotics, and other drugs. The fourth part of the course is devoted to the study of the ethical and regulatory aspects of pharmaceutical biotechnology.

About the Book :

Pharmaceutical biotechnology holds great promise to revolutionise the biological sciences, leading to new advancements in diagnosis and prevention. This introductory textbook explains the basic science and the applications of biotechnology-derived pharmaceuticals, with special emphasis on their clinical use. It serves as a comprehensive one-stop source for undergraduate and graduate pharmacists, pharmaceutical science students, and professionals in the pharmaceutical industry.

The book begins with an introduction to biotechnology and its main branches, explaining the fundamental science and applications of biotechnology-derived pharmaceuticals, with special emphasis on their clinical use. It covers the scientific applications of biotechnology in genetic engineering, medicine, and fermentation technology, making the subject interesting and relevant. This edition completely updates the basics of biotechnology and includes additional coverage of newer approaches.

About the Authors :



Dr. Vijay Sharma obtained his B. Pharm from MJP Rohilkhand University, Bareilly, Uttar Pradesh, his M. Pharm in Pharmaceutics from PRIST University, Tamilnadu and PhD in Pharmacy at IFTM University, Moradabad, Uttar Pradesh. He has more than 17 Years of teaching experience with experience of supervising M. Pharm students and PhD scholars. At the moment, he is employed in academia. Dr. Sharma has published number of research/review paper in national and international Journals as well as participated in several prestigious conferences/workshops/seminars. He has authored 2 Books and published 8 Indian Patents and 2 Indian design patent was granted from Indian Patent Office. Apart from this, Dr Sharma was awarded with the Young Scientist Award, Certificate of Excellence etc. Apart from his academic duties in the Pharmacy Academy, IFTM University, he is also engaged in administrative work.

Dr. Gyanendra Kumar Sharma received his B. Pharm. degree from M. J. P. Rohilkhand University Bareilly (UP), M. Pharm. degree from J.S.S. College of Pharmacy, Ooty (T.N.) and PhD from Uttar Pradesh Technical University, Lucknow. He has worked in the field of Pharmacy for over 20 years. He has published over 40 research and review articles in national and international publications, as well as participated in a number of prestigious national/international conferences, seminars and workshops. He is having president local branch Mathura Indian Pharmacy Graduate Association (IPGA) and Board of studies members in different universities. He oversaw more than thirty M. Pharm. and two Ph.D. projects/dissertations. He is current working as Professor, Sharda School of Pharmacy, Sharda University, Agra (UP) India -282007.



Dr. Alankar Shrivastav obtained his B. Pharm from Siddhartha Institute of Pharmacy, Uttarakhand Technical University, Dehradun, Uttarakhand and his M. Pharm in Pharmacology from School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh and PhD in Pharmacy at IFTM University, Moradabad, Uttar Pradesh. He has more than 5 Years of teaching experience with experience supervising 3 M. Pharm students. At the moment, I'm employed in academia. Mr. Shrivastav authored 6 Books and published 7 Indian Patents and a patent was granted from Indian Patent Office. He has to his credit 18 research papers and review articles in various journals of high repute. Apart from this, Mr Shrivastav was awarded a Gold Medallist in his D. Pharm and M. Pharm Degree and received the Young Scientist Award, Certificate of Excellence etc. Apart from his academic duties as Assistant Professor in the Pharmacy Academy, IFTM University, he is also engaged in administrative work as coordinator-IFTM

University Alumni Association and Culture Committee.

Mr. Tribhuvan Kumar Vashishtha obtained his B. Pharm from the Institute of Pharmacy, Bundelkhand University Jhansi (Uttar Pradesh) and his M. Pharm in Pharmacognosy from Institute of Pharmacy, Bundelkhand University Jhansi (Uttar Pradesh). He is now Pursuing his PhD in Pharmacy at IFTM University, Moradabad (Uttar Pradesh). He has more than 05 years of teaching experience and more than years 10 of years' experience in Hospital Administration. Apart from his Academic duties as Assistant Professor in the Pharmacy Academy, IFTM University, Moradabad (Uttar Pradesh), he is also engaged in administrative work and Culture Committee.



Prof. Navneet Verma obtained his B. Pharm degree from UPTU, Lucknow, M. Pharm. (Pharmaceutics) from Bundelkhand University, Jhansi and a Ph.D. degree in Pharmaceutical Sciences, having 19 years' experience teaching in Pharmaceutics at the UG and PG students at IFTM University, Moradabad. Prof. Verma has received several awards and recognitions from various societies and agencies. He is working as Dean & Director, Pharmacy, at IFTM University. He has supervised 22 M. Pharm. dissertations and 08 Ph.D. degrees have been awarded. Prof. Verma is an active member of the reviewer board of various National and International journals. He has, to his credit 78 research papers in journals of National & International repute and 15 papers have so far been presented in various Conferences, Seminars and Workshops. He has also organized several seminars, conferences and academic events in the IFTM University successfully and is an active member of various professional bodies. He is also acting as Pro. Vice Chancellor of IFTM University Moradabad.



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