



# Catalogue

---

**2020 - 2021**

**OUR PUBLICATIONS ARE ALSO  
AVAILABLE ONLINE AT:**

- [www.rastogipublications.com](http://www.rastogipublications.com)
- [www.amazon.in](http://www.amazon.in)
- [www.flipkart.com](http://www.flipkart.com)

ebooks of several popular titles  
shall also be available shortly

FOR ALL OUR  
ENGLISH & HINDI MEDIUM  
TEXTBOOKS

Please Ask For Our  
Complete (Hindi &  
English) Catalogue

## **WE PUBLISH UNIVERSITY LEVEL TEXTBOOKS ON**

- BOTANY ● ZOOLOGY
- BIOLOGICAL CONCEPTS
- CELL BIOLOGY ● GENETICS
- BIOTECHNOLOGY
- BIOCHEMISTRY ● MICROBIOLOGY
- ENVIRONMENTAL SCIENCE
- AGRICULTURE & RELATED AREAS
- PHYSICS ● POLITICAL SCIENCE
- GEOGRAPHY ● EDUCATION

**UNDERGRADUATE TEXT BOOKS  
BASED ON CBCS SYLLABUS  
FOR VARIOUS INDIAN UNIVERSITIES**

**TEXTBOOKS  
FOR IX, X, XI & XII CLASSES**

- C.B.S.E. AND VARIOUS  
STATE BOARDS OF SECONDARY  
EDUCATION  
AND
- CHSE, ODISHA (+2 CLASSES)



**RASTOGI PUBLICATIONS**

'GANGOTRI', SHIVAJI ROAD, MEERUT- 250 002, INDIA

Phones : (0121) 2515142; 2516080

Mobile : 9412700277/9412708462 (11AM to 6PM, Sunday Closed)

e-mail : [info@rastogipublications.com](mailto:info@rastogipublications.com) / [salespromo@rastogi publications.com](mailto:salespromo@rastogi publications.com)

website : [www.rastogipublications.com](http://www.rastogipublications.com)

# INDEX

<b>Code No.</b>	<b>Book Name</b>	<b>Page No.</b>
LIST	LIST OF TEXT BOOKS BASED ON CBCS SYLLABUS	3-6
BC-6	GENETICS	7
BC-51	GENETICS: CLASSICAL TO MODERN	8
BC-73	QUANTITATIVE GENETICS	9
BC-26	CYTOGENETICS	9
BC-27	CELL AND MOLECULAR BIOLOGY	10
BC-59	CELL BIOLOGY	11
BC-60	MOLECULAR BIOLOGY	11
BC-22	ELEMENTS OF BIOTECHNOLOGY	12
BC-41	BIOTECHNOLOGY AND GENOMICS	13
BC-55	PLANT BIOTECHNOLOGY	14
BC-68	ELEMENTS OF PLANT BIOTECHNOLOGY	15
BC-56	(An Abridged Edition) ANIMAL BIOTECHNOLOGY	16
B-69	MOLECULAR BIOLOGY AND BIOTECHNOLOGY	17
BC-45	MOLECULAR BIOLOGY AND GENETIC ENGINEERING	18
BC-4	ECOLOGY AND ENVIRONMENT	19
BC-61	FUNDAMENTALS OF ECOLOGY	19
B-4	(An Abridged Edition) MICROBIOLOGY	20
BC-63	ENVIRONMENTAL MICROBIOLOGY	20
BC-35	A TEXT BOOK OF BIOCHEMISTRY	21
BC-57	CONCEPTS OF BIOCHEMISTRY	21
BC-50	(An Abridged Edition) IMMUNOLOGY	22
Z-68A	BIOTECHNOLOGY AND IMMUNOLOGY	22
BC-52	BIOPHYSICS	23
BC-53	BIOINFORMATICS	23
BC-33	ELEMENTS OF BIOSTATISTICS	24
BC-43	BIOTECHNIQUES: THEORY & PRACTICE	24
BC-64	BIOMOLECULES AND CELL BIOLOGY	25
BC-67	FUNDAMENTALS OF ENVIRONMENTAL STUDIES	25
BC-7	CYTOTOLOGY, GENETICS AND EVOLUTION	26
Z-1	MODERN TEXT BOOK OF ZOOLOGY: INVERTEBRATES	27
Z-3	MODERN TEXT BOOK OF ZOOLOGY: VERTEBRATES	28
Z-5 TO Z-13	ZOOLOGY PHYLUM TEXT BOOKS: PROTOZOA TO MINOR PHYLA	29
Z-14	THE BIRDS	29
Z-71	ANIMAL DIVERSITY	30
Z-72	COMPARATIVE ANATOMY AND DEVELOPMENTAL BIOLOGY	30
Z-76	CHORDATA AND COMPARATIVE ANATOMY	31
Z-22	DEVELOPMENTAL BIOLOGY	31
Z-36	ANIMAL PHYSIOLOGY AND BIOCHEMISTRY	32
BC-72	BIOCHEMISTRY OF METABOLIC PROCESSES	32
Z-23(EN)	ANIMAL BEHAVIOUR	33
Z-80	CONCEPTS OF ANIMAL BEHAVIOUR (WITH CHRONOBIOLOGY) (An Abridged Edition)	33
Z-75	WILD LIFE CONSERVATION AND MANAGEMENT	34
BC-2	EVOLUTIONARY BIOLOGY	34
Z-56	FISH AND FISHERIES	35
Z-57	ELEMENTS OF ENTOMOLOGY	35
Z-18	ECONOMIC ZOOLOGY	36
Z-40	PARASITOLOGY (Medical Zoology)	36
Z-60	ENDOCRINOLOGY AND REPRODUCTIVE BIOLOGY	37
BC-25	ENVIRONMENTAL BIOLOGY AND TOXICOLOGY	37
Z-73	FOOD, NUTRITION AND HEALTH	38
BC-65	RESEARCH METHODOLOGY	38
Z-20	PRACTICAL ZOOLOGY INVERTEBRATE	39
Z-21	PRACTICAL ZOOLOGY VERTEBRATE	39



# INDEX

Z-52	PRACTICAL ZOOLOGY Volume-3	40
Z-74	C.B.C.S.: B.Sc 1st Year PRACTICAL ZOOLOGY	40
Z-77	C.B.C.S.: B.Sc 2nd Year PRACTICAL ZOOLOGY	40
B-39	A TEXT BOOK OF BOTANY (Microbiology, Algae, Fungi and Plant Pathology, Bryophyta, Pteridophyta, Gymnosperms and Palaeobotany)	41
B-75	MICROBIOLOGY AND PHYCOLOGY	42
B-2	MYCOLOGY AND PHYTOPATHOLOGY (Fungi and Plant Pathology)	42
B-77	ARCHEGONIATE (Bryophyta, Pteridophyta & Gymnosperms)	43
B-78	BIODIVERSITY (Microbiology, Fungi, Algae, Archegoniate: Bryophyta, Pteridophyta And Gymnosperms)	44
B-44	A TEXT BOOK OF BOTANY: ANGIOSPERMS	45
B-31	DIVERSITY AND SYSTEMATICS OF SEED PLANTS (Gymnosperms and Taxonomy)	45
B-32	ANATOMY AND EMBRYOLOGY OF ANGIOSPERMS (Including: Morphology and Morphogenesis)	46
B-10	EMBRYOLOGY OF ANGIOSPERMS	46
B-9	TAXONOMY OF ANGIOSPERMS	47
B-82	PLANT SYSTEMATICS	47
B-88	PLANT TAXONOMY	47
B-56	ECONOMIC BOTANY	48
B-81	ETHNOBOTANY	48
B-7	PLANT ANATOMY	49
B-28	PLANT PHYSIOLOGY AND BIOCHEMISTRY	49
B-48	PLANT PATHOLOGY	50
B-5	MICROBIOLOGY AND PLANT PATHOLOGY	50
B-70	ENVIRONMENTAL BOTANY AND PLANT PATHOLOGY	51
BC-69	PLANT ECOLOGY AND PHYTOGEOGRAPHY	51
B-90	PLANT METABOLISM	52
B-93	ANALYTICAL TECHNIQUES IN PLANT SCIENCES	52
B-14	A TEXT BOOK OF PRACTICAL BOTANY VOL.1	53
B-15	A TEXT BOOK OF PRACTICAL BOTANY VOL.2	53
B-84	C.B.C.S.: B.Sc 1st Year PRACTICAL BOTANY Microbiology, Phycology, Mycology and Phytopathology, Archegoniate, Biomolecules and Cell Biology	54
B-87	C.B.C.S.: B.Sc 1st Year PRACTICAL BOTANY (Biodiversity, Ecology and Taxonomy)	54
B-86	C.B.C.S.: B.Sc 2nd Year PRACTICAL BOTANY (Anatomy, Economic, Botany, Genetics, Molecular Biology and Plant Systematics)	54
P-14/15	HISTORY OF POLITICAL THOUGHT Vol.-I / Vol.II	55
PH-1	NUCLEAR PHYSICS	55
PH-03	QUANTUM MECHANICS AND ATOMIC PHYSICS	55
PH-2	MODERN PHYSICS	55
G-38	GEOGRAPHIC THOUGHT AND METHODOLOGY	56
CBSE-2/4/5	A TEXT BOOK OF MATHEMATICS: Class- XI & XII (Vol.: I-II)	57
CBSE-1/3	CONCEPTS OF BIOLOGY: Class-XI & XII	57
CBSE-17/16	A TEXT BOOK OF MATHEMATICS: Class-IX & X	58
CBSE-20/21	PHYSICS-IX & X	58
CBSE-22/23	CHEMISTRY-IX & X	58
CBSE-24/25	BIOLOGY-IX & X	58
CHSE-9	CONCEPTS OF BIOLOGY: Class-XI	59
CHSE-9a	INTRODUCTORY BOTANY: Class-XI	59
CHSE-9b	INTRODUCTORY ZOOLOGY: Class-XI	59
CHSE-10	CONCEPTS OF BIOLOGY: Class-XII	59
CHSE-5	INTRODUCTORY BOTANY: Class-XII	59
CHSE-6	INTRODUCTORY ZOOLOGY: Class-XII	59
LIST	SOME OF OUR STOCKISTS IN VARIOUS STATES	60

**CHSE:  
ODISHA EDITIONS**



# TEXT BOOKS BASED ON CBCS SYLLABUS

## FOR UNDERGRADUATE STUDENTS OF VARIOUS INDIAN UNIVERSITIES

### FOR CORE & ELECTIVE COURSES

ON

### BOTANY • ZOOLOGY • MICROBIOLOGY BIOTECHNOLOGY AND BIOCHEMISTRY

FOR ACADEMIC SESSION : 2020-2021& ONWARDS

#### BOTANY B.Sc. (Pass & Hons./Major)

1. A Text Book of Botany (Microbiology, Algae, Fungi, Plant Pathology, Bryophyta, Pteridophyta, Gymnosperms and Palaeobotany) (Covering syllabus of several courses) —Dr. Singh, Dr. Pande & Dr. Jain (Code : B-39)	875.00	11. Taxonomy of Angiosperms —Dr. Singh & Dr. Jain (Code : B-09)	355.00
2. Microbiology & Phycology (Microbes & Algae) —Dr. Singh, Dr. Pande & Dr. Jain (Code : B-75)	325.00	12. Economic Botany —Dr. Singh, Dr. Pande & Dr. Jain (Code : B-56)	235.00
3. Mycology & Phytopathology (Fungi & Plant Pathology) —P.D. Sharma (Code : B-02)	325.00	13. Plant Anatomy —Dr. M.S. Talyal (Code : B-07)	245.00
4. Archegoniate (Bryophyta, Pteridophyta and Gymnosperms) —Dr. Singh, Dr. Pande & Dr. Jain (Code : B-77)	425.00	14. Plant Physiology —Dr. H.S. Srivastawa (Code : B-12)	285.00
5. Biodiversity (Viruses, Bacteria, Algae, Fungi & Archegoniate) —Dr. Singh, Dr. Pande & Dr. Jain (Code : B-78)	465.00	15. Plant Physiology and Biochemistry —Dr. H.S. Srivastawa (Code : B-28)	475.00
6. Biomolecules and Cell Biology —Dr. P.K. Gupta (Code : BC-64)	335.00	16. Microbiology —Dr. P.D. Sharma (Code : B-04)	645.00
7. Text Book of Botany : Diversity of Microbes and Cryptogams (Virus, Bacteria, Algae, Fungi, Bryophyta & Pteridophyta) —Dr. Singh, Dr. Pande & Dr. Jain (Code : B-30)	510.00	17. Cell Biology —Dr. P.K. Gupta (Code : BC-59)	435.00
8. Text Book of Botany : Anatomy and Embryology of Angiosperms (Anatomy, Embryology and Morphology & Morphogenesis) —Dr. Singh, Dr. Pande & Dr. Jain (Code : B-32)	395.00	18. Molecular Biology —Dr. P.K. Gupta (Code : BC-60)	425.00
9. Characteristics and Diversity of Seed Plants (Gymnosperms & Taxonomy of Angiosperms) —Dr. Singh, Dr. Pande & Dr. Jain (Code : B-83)	245.00	19. Concepts of Genetics (Abridged Edn.) —Dr. P.K. Gupta (Code : BC-62)	295.00
10. Embryology of Angiosperms —Dr. Singh, Dr. Pande & Dr. Jain (Code : B-10)	225.00	20. Cell Biology and Genetics —Dr. P.K. Gupta (Code : BC-12)	445.00
		21. Cytology, Genetics, Evolution & Plant Breeding —Dr. P.K. Gupta (Code : BC-11)	575.00
		22. Concepts of Biochemistry (Abridged Edn.) —Dr. S.N. Gupta (Code : BC-57)	285.00
		23. Microbiology and Plant Pathology —Dr. P.D. Sharma (Code : B-05)	655.00
		24. Plant Pathology —Dr. P.D. Sharma (Code : B-48)	525.00



<b>25. Elements of Biotechnology</b> —Dr. P.K. Gupta (Code : BC-22)	<b>475.00</b>	<b>36. Ethnobotany</b> —Dr. Vinay Sharma & Dr. Afroz Alam (Code : B-81)	<b>395.00</b>
<b>26. Plant Biotechnology</b> —Dr. P.K. Gupta (Code : BC-55)	<b>475.00</b>	<b>37. Analytical Techniques in Plant Sciences</b> —Dr. Dr. S.V.S. Rana (Code : B-93)	
<b>27. Elements of Plant Biotechnology</b> (Abridged Edition) —Dr. P.K. Gupta (Code : BC-68)	<b>255.00</b>	<b>PRACTICALS</b>	
<b>28. Plant Systematics</b> —Dr. Singh, Dr. Pande & Dr. Jain (Code : B-82)	<b>295.00</b>	<b>38. Practical Botany : Vol. I</b> (Algae, Fungi, Bryophytes, Pteridophytes, Gymnosperms and Palaeobotany) —Dr. Ashok Bendre & Dr. Ashok Kumar (Code : B-14)	<b>325.00</b>
<b>29. Genetics</b> —Dr. P.K. Gupta (Code : BC-06)	<b>715.00</b>	<b>39. Practical Botany : Vol. II</b> (Taxonomy, Physiology, Anatomy, Ecology, Genetics and Economic Botany) —Dr. Ashok Bendre & Dr. Ashok Kumar (Code : B-15)	<b>425.00</b>
<b>30. Biotechniques : Theory and Practice</b> —Dr. S.V.S. Rana (Code : BC-43)	<b>365.00</b>	<b>40. B.Sc. First Year Practical Botany</b> (Microbiology, Phycology, Mycology, Phytopathology, Archegoniate, Biomolecules and Cell Biology) —Dr. Ashok Bendre (Code : B-84)	<b>205.00</b>
<b>31. Bioinformatics</b> —Dr. Vinay Sharma, Dr. Ashok Munjal & Dr. Ashish Shanker (Code : BC-53)	<b>315.00</b>	<b>41. B.Sc. First Year Practical Botany</b> (Microbes, Fungi, Algae, Ecology Taxonomy & Archegoniates) —Dr. Ashok Bendre (Code : B-87)	<b>225.00</b>
<b>32. Elements of Biostatistics</b> —Dr. Satguru Prasad (Code : BC-33)	<b>315.00</b>	<b>41. B.Sc. Second Year Practical Botany</b> (Anatomy, Economic Botany, Genetics, Molecular Biology, Plant Ecology and Plant Systematics) —Dr. Ashok Bendre (Code : B-86)	<b>295.00</b>
<b>33. Environmental Microbiology</b> —Dr. P.D. Sharma (Code : BC-63)	<b>245.00</b>		
<b>34. Evolutionary Biology</b> —Dr. B.S. Tomar & Dr. S.P. Singh (Code : BC-02)	<b>315.00</b>		
<b>35. Environmental Biotechnology</b> —Dr. S.V.S. Rana (Code : BC-54)	<b>245.00</b>		

## **ZOOLOGY**

### **B.Sc. (Pass & Hons./Major)**

<b>1. A Text Book of Zoology : INVERTEBRATES</b> (Animal Diversity—I) (Protozoa to Echinodermata) —Prof. R.L. Kotpal (Code : Z-1)	<b>745.00</b>	<b>7. Cell Biology</b> —Dr. P.K. Gupta (Code : BC-59)	<b>435.00</b>
<b>2. A Text Book of Zoology : VERTEBRATES</b> (Animal Diversity—II) (Chordates & Comparative Anatomy) —Prof. R.L. Kotpal (Code : Z-3)	<b>745.00</b>	<b>8. Molecular Biology</b> —Dr. P.K. Gupta (Code : BC-60)	<b>425.00</b>
<b>3. Animal Diversity</b> [An Edited Book : Comprising topics on Invertebrates & Vertebrates] (Based on New UGC-CBGS Syllabus) —Prof. R.L. Kotpal (Code : Z-71)	<b>575.00</b>	<b>9. Concepts of Genetics (An abridged edition)</b> —Dr. P.K. Gupta (Code : BC-62)	<b>295.00</b>
<b>4. Comparative Anatomy and Developmental Biology</b> (Based on New UGC-CBGS Syllabus) —Prof. R.L. Kotpal & K.V. Sastry (Code : Z-72)	<b>395.00</b>	<b>10. Genetics</b> —Dr. P.K. Gupta (Code : BC-06)	<b>675.00</b>
<b>5. Chordata and Comparative Anatomy</b> —Prof. R.L. Kotpal (Code : Z-76)	<b>455.00</b>	<b>11. Biomolecules and Cell Biology</b> (Based on New UGC-CBGS Syllabus) —Dr. P.K. Gupta (Code : BC-64)	<b>315.00</b>
<b>6. Fundamentals of Ecology</b> —Dr. P.D. Sharma (Code : BC-61)	<b>355.00</b>	<b>12. Cytology, Genetics &amp; Evolution</b> —Dr. P.K. Gupta (Code : BC-07)	<b>515.00</b>
		<b>13. Cell Biology and Genetics</b> —Dr. P.K. Gupta (Code : BC-12)	<b>445.00</b>
		<b>14. Concepts of Biochemistry (Abridged Edn.)</b> —Dr. S.N. Gupta (Code : BC-57)	<b>285.00</b>
		<b>15. Biochemistry of Metabolic Processes</b> —Dr. S.N. Gupta (Code : BC-72)	<b>145.00</b>



