

## **About the Book**

*Pharmaceutical biotechnology is evolving as an increasingly vital tool in the field of life science of life science by contributing to diagnostics medical tests, therapeutic drugs and gene therapy for hereditary diseases. Pharmaceutical biotechnology tools such as recombinant and transgenic organisms have revolutionized life sciences.*

*This book aims to explain the basics and application of the subject to the newly inducted minds in the field of pharmaceutical biotechnology. Therefore this book is presented in the form of queries to expound the concepts and elaborately uses illustrations to elucidate.*

### **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 cultures*
8. *Protoplast isolation, fusion and its applications*
9. *Secondary metabolites*
10. *Transformation of genes in medicinal plants*
11. *Introduction to animal biotechnology*
12. *Immunotechnology*
13. *Introduction to induction biotechnology*
14. *Microbial biotechnology*
15. *Enzyme biotechnology*
16. *Bioreactors*
17. *Biopolymers and their application*
18. *Nanobiotechnology*
19. *Pharmacogenomics*
20. *DNA vaccines*
21. *Proteomics*
22. *RNA Interference*
23. *Metabolic engineering*
24. *Gene therapy*