



## **Pharmaceutical Biotechnology**

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## **KEY SELLING POINTS**

\* Clearly written in concise sections \* Outstanding synopsis of the subject

## THE BOOK

Pharmaceutical biotechnology is evolving as an increasingly vital tool in the field of life sciences by contributing to diagnostic medical tests, therapeutic drugs and also gene therapy for hereditary diseases. Pharmaceutical biotechnology tools such as recombinant proteins and transgenic organisms have revolutionised life sciences. This book aims to explain the basics and applications of pharmaceutical biotechnology to readers new to the subject. It is written and presented in a clear, easy-to-follow manner, and contains numerous figures and illustrations to explain the material. Consisting of 25 chapters divided into 5 units:- genetic engineering, plant biotechnology, animal biotechnology, microbiology and industrial biotechnology and nanobiotechnology – the book gives concise descriptions across all areas of biotechnology, brings the reader up to date with the latest findings, and also looks at what the future prospects have in store. Each chapter also offers suggested readings for further study. The three young authors have provided an excellent overview to the field of pharmaceutical biotechnology. The book can be read both as an introduction to the subject, and a synopsis of past, present and future findings. For this reason, it will be a valuable addition in any life science library.

## **CONTENTS**

1. Introduction to Genetic Engineering 2. Basic Techniques of Genetic Engineering 3. Recombinant DNA Technology 4. Application of Genetic Engineering in Medicine 5. Introduction to Plant Biotechnology 6. Basic Principles of Plant Tissue Culture 7. Types of In Vitro Cultures 8. Protoplast Isolation, Fusion and Its Applications 9. Secondary Metabolites 10. Transformation of Genes in medicinal Plants 11. Introduction to Animal Biotechnology 12. Basic Techniques of Animal Cell Culture 13. Immunotechnology 14. Introduction to Industrial Biotechnology 15. Microbial Biotechnology 16. Enzyme Biotechnology 17. Bioreactors 18. Biopolymers and their Applications 19. Nanobiotechnology 20. Pharmacogenomics 21. DNA Vaccines 22. Proteomics 23. RNA Interference 24. Metabolic Engineering 25. Gene Therapy