<b>16. Animal Physiology and Biochemistry</b> —Dr. K.V. Sastry (Code : Z-36)	495.00	<b>29. Environmental Microbiology</b> —Dr. P.D. Sharma (Code : BC-63)	245.00
<b>17. Developmental Biology</b> —Dr. K.V. Sastry & Dr. Vineeta Shukla (Code : Z-22)	355.00	<b>30. Bioinformatics</b> —Dr. Sharma, Dr. Munjal & Dr. Shanker (Code : BC-53)	315.00
<b>18. Evolutionary Biology</b> —Dr. B.S. Tomar (Code : BC-02)	315.00	<b>31. Biotechniques : Theory &amp; Practice</b> —Dr. S.V.S. Rana (Code : BC-43)	365.00
<b>19. Economic Zoology</b> —Dr. G.S. Shukla & Dr. V.B. Upadhyay (Code : Z-18)	400.00	<b>32. Microbiology</b> —Dr. P.D. Sharma (Code : B-04)	645.00
<b>20. Fish and Fisheries</b> —Dr. Kamleshwar Pandey & Dr. J.P. Shukla (Code : Z-56)	535.00	<b>33. Elements of Biostatistics</b> —Dr. S.G. Prasad (Code : BC-33)	300.00
<b>21. Elements of Entomology</b> —Dr. Rajendra Singh (Code : Z-57)	495.00	<b>34. Wild Life Conservation and Management</b> —Dr. Reena Mathur (Code : Z-75)	475.00
<b>22. Environmental Biology and Toxicology</b> —Dr. P.D. Sharma (Code : BC-25)	495.00	<b>35. Food, Nutrition &amp; Health</b> —Dr. Beena Mathur (Code : Z-73)	275.00
<b>23. Animal Behaviour</b> —Dr. Reena Mathur (Code : Z-23EN)	625.00	<b>36. Research Methodology</b> —Dr. Chaitali Ghosh & Mamtesh Singh (Code : BC-65)	145.00
<b>24. Concepts of Animal Behaviour</b> (Abridged Edition) —Dr. Reena Mathur (Code : Z-80)	225.00	<b>PRACTICALS written by —Dr. S.S. Lal</b>	
<b>25. Endocrinology and Reproductive Biology</b> —Dr. K.V. Sastry (Code : Z-60)	280.00	<b>37. Practical Zoology : Invertebrate</b> (With Cell Biology, Genetics & Ecology) (Code : Z-20)	455.00
<b>26. Immunology</b> —S.S. Lal (Code : BC-50)	595.00	<b>38. Practical Zoology : Vertebrate</b> (Code : Z-21)	455.00
<b>27. Animal Biotechnology</b> —Dr. P.K. Gupta (Code : BC-56)	675.00	<b>39. Practical Zoology : Vol-3</b> (Code : Z-52)	355.00
<b>28. Environmental Biotechnology</b> —Dr. S.V.S. Rana (Code : BC-54)	245.00	<b>40. B.Sc. First Year Practical Zoology</b> (Animal Diversity; Comparative Anatomy and Developmental Biology) (Code : Z-74)	275.00
		<b>41. B.Sc. Second Year Practical Zoology</b> (Chordata, Physiology, Comparative, Anatomy of Vertebrates, Biochemistry and Genetics) (Code : Z-77)	375.00

## MICROBIOLOGY & BIOTECHNOLOGY

### B.Sc. (Pass & Hons./Major)

<b>1. Microbiology</b> —Dr. P.D. Sharma (Code : B-04)	645.00	<b>7. Molecular Biology</b> —Dr. P.K. Gupta (Code : BC-60)	425.00
<b>2. Environmental Microbiology</b> —Dr. P.D. Sharma (Code : BC-63)	245.00	<b>8. Genetics</b> —Dr. P.K. Gupta (Code : BC-6)	675.00
<b>3. Immunology</b> —Dr. S.S. Lal (Code : BC-50)	595.00	<b>9. Cell &amp; Molecular Biology</b> —Dr. P.K. Gupta (Code : BC-27)	795.00
<b>4. Biochemistry</b> —Dr. S.N. Gupta (Code : BC-35)	625.00	<b>10. Molecular Biology &amp; Genetic Engineering</b> —Dr. P.K. Gupta (Code : BC-45)	395.00
<b>5. Concepts of Biochemistry (Abridged Edn.)</b> —Dr. S.N. Gupta (Code : BC-57)	285.00	<b>11. Molecular Biology &amp; Biotechnology</b> —Dr. P.K. Gupta (Code : B-69)	495.00
<b>6. Cell Biology</b> —Dr. P.K. Gupta (Code : BC-59)	435.00	<b>12. Bioinformatics</b> —Dr. Sharma, Dr. Munjal & Dr. Shanker (Code : BC-53)	315.00
		<b>13. Biostatistics</b> —Dr. Satguru Prasad (Code : BC-33)	300.00



<b>14. Plant Pathology</b> —Dr. P.D. Sharma (Code : B-48)	<b>525.00</b>	<b>23. A Text Book of Botany (Plant Diversity)</b> (Microbiology, Algae, Fungi, Plant Pathology, Bryophyta, Pteridophyta, Gymnosperms and Palaeobotany) —Dr. Singh, Dr. Pande & Dr. Jain (Code : B-39)	<b>845.00</b>
<b>15. Biotechnology and Genomics</b> —Dr. P.K. Gupta (Code : BC-41)	<b>565.00</b>	<b>24. Plant Physiology</b> —Dr. H.S. Srivastava (Code : B-12)	<b>285.00</b>
<b>16. Elements of Biotechnology</b> —Dr. P.K. Gupta (Code : BC-22)	<b>425.00</b>	<b>25. Invertebrate Zoology (Animal Diversity-I)</b> —Dr. R.L. Kotpal (Code : Z-1)	<b>725.00</b>
<b>17. Plant Biotechnology</b> —Dr. P.K. Gupta (Code : BC-55)	<b>475.00</b>	<b>26. Vertebrate Zoology (Animal Diversity-II)</b> —Dr. R.L. Kotpal (Code : Z-3)	<b>725.00</b>
<b>18. Elements of Plant Biotechnology (Abridged Edition)</b> —Dr. P.K. Gupta (Code : BC-68)	<b>255.00</b>	<b>27. Evolutionary Biology</b> —Dr. Singh & Tomar (Code : BC-2)	<b>315.00</b>
<b>19. Animal Biotechnology</b> —Dr. P.K. Gupta (Code : BC-56)	<b>675.00</b>	<b>28. Animal Physiology</b> —Dr. K.V. Sastry (Code : Z-16)	<b>345.00</b>
<b>20. Environmental Biotechnology</b> —Dr. S.V.S. Rana (Code : BC-54)	<b>245.00</b>	<b>29. Developmental Biology</b> —Dr. Sastry & Dr. Shukla (Code : Z-22)	<b>355.00</b>
<b>21. Biotechnique : Theory and Practice</b> —Dr. S.V.S. Rana (Code : BC-43)	<b>365.00</b>		
<b>22. Ecology &amp; Environment</b> —Dr. P.D. Sharma (Code : BC-04)	<b>695.00</b>		

***Our Publications are also available online at:***

***www.rastogipublications.com***

***www.amazon.in • www.flipkart.com***

**Please refer our Catalogue**

**or**

**For Further Information**

**Visit us on: [www.rastogipublications.com](http://www.rastogipublications.com)**

**Please send your queries at e-mail:**

**<[salespromo@rastogipublications.com](mailto:salespromo@rastogipublications.com)>**

**or**

**<[info@rastogipublications.com](mailto:info@rastogipublications.com)>**



# GENETICS

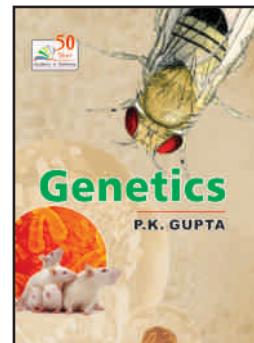
Prof. P.K. Gupta

Ph.D (Manitoba, Canada)  
FNASc, FASc, FNAAS, FNA

Formerly, Professor & Head

Agriculture Botany and Dean, Faculty of Agriculture

CCS University, Meerut



**CONTENTS:** 1. Genetics: Definitions, History and Scope; 2. Mendel's Laws of Inheritance; 3. Lethality and Interaction of Genes; 4. Quantitative Genetics: Multiple Factor Hypothesis; 5. Multiple Alleles and Isoalleles: (Classical Concept of Allelomorphism); 6. Physical Basis of Heredity: 1. The Chromosome Theory of Inheritance; 7. Physical Basis of Heredity : 2. The Nucleus and the Chromosome; 8. Physical Basis of Heredity : 3. Cell Division (Mitosis and Meiosis); 9. The Cell Division Cycle: Genetics and Molecular Basis; 10. Linkage and Crossing Over in Diploid Organisms (Higher Eukaryotes); 11. Tetrad Analysis, Mitotic Recombination and Gene Conversion in Haploid Organisms : (Fungi and Single Celled Algae); 12. Genetics of Cell Division, Sexuality and Recombination in Bacteria and Viruses; 13. Molecular Basis of Recombination; 14. Recombination and Resolution of Gene Structure: (A Modified Concept of Allelomorphism); 15. Accessory Genetic Elements: Plasmids, Transposons and Retroelements; 16. Sex-Linked, Sex-Influenced and Sex-Limited Traits; (Including Sex-Biased Inheritance); 17. Genetics of Sex Determination, Sex Differentiation and Dosage Compensation; 18. Maternal Effects and Cytoplasmic Inheritance; 19. Structural Changes in Chromosomes; 20. Numerical Changes in Chromosomes; 21. Mutations: 1. Morphological Level (Including Lethal Mutations); 22. Mutations: 2. Biochemical Level (Biochemical and Microbial Genetics); 23. Mutations: 3. Molecular Mechanism and Use in Functional Genomics; 24. Human Genetics and Genomics; 25. Chemistry of the Gene: 1. Nucleic Acids and Their Structure; 26. Chemistry of the Gene: 2. Replication and Modification of DNA; 27. DNA Damage and DNA Repair; 28. Organization of Genetic Material: 1. Genome Size, C-Value Paradox and Repetitive DNA Sequences; 29. Organisation of Genetic Material: 2. Packaging of DNA as Nucleosomes in Eukaryotes; 30. Organization of Genetic Material: 3. Mitochondrial, Chloroplast and Apicoplast Genomes; 31. Organization of Genetic Material: 4. Split Genes, Overlapping Genes, Pseudogenes, Retrogenes and Cryptic Genes; 32. Dynamic RNA: Ribozymes, Small/Long ncRNAs and RNA World; 33. The Genetic Code; 34. Transcription in Prokaryotes and Eukaryotes; 35. RNA Processing: (Decay, Splicing, Editing and Repair of RNA); 36. Expression of Gene and Protein Synthesis: 3. Molecular Machines for Translation of mRNA (Ribosome, tRNA and aaRS); 37. Expression of Gene and Protein Synthesis: 4. Protein Structure and Translation of mRNA in Prokaryotes and Eukaryotes; 38. Protein Modification, Folding, Translocation and Degradation; 39. Operon Circuits in Bacteria and Other Prokaryotes; 40. Regulation of Gene Expression: 2. Regulation Cascades in Bacteriophages; 41. Regulation of Gene Expression: 3. A Variety of Mechanisms in Eukaryotes; 42. Regulation of Gene Expression: 4. Chromatin Remodeling and Cellular Memory; 43. Cell Receptors and Signal Transduction; 44. Genes in Development; 45. Epigenetics and Epigenomics; 46. Genetic Engineering and Biotechnology : 1. Recombinant DNA, Cloning, PCR and Microarrays; 47. DNA-Based Molecular Markers; 48. Isolation, Synthesis and Sequencing of Genes/Genomes: (Including 'Synthetic Genomics'); 49. Genetic Engineering and Biotechnology: 4. Gene Transfer Methods and Transgenic Organisms; 50. Multigene Families in Eukaryotes; 51. Omics Technologies: Genomics, Transcriptomics, Proteomics and Metabolomics (Including Single Cell Omics); 52. Genetics of Cancer: Oncogenes, Tumour Suppressor Genes, Tumour Viruses and Oncogenesis; 53. Population and Evolutionary Genetics; 54. Genetics of Inbreeding Depression and Heterosis;—References;—Author Index;—Subject Index.

5th Revised Edition (Reprint): 2019-20

ISBN: 978-81-7133-932-7

Code No.: BC-6

PRINTED IN DOUBLE COLOUR

Size: Crown 4vo

Pages: xxviii + 748

Price: ₹715.00

In this 5th edition

nearly 100 pages have increased.

Most of the chapters are revised and few

new chapters have also been added.



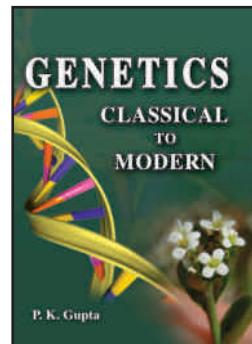
www.rastogipublications.com

# **GENETICS**

## **CLASSICAL TO MODERN**

(An Enlarged Edition)

*Prof. P.K. Gupta FNA*



**CONTENTS:** 1. Genetics, Epigenetics and Genomics: An Overview; 2. Mendel's Laws of Inheritance; 3. Lethality and Interaction of Genes; 4. Genetics of Quantitative Traits (QTs): 1. Mendelian Approach (Multiple Factor Hypothesis); 5. Genetics of Quantitative Traits: 2. Biometrical Approach; 6. Genetics of Quantitative Traits: 3. Molecular Markers and QTL Analysis; 7. Genetics of Quantitative Traits: 4. Linkage Disequilibrium (LD) and Association Mapping; 8. Multiple Alleles and Isoalleles; (Based on Classical Concept of Allelomorphism); 9. Physical Basis of Heredity: 1. The Chromosome Theory of Inheritance; 10. Physical Basis of Heredity: 2. The Nucleus and the Chromosome; 11. Physical Basis of Heredity: 3. Cell Division (Mitosis and Meiosis); 12. The Cell Division Cycle: Molecular Basis; 13. Linkage and Crossing Over in Diploid Organisms (Higher Eukaryotes); 14. Tetrad Analysis, Mitotic Recombination and Gene Conversion in Haploid Organisms (Fungi and Single Celled Algae); 15. Genetics of Sexuality and Recombination in Bacteria and Viruses; 16. Molecular Basis of Division of Bacterial Cells and Eukaryotic Organelles (Including Sporulation in Bacteria); 17. Molecular Basis of Homologous Recombination (HR); 18. Molecular Basis of Site-Specific Recombination (Gene Targeting); 19. Recombination and Resolution of Gene Structure (A Modified Concept of Allelomorphism); 20. Accessory Genetic Elements: Plasmids, Transposons and Retroelements; 21. Sex-Linked, Sex-Influenced and Sex-Limited Traits (Including Sex-Biased Inheritance); 22. Genetics of Sex Determination, Sex Differentiation and Dosage Compensation; 23. Maternal Effects and Cytoplasmic Inheritance; 24. Structural Changes in Chromosomes; 25. Numerical Changes in Chromosomes; 26. Mutations: 1. Morphological Level (Including Lethal Mutations); 27. Mutations: 2. Biochemical Level (Biochemical and Microbial Genetics); 28. Mutations: 3. Molecular Mechanism and Use in Functional Genomics; 29. Human Genetics and Genomics; 30. Chemistry of the Gene: 1. Nucleic Acids and Their Structure; 31. Chemistry of the Gene: 2. Synthesis, Modification and Repair of DNA; 32. Organization of Genetic Material: 1. Genome Size, C-Value Paradox and Repetitive DNA Sequences; 33. Organisation of Genetic Material: 2. Packaging of DNA as Nucleosomes in Eukaryotes; 34. Organization of Genetic Material: 3. Mitochondrial and Chloroplast Genomes; 35. Organization of Genetic Material: 4. Split Genes, Overlapping Genes, Pseudogenes, Retrogenes and Cryptic Genes; 36. The Genetic Code; 37. Expression of Gene and Protein Synthesis: 1. Transcription in Prokaryotes and Eukaryotes; 38. Expression of Gene and Protein Synthesis: 2. RNA Processing (Decay, Splicing, Editing and Repair of RNA); 39. Expression of Gene and Protein Synthesis: 3. Protein Structure and Molecular Machines for Translation of mRNA (Ribosome, tRNA and aaRS); 40. Expression of Gene and Protein Synthesis: 4. Translation of mRNA in Prokaryotes and Eukaryotes; 41. Protein Modification, Folding, Translocation and Degradation; 42. Regulation of Gene Expression: 1. Operon Circuits in Bacteria and Other Prokaryotes; 43. Regulation of Gene Expression: 2. Regulation Cascades in Bacteriophages; 44. Regulation of Gene Expression: 3. A Variety of Mechanisms in Eukaryotes; 45. Regulation of Gene Expression: 4. Chromatin Remodeling and Cellular Memory; 46. Cell Receptors and Signal Transduction; 47. Genes in Development; 48. Behavioural Genetics; 49. Epigenetics and Epigenomics; 50. Genetic Engineering and Biotechnology: 1. Recombinant DNA, Molecular Probes, Gene Libraries, PCR (Cloning and Amplification of DNA) and DNA Chips; 51. Genetic Engineering and Biotechnology: 2. Restriction Maps and Molecular Marker Maps; 52. Genetic Engineering and Biotechnology: 3. Isolation, Sequencing and Synthesis of Genes; 53. Genetic Engineering and Biotechnology: 4. Gene Transfer Methods and Transgenic Organisms; 54. Genetic Engineering and Biotechnology: 5. Hybridoma and Monoclonal Antibodies; 55. Multigene Families in Eukaryotes; 56. Genomics and Proteomics (Animals, Plants and Microbes); 57. Genetics of Cancer: Proto-oncogenes, Oncogenes and Tumour Suppressor Genes; 58. Population and Evolutionary Genetics; 59. Genetics of Inbreeding Depression and Heterosis; 60. Bioinformatics, In Silico Biology and Systems Biology for Geneticists; I Glossary; I References; I Author Index; I Subject Index.

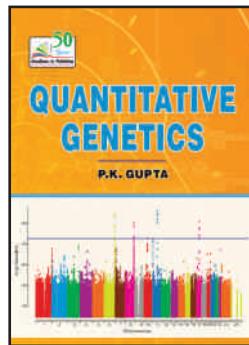
1st Reprint (1st Edition): 2013	Size: Crown 4vo
ISBN: 81-7133-896-8	Pages: xxviii+984
Code No.: BC-51	Price: ₹595.00



# QUANTITATIVE GENETICS

Prof. P.K. Gupta FNA

**CONTENTS:** 1. Genetics of Quantitative Traits (QTs) : An Overview; 2. Quantitative Traits (QTs) with Continuous and Discontinuous Distributions (Including Binary and Ordinal Traits); 3. Initial Studies on Quantitative Genetics: Multiple Factor Hypothesis; 4. Biometrical and Population Genetics; 5. Basic Statistics for Quantitative Genetics; 6. Matrix Algebra and Linear Models in Quantitative Genetics; 7. Genotyping for QTL Analysis: 1. Molecular Markers; 8. Genotyping for QTL Analysis; 2. DNA Sequencing Technologies (Including Next Generation Sequencing Methods); 9. Phenotyping for QTL Analysis: 1. Phenomics and High Throughput Phenotyping in Animals; 10. Phenotyping for QTL Analysis: 2. Phenomics and High Throughput Phenotyping in Plants; 11. QTL Analysis: Experimental Populations, Genetic Models and Recording of Data; 12. QTL Analysis Using Experimental Populations: Single Marker Analysis 13. Linkage and QTL Analysis: Complex Human Disorders; 14. QTL Mapping for Complex Traits in Laboratory/Domestic Animals; 15. QTL Analysis in Plants Using Experimental Populations: 1. Interval Mapping in Inbreds; 16. QTL Analysis in Plants Using Experimental Populations: 2. Linkage-Based Interval Mapping in Outbreds; 17. QTL Analysis Using Natural, Breeding and Admixed Populations; 18. Genetical Genomics: Analysis for eQTL, pQTL and mQTL; 19. Linkage Disequilibrium (LD) : Basic Concepts; 20. LD-Based Association Mapping; 21. Joint Linkage Mapping (JLM) and Joint Linkage-Association Mapping (JLAM); 22. Meta-QTL Analysis and GWAS Meta-Analysis; 23. Bayesian Approach of QTL Mapping; 24. Epistasis, Two Locus QTL Analysis and Plant Breeding; 25. QTL Analysis for Study of Domestication in Crops and Animals; 26. Quantitative Disease Resistance (QDR) and Quantitative Resistance Loci (QRLs); 27. High Resolution QTL Mapping (Use of RILs, NILs, CSSLs and Resequencing); 28. Positional/Map-Based Cloning of QTL (Chromosome Walking, Jumping and Landing); 29. Marker-Assisted Selection (MAS) for Animal/Plant Breeding; 30. Genomic Selection and Animal/Plant Breeding; 31. Quantitative Genetics for Heterosis Breeding; 32. Resampling and Simulation Studies in Quantitative Genetics; 33. Statistical Power and Resolution of QTL Mapping; 34. Breeding by Design; 35. Epigenetics and Quantitative Traits: EpiQTL Analysis/EWAS; References; Subject Index.



1st Edition: 2020

Size: Crown 4vo

ISBN: 978-93-5078-154-8

Pages: 548

Code No.: BC-73

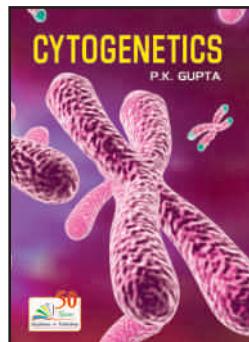
Price: ₹ 495.00

PRINTED IN DOUBLE COLOUR

# CYTOGENETICS

Prof. P.K. Gupta FNA

**CONTENTS:** 1. Chromosomes and Cytogenetics: An Introduction, 2. Duplications and Deficiencies, 3. Inversions, 4. Interchanges, 5. Haploidy in Higher Plants, 6. Polyploidy-I. Autopolyploidy, 7. Polyploidy-II. Autopolyploidy and Genome Analysis, 8. Aneuploidy-I. Hyperploids (Trisomics and Tetrasomics), 9. Aneuploidy-II. Hypoploidy (Monosomics and Nullisomics), 10. Aneuploidy III. Alien Gene Transfer through Chromosome Manipulations, 11. Cytogenetics of Sex Determination and Sex Differentiation, 12. Cytogenetics of Apomixis, 13. Molecular Cytogenetics I. Nuclear DNA and its Organization, 14. Molecular Cytogenetics II. Genetic and Physical Chromosome Maps using Molecular Markers. 15. Molecular Cytogenetics –III. Multigene Families in Eukaryotes, References, Author Index, Subject Index.



2nd Revised Edition: 2020-21

Size: Royal 4vo

ISBN: 81-7133-737-6

Pages: 456

Code No.: BC-26

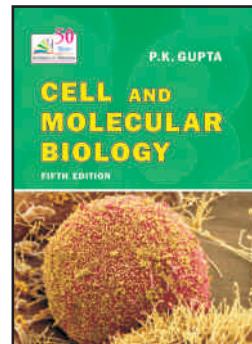
Price: ₹ 495.00



www.rastogipublications.com

# CELL AND MOLECULAR BIOLOGY

Prof. P.K. Gupta FNA



**CONTENTS:** 1. A Preview of The Cell; 2. Techniques for Cell Study; 3. Cell Wall and Extracellular Matrix (ECM); 4. Cell Membrane (Including Plasma Membrane); 5. Cytoskeleton: Microtubules, Actin Filaments and Intermediate Filaments; 6. Eukaryotic Cell Organelles : 1. Mitochondria; 7. Eukaryotic Cell Organelles: 2. Mitochondria; 8. Eukaryotic Cell Organelles : 3. ER, Ribosomes, Endosomes, Golgi, Lysosomes, Peroxisomes, Hydrogenosomes and Centrosome; 9. Prokaryotic Organelles (Magnetosomes, Carboxysomes, etc.); 10. Plasmids, IS Elements, Transposons and Retroelements; 11. Membrane Function: 1. Cell Adhesion and Cell Junctions (Including Plasmodesmata in Plant Cells); 12. Membrane Function: 2. Membrane Transport and Membrane Excitability (Neurotransmission); 13. Membrane Function: 3. Vesicular Transport and Membrane Fusion (Secretory and Endocytic Pathways); 14. Cell Metabolism: 1. Enzymes, Bioenergetics and Metabolic Energy; 15. Cell Metabolism: 2. Aerobic and Anaerobic Respiration; 16. Cell Metabolism: 3. Photosynthesis and Photorespiration; 17. The Cell Nucleus: 1. Nucleus and Nuclear Pore Complex; 18. The Cell Nucleus: 2. Nucleolus and Other Subnuclear Organelles; 19. The Cell Nucleus: 3. The Chromosomes; 20. Cell Division in Eukaryotes : 1. Mitosis and Meiosis; 21. Cell Division in Eukaryotes: 2. Genetics and Molecular Basis of Cell Cycle; 22. Structure of Prokaryotic Nucleoid and Molecular Basis of the Division and Eukaryotic; Organelles; 23. Programmed Cell Death and Apoptosis; 24. Germ Cells, Fertilization, Parthenogenesis and Apomixis; 25. Basic Concepts in Genetics; 26. Maternal Effects and Cytoplasmic Inheritance; 27. Linkage and Crossing Over in Diploid Organisms (Higher Eukaryotes); 28. Tetrad Analysis, Mitotic Recombination and Gene Conversion in Haploid Organisms (Fungi and Single Celled Algae); 29. Sexuality and Recombination in Bacteria and Viruses; 30. Molecular Mechanism of Genetic Recombination: 1. Homologous Recombination; 31. Molecular Mechanism of Genetic Recombination: 2. Site-Specific Recombination; 32. Recombination and Resolution of Gene Structure (A Modified Concept of Allelomorphism); 33. Structural Changes in Chromosomes; 34. Numerical Changes in Chromosomes; 35. Mutations : 1. Biochemical Level (Biochemical and Microbial Genetics); 36. Mutations : 2. Molecular Level (Mechanism); 37. Chemistry of the Cell 1. Micromolecules (Sugars, Fatty Acids, Amino Acids, Nucleotides and Lipids); 38. Chemistry of the Cell 2. Macromolecules (Chemical Bonds, Nucleic, Acids Proteins & Polysaccharides); 39. Synthesis, Modification and Repair of Nucleic Acids; 40. Organization of Genetic Material: 1. Genome Size, C-Value Paradox and Repetitive DNA Sequences; 41. Organisation of Genetic Material 2. Packaging of DNA as Nucleosomes in Eukaryotes; 42. Organization of Genetic Material 3. Mitochondrial, Chloroplast and Apicoplast Genomics; 43. Organization of Genetic Material 4. Split Genes, Overlapping Genes, Pseudogenes, Retrogenes and Cryptic Genes; 44. Multigene Families in Eukaryotes; 45. Dynamic RNA: Ribozymes, Small/Long ncRNAs and RNAWorld; 46. The Genetic Code; 47. Transcription in Prokaryotes and Eukaryotes; 48. RNA Processing (Decay, Splicing, Editing and Repair of RNA); 49. Molecular Machines for Translation of mRNA (Ribosome, tRNA and aaRS); 50. Translation of mRNA; 51. Protein Modification, Folding, Translocation and Degradation; 52. Operon Circuits in Bacteria and Other Prokaryotes; 53. Regulation Cascades in Bacteriophages; 54. Regulation of Gene Expression in Eukaryotes; 55. Chromatin Remodeling and Cellular Memory in Eukaryotes; 56. Cell Receptors and Signal Transduction; 57. Specification of Cell Fate and Cell Commitment; 58. Genes in Development; 59. Epigenetics and Epigenomics; 60. Immune System in Animals and Plants; 61. Genetics of Cancer: Proto-oncogenes, Oncogenes Tumour Suppressor Genes; 62. Recombinant DNA, Molecular Probes, Gene Libraries, PCR and DNA Chips; 63. Molecular Markers, Restriction Maps and Molecular Genetic Maps; 64. Isolation, Sequencing and Synthesis of Genes/Genomes; 65. Gene Transfer and Gene Targeting; 66. Transgenic Animals and Plants; 67. Hybridoma and Monoclonal Antibodies; 68. Stem Cells and Therapeutic Cloning; 69. Genomics, Proteomics, Transcriptomics and Metabolomics 70. Bioinformatics, In Silico Biology and Systems Biology; References; Author Index; Index.

Fifth Revised Edition (Reprint): 2018-19

Size: Crown 4vo

ISBN: 978-93-5078-154-8

Pages: xxxvi+1192

Code No.: BC-27

Price: ₹ 795.00

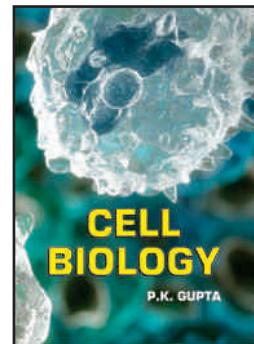
PRINTED IN DOUBLE COLOUR



# CELL BIOLOGY

(Based on undergraduate CBCS Syllabus)

Prof. P.K. Gupta FNA



**CONTENTS:** 1. A Preview of The Cell; 2. Techniques for Cell Study; 3. Cell Wall and Extracellular Matrix (ECM); 4. Cell Membrane (Including Plasma Membrane); 5. Cytoskeleton: Microtubules, Actin Filaments and Intermediate Filaments; 6. Eukaryotic Cell Organelles : 1. Mitochondria; 7. Eukaryotic Cell Organelles: 2. Plastids and Apicoplast ; 8. Eukaryotic Cell Organelles : 3. ER, Ribosomes, Endosomes, Golgi, Lysosomes, Peroxisomes, Hydrogenosomes and Centrosome; 9. Prokaryotic Organelles (Magnetosomes, Carboxysomes, etc.); 10. Plasmids, IS Elements, Transposons and Retroelements; 11. Membrane

Function: 1. Cell Adhesion and Cell Junctions (Including Plasmodesmata in Plant Cells); 12. Membrane Function: 2. Membrane Transport and Membrane Excitability (Neurotransmission); 13. Membrane Function: 3. Vesicular Transport and Membrane Fusion (Secretory and Endocytic Pathways); 14. Cell Metabolism: 1. Enzymes, Bioenergetics and Metabolic Energy; 15. Cell Metabolism: 2. Aerobic and Anaerobic Respiration; 16. Cell Metabolism: 3. Photosynthesis and Photorespiration; 17. The Cell Nucleus: 1. Nucleus and Nuclear Pore Complex; 18. The Cell Nucleus: 2. Nucleolus and Other Subnuclear Organelles; 19. The Cell Nucleus: 3. The Chromosomes; 20. Cell Division in Eukaryotes : 1. Mitosis and Meiosis; 21. Cell Division in Eukaryotes: 2. Genetics and Molecular Basis of Cell Cycle; 22. Structure of Prokaryotic Nucleoid and Molecular Basis of the Division and Eukaryotic Organelles; 23. Structure and Synthesis of Nucleic Acids; 24. Structure and Synthesis of Proteins; 25. Regulation of Protein Synthesis; 26. Cell Receptors and Signal Transduction; 27. Programmed Cell Death and Apoptosis; 28. Genetics of Cancer: Proto-oncogenes, Oncogenes Tumour Suppressor Genes; References, Author Index; Subject Index.

First Edition (2nd Reprint): 2018-2019

Size: Crown 4vo

ISBN: 978-93-5078-120-3

Pages: 504

Code No.: BC-59

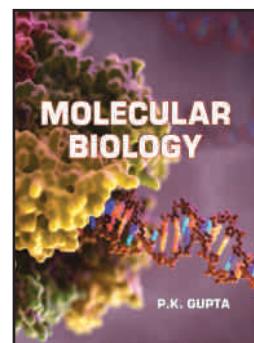
Price: ₹ 435.00

PRINTED IN DOUBLE COLOUR

# MOLECULAR BIOLOGY

(Based on undergraduate CBCS Syllabus)

Prof. P.K. Gupta FNA



**CONTENTS:** 1. Molecular Biology: An Overview; 2. Chemistry of the Cell : Micromolecules (Sugars, Fatty Acids, Amino Acids, Nucleotides and Lipids); 3. Chemistry of the Cell 2. Macromolecules (Chemical Bonds, Nucleic Acids, Proteins & Polysaccharides); 4. Synthesis, Modification and Repair of Nucleic Acids; 5. Organization of Genetic Material: 1. Genome Size, C-Value Paradox and Repetitive DNA Sequences; 6. Organisation of Genetic Material 2. Packaging of DNA as Nucleosomes in Eukaryotes; 7. Organization of Genetic Material 3. Mitochondrial, Chloroplast and Apicoplast Genomes; 8. Organization of Genetic Material 4. Split Genes, Overlapping Genes, Pseudogenes, Retrogenes and Cryptic Genes; 9. Multigene Families in Eukaryotes; 10. Dynamic RNA: Ribozymes, Small/Long ncRNAs and RNA World; 11. The Genetic Code; 12. Transcription in Prokaryotes and Eukaryotes; 13. RNA Processing (Decay, Splicing, Editing and Repair of RNA); 14. Molecular Machines for Translation of mRNA (Ribosome, tRNA and aaRS); 15. Translation of mRNA: Mechanism; 16. Protein Modification, Folding, Translocation and Degradation; 17. Operon Circuits in Bacteria and Other Prokaryotes; 18. Regulation Cascades in Bacteriophages; 19. Regulation of Gene Expression in Eukaryotes; 20. Chromatin Remodeling and Cellular Memory in Eukaryotes; 21. Cell Receptors and Signal Transduction; 22. Specification of Cell Fate and Cell Commitment; 23. Genes in Development; 24. Epigenetics and Epigenomics; 25. Immune System in Animals and Plants; 26. Genetics of Cancer: Proto-oncogenes, Oncogenes, Tumour Suppressor Genes; References, Author Index; Subject Index.

Second Edition: 2018-2019

Size: Crown 4vo

ISBN: 978-93-5078-121-0

Pages: 496

Code No.: BC-60

Price: ₹ 425.00

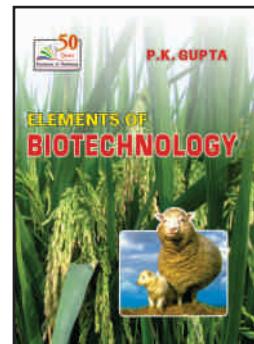
PRINTED IN DOUBLE COLOUR



www.rastogipublications.com

# ELEMENTS OF BIOTECHNOLOGY

Prof. P.K. Gupta FNA



**CONTENTS:** PART I:- **Biotechnology: General Features:** 1. Biotechnology: History, Definition and Scope; 2. Recombinant DNA and Genetic Engineering: 1. Cloning and Expression Vectors; 3. Recombinant DNA and Genetic Engineering: 2. Chimeric DNA, Probes and Genomic/cDNA Libraries; 4. PCR and Microarrays 5. Isolation and Synthesis of Genes (Including Synthesis of a Bacterial Genome); 6. Molecular Markers and DNA Sequencing (Including Whole Genome Sequencing) **PART II:- Animal Biotechnology:** 7. Animal Cell and Tissue Culture: 1. Laboratory Facilities, Culture Media and Procedures; 8. Animal Cell and Tissue Culture: 2. Primary Culture, Cell Lines & Cloning; 9. Animal Cell and Tissue Culture; 3. Tissue and Organ Culture: Primary Explanation Techniques; 10. In Vitro Fertilization and Embryo Transfer in Humans and Livestock; 11. Transfection Methods and Transgenic Animals; 12. Immunotechnology: 1. Immune System, Antibodies, Interferons and Vaccines; 13. Immunotechnology: 2. Hybridoma and Monoclonal Antibodies (Mabs); 14. Animal Genomics: 1. Molecular Maps; 15. Animal Genomics: 2. Whole Genome Sequences and Their Annotation; 16. Biotechnology in Medicine; **PART III:- Plant Biotechnology:** 17. Plant Cell and Tissue Culture: 1. Culture Media and Cell Culture; 18. Plant Cell and Tissue Culture: 2. Tissue Culture, Micropropagation and Somaclonal Variation; 19. Plant Cell and Tissue Culture: 3. Production and Uses of Haploids; 20. Plant Cell and Tissue Culture: 4. Protoplast Culture, Regeneration and Somatic Hybridization; 21. Gene Transfer Methods in Plants; 22. Transgenic Plants; 23. Chloroplast and Mitochondrion Engineering; 24. Plant Genomics: 1. Molecular Maps of Plant Genomes; 25. Plant Genomics: 2. Whole Genome Sequences; **PART IV:- Industrial & Microbial Biotechnology:** 26. Enzyme Biotechnology; 27. Protein Engineering, Immunotoxins and Drug Designing; 28. Metabolic Engineering for Overproduction of Metabolites; 29. Microbial Biotechnology: 1. Isolation, Culture and Genetic Manipulation of Microbes; 30. Microbial Biotechnology: 2. Microbes for Production of Chemicals; 31. Microbial Biotechnology: 3. Microbes for Cleaner Technologies; 32. Microbial Biotechnology: 4. Microbes for Agriculture; 33. Microbial Biotechnology: 5. Microbial Genomics for Industry; **PART V:- Biotechnology & Environment:** 34. Pollution Control; 35. Bioremediation (Including Phytoremediation); 36. Bioenergy and Biofuels; 37. Restoration of Degraded Lands; 38. Biodiversity and its Conservation; **PART VI:- Biotechnology & Intellectual Property:** 39. Biotechnology & Intellectual Property: 1. Intellectual Property Rights (IPR) & Intellectual Property Protection (IPP); 40. Biotechnology & Intellectual Property: 2. Patenting of Biological Material: Obligations and Implications;

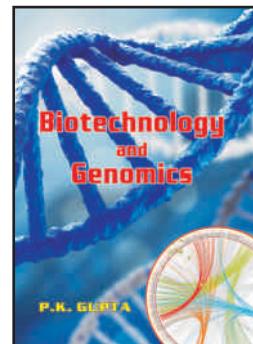
4th Reprint (2nd Edition): 2019-2020	Size: Crown 4vo
ISBN: 978-81-7133-937-2	Pages: xxiv + 468
Code No.: BC-22	Price: ₹ 475.00

PRINTED IN DOUBLE COLOUR



# BIOTECHNOLOGY AND GENOMICS

Prof.. P.K. Gupta FNA



## **CONTENTS: Part I. Biotechnology and Genomics: General Features:** 1.

Biotechnology and Genomics : History, Dimension and Scope, 2. Recombinant DNA and Gene Cloning: (1. Cloning and Expression Vectors), 3. Recombinant

DNA and Gene Cloning: (2. Chimeric DNA, Molecular Probes and Gene Libraries), 4. Polymerase Chain Reaction (PCR) and Gene Amplification, 5. DNA Chip Technology and Microarrays, 6. Mass Spectrometry : An Essential Tool for Genome and Proteome Analysis, 7. Triplex DNA, TFOs, PNAs, RNA-DNA Hybrids and ds RNA/RNAi, 8. Isolation, Sequencing and Synthesis of Genes, 9. DNA-Based Molecular Markers in Biotechnology, 10. Biosensors as Biotechnology Tools, 11. Methods and Uses of Genomics and Proteomics Research, 12. Bioinformatics and Data Mining ('In Silico Biology').

**Part II. Animal Biotechnology and Genomics:** 13. Animal Cell and Tissue Culture: (1. Laboratory Facilities, Culture Media and Procedures), 14. Animal Cell and Tissue Culture: (2. Primary Culture and Cell Lines), 15. Animal Cell and Tissue Culture: (3. Pluripotent Stem Cell Lines), 16. Animal Cell and Tissue Culture: (4. Primary Explanation Techniques and Organ/Embryo Culture.), 17. Animal Cell and Tissue Culture : (5. Cell and Tissue Engineering), 18. Invitro Fertilization and Embryo Transfer in Humans and Livestock, 19. Cloning of Animals : Methods and Utility, 20. Transfection Methods and Transgenic Animals, 21. Immunotechnology (1. B-Cells, Antibodies, Interferons and Vaccines), 22. Immunotechnology: (2. T-Cell Receptors and MHC Restriction), 23. Immunotechnology: (3. Hybridoma and Monoclonal Antibodies : mAbs), 24. Animal and Human Genomics: (1. Molecular Maps), 25. Animal and Human Genomics: (2. Progress in Genomics Research), 26. Biotechnology in Medicine: (1. Vaccines, Diagnostics and Forensics), 27. Biotechnology in Medicine: (2. Gene Therapy), 28. Biotechnology in Medicine:(3. Pharmacogenetics / Pharmacogenomics and Personalized Medicine).

**Part III. Plant Biotechnology** 29. Plant Cell and Tissue Culture: (1. Culture Media and Cell Culture), 30. Plant Cell and Tissue Culture: (2. Tissue Culture Micropropagation and Somaclonal Variation), 31. Plant Cell and Tissue Culture: (3. Production and Uses of Haploids), 32. Plant Cell and Tissue Culture: (4. Protoplast Culture, Regeneration and Somatic Hybridization), 33. Gene Transfer Methods in Plants, 34. Transgenic Plants: (1. Study of Regulatory Sequences), 35. Transgenic Plants: (2. Genetically Modified Crops and Floricultural Plants), 36. Transgenic Plants : (3. Molecular Farming/Pharming), 37. Transgenic Plants: (4. Field Testing and Commercialization), 38. Transplastomic Plants and Chloroplast Engineering, 39. Plant Genomics: (1. Construction of Molecular Maps and Synteny : Collinearity), 40. Plant Genomics: (2. Whole Genome Sequencing and Functional Genomics).

**Part IV. Industrial and Microbial Biotechnology** 41. Biocatalysis and Enzyme Biotechnology, 42. Protein and Enzyme Engineering, 43. Drug Discovery and Drug Designing. 44. Metabolic Engineering and Metabolomics, 45. Microbes and Microbial Genomics for Industry, 46. Bioprocess Engineering and Downstream Processing, 47. Biopesticides and Integrated Pest Management (IPM), 48. Biofertilizers and Integrated Nutrient Management (INM). **Part V. Biotechnology and Environments** 49. Pollution Control, 50. Bioremediation (Including Phytoremediation), 51. Environment and Energy, 52. Restoration of Degraded Lands, 53. Biodiversity and Its Conservation. **Part VI. Biotechnology Genomics and Intellectual Property;** 54 Intellectual Property Rights (IPRs) and Protection (IPP), 55. Patenting of Biological Material, 56. Intellectual Property Rights (IPRs) for Plant Breeding. 57. Terminator and Traitor Technologies (v-GURT and t-GURT), 58. Biotechnology Entrepreneurship, References, Author Index, Index, Appendix.

7th Reprint (1st Edition): 2016-2017

Size: Crown 4vo

ISBN: 978-81-7133-845-0

Pages: xxxii+796

Code No.: BC-41

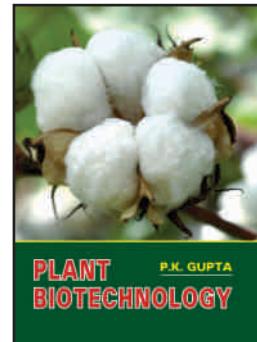
Price: ₹565.00



www.rastogipublications.com

# PLANT BIOTECHNOLOGY

Prof. P.K. Gupta FNA



**CONTENTS:** 1. An Overview; **PART-I:** DNA Technology; 2. Recombinant DNA and Gene Cloning: 1. Cloning and Expression Vectors; 3. Recombinant DNA and Gene Cloning: 2. Chimeric DNA, Molecular Probes and Gene Libraries; 4. PCR and Microarrays; 5. Isolation and Synthesis of Genes/Genomes (including 'synthetic genomics'); 6. DNA Sequencing Technologies (including New Generation Sequencing Methods); 7. DNA-Based Molecular Markers; **PART II:** Plant Cell and Tissue Culture; 8. Plant Cell and Tissue Culture: 1. Culture Media and Cell Culture; 9. Plant Cell and Tissue Culture: 2. Tissue Culture and Somaclonal Variation; 10. Plant Cell and Tissue Culture: 3. Clonal Micropropagation; 11. Plant Cell and Tissue Culture: 4. Germplasm Conservation; 12. Plant Cell and Tissue Culture: 5. Production of Virus Free Plants; 13. Plant Cell and Tissue Culture: 6. Production of Metabolites; 14. Plant Cell and Tissue Culture: 7. Production and Uses of Haploids; 15. Plant Cell and Tissue Culture: 8. Protoplast Culture, Regeneration and Somatic Hybridization; **PART III:** Transgenic Plants (Including Transplastomic Plants); 16. Gene Transfer Methods in Plants; 17. Gene Targeting in Plants; 18. Transgenic Plants: 1. Study of Regulatory Sequences; 19. Transgenic Plants: 2. Genetically Modified Improvement of Crops and Floricultural Plants; 20. Transgenic Plants: 3. Molecular Farming/Pharming; 21. Transgenic Plants: 4. Field Testing and Commercialization; 22. Transplastomic Plants and Chloroplast Engineering; **PART IV:** Plant Genomics and Quantitative Genetics; 23. Plant Genomics: 1. Construction of Molecular Maps and Synteny (Collinearity); 24. Plant Genomics: 2. Whole Genome Sequencing and Functional Genomics; 25. Metabolic Engineering and Metabolomics (For Overproduction of Metabolites); 26. Quantitative Genetics and QTL Analysis; 27. Linkage Disequilibrium (LD) and Association Mapping; 28. Marker-Assisted Selection (MAS) for Plant Breeding; **PART V:** Plant Biotechnology for Agricultural Practices; 29. Biopesticides and Integrated Pest Management (IPM); 30. Biofertilizers and Integrated Nutrient Management (INM) (Including Organic Farming); **PART VI:** Plant Biotechnology for Environment; 31. Environment, BioEnergy and BioFuels; 32. Bioremediation (Including Phytoremediation); 33. Biodiversity and Plant Genetic Resources; 34. Plant Biotechnology and Climate Change; **Part VII:** IPR and Plant Biotechnology: 35. IPR and Plant Breeding; 36. Terminator and Traitor Technologies (v-GURT and t-GURT)



2nd Edition: 2015-2016

ISBN: 978-93-5078-100-5

Code No.: BC-55

Size: Crown 4vo

Pages: 28+676

Price: ₹475.00

PRINTED IN DOUBLE COLOUR



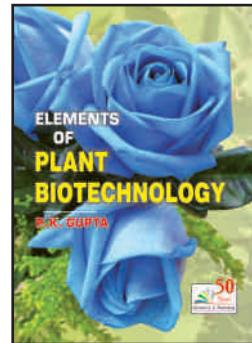
# ELEMENTS OF PLANT BIOTECHNOLOGY

(An Abridged Edition)

(Based on undergraduate CBCS Syllabus)

New Arrival

Prof. P.K. Gupta FNA



**CONTENTS:** 1. Plant Biotechnology: An Overview; 2. Culture Media and Culturing of Plant Cells; 3. Tissue Culture, Totipotency, Organogenesis, Embryogenesis and Wide Hybridization; 4. Protoplast Isolation, Culture, Regeneration and Fusion; 5. Applications of Tissue Culture: I. Clonal Micropropagation; 6. Applications of Tissue Culture: II. Virus Elimination and Production of Disease Free Plants; 7. Applications of Tissue Culture: III. Production of Secondary Metabolites; 8. Applications of Tissue Culture: IV. Production and Uses of Haploids; 9. Applications of Tissue Culture: V. Conservation of Germplasm; 10. Recombinant DNA Technology: I. Restriction Endonucleases, Restriction Mapping and Cloning / Expression Vectors; 11. Recombinant DNA Technology: II. Chimeric DNA (Gene Constructs), Molecular Probes and Gene Libraries; 12. PCR and Microarrays; 13. Methods for Gene Transfer (Transgenic Plants); 14. Transgenic Crops: I. Resistance to Biotic Stresses (Bt-Cotton and Round-Up Ready Soybean); 15. Transgenic Crops: II. Resistance Against Abiotic Stresses; 16. Transgenic Crops: III. Crop Productivity and Nutritional Quality (Including Flaver Savr Tomato and Golden Rice); 17. Transgenic Crops: IV. Improved Horticultural and Ornamental Plants (Including Blue Coloured Moondust Carnation and Roses); 18. Transgenic Crops: V. Molecular Farming/Pharming (Including Edible Vaccines, hGH, Humulin and Industrial Enzymes); 19. Transgenic Crops: VI. Biosafety, Field Testing and Commercialization; 20. Bioremediation (Including Phytoremediation).

First Edition: 2018-2019

Size: Crown 4vo

ISBN: 978-93-5078-180-7

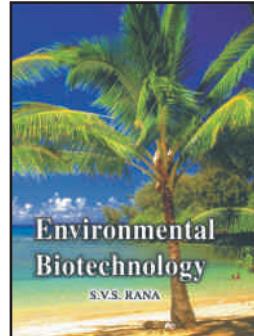
Pages: xii+268

Code No.: BC-68

Price: ₹255.00

# ENVIRONMENTAL BIOTECHNOLOGY

Prof. S.V.S. Rana



**CONTENTS:** 1. An Introduction to Environmental Science; 2. Environmental Pollution; 3. Global Environmental Problems; 4. Fundamentals of Biotechnology; 5. Biotechnological Processes; 6. Essentials of Genetic Engineering (Recombinant DNA Technology); 7. Integrated Approach to Environmental Biotechnology; 8. Cell and Tissue Culture; 9. Energy and Biofuels; 10. Biofertilizers, Biopesticides and Integrated Pest Management; 11. Bioremediation and Phytoremediation; 12. Bioabsorption and Bioleaching of Heavy Metals; 13. Biotechnology of Waste; 14. Wastewater Treatment; 15. Solid Waste Pollution and Its Management; 16. Biomedical Waste Management; 17. Biodegradation of Pollutants by Microorganisms; 18. Biodegradation of Pollutants by Fungi; 19. Biotransformation; 20. Biodiversity and Biotechnology; 21. Transgenic Animals and Plants; 22. Ecogenomics; 23. Bioprospecting; Subject Index;

2nd Revised Edition: 2014-15

Size: Crown 4vo

ISBN: 978-93-5078-081-7

Pages: xii+316

Code No.: BC-54

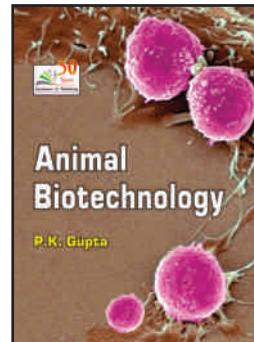
Price: ₹245.00



[www.rastogipublications.com](http://www.rastogipublications.com)

# ANIMAL BIOTECHNOLOGY

Prof. P.K. Gupta FNA



**CONTENTS:** 1. Animal Biotechnology: An Overview; **PART-I.** DNA Technology: 2. Recombinant DNA and Gene Cloning: 1. Cloning and Expression Vectors; 3. Recombinant DNA and Gene Cloning: 2. Restriction Enzymes, Restriction Mapping, Chimeric DNA, Molecular Probes and Gene Libraries; 4. PCR, and Microarrays (Including qRT-PCR and RACE-PCR); 5. Isolation and Synthesis of Genes/Genomes (Including 'Synthetic Genomics'); 6. DNA-Based Molecular Markers; 7. DNA Sequencing Technologies (Including Next Generation Sequencing Methods); 8. DNA Fingerprinting and DNA Barcoding; 9. Genomics, Transcriptomics, Proteomics and Metabolomics; 10. Bioinformatics, In Silico Biology and Systems Biology; **PART-II.** Cell, Tissue and Organ Culture; Tissue Engineering, IVF and Cloning; 11. Animal Cell and Tissue Culture 1. Laboratory Facilities, Culture Media and Procedures; 12. Animal Cell and Tissue Culture 2. Primary Culture and Cell Lines; 13. Animal Cell and Tissue Culture 3. The Stem Cells; 14. Animal Cell and Tissue Culture 4. Primary Explantation Techniques: Tissue and Organ/Embryo Culture; 15. Tissue Engineering and Electrophysiology; 16. In Vitro Fertilization, Artificial Insemination and Embryo Transfer; 17. Cloning of Animals: Methods and Utility. **PART-III.** Gene Transfer/Targeting, Transgenic Animals, Biosafety and Drug Discovery/Designing; 18. Transfection Methods, Gene Targeting and Transgenic Animals; 19. Regulatory System for GE Animals: Biosafety and Ethical Issues; 20. Drug Discovery and Drug Designing (Including the Use of Microbial Genomics and Development of 'Genomic' Drugs); **PART-IV.** Biotechnology in Medicine; 21. Immunology 1. B-Cells and Antibodies (Immunoglobulins); 22. Immunology 2. T-Cells, T-Cell Receptors and MHC Restriction; 23. Immunology 3. Hybridoma Technology and Monoclonal Antibodies (mAbs); 24. Vaccines, Diagnostics and Forensics; 25. HIV, AIDS and Biotechnology; 26. Gene Therapy; 27. Pharmacogenetics, Pharmacogenomics and Personalized Medicine; 28. Regenerative Medicine; 29. Translational Medicine (Including Precision Medicine); 30. Oncogenes, Tumour Suppressor Genes, Tumour Viruses and Oncogenesis; **PART-V.** Animal Cytogenetics, QTL Analysis and Association Mapping; 31. Animal Cytogenetics and Genome Imprinting (Including Human Cytogenetics); 32. Linkage-Based Genetics of Simple and Complex Human Disorders (Including QTL Analysis); 33. QTL Mapping for Complex Traits in Laboratory/Domestic Animals; 34. Linkage Disequilibrium (LD) & Association Mapping; **PART-VI.** Animal Genomics (Including Molecular Maps and Whole Genome Sequencing); 35. Molecular Maps of Human and Animal Genomes 1. Methods for Construction of Maps; 36. Molecular Maps of Human and Other Animal Genomes 2. Available Molecular Maps; 37. Human Genome; 38. Non-Human Animal Genomes ; 39. Microbiome and Metagenome of Human and Other Mammals; **PART-VII. Functional Genomics:** 40. Methods for Genome Annotations and Identification of Genes; 41. Annotation of Genes: Reverse Genetics and Mutagenesis (Insertions, Deletions, RNAi, Nucleases and Knock-Outs); 42. Chemical Genetics/Genomics and Optogenetics; 43. Transcriptomics and ENCODE; 44. Proteomics and Metabolomics; **PART-VIII. Other Areas of Animal Biotechnology:** 45. Aquatic Ecosystem, Aquaculture and Aquatic Biotechnology: Blue Revolution; 46. Leather Industry and Animal Biotechnology; 47. Apoptosis and Animal Biotechnology; 48. Nanotechnology for Medicine and Animal Production; 49. Animal Biodiversity and Animal Genetic Resources (AnGR); 50. Intellectual Property Rights (IPRs) and Animal Biotechnology; References; Index.

1st Edition: 2017-18

ISBN: 978-93-5078-138-8

Code No.: BC-56

Size: Crown 4vo

Pages: 828

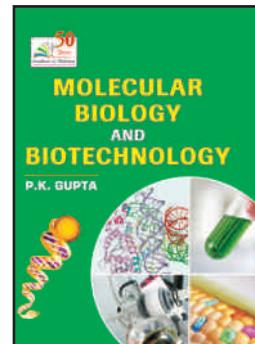
Price: 675.00

PRINTED IN DOUBLE COLOUR



# MOLECULAR BIOLOGY AND BIOTECHNOLOGY

Prof. P.K. Gupta FNA



**CONTENTS:** Molecular Biology: UNIT-I: 1. Nucleic Acids and Genetics Material, Nucleotides and the Structure of Nucleic Acid; 2. The Genetic Code : Properties of the Codon Assignment, Initiation/Termination Codons; 3. Mechanism of Protein Synthesis : 1. Transcription in Prokaryotes and Eukaryotes; 4. Mechanism of Protein Synthesis : 2. RNA Processing; 5. Mechanism of Protein Synthesis : 3. Molecular Machines for Translation of mRNA (Ribosome, tRNA and aaRs); 6. Mechanism of Protein Synthesis : 4. Protein Structure and Translation of mRNA in Prokaryotes and Eukaryotes;  
UNIT-II: 7. Carbohydrates, Amino Acids and Proteins; 8. Vitamins; 9. Animal Hormones (Endocrinology); 10. Plant Hormones (Phytohormones); 11. Enzymes : 1. Properties, Nomenclature and Classification; 12. Enzymes : 2. Bioenergetics : Enthalpy/Entropy and Laws of Thermodynamics; 13. Enzymes : 3. Mechanism of Enzyme Action (Active Sites, Specificity, E-S Complex, Free Energy and Gibbs Energy); 14. Enzymes : 4. Enzyme Kinetics and Factors Affecting Enzyme Activity;  
UNIT-III: 15. Replication of DNA in Prokaryotes and Eukaryotes; 16. Regulation of Gene Expression in Bacteria and Other Prokaryotes; 17. Gene Expression and Regulation; A Variety of Mechanisms in Eukaryotes (Including Hormonal Control and Second Messengers Ca<sup>+</sup>, Cyclic AMP, IP3 etc.);  
UNIT-IV: 18. Biotechnology : History, Definition and Scope; 19. Recombinant DNA and Genetic Engineering : 1. Cloning and Expression Vectors; 20. Recombinant DNA and Genetic Engineering : 2. Chimeric DNA, Probes and Genomic/cDNA Libraries; 21. Plant Cell and Tissue Culture : 1. Culture Media and Cell Culture; 22. Plant Cell and Tissue Culture : 2. Tissue Culture, Micropropagation, Somaclonal Variation and Wide Hybridization; 23. Plant Cell and Tissue Culture : 3. Production and Uses of Haploids; 24. Plant Cell and Tissue Culture : 4. Protoplast Culture, Regeneration and Somatic Hybridization; 25. Gene Transfer Methods in Plants; 26. Transgenic Plants (Including Cisgenic Plants); 27. Biotechnology for Healthcare : 1. Prevention, Diagnostics, Therapy and Genetic Counselling; 28. Biotechnology for Healthcare: 2. Gene Therapy; 29. Biotechnology for Healthcare: 3. Pharmacogenetics / Pharmacogenomics; 30. Microbial Biotechnology: 1. Isolation, Culture and Genetic Manipulation of Microbes; 31. Microbial Biotechnology: 2. Microbes for Production of Chemicals; 32. Microbial Biotechnology: 3. Microbes for Cleaner Technologies and Pollution Control; 33. Microbial Biotechnology: 4. Microbes for Agriculture; 34. Environmental Biotechnology: 1. Pollution Control; 35. Environmental Biotechnology: 2. Bioremediation (Including Phytoremediation) 36. Environmental Biotechnology: 3. Bioenergy and Biofuels;

3rd Reprint (First Edition): 2017-2018

ISBN: 978-93-5078-050-3

Code No.: B-69

FIRST U.P. UNIFIED EDITION

Size: Crown 4vo

Pages: xii+508

Price: ₹495.00

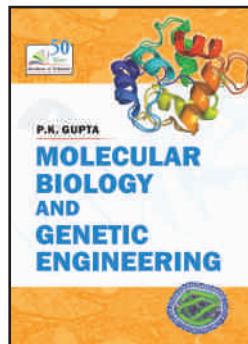
HINDI EDITION  
IS ALSO AVAILABLE  
CODE No.: BC-71



[www.rastogipublications.com](http://www.rastogipublications.com)

# MOLECULAR BIOLOGY AND GENETIC ENGINEERING

Prof. P.K. Gupta FNA



**CONTENTS:** 1. Molecular Biology and Genetic Engineering: Definition, History and Scope, 2. Chemistry of the Cell: 1. Micromolecules (Sugar, Fatty Acids, Amino Acids, Nucleotides and Lipids ), 3. Chemistry of the Cell: 2. Macromolecules (Nucleic Acids, Proteins and Polysaccharides), 4. Chemistry of Gene: Synthesis, Modification and Repair of DNA 5. Organisation of Genetic Material: 1. Packaging of DNA as Nucleosomes in Eukaryotes, 6. Organisation of Genetic Material : 2. Repetitive and Unique DNA Sequences, 7. Organisation of Genetic Material: 3. Split Genes, Overlapping Genes, Pseudogenes and Cryptic Genes, 8. Multigene Families in Eukaryotes, 9. Organisation of Mitochondrial and Chloroplast Genomes, 10. The Genetic Code, 11. Ribosome, Transfer RNA and Aminoacyl-tRNA Synthetases, 12. Expression of Gene: Protein Synthesis: 1. Transcription on Prokaryotes and Eukaryotes, 13. Expression of Gene: Protein Synthesis, 2. RNA Processing (RNA Splicing, RNA Editing and Ribozymes), 14. Expression of Gene: Protein Synthesis, 3. Synthesis and Transport of Proteins, Prokaryotes and Eukaryotes, 15. Regulation of Gene Expression, 1. Operon Circuits in Bacteria and Other Prokaryotes, 16. Regulation of Gene Expression, 2. Circuits for Lytic Cycle and Lysogeny in Bacteriaophages, 17. Regulation of Gene Expression, 3. A Variety of Mechanism in Eukaryotes ( Including Cell Receptors and Cell Signalling); 18. Recombinant DNA & Gene Cloning: 1. Cloning and Expression Vectors, 19. Recombinant DNA & Gene Cloning: 2. Chimeric DNA, Molecular Probes and Gene Libraries, 20. Isolation, Sequencing & Synthesis of Genes, 21. Proteins: Separation, Purification and Identification, 22. Immunotechnology: 1. B-Cells, Antibodies, Interferons and Vaccines, 23. Immunotechnology : 2. T-Cell Receptors and MHC Restriction, 24. Immunotechnology: 3. Hybridoma and Monoclonals, Antibodies (mAbs), 25. Animal & Human Genomics, 26. Biotechnology in Medicine: 1. Vaccines Diagnostic and Forensics, 27. Biotechnology in Medicine : 2. Gene Therapy, 28. Biotechnology in Medicine: 3. Pharmacogenetics / Pharmacogenomics and Personalized Medicine, 29. Plant Cell & Tissue Culture : Production and Uses of Haploids, 30. Gene Transfer Plants : Genetically Modified (GM) Crops and Floricultural Plants. 31. Plant Genomics.



4th Reprint (1st Edition): 2019-2020

ISBN: 81-7133-719-8

Code No.: BC-45

Size: Crown 4vo

Pages: xxii+590

Price: ₹495.00

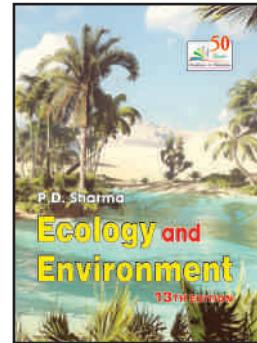


# ECOLOGY AND ENVIRONMENT

Dr. P.D. Sharma

**CONTENTS:** 1. Introduction; 2. Climatic and Topographic Factors; 3. Edaphic Factors : Soil Science; 4. Water Regimes and Ecological Adaptations; 5. Biotic Factor (Interactions Among Organisms); 6. Autecology of Species; 7. Population

Characteristics, Growth and Regulation; 8. Community Characteristics, Classification and Succession; 9. Ecosystem Structure and Rate Functions; 10. Habitat Ecology; 11. Environmental Challenges and Sustainable Development; 12. Air Pollution and Status of Air Quality in India; 13. Water Pollution and Water Quality in India; 14. Land Pollution; 15. Radiation and Chemical Toxicology; 16. Bioremediation of Polluted Environments; 17. Global Warming and Climate Change; 18. Natural Resources Degradation and Conservation; 19. Biogeographic Regions and Vegetation of India; 20. Biodiversity and Wildlife Conservation; 21. Energy and Environment; 22. Environmental Monitoring and Impact Assessment; 23. Environmental Laws; 24. Environmental Education and Organisations; Glossary; Index



13th Edition (Reprint): 2019-20

ISBN: 978-93-5078-122-7

Code No.: BC-4

PRINTED IN DOUBLE COLOUR

Size: Crown 4vo

Pages: xx+756

Price: ₹ 725.00

REVISED HINDI EDITION  
IS ALSO AVAILABLE  
CODE No.: BC-31

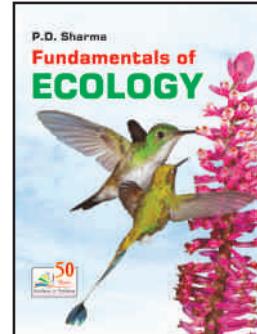
## FUNDAMENTALS OF ECOLOGY

(An Abridged Edition)

(Based on undergraduate CBCS Syllabus)

New Arrival

Prof. P.D. Sharma



**CONTENTS: Evolution :** 1. Introduction; 2. Ecological Factors: Light, Temperature, Soil, Water; 3. Ecological Adaptations to Water Extremes; 4. Population: Structure, Growth and Regulation; 5. Population Interactions; 6. Community Characteristics and Ecological Succession; 7. Ecosystem Structure, Rate Functions and Biogeochemical Cycles; 8. Biodiversity and Wildlife Conservation; 9. Phytogeography: Basic Principles, Biogeographic Zones and Vegetation of India; 10. Practical Exercises; Glossary; Index

1st Edition (Reprint): 2018-2019

ISBN: 978-93-5078-167-8

Code No.: BC-61

Size: Crown 4vo

Pages: 340

Price: ₹ 355.00

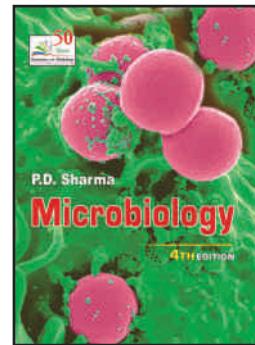


www.rastogipublications.com

# MICROBIOLOGY

Dr. P.D. Sharma

**CONTENTS:** 1. History and Scope of Microbiology; 2. Tools and Techniques of Microbiology; 3. Bacterial, Archaeal and Eukaryotic Cells Structure; 4. Microbial Nutrition and Growth; 5. Microbial Metabolism; 6. Microbial Recombination DNA Technology and Genomics; 7. Control of Microbial Growth 8. Diversity, Status and Classification of Microbial World 9. Prokaryotic Microorganisms; 10. Eukaryotic Microorganisms; 11. Acellular Microorganisms: Viruses, Satellites, Virusoids, Viroids and Prions; 12. Microbiology of Air: Aeromicrobiology; 13. Microbiology of Water; 14. Soil Microbiology; 15. Microbiology of Extreme Environments: Biotechnological Applications of Extremophiles 16. Biodeterioration of Monuments and Other Building Materials 17. Biohydrometallurgy: Bioleaching and Biomining; 18. Biodegradation of Organic Pollutants; 19. Bioremediation of Polluted Sites; 20. Domestic Liquid Wastewater (Sewage) and Solid Waste Management; 21. Microbial Interactions; 22. Agricultural Microbiology; 23. Microbiology of Foods, Milk and Dairy Products; 24. Industrial Microbiology; 25. Infection and Disease; 26. Human Diseases Caused by Bacteria; 27. Human Diseases Caused by Viruses and Prions; 28. Human Diseases Caused by Fungi, Protozoa and Helminths; 29. Microbiomics: General and Specific (Immune) Resistance; 30. Immunity, Serology and Immune Disorders; Glossary



Fourth Revised Edition: 2019-2020

Size: Crown 4vo

ISBN: 978-81-7133-935-2

Pages: 763

Code No.: B-4

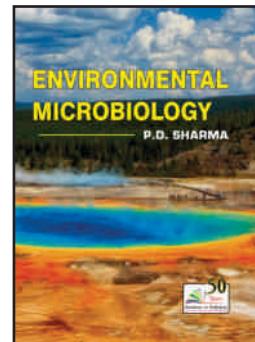
Price: ₹ 645.00

PRINTED IN DOUBLE COLOUR

# ENVIRONMENTAL MICROBIOLOGY

Dr. P.D. Sharma

**CONTENTS:** 1. Introduction; 2. Aeromicrobiology: Microbes in Atmosphere; 3. Aquatic Microbiology: Aquatic Environments; 4. Soil Microbiology: Terrestrial Environments; 5. Extreme Environments and Extremophiles; 6. Microbiomics and Microbial Interactions; 7. Biogeochemical Cycles; 8. Microbes and Agriculture: Agricultural Microbiology; 9. Biodeterioration of Monuments of Cultural Heritage; 10. Microbial Biodegradation of Organic Pollutants; 11. Microbial Bioremediation; 12. Potable Water: Purification (Treatment) and Microbiological Analysis; 13. Solid Waste and Domestic Liquid Wastewater (Sewage) Management; Index



1st Edition: 2016-2017

Size: Crown 4vo

ISBN: 978-93-5078-140-1

Pages: 312

Code No.: BC-63

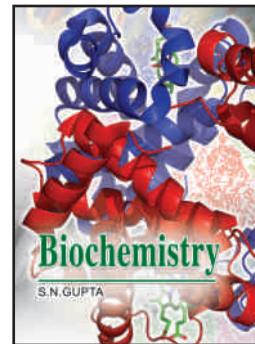
Price: ₹ 245.00



# A TEXT BOOK OF BIOCHEMISTRY

Dr. S.N. Gupta

**CONTENTS:** Introduction; **1.** History of Biochemistry; **2.** Biochemistry and the Cell; **3.** Atoms and Molecules; **4.** Enzymes; **5.** Carbohydrates I: Structure; **6.** Carbohydrates II: Photosynthesis; **7.** Carbohydrates III: Degradation; **8.** Oxidative Phosphorylation; **9.** Amino Acid: Structure and Properties; **10.** Amino Acid: Synthesis; **11.** Amino Acid: Degradation; **12.** Proteins Classification & Types; **13.** Protein Synthesis I: Genetic Code; **14.** Protein Synthesis II: Biosynthesis; **15.** Protein Degradation & Modifications; **16.** Nucleic Acid Biosynthesis: Nucleotide Structure; **17.** Nucleic Acid: Structure **18.** Nucleic Acid Biosynthesis I: DNA; **19.** Nucleic Acid Biosynthesis II: RNA; **20.** Lipids I: Classification , Structure & Types; **21.** Lipids II : Biosynthesis; **22.** Lipids III : Degradation; **23.** Animal Hormones; **24.** Plant Hormones; **25.** Vitamins; **26.** Secondary Metabolites; **Analytical Techniques** **27.** Chromatography; **28.** Electrophoresis; **29.** Blotting Techniques; **30.** Radio-Isotope Techniques; **31.** Mass Spectrometry; **32.** Nuclear Magnetic Resonance Spectroscopy; **34.** Spectrophotometry; **35.** X-ray Differraction Techniques **36.** Sequencing and Synthesis Techniques; Glossary of Technical Terms; Author Index; Subject Index.



2nd Revised Edition: 2015-2016

Size: Crown 4vo

ISBN: 978-93-5078-096-1

Pages: xx+1084

Code No.: BC-35

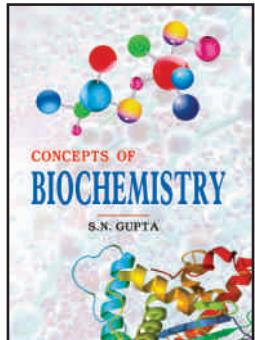
Price: ₹ 625.00

PRINTED IN DOUBLE COLOUR

# CONCEPTS OF BIOCHEMISTRY

(An Abridged Edition)

Dr. S.N. Gupta



**CONTENTS:** **1.** History of Biochemistry; **2.** Pillars of Biochemistry; **3.** Atoms and Molecules; **4.** Carbon Molecules; **5.** Water Molecules; **6.** Bioenergetics; **7.** Enzymes-I; **8.** Enzymes-II; **9.** Enzymes-III; **10.** Carbohydrates; **11.** Photosynthesis-I; **12.** Photosynthesis-II; **13.** Degradation of Carbohydrates; **14.** Amino Acids: I. Structure; **15.** Amino Acids -II Biosynthesis; **16.** Protein; **17.** Protein Synthesis; **18.** Lipids; **19.** Lipid Metabolism; **20.** Nucleotide Biosynthesis; **21.** Nucleic Acids-I -DNA; **22.** Nucleic Acids-I -RNA; **23.** DNA Synthesis; **24.** RNA Synthesis; **25.** Vitamins; **26.** Plant Hormones; **27.** Animal Hormones; **28.** Pigments; **29.** Secondary Metabolites; Bibliography; Index.

1st Edition (Reprint): 2019-2020

Size: Crown 4vo

ISBN: 978-93-5078-092-3

Pages: xvi+324

Code No.: BC-57

Price: ₹ 285.00



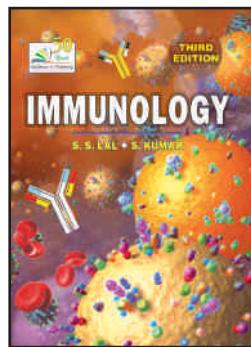
www.rastogipublications.com

# IMMUNOLOGY

Dr. S.S. Lal

Dr. Sanjeev Kumar (U.K.)

**CONTENTS:** 1. Introduction; 2. Historical Background; 3. Lymphoid Organs  
4. Fine Structure and Diversity of Antibodies; 5. Mechanism of Immune Response  
6. Immune Component Cells and Associated Tissues; 7. Major Histocompatibility  
Complex; 8. Complements; 9. Innate or Natural Immunity: The First Line of  
Defence; 10. Humoral Immunity; 11. Cell Mediated Immunity;  
12. Hypersensitivity Reactions; 13. Immunodeficiency Diseases; 14. Acquired



Immune Deficiency Syndrome (AIDS); 15. Antigen Recognition by B-cell; 16. Antigen Recognition by T-cell; 17. Vaccines and Vaccinations or Immunizations; 18. Infections and Infectious Diseases; 19. Immune Responses and Immunity to Certain Prokaryotic and Eukaryotic Parasite Caused Diseases; 20. Transplantation Immunology; 21. Cancer (Tumor) Immunology; 22. Inflammation; 23. Inflammasomes; 24. Interleukins (= Cytokines); 25. Tolerance; 26. Autoimmunity; 27. Immunogenetics: Genetic Organization and Rearrangements of Genes Producing; Antibodies and T-cell Receptors; 28. Hybridoma Technology; 29. Recombinant DNA Technology and Antibody Engineering; 30. Antigen Antibody Reactions (= Tools for Immunological Studies); 31. Antibodies and Immunotherapy Recent Developments; 32. Immunotoxicology; 33. Immunogenic Cell Death; 34. Role of Cytotoxic T-lymphocyte Associated Protein-4 (CTLA-4) and Programmed Cell Death Protein-1 (PD-1) in Cancer (Neoplasm) Immunotherapy; 35. Fibrosis; 36. Brain Reactive Antibodies Autoantibodies and Various Diseases

3rd Revised Edition: 2020-2021

Size: Crown 4vo

ISBN: 978-93-5078-073-2

Pages: xii+564

Code No.: BC-50

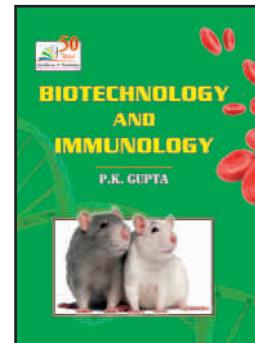
Price: ₹625.00

WITH MULTI COLOURED PLATES

## BIOTECHNOLOGY AND IMMUNOLOGY

Prof. P.K. Gupta FNA

**CONTENTS: UNIT-I:** 1. BIOTECHNOLOGY: History, Definition and Scope; 2. Recombinant DNA and Genetic Engineering : 1. Cloning and Expression Vectors; 3. Recombinant DNA and Genetic Engineering : 2. Chimeric DNA, Probes and Genomic / cDNA Libraries; 4. Application of Genetic Engineering in Agriculture : 1. Gene Transfer Methods in Plants; 5. Application of Genetic



Engineering in Agriculture: 2. Transgenic Plants (Including Cisgenic Plants); 6. Application of Genetic Engineering in Medicine: (Including Pharmaceuticals, Insulin Production); 7. Genetic Engineering for Bioenergy and Biofuels; 8. Microbial Biotechnology : 1. Fermentation Technology for Industrial Production of Chemical and Food Processing; 9. Microbial Biotechnology : 2. Microbes for Production of Enzymes, Antibiotics, etc.; **UNIT-II:** 10. IMMUNOLOGY: An Overview; 11. Lymphatic System and Lymphoid Organs; 12. B-Cells and Antibodies (Immunoglobulins); 13. T-Cells and T-Cell Receptors; 14. MHC/HLA Restriction; 15. Tolerance of Autoimmunity, Autoimmune Diseases and AIDS; 16. Interferons, Vaccines and Prevention of HIV Infection; 17. Hybridoma Technology and Monoclonal Antibodies (mAbs); 18. Monoclonal Antibodies Without Hybridoma and Antibody Engineering using Genetic Manipulations.

2nd Edition (4th Reprint): 2018-2019

Size: Crown 4vo

ISBN: 978-93-5078-051-0

Pages: viii+252

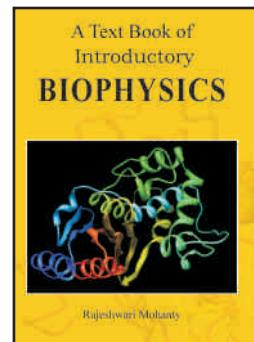
Code No.: Z-68A

Price: ₹235.00



# BIOPHYSICS

Dr. M.R. Rajeshwari FRSC  
Professor of Biophysics  
Department of Biochemistry  
AIIMS, New Delhi

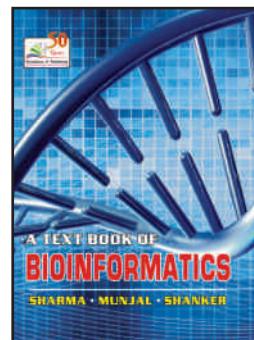


**CONTENTS:** UNIT-1. Basic Biophysics: 1. Atomic Structure; 2. Water- The Molecule of Life; 3. Thermodynamics and Bioenergetics; UNIT-2. Thermodynamics and Bioenergy and Membrane Biophysics: 4. Macromolecules; 5. Membrane Biophysics; UNIT-3. Biophysical Techniques: 6. Biophysical Techniques-I; 7. Biophysical Techniques-II; UNIT-4. Environmental Biophysics: 8. Radiation Biophysics; 9. Photosynthesis in Plants; Suggested Reading; Important Physical Constants and Formulae; Index.

1st Edition (Reprint): 2019-2020	Size: Royal 4vo
ISBN: 978-93-5078-015-2	Pages: xx+368
Code No.: BC-52	Price: ₹375.00

# BIOINFORMATICS

Dr. Vinay Sharma  
Dr. Ashok Munjal  
Dr. Ashish Shanker



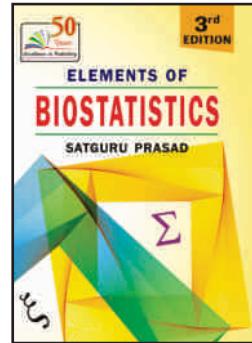
**CONTENTS:** 1. Introduction to Bioinformatics; 2. Introduction to Computers; 3. Introduction to Internet; 4. Search Engines : Tools for Web Search; 5. Programming Languages; 6. Genomics and Proteomics; 7. Biological Databases; 8. Sequence Analysis; 9. Phylogenetic Analysis; 10. Microarray Technology: A Boon to Biological Sciences; 11. Bioinformatics in Drug Discovery: A Brief Overview; 12. Genome Sequencing Projects; 13. BTIS Network in India; Glossary; Abbreviations; Index.

2nd Edition (Reprint): 2018-2019	Size: Crown 4vo
ISBN: 978-93-5078-142-5	Pages: xvi+352
Code No.: BC-53	Price: ₹315.00



# ELEMENTS OF BIOSTATISTICS

Dr. Satguru Prasad



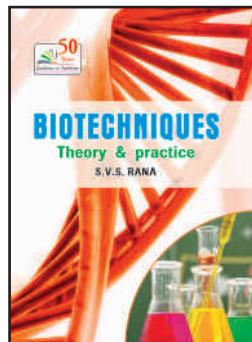
**CONTENTS:** Review of Basic Arithmetic Problems: 1. An Introduction to Biostatistics, 2. Statistical Terms and Symbols, 3. Designing and Methodology of An Experiment, 4. Sample and Sampling, 5. Collection and Representation of Data, 6. Measures of Central Tendency, 7. Measures of Dispersion, 8. F- Test and Analysis of Variance, 9. Distribution Patterns, 10. Statistical Inference, 11. Tests of Significance of Mean, 12. The Chi-Square Test 13. Probability, 14. Correlation, 15. Regression Analysis, 16. Vital Statistics, 17. Computer Applications in Biostatistics, Glossary and Technical Terms., Standard Formulae, Tables, Index.

Seventh Reprint (3rd Edition): 2019-2020	Size: Demy 8vo
ISBN: 978-81-7133-985-3	Pages: viii+314
Code No.: BC-33	Price: ₹315.00

**HINDI EDITION  
IS ALSO AVAILABLE  
CODE No.: BC-39**

# BIOTECHNIQUES (THEORY & PRACTICE )

Prof. S.V.S. Rana



**CONTENTS:** 1. Assay Methods; 2. Cell and Tissue Culture; 3. Basic Requirements in a Biological Laboratory; 4. Fixation; 5. Histological Methods; 6. Microscopy; 7. Centrifugation; 8. Spectrophotometry; 9. Mass Spectrometry; 10. Electron Spin Resonance and Nuclear Magnetic Resonance Spectroscopy; 11. X-Ray Diffraction; 12. Chromatography; 13. Electrophoresis Instrumentation; 14. Polymerase Chain Reaction (PCR); 15. Immunodiagnostic Methods; 16. Radio-isotopes Techniques; 17. Electrochemical Techniques & Biosensors; 18. Methods of Environmental Analysis; 19. Air Pollution Analysis; 20. Monitoring of Ambient Air Pollution; 21. Water Pollution Analysis; 22. Soil Pollution and Pesticide Analysis; 23. Noise Pollution Measurement; 24. Applications of Computer in Modern Biology; 25. Perfusion, Organ Ablations / Surgical Techniques; 26. Management of Laboratory Animals; 27. Biostatistics; 28. Preparation of Reagents, Stains and Buffers; 29. Hazardous Laboratory Materials/Chemicals; Suggested Further Readings;

3rd Edition (Reprint): 2020-2021	Size: Crown 4vo
ISBN: 978-81-7133-993-8	Pages: xii+364
Code No.: BC-43	Price: ₹365.00

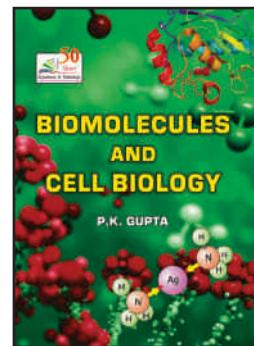


# **BIMOLECULES AND CELL BIOLOGY**

(Based on undergraduate CBCS Syllabus)

*Prof. P.K. Gupta*

**CONTENTS:** SECTION-1: BIOMOLECULES: 1. Biomolecules and Chemical Bonds; 2. Water, pH and Buffers; 3. Carbohydrates; 4. Lipids; 5. Proteins; 6. Nucleic Acids (Deoxyribonucleic Acid, DNA); 7. Nucleic Acids (Ribonucleic Acids, RNA); 8. Bioenergetics; 9. Enzymes: Properties, Nomenclature and Classification; 10. Enzymes: Mechanism of Enzyme Action; 11. Enzymes : Enzyme Kinetics and Factors Affecting Enzyme Activity; SECTION-2: CELL BIOLOGY: 12. Cell Theory and The Cell; 13. Cell Wall and Extracellular Matrix (ECM); 14. Structure of Cell Membrane (Including Plasma Membrane); 15. Membrane Transport (Including Vesicular Transport: Endocytosis and Exocytosis); 16. Nucleus, Nucleolus and Chromosomes; 17. Nuclear Envelope (Nuclear Pore Complex and Nucleo-Cytoplasmic Transport); 18. Cytoskeleton [Microtubules, Actin Filaments (Microfilaments) and Intermediary Filaments]; 19. The Plastids: Chloroplast and Photosynthesis; 20. Mitochondrion, Peroxisome and Hydrogenosome; 21. Endomembrane System [Endoplasmic Reticulum (ER), Ribosome, Golgi Apparatus, Lysosome and Endosome]; 22. Cell Division (Mitosis and Meiosis); 23. Regulation of Cell Cycle (Molecular Basis).



1st Edition(First Reprint): 2019-2020	Size: Crown 4vo
ISBN: 978-93-5078-153-1	Pages: viii+360
Code No.: BC-64	Price: ₹335.00

## **FUNDAMENTALS OF ENVIRONMENTAL STUDIES**

**New Arrival**

(Based on Undergraduate CBCS Syllabus)  
A Textbook for a Compulsory Course  
for various Indian Universities and All State Universities of Odisha

*Dr. S.V.S. Rana*  
Formerly, Vice-chancellor,  
Bundelkhand University, Jhansi (U.P.)

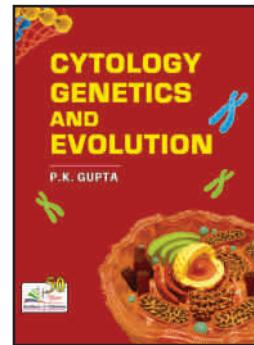
**CONTENTS:** 1. Environmental Studies — Basic Concepts; 2. Atmosphere; 3. Hydrosphere; 4. Lithosphere; 5. Biosphere; 6. Introduction to Ecology; 7. Ecosystem; 8. Nitrogen and Carbon Cycles; 9. Air Pollution and Global Environmental Problems; 10. Water Pollution; 11. Soil and Land Pollution; 12. Radioactive Pollution; 13. Population Ecology; 14. Community Ecology; 15. Urbanization and its Effects on Society; 16. Communicable Diseases; 17. Non Communicable Diseases; 18. Environmentalism and Environmental Movement in India; 19. Role of Women in Environment Protection; 20. Environmental Movements in Odisha; 21. Central Pollution Control Board; 22. Natural Resources; 23. Management and Conservation of Wild Life; 24. Soil Erosion and Soil Conservation; 25. Environmental Laws / Acts in India; 26. Natural Disasters and Their Management.

First Edition: 2019-2020	Size: Crown 4vo
ISBN: 978-81-9406-315-5	Pages: viii+228
Code No.: BC-67	Price: ₹195.00



# CYTOLOGY GENETICS AND EVOLUTION

Prof. P.K. Gupta FNA



**CONTENTS: CELL BIOLOGY(Cytology):** 1. Cell Theory and The Cell; 2. Techniques for Cell Study; 3. Cell Wall and Extracellular Matrix; 4. Structure of Cell Membrane (Including Plasma Membrane); 5. Functions of Cell Membrane; 6. Intracellular Compartments: 1. Nucleus, Nucleolus and Chromosomes; 7. Intracellular Compartments: 2. The Mitochondrion; 8. Intracellular Compartments: 3. The Plastids; 9. Intracellular Compartments: 4. Endoplasmic Reticulum (ER), Ribosome, Golgi, Lysosome Endosome, Peroxisome, Hydrogenosome and Centrosome; 10. Cytoskeleton : (Microtubules, Actin Filaments and Intermediate Filaments); 11. Cell Division (Mitosis and Meiosis); 12. Molecular Basis of Cell Cycle.

**GENETICS:** 1. Genetics : An Overview; 2. Mendel's Laws of Inheritance; 3. Lethality and Interaction of Genes; 4. Quantitative Inheritance; 5. Multiple Alleles: (Based on Classical Concept of Allelomorphism); 6. Physical Basis of Heredity: Chromosome Theory of Inheritance; 7. Linkage and Crossing Over; 8. Sex Linked, Sex Influenced and Sex Limited Traits; 9. Sex Determination, Sex Differentiation, Dosage Compensation and Genetic Imprinting; 10. Extranuclear Inheritance (Maternal Effects, Cytoplasmic Inheritance and Organellar Genetics); 11. Structural Changes in Chromosomes; 12. Numerical Changes in Chromosomes; 13. Mutations: 1. Morphological Level (Including Lethal Mutations); 14. Mutations: 2. Biochemical Level; (Biochemical and Microbial Genetics) 15. Fine Structure of Gene: A New Concept of Allelomorphism; 16. Cell Division, Sexuality and Recombination in Bacteria and Viruses; 17. Plasmids, IS Elements, Transposons and Retroelements; 18. Human Genetics; 19. Structure and Synthesis of Nucleic Acids; 20. Structure and Synthesis of Proteins; 21. Regulation of Protein Synthesis; 22. Genetic Code, Overlapping Genes and Split Genes; 23. Recombinant DNA, PCR and DNA Chips/Microarrays; 24. Synthesis, Isolation and Sequencing of Genes; 25. Population and Evolutionary Genetics.

**EVOLUTION:** 1. Organic Evolution and Origin of Life; 2. Evidences of Organic Evolution; 3. Evolution Through Ages; 1. Fossils and Geological Time Scale; 4. Evolution Through Ages; 2. Evolution of Man, Elephant and Camel; 5. Geographic Distribution and Evolution; 6. Theories of Organic Evolution; 7. Speciation and Isolating Mechanisms;

**ECOLOGY:** 1. Ecology: An Introduction; 2. Ecosystem: 1. Components and Major Ecosystems; 2. Ecosystem: 3. Dynamics and Energy Flow; 4. Ecological Factors; 5. Ecological Adaptations; 6. Plant Community and Plant Succession; 7. Biosphere, Biogeography and Biomes; 8. Environmental Pollution.

**PLANT BREEDING:** 1. Plant Breeding: An Introduction; 2. Reproductive Systems in Crop Plants; 3. Origin, Domestication and Introduction of Plants; 4. Selection Methods of Plant Breeding; 5. Techniques of Hybridization; 6. Inbreeding Depression and Heterosis; 7. Hybridization Methods of Plant Breeding: 1. Self Pollinated Crops; 8. Hybridization Methods of Plant Breeding : 2. Cross Pollinated Crops; 9. Hybridization Methods of Plant Breeding : 3. Vegetatively Propagated Crops; 10. Production and Uses of Transgenic(GM) Crops; 11. Some Important Plant Breeders of World and India; 12. National and International Institutes for Agricultural Research; 13. 'Green Revolution' and the Plant Breeding Work on Wheat and Rice Done in India.

8th Edition(Second Reprint): 2019-2020	Size: Crown 4vo
ISBN: 978-93-5078-136-4	Pages: xviii+627
Code No.: BC-7	Price: ₹515.00

**HINDI EDITIONS  
ALSO AVAILABLE  
CODE No.: BC-14**

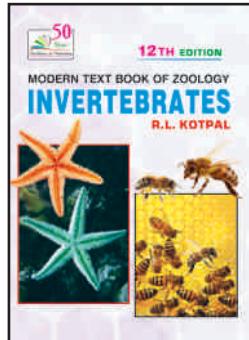
<b>New Revised Editions:</b>	<b>For Contents</b>	<b>HINDI EDITION CODE NOS.</b>		
1. CONCEPTS OF GENETICS (BC-62)	(See Above)	₹295.00	(Pages: 344)	
2. CELL BIOLOGY & GENETICS (BC-12)	(See Above)	₹445.00	(Pages: 524)	BC-28
3. CYTOLOGY, GENETICS, (BC-10) EVOLUTION & ECOLOGY	(See Above)	₹565.00	(Pages: 708)	BC-17
4. CYTOLOGY, GENETICS, (BC-11) EVOLUTION & PLANT BREEDING	(See Above)	₹575.00	(Pages: 740)	BC-18

**REVISED HINDI EDITIONS  
OF ALL THE ABOVE BOOKS ARE AVAILABLE**



# MODERN TEXT BOOK OF ZOOLOGY INVERTEBRATES

Prof. R. L. Kotpal



**CONTENTS:** 1. Animal Diversity and Taxonomy 2. The Invertebrates: An Introduction; SUB KINGDOM PROTOZOA — 3. *Euglena viridis*; 4. *Trypanosoma gambiense*; 5. *Leishmania donovani*; 6. *Amoeba proteus*; 7. *Entamoeba histolytica*; 8. *Elphidium crispum* (*Polystomella crispata*); 9. *Plasmodium vivax*: The Malaria Parasite; 10. *Monocystis agilis*; 11. *Eimeria tenella*; 12. *Paramecium caudatum*: The Slipper Animalcule; 13. *Vorticella*: The Bell Animalcule; 14. Protozoa : Characters, Classification & Types: 15. Protozoa: General Account; SUB KINGDOM METAZOA — 16. Organization of Metazoa; 17. Origin of Metazoa; 18. Origin of Bilateria; **LOWER INVERTEBRATES** — 19. *Leucosolenia*: An Asconoid Sponge; 20. *Scypha* (=Sycon): A Syconoid Sponge; 21. Porifera: Characters, Classification & Types; 22. Porifera: General Account; 23. *Hydra*; 24. *Obelia*: A Sea Fur; 25. *Aurelia*: A Jelly-Fish; 26. *Metridium*: A Sea Anemone; 27. Coelenterata : Characters, Classification & Types; 28. Coelenterata: General Account; 29. Ctenophora; 30. *Dugesia* (*Euplanaria*): A Planarian Regeneration; 31. *Faciola hepatica*: The Sheep Liverfluke; 32. *Taenia solium*: The Pork Tapeworm; 33. Platyhelminthes: Characters, Classification & Types; 34. Super Phylum Aschel- minthes: The Pseudocoelomate Phyla; 35. *Ascaris lumbricoides*: The Common Roundworm; 36. *Ancylostoma duodenale*: The Common Hookworm; 37. *Wuchereria bancrofti*; 38. Nematoda: Characters, Classification & Types; 39. Helminthes: General Account; **HIGHER INVERTEBRATES** — 40. *Neanthes* or *Nereis*; 41. *Pheretima posthuma* : The Indian Earthworm; 42. *Hirudinaria granulosa*: The Indian Cattle Leech; 43. Annelida: Characters, Classification & Types; 44. Annelida: General Account; 45. *Palaemon* (=*Macrobrachium*) *malcolsonii*: The Indian Fresh water Prawn; 46. *Palamnaeus*: Indian Scorpion; 47. *Periplaneta americana*: The Common Cockroach; 48. Grasshopper or Locust; 49. *Musca domestica*: The Housefly; 50. *Culex* and *Anopheles*: The Mosquitoes; 51. *Apis*: The Honey Bee; 52. *Bombyx mori*: The Silkworm; 53. Arthropoda: Characters, Classification & Types; 54. Arthropoda : General Account; 55. *Peripatus*; 56. *Pila*: The Apple Snail; 57. *Unio* (*Lamellidens*): Freshwater Mussel; 58. *Neopilina*; 59. *Sepia* : The Cuttle Fish; 60. Mollusca; Characters, Classification & Types; 61. Mollusca : General Account; 62. *Asterias* : A Sea Star; 63. Echinodermata: Characters, Classification & Types; 64. Echinodermata: General Account; 65. *Balanoglossus*: A Tongue Worm; 66. *Hemichordata*, Characters, Classification & Types; Glossary ; Selected References.



12th Edition: 2019-2020

ISBN: 978-93-5078-040-4

Code No.: Z-1

PRINTED IN DOUBLE COLOUR

Size: Crown 4vo

Pages: xx+984

Price: ₹ 745.00

**HINDI EDITION  
IS ALSO AVAILABLE  
CODE No.: Z-2**



[www.rastogipublications.com](http://www.rastogipublications.com)

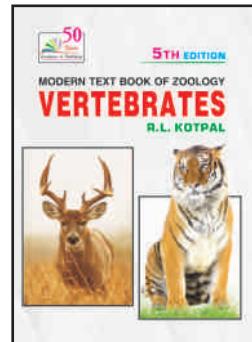
# MODERN TEXT BOOK OF ZOOLOGY

## VERTEBRATES

Prof. R. L. Kotpal

**CONTENTS:** 1. Phylum Chordata: An Introduction. **SECTION 1: Protochordates**  
2. Type-1, *Balanoglossus*: A Tongue Worm, 3. Sub-phylum I, Hemichordata,  
4. Type 2, *Herdmania* : A Sea-Squirt, 5. Subphylum II, Urochordata, 6. Type  
3, *Branchiostoma (Amphioxus)*: The Lancelet, 7. Subphylum III, Cephalochordata,  
8. Protochordata: General & Comparative. **SECTION 2: Vertebrates**—

9. Subphylum IV, Vertebrata, 10. Class-1, Ostracodermi (Extinct), 11. Type-4, *Petromyzon*: The Lamprey, 12. Class-2, Cyclostomata, 13. Class-3, Placodermi (Extinct), 14. Type-5, *Scoliodon*: The Dogfish, 15. Class-4, Chondrichthyes: The Cartilaginous Fishes, 16. Type-6, *Labeo rohita* : Rohu, a Bony Fish, 17. Class-5, Osteichthyes: The Bony Fishes, 18. Superclass: Pisces and Fish General, 19. Type-7, *Rana tigrina*: Common Indian Bull Frog, 20. Class 6, Amphibia, 21. Amphibia : General Account. **SECTION 3: Higher Vertebrates** – 22. Type-8, *Uromastix hardwickii* : The Spiny Tailed Lizard, 23. Type-9, *Calotes versicolor*, The Garden Lizard, 24. Snakes : General Account, 25. Class-7, Reptilia, 26. Reptilia: General Account, 27. Type-10, *Columba livia* : The Common Rock Pigeon, 28. Class 8, Aves : The Birds, 29. Aves: General Account, 30. Type-11, *Oryctolagus* : The Rabbit, 31. Class 9, Mammalia, 32. Subclass Prototheria (Order Monotremata), 33. Infraclass Metatheria (Order Marsupialia), 34. Mammalia : General Account. **SECTION 4: Vertebrate Osteology** – 35. Endoskeleton of *Scoliodon*, 36. Endoskeleton of *Labeo rohita*, 37. Endoskeleton of Frog, 38. Endoskeleton of *Varanus*, 39. Endoskeleton of Fowl, 40. Endoskeleton of Rabbit. **SECTION-5: Vertebrate Embryology** – 41. Introduction to Vertebrate Embryology, 42. Development of *Balanoglossus*, 43. Development of *Herdmania*, 44. Development of *Branchiostoma*, 45. Development of Frog, 46. Development of Chick (Fowl), 47. Development of Rabbit, 48. Placentation in Mammals. **SECTION 6 : Miscellany** – 49. Organ Histology of Frog and Rabbit, 50. Wild Life of India. **SECTION-7: Comparative Anatomy** – 51. Integuments and its Derivative in Vertebrates, 52. Endo-skeleton in Vertebrates, 53. Digestive System, 54. Respiratory System 55. Circulatory System, 56. Urinogenital System, 57. Nervous System, 58. Receptor Organs, 59. Endocrine System, 60. Some Comparative Charts of Vertebrate Animal . Types , Glossary, Selected References.



5th Edition: 2019-2020

ISBN: 978-93-5078-095-4

Code No.: Z-3

PRINTED IN DOUBLE COLOUR

Size: Crown 8vo

Pages: xx+948

Price: ₹ 745.00

**HINDI EDITION  
IS ALSO AVAILABLE  
CODE No.: Z-4**



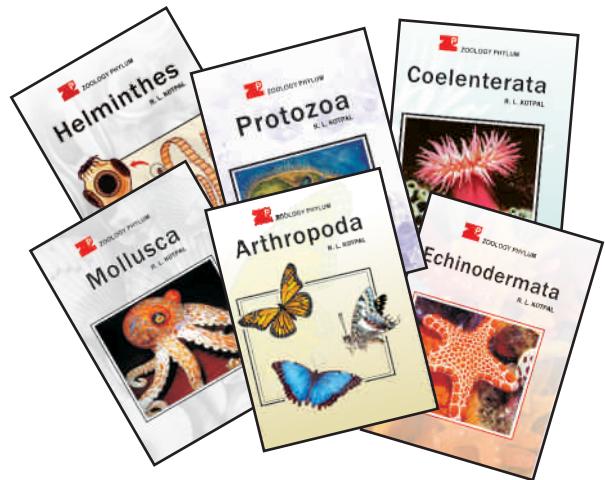
# ZOOLOGY PHYLUM TEXT BOOKS

## PROTOZOA

### TO

### MINOR PHYLA

Prof. R. L. Kotpal



**CONTENTS:** The contents of the books have been chosen keeping in view the needs of zoology students of various universities of India and abroad. The illustrations are simple and are finely drawn. Books are nicely printed in Crown 8vo size and are bound in attractive multicoloured jacket.

Z-5. PROTOZOA	(11 Ed.)	81-7133-879-8	₹ 195·00
Z-6. PORIFERA	( 7 Ed.)	81-7133-731-7	₹ 90·00
Z-7. COELENTERATA	( 7 Ed.)	81-7133-628-0	₹ 135·00
Z-8. HELMINTHES	( 8 Ed.)	978-93-5078-024-4	₹ 135·00
Z-9. ANNELIDA	(11 Ed.)	81-7133-629-9	₹ 130·00
Z-10. ARTHROPODA	(11 Ed.)	81-7133-802-X	₹ 180·00
Z-11. MOLLUSCA	( 8 Ed.)	81-7133-732-5	₹ 120·00
Z-12. ECHINODERMATA	( 8 Ed.)	81-7133-630-2	₹ 135·00
Z-13. MINOR PHYLA	(11 Ed.)	978-93-5078-025-1	₹ 135·00

## THE BIRDS

Prof. R. L. Kotpal



4th Edition (4th Reprint): 2016-17

ISBN: 81-7133-631-0

Code No.: Z-14

Size: Crown 8vo

Pages: 338

Price: ₹ 105.00

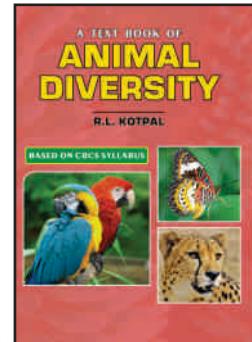


[www.rastogipublications.com](http://www.rastogipublications.com)

# ANIMAL DIVERSITY

(Comprising Invertebrates and Vertebrates)  
(Based on undergraduate CBCS Syllabus)

R.L. Kotpal



**CONTENTS:** 1. Animal Diversity and Taxonomy; 2. The Invertebrates; 3. Protozoa: Characters, Classification and Types; 4. Protozoa: General Account; 5. Organization of Metazoa; 6. Porifera: Characters, Classification and Types; 7. Porifera: General Account; 8. Coelenterata: Characters, Classification and Types; 9. Coelenterata: General Account; 10. Platyhelminthes: Characters, Classification and Types; 11. Taenia solium: The Pork Tapeworm; 12. Phylum Nematoda: Characters, Classification and Types; 13. Ascaris lumbricoides: The Common Roundworm; 14. Helminthes: General Account; 15. Annelida: Characters, Classification and Types; 16. Annelida: General Account; 17. Arthropoda: Characters, Classification and Types; 18. Arthropoda: General Account; 19. Mollusca: Characters, Classification and Types; 20. Mollusca : General Account; 21. Echinodermata: Characters, Classification and Types; 22. Echinodermata: General Account; 23. Phylum Chordata: An Introduction; 24. Hemichordata: Characters, Classification and Types; 25. Subphylum-II. Urochordata; 26. Subphylum-III. Cephalochordata; 27. Protochordata: General and Comparative; 28. Agnatha: Class Cyclostomata; 29. Superclass Pisces and Fish General; 30. Class Chondrichthyes: The Cartilaginous Fishes; 31. Class Osteichthyes: The Bony Fishes; 32. Class Amphibia; 33. Amphibia: General Account; 34. Class Reptilia; 35. Snakes: General Account; 36. Class Aves: The Birds; 37. Aves: General Account; 38. Class Mammalia; 39. Mammalia: General Account

2nd Reprint (1st Edition): 2020

Size: Crown 4vo

ISBN: 978-93-5078-139-5

Pages: viii+vi+664

Code No.: Z-71

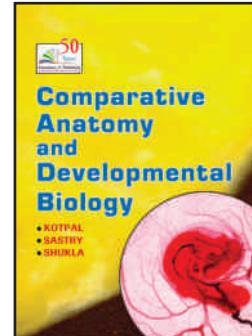
Price: ₹575.00

# COMPARATIVE ANATOMY AND DEVELOPMENTAL BIOLOGY

(Based on undergraduate CBCS Syllabus)

R.L. Kotpal, Shastri & Shukla

**CONTENTS:** **Section-1. Comparative Anatomy:** 1. Integument and its Derivatives in Vertebrates; 2. Endoskeleton in Vertebrates; 3. Digestive System in Vertebrates; 4. Respiratory System in Vertebrates; 5. Circulatory System in Vertebrates; 6. Urinogenital System in Vertebrates; 7. Neural System In Vertebrates; 8. Receptors Organs in Vertebrates; 9. Endocrine System in Vertebrates; 10. Some Comparative Charts of Vertebrate Animal Types; **Section-2. Developmental Biology:** 1. Introduction; 2. Gametogenesis; 3. Discharge and Transportation of Gametes; 4. Fertilization; 5. Cleavage; 6. Morulation and Blastulation; 7. Fate Maps, Gastrulation and Tabulation; 8. Embryogenesis and Metamorphosis of Frog; 9. Organogenesis of Frog; 10. Metamorphosis; 11. Embryogenesis of Chick; 12. Embryogenesis in Eutherian Mammal; 13. Embryonic Adaptations and Placentation in Mammals; 14. Gene Action and Hormonal Control in Development; 5. Transplantation, Embryonic Induction and Competence; 16. Gradient Theory; 17. Cell Differentiation and Determination; 18. Intercellular Communication and Cell Signaling; 19. Aging and Cell Death.



1st Edition (Reprint): 2019-2020

Size: Crown 4vo

ISBN: 978-93-5078-149-4

Pages: 450

Code No.: Z-72

Price: ₹395.00

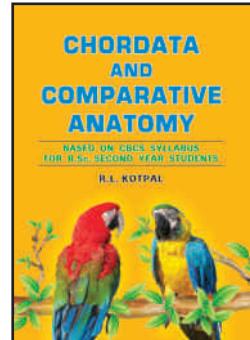


# **CHORDATA AND COMPARATIVE ANATOMY**

(An Abridged Edition)

(Based on undergraduate CBCS Syllabus)

**New Arrival**



*Prof. R. L. Kotpal*

**CONTENTS:** SECTION-1 Diversity and Distribution of Chordata: 1. Introduction to Chordata; UNIT-I: Protochordata and Origin of Chordates: 2. Protochordata; 3. Larval Forms in Protochordates; 4. Origin of Chordates; UNIT-II: Introduction to Vertebrata and Agnatha: 5. Introduction to Vertebrata; 6. Introduction to Agnatha; UNIT-III: Pisces and Amphibia: 7. Pisces; 8. General Account of Fishes; 9. Amphibia; UNIT-IV : Reptilia and Aves: 10. Reptilia; 11. Aves (Birds): Classification; 12. Aves: General Account; UNIT-V: Mammals and Zoogeography: 13. Mammalia: Classification; 14. Prototheria; 15. Metatheria; 16. Mammalia: General Account; 17. Zoogeographical Realms; SECTION-2 Comparative Anatomy: UNIT-I : Integumentary System and Skeletal System: 18. Integumentary System; 19. Skeletal System; 20. UNIT-II: Digestive System and Respiratory System: 20. Digestive System; 21. Respiratory System; UNIT-III: Circulatory System: 22. Circulatory System; UNIT-IV,: Urinogenital System: 23. Urinogenital System; UNIT-V: Nervous System and Sense Organs: 24. Nervous (Neural) System; 25. Receptors or Sense Organs; Comparative Charts of Anatomy: 26. Some Comparative Charts of Anatomy of Vertebrates.

1st Edition: 2019-2020

Size: Crown 4vo

ISBN: 978-93-5078-172-2

Pages: xx+510

Code No.: Z-76

Price: ₹ 455.00

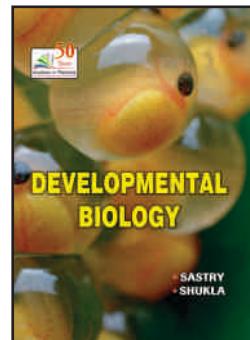
# **DEVELOPMENTAL BIOLOGY**

*Dr. K.V. Sastry*

*Dr. Vineeta Shukla*

**CONTENTS:** 1. Introduction; 2. Gametogenesis; 3. Discharge and Transportation of Gametes; 4. Fertilization; 5. Cleavage; 6. Morulation and Blastulation; 7. Fate Maps, Gastrulation and Tubulation; 8. Gene Action and Hormonal Control in Development; 9. Embryogenesis of a Simple Ascidian; 10. Embryogenesis of Amphioxus; 11. Embryogenesis and Metamorphosis of Frog; 12. Organogenesis of

Frog; 13. Embryogenesis of Chick; 14. Embryogenesis in Eutherian Mammal; 15. Transplantation, Embryonic Induction and Competence; 16. Gradient Theory; 17. Embryonic Adaptations and Placentation in Mammals; 18. Regeneration; 19. Cell Differentiation and Determination; 20. Intercellular Communication and Cell Signaling; 21. Malignancy; 22. Aging and Cell Death; 23. Metamorphosis; 24. Asexual Reproduction; 25. Parthenogenesis.



2nd Revised Edition(Reprint): 2020-2021

Size: Crown 4vo

ISBN: 978-93-5078-128-9

Pages: 372

Code No.: Z-22

Price: ₹ 355.00



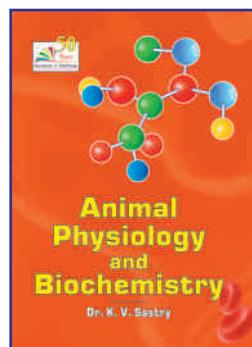
[www.rastogipublications.com](http://www.rastogipublications.com)

# **ANIMAL PHYSIOLOGY AND BIOCHEMISTRY**

**Dr. K.V. Sastry**

Revised by

**Dr. Priyanka Mathur**



**CONTENTS:** ANIMAL PHYSIOLOGY :1. Introduction; 2. Cell-structure; 3. Osmoregulation; 4. Thermoregulation; 5. Feeding and Digestion; 6. Absorption; 7. Metabolism; 8. Respiration; 9. The Blood and Circulatory System; 10. Excretion; 11. Muscle Contraction; 12. Nervous System; 13. Sense Organs; 14. Bioluminescence, 15. Endocrine Glands, 16. Reproduction, 17. Experiments in Physiology, Glossary. BIOCHEMISTRY: 1. Nucleic Acids, 2. Hydrogen Ion Concentration and Buffering Mechanism, 3. Carbohydrates, 4. Proteins, 5. Protein Synthesis and its Regulation, 6. Lipids, 7. Vitamins, 8. Minerals: Macronutrients and Micronutrients, 9. Enzymes.

<b>3rd Edition (Reprint):</b> 2019-2020	<b>Size:</b> Crown 4vo
<b>ISBN:</b> 978-93-5078-163-0	<b>Pages:</b> viii+506
<b>Code No.:</b> Z-36	<b>Price:</b> ₹ 495.00

**ALSO AVAILABLE**  
**ANIMAL PHYSIOLOGY**  
**CODE No.: Z-16 PRICE: ₹295.00**

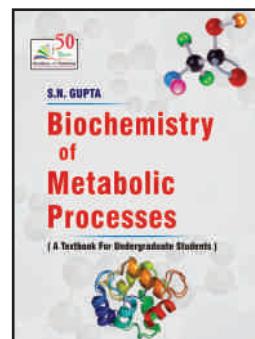
# **BIOCHEMISTRY OF METABOLIC PROCESSES**

(Based on undergraduate CBCS Syllabus)

**Prof. S.N. Gupta**

Formerly, Prof. & Head Dept. of Botany  
DDU Gorakhpur University, Gorakhpur

**New Arrival: 2019**



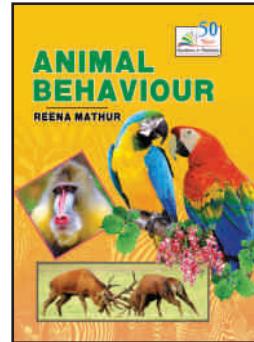
**CONTENTS:** 1. Introduction to Biomolecules; 2. Carbohydrates; 3. Lipids; 4. Amino Acids and Proteins; 5. Some Biochemical Techniques; 6. Carbohydrate Metabolism; 7. Lipid Metabolism; 8. Protein Metabolism; 9. Enzymes; 10. Oxidative Phosphorylation; Practicals

<b>1st Edition:</b> 2019-2020	<b>Size:</b> Crown 4vo
<b>ISBN:</b> 978-81-940631-3-1	<b>Pages:</b> viii+160
<b>Code No.:</b> BC-72	<b>Price:</b> ₹ 175.00



# ANIMAL BEHAVIOUR

Dr. Reena Mathur



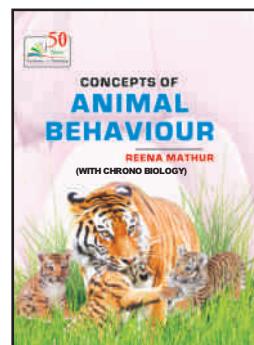
**CONTENTS:** 1. Introduction and Significance of Study of Animal Behaviour; 2. Concepts & Patterns; 3. Approach and Methods; 4. Mammalian Nervous System & Behaviour; (With Special Reference to Hypothalamus); 5. Pheromones; 6. Hormones and Drugs; 7. Biological Clocks; 8. Chronobiology; 9. Orientation; 10. Bird Migration and Navigation; 11. Fish Migration; 12. Communication; 13. Feeding Strategies; 14. Aggressive and Territorial Behaviour; 15. Social Organisation; 16. Reproductive Behaviour in Animals: Courtship and Mating; 17. Parental Behaviour; 18. Learning; 19. Behavioural Genetics; 20. Sociobiology; 21. Human Ethology; 22. Wild Life of India : Diversity, Conservation and Management; 23. Wildlife Census and Indices; 24. Innovative Methods in Wildlife; 25. Experiments; Glossary; Suggested Books; Animal Records.

6th Revised Edition: 2020-2021	Size: Crown 4vo
ISBN: 978-93-5078-160-9	Pages: xvi+676
Code No.: Z-23(EN)	Price: ₹ 675.00

## CONCEPTS OF ANIMAL BEHAVIOUR (WITH CHRONOBIOLOGY)

(An Abridged Edition)  
(Based on undergraduate CBCS Syllabus)

New Arrival



Dr. Reena Mathur

**CONTENTS:** 1. Introduction and Significance of Study of Animal Behaviour; 2. Concepts and Patterns, Mechanism of Behaviour, 3. Reflexes and Orientation; 4. Communication; 5. Social Organization, Mating Groups and Strategies, 6. Reproductive behaviour Sexual Conflict, 7. Learning, Neural Mechanism, 8. Sociobiology; 9. Biological Clocks 10. Chronobiology; 11. Experiments.

4th Edition: 2019-2020	Size: Crown 4vo
ISBN: 978-81-9377-577-6	Pages: 264
Code No.: Z-80	Price: ₹ 225.00

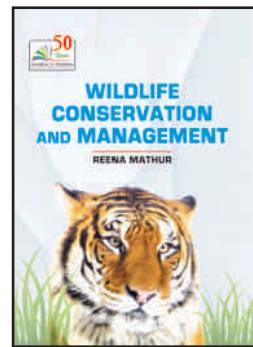
HINDI EDITION  
IS ALSO AVAILABLE  
CODE No.: Z-54



www.rastogipublications.com

# WILD LIFE CONSERVATION AND MANAGEMENT

New Arrival



Dr. Reena Mathur

Foreword by

Dr. V.B. Mathur

(Director, Wild Life Institute of India)

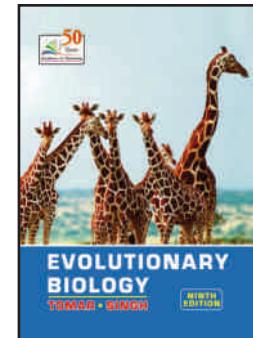
**CONTENTS:** 1. History and Diversity; 2. The Value of Wildlife; 3. Laws, Ministry, Organizations; 4. Environmental Ethics and Management; 5. Protected Areas; 6. Biogeographical Zones; 7. Major Projects; 8. Ecotourism and Environment Impact Assessment; 9. Ecological Restoration; 10. Human Wildlife Conflict; 11. Wildlife Trade and Crime; 12. Zoo, Captive Wild Animals; 13. Wildlife Census and Indices; 14. Innovative Methods in Wildlife; 15. Animals in Indian Methodology; 16. Who is Who; Glossary; References.

1st Edition: 2018-2019	Size: Crown 4vo
ISBN: 978-81-9377-576-9	Pages: 472
Code No.: Z-75	Price: ₹475.00

# EVOLUTIONARY BIOLOGY

Dr. B.S. Tomar

Dr. S.P. Singh



**CONTENTS: Section A- Evolution:** 1. Origin of Life, 2. Historical Account of Evolution, 3. Evidences of Evolution, 4. Recapitulation Hypothesis, 5. Lamarckianism, 6. Darwin's Natural Selection Theory, 7. Weismann's Germplasm Theory, 8. Mutation Theory of De Vries, 9. Variation, 10. Isolation, 11. Population, Genetics & Evolution; 12. Molecular Evolution

**Section B-Adaptations:** 13. Adaptations, 14. Macroevolution (Adaptive Radiative), 15. Mimicry.

**Section C-Distribution :** 16. Distribution & Barriers, 17. Bathymetric Distribution, 18. Zoogeographical Regions.

**Section D- Palaeontology:** 19. Palaeontology, 20. Biostratigraphy, 21. Fossils, 22. Rocks, 23. Geological Distribution of Animals, 24. Ancestry of Man (Origin & Evolution of Man), 25. Ancestry of Horse, 26. Ancestry of Camel. 27. Ancestry of Elephant,

**Section E-General:** 28. Origin of Chordates, 29. Migration, Bibliography.

9th Revised Edition: 2019-2020	Size: Crown 4vo
ISBN: 978-93-5078-127-2	Pages: xii + 352
Code No.: BC-2	Price: ₹315.00

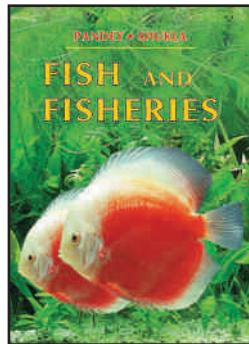


# FISH AND FISHERIES

Prof. Kamleshwar Pandey

Dr. J.P. Shukla

**CONTENTS:** 1. Introduction: Facts and Structure of Fishes; 2. Agnatha-Ostracoderms and Cyclostomes; 3. General Characters, Classification, Evolution & Phylogeny of Fishes; 4. Placoderms; 5. Elasmobranchs; 6. Holocephali;



7. Dipnoi; 8. Teleostomi (Perfect-Mouthed Fishes); 9. Locomotion and Migration; 10. Fins; 11. Integumentary System (The Skin, Scales and Colouration); 12. Fish Osteology; 13. Digestive System; 14. Gill Respiration; 15. Accessory Respiratory Organs; 16. Air Bladder and Weberian Apparatus; 17. Blood Vascular System; 18. Nervous System; 19. Excretion and Osmoregulation; 20. Reproduction; 21. Development; 22. Acoustico-Lateralis System; 23. Endocrine Glands; 24. Specialised Organs in Fishes; 25. Adaptations in Fishes; 26. Fishing Methods in India; 27. Physico-Chemical & Biological Factors in Fish Culture; 28. Construction and Maintenance of Fish Farm; 29. Fish Culture in Fresh Water; 30. Composite Fish Culture; 31. Air Breathing & Carnivorous Fish Culture; 32. Sewage Fed Fisheries; 33. Induced Breeding; 34. Inland Fisheries; 35. Marine Fisheries; 36. Population Dynamics; 37. Exotic Fishes; 38. Planktons; 39. Aquatic Weeds and Their Control; 40. Aquatic Pollution; 41. Larvivorous Fishes in Relation to Public Health; 42. Fish Pathology and Cure; 43. Age Determination in Fishes; 44. Cage Culture; 45. Economic Importance of Fishes; 46. Fish Preservation; 47. Parental Care in Fishes; 48. Prawn Fishery; 49. Fisheries Today - Growth Expansion and Trade; 50. Freshwater Aquarium; 51. Common Freshwater and Marine Food-Fishes of India; 52. Integrated Fish Farming; 53. Geographical Distribution of Fishes Ichthyogeography; 54. Fish-Fishery Aquaculture: Potential and Prospects; Selected References.

4th Revised Edition: 2019-2020

Size: Crown 4vo

ISBN: 978-81-7133-967-9

Pages: 588

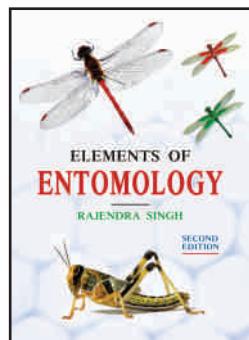
Code No.: Z-56

Price: ₹ 585.00

# ELEMENTS OF ENTOMOLOGY

Dr. Rajendra Singh

**CONTENTS:** 1. Origin and Evolution of Insects; 2. Elementary Knowledge of Collection and Preservation of Insects; 3. Classification and Identification of Economically Important Insect Orders; 4. Insect Integument; 5. Segmentation and Body Regions; 6. Digestive System; 7. Circulatory System; 8. Respiratory System;



9. Excretory System; 10. Reproductive System; 11. Post-embryonic Development; 12. Exocrine and Endocrine Glands; 13. Nervous System; 14. Sense Organs; 15. Bioluminescence and Sound Production; 16. Insects and The Abiotic Environment; 17. Insect Population and Pest Outbreak; 18. Insect-Plant Interaction; 19. Locusts and Termites; 20. Household Insects and Their Control; 21. Insects Injurious to Man and Livestock; 22. Insects Transmitting Disease in Plants (Aphids and Whiteflies); 23. Insects Injurious to Crops; 24. Methods of Insect Pest Management; 25. Beneficial Insects : Apiculture, Sericulture and Lac Culture; 26. Stored Grain Pests and Their Management (Safe Storage of Food Grains); 27. Ticks and Mites : Economic Importance; Glossary; Selected Readings.

2nd Revised Edition: 2018-2019

Size: Crown 4vo

ISBN: 978-93-5078-098-5

Pages: xvi + 492

Code No.: Z-57

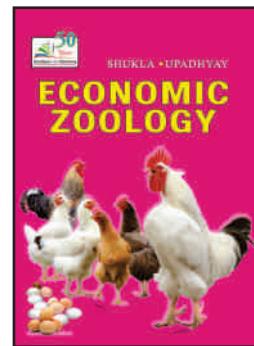
Price: ₹ 495.00



# ECONOMIC ZOOLOGY

Professor. G.S. Shukla  
Professor. V.B. Upadhyay

**CONTENTS:** 1. Parasitic Protozoa and Human Diseases, 2. Economically Important Phytoparasitic Nematodes and their Control, 3. Zooparasitic Helminths and their Control, 4. Mites and Ticks and their Control, 5. Economic Importance of Insects, 6. House Hold Insects, 7. Insect Pests of Some Crops, 8. Insect Pest Management, 9. Apiculture, 10. Lac Culture, 11. Sericulture, 12. Pearl Culture, 13. Coral and Coral Reef, 14. Edible Freshwater Fishes, 15. Fish Culture, 16. By-Products of Fishing Industry, 17. Prawn Fishery, 18. Poultry, 19. Economic Importance of Mammals, 20. Piggery, 21. Dairy Industry, 22. Leather Industry, 23. Wool Industry, 24. Fur and Fur Industry, 25. Pharmaceuticals from Animals, 26. Rats and their Control, 27. Wild Life in India and its Conservation, 28. Snake Venom, 29. AIDS;



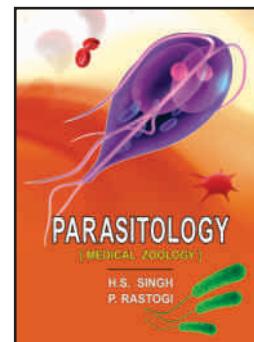
6th Reprint (5th Edition): 2019-2020	Size: Crown 4vo
ISBN: 978-93-5078-035-0	Pages: viii+376
Code No.: Z-18	Price: ₹410.00

HINDI EDITION  
IS ALSO AVAILABLE  
CODE No.: Z-51

# PARASITOLOGY (Medical Zoology)

Prof. H.S. Singh  
Professor, Department of Zoology  
CCS University, Meerut

Dr. P. Rastogi  
Asst. Professor, Department of Zoology  
Meerut College, Meerut



**CONTENTS:** 1. Introduction, 2. Host-Parasite Interaction, 3. Human Defense Mechanism , 4. Cells and Tissues of Immune System, 5. Synthesis and Structure of Antibodies, 6. Complement, 7. Pathogenic Microbes: Viruses, 8. Pathogenic Microbes: Bacteria, 9. Parasitic Protozoa: *Entamoeba histolytica* (Schaudinn, 1903), 10. Parasitic Protozoa: *Trypanosoma* (Gruby, 1843) 11. Parasitic Protozoa: *Leishmania* (Ross, 1903) 12. Parasitic Protozoa: *Plasmodium* (Marchiafava And Celli, 1885) 13. Parasitic Protozoa: *Giardia lamblia* (Lumbi, 1859) 14. Parasitic Protozoa: *Trichomonas* (Donne, 1837) 15. Platyhelminths : *Fasciola hepatica* (Linnaeus, 1758) 16. Platyhelminths: *Schistosoma* (Weinland, 1858) 17. *Taenia* (Linnaeus, 1758) 18. Parasitic Platyhelminths : *Echinococcus* (Rudolphi, 1801) 19&20. Parasitic Platyhelminths: *Hymenolepis* (Weinland, 1858) 21. Parasitic Nematodes: *Ascaris lumbricoides* (Linnaeus, 1758) 22. Parasitic Nematodes : Hookworms 23. Parasitic Nematodes: Pinworm : *Enterobius vermicularies* ( Linnaeus , 1758 Leach, 1853 ) 24. Parasitic Nematodes : *Dracunculus medinensis* ( Linnaeus, 1758 Gallandant, 1773) 25. Parasitic Nematodes : *Trichinella spiralis* (Owen, 1835 Railliet, 1895) 26. Parasitic Nematodes : *Wuchereria bancrofti* (Cobbold, 1877 Seurat, 1921).

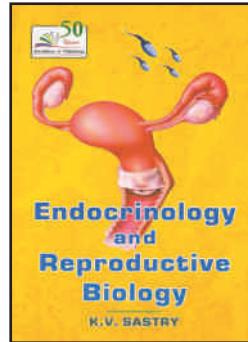
1st Reprint (1st Edition): 2019-2020	Size: Crown 4vo
ISBN: 978-93-5078-087-9	Pages: xiv+432
Code No.: Z-40	Price: ₹415.00

WITH MULTI COLOURED PLATES



# **ENDOCRINOLOGY AND REPRODUCTIVE BIOLOGY**

*Dr. K.V. Sastry*

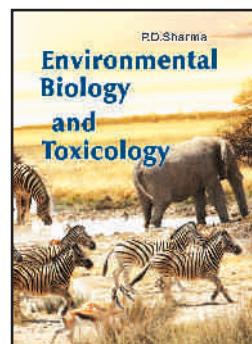


**CONTENTS:** 1. Introduction, 2. Endocrine Glands and Hormones, 3. Nature and Mechanism of Hormone Action, 4. Hormonal Regulation of Physiological Process, 5. Biosynthesis and Secretion of Hormones, 6. Hormones and Human Health, 7. Reproductive Cycles in Vertebrates, 9. Hormonal Regulation of Gametogenesis in Males and Females , 10. Fertilization *in vivo* and *in vitro*, Post Fertilization events, 11. Sex Determination and Differentiation, 12. Hormonal Disorders.

<b>8th Reprint (1st Edition):</b> 2018-2019	<b>Size:</b> Demy 8vo
<b>ISBN:</b> 81-7133-777-5	<b>Pages:</b> viii+320
<b>Code No.:</b> Z-60	<b>Price:</b> ₹ 280.00

# **ENVIRONMENTAL BIOLOGY AND TOXICOLOGY**

*Dr. P.D. Sharma*



**ENVIRONMENTAL BIOLOGY: Contents:** 1. Introduction; 2. The Earth's Life-Support Systems: Four Spheres; 3. The Atmosphere; 4. The Hydrosphere; 5. The Lithosphere; 6. The Biosphere-Ecosystems; 7. Population Characteristics and Interactions; 8. Community Structure and Dynamics; 9. Environmental Challenges and Sustainable Development; 10. Environmental Pollution and Public Health; 11. Bioremediation: A Promising Biotechnology for Pollution Cleanup; 12. Global Warming and Climate Change; 13. Natural Resources Degradation and Their Conservation; 14. Biodiversity and Wildlife (Biogeographic Regions) of India and Conservation Strategies; 15. Energy Resources Crisis and Non-Conventional Sources; 16. Environmental Monitoring, Remote Sensing and Environmental Impact Assessment; 17. Environmental Education and Organisations; Glossary; Index.

**TOXICOLOGY: Contents:** 1. Introduction; 2. Basic Concepts of Toxicology; 3. Toxicological Testing Methods; 4. Toxicants of Public Health Hazard; 5. Absorption, Translocation and Excretion of Chemicals (Xenobiotics); 6. Biological Magnification of Toxic Materials; 7. Biotransformation of Xenobiotics (Selective Toxicity); 8. Biomonitoring of Toxic Chemicals; 9. Environmental Legislation and Chemical Safety Evaluation; Selected Readings; Index.

<b>3rd Edition (3rd Reprint):</b> 2020-2021	<b>Size:</b> Crown 4vo
<b>ISBN:</b> 978-81-7133-993-8	<b>Pages:</b> xx+569
<b>Code No.:</b> BC-25	<b>Price:</b> ₹ 495.00



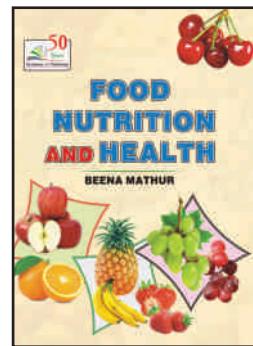
# **FOOD, NUTRITION AND HEALTH**

(Based on undergraduate CBCS Syllabus)

**New Arrival**

*Prof. Beena Mathur*

Formerly, Prof. & Head Dept. of Home Science  
(Specialization: Food & Nutrition)  
**University of Rajasthan, Jaipur.**



**CONTENTS:** 1. Basic Concepts of Food, Nutrition and Health; 2. Food Components : Macro Nutrients Carbohydrates, Proteins and Fats; 3. Food Components : Micro Nutrients; 4. Food Components : Minerals and Trace Elements; 5. Water and Electrolyte Balance; 6. Balanced Diet; 7. Energy Metabolism; 8. Nutrition Through Life Cycle; 9. Major Nutritional Deficiency Diseases; 10. Life Style Related Diseases; 11. Common Ailments; 12. Food Hygiene, Spoilage and Safety; 13. Life Style Health Problems : Smoking, Tobacco Chewing, Alcoholism, Drugs and AIDS

**1st Edition:** 2019-2020

**Size:** Crown 4vo

**ISBN:** 978-81-940631-2-4

**Pages:** viii+296

**Code No.:** Z-73

**Price:** ₹ 275.00

# **RESEARCH METHODOLOGY**

(Based on undergraduate CBCS Syllabus)

**New Arrival**

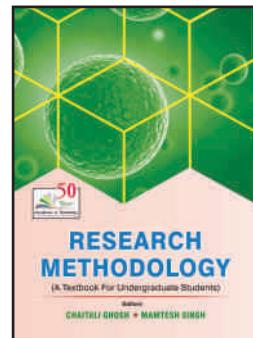
**EDITORS**

*Dr. Chaitali Ghosh*

*Dr. Mamtesh Singh*

Asstt. Professor of Zoology

**Gargi College, New Delhi**



**CONTENTS:** 1. Foundations of Research; 2. Research Design; 3. Data Collection and Analysis; 4. Statistics in Research; 5. Interpretation and Report Writing; 6. Ethical Issues.

**1st Edition:** 2019-2020

**Size:** Crown 4vo

**ISBN:** 978-81-940631-4-8

**Pages:** viii+130

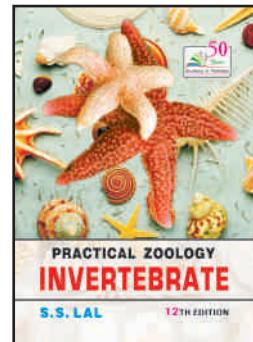
**Code No.:** BC-65

**Price:** ₹ 145.00



## **PRACTICAL ZOOLOGY INVERTEBRATE**

*Dr. S.S. Lal*



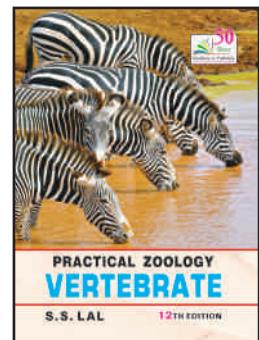
**CONTENTS:** 1. Introduction, 2. Study of Museum Specimens : Phylum Porifera to Minor Phyla, 3. Microscope and its Practical Use, 4. General Method of Microscopic Preparations, 5. Culture Methods, 6. Preparation of Permanent Stained Slides, 7. Study of Prepared Slides: Phylum Protozoa to Echinodermata, 8. Dissections (Major and Minor), 9. Wonder Invertebrates, 10. Preparation of Fixatives, Stains and Other Reagents, 11. Experimental Cytology, 12. Study of *Drosophila* and Human Chromosome, 13. Genetic Exercises, 14. Experimental Ecology, 15. Practicals on Evolution and Animal Behaviour, 16. Viva Voce.

12th Edition (1st Reprint): 2019-2020	Size: Crown 4vo
ISBN: 978-93-5078-161-6	Pages: xvi+548
Code No.: Z-20	Price: ₹ 455.00

**HINDI EDITION  
IS ALSO AVAILABLE  
CODE No.: Z-31**

## **PRACTICAL ZOOLOGY VERTEBRATE**

*Dr. S.S. Lal*



**CONTENTS:** 1. Introduction to Phylum Chordata, 2. Study of Museum Specimens, 3. Wonder Vertebrate Animals, 4. Preparation of Fixatives, Stains and Other Reagents, 5. General Method of Microscopic Preparations, 6. Microtomy, 7. Preparation of Permanent Stained Slides (Mountings), 8. Study of Histological Slides, 9. Developmental Biology, 10. Comparative Osteology (Study of Bones), 11. Dissections (Major and Minor), 12. Experimental Biochemistry and Physiology, 13. Some Important Histochemical Tests, 14. Experimental Cytology, 15. Study of *Drosophila* and Human Chromosomes, 16. Experimental Ecology, 17. Experimental Endocrinology, 18. Practicals on Evolution and Animal Behaviour; Viva Voce.

12th Edition (1st Reprint): 2019-2020	Size: Crown 4vo
ISBN: 978-93-5078-016-9	Pages: XX+532
Code No.: Z-21	Price: ₹ 455.00

**HINDI EDITION  
IS ALSO AVAILABLE  
CODE No.: Z-32**



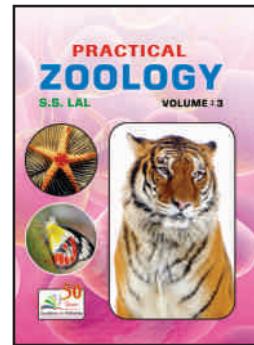
[www.rastogipublications.com](http://www.rastogipublications.com)

# PRACTICAL ZOOLOGY

## Volume 3

Dr. S.S. Lal

**CONTENTS:** 1. Introduction, 2. Microscope and its Practical Use, 3. General Method of Microscopic Preparations, 4. Culture Methods, 5. Study of Living Animals, Collection and Preparation of Permanent Stained Slides, 6. Economically Important Animals, 7. Experimental Biochemistry & Physiology, 8. Some Important Histochemical Tests, 9. Preparation of Fixatives, Stains and other Reagents, 10. Experimental Cytology, 11. Study of *Drosophila* and Human Chromosomes 12. Genetic Exercises, 13. Developmental Biology = Reproductive Biology = Study of Embryological Slides, 14. Practicals on Evolution and Animal Behaviour, 15. Experimental Endocrinology, 16. Biometry (=Biostatistics), 17. Dissections (Major and Minor), 18. Experimental Microbiology, 19. Molecular Biology and Biotechnology, 20. Experimental Ecology (=Environmental Biology), 21. Histopathological Examinations of Tissues Affected by Pollutants, 22. Viva-Voce.



7th Reprint (2nd Edition): 2019-2020

Size: Crown 4vo

ISBN: 978-81-7133-871-2

Pages: xii+416

Code No.: Z-52

Price: ₹355.00

## C.B.C.S.: B.Sc 1st Year

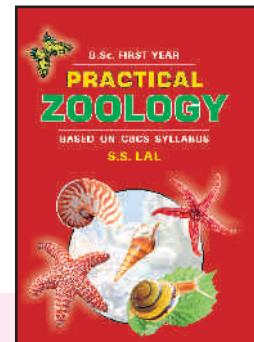
# PRACTICAL ZOOLOGY

(Animal Diversity- Including Invertebrates and Vertebrates;  
Comparative Anatomy and Developmental Biology)  
(Based on undergraduate CBCS Syllabus)

Dr. S.S. Lal

### New Arrival

(For Pass Students)



1st Edition: 2019-2020

Size: Crown 4vo

ISBN: 978-93-5078-164-7

Pages: 325

Code No.: Z-74

Price: ₹285.00

## C.B.C.S.: B.Sc 2nd Year

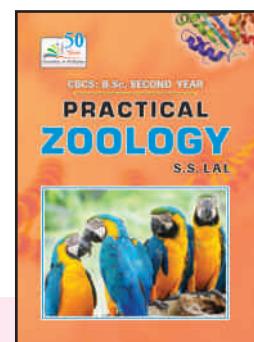
# PRACTICAL ZOOLOGY

(Chordata, Physiology, Comparative Anatomy of Vertebrates,  
Biochemistry, Cell Biology and Genetics)  
(Based on undergraduate CBCS Syllabus)

Dr. S.S. Lal

### New Arrival

(For Hons/Major Students)



1st Edition: 2018-2019

Size: Crown 4vo

ISBN: 978-93-5078-181-4

Pages: 404

Code No.: Z-77

Price: ₹375.00



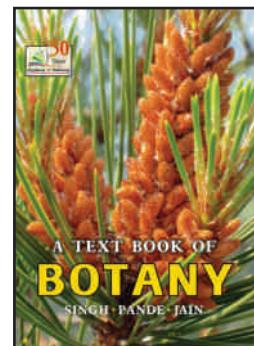
# A TEXT BOOK OF BOTANY

(MICROBIOLOGY, ALGAE, FUNGI AND PLANT PATHOLOGY,  
BRYOPHYTA, PTERIDOPHYTA, GYMNOSPERMS  
AND PALAEOBOTANY)

Dr. V. Singh; Dr. P.C. Pande & Dr. D.K. Jain

**CONTENTS:** Introduction : Cryptogams; **UNIT-I: MICROBIOLOGY:** 1. Diversity of Microbes : Introduction; 2. Viruses; Viroids and Prions 3. Bacteria : Structure and Reproduction; 4. Economic Importance of Bacteria; 5. Cyanobacteria; *Actinomycetes*; *Mycoplasmas* and Rickettsias 6. Distribution of Microorganisms in

Nature; 7. Isolation and Cultivation of Microorganisms; 8. Infection and Immunity; 9. Applications of Microbiology; 10. Antibiotics; 11. Acquired Immunodeficiency Syndrome (AIDS); 12. Plant Diseases: Introduction; 13. Important Plant Diseases; 14. Plant Diseases: Control; **UNIT-II: ALGAE:** 1. Algae: General Characters; 2. Classification of Algae; 3. Cyanophyceae: General Characters and Classification; 4. Chroococcales: *Gloeocapsa*; *Microcystis*; 5. Nostocales: *Oscillatoria*; *Spirulina*; *Nostoc*; *Scytonema*; *Gloeotrichia*, *Rivularia*; 6. Chlorophyceae: General Characters and Classification; 7. Volvocales: *Chlamydomonas*; *Volvox*; 8. Chlorococcales: *Chlorella*, *Hydrodictyon* *Scenedesmus*; 9. Ulotrichales: *Ulva*; 10. Cladophorales: *Cladophora*; 11. Chaetophorales: *Fritschella*, *Coleochaete*; 12. Oedogoniales: *Oedogonium*; 13. Conjugales: *Zygema*; *Cosmarium*; 14. Siphonales: *Codium*; *Vaucheria*; 15. Charales: *Chara*; 16. Bacillariophyceae: General Characters and Classification; 17. Pennales: *Navicula*; 18. Phaeophyceae: General Characters and Classification; 19. Ectocarpales: *Ectocarpus*; 20. Fucales: *Fucus*; *Sargassum*; 21. Dictyotales: *Dictyota*; 22. Laminariales: *Laminaria*; 23. Rhodophyceae: General Characters and Classification; 24. Nemalionales: *Batrachospermum*; 25. Ceramiales: *Polysiphonia*; 26. Origin and Evolution of Sex in Algae; 27. Economic Importance of Algae; 28. Culturing of Algae; 29. Professor M O P Iyengar. **UNIT-III: FUNGI, AND PLANT PATHOLOGY:** 1. Fungi: General Characters; 2. Taxonomic Status and Classification of Fungi; 3. Myxomycetes: *Physarum*; 4. Chytridiomycetes: Chytridiales: *Synchytrium*; 5. Chytridiomycetes Blastocladiales: *Allomyces*; 6. Oomycetes: Saprolegniales: *Achlya*; *Saprolegnia*; 7. Peronosporales: *Phytophthora*; *Pythium*; *Albugo*; 8. Zygomycetes: Mucorales: *Mucor*; *Rhizopus*; 9. Ascomycotina Hemiascomycetes; Endomycetales: *Saccharomyces*; 10. Eurotiales: *Aspergillus*; *Penicillium*; 11. Erysiphales: *Erysiphe*; *Sphaerotheca*; *Uncinula*; 12. Sphaeriales: *Neurospora*; *Claviceps*; *Xylaria*; *Chaetomium*; 13. Pezizales: *Peziza*; *Morchella*; *Ascobolus*; 14. Basidiomycotina: Teliomycetes; Ustilaginales: *Ustilago*; 15. Uredinales: *Puccinia*; 16. Agaricales: *Agaricus*; 17. Aphyllophorales: *Polyporus*; 18. Gasteromycetes: Lycoperdales: *Lycoperdon*; 19. Deuteromycotina Hypomycetes; Moniliales: *Alternaria*; *Cercospora*; *Helminthosporium*; *Fusarium*; 20. Melanoconiales: *Colletotrichum*; 21. Heterothallism in Fungi; 22. Parosexuality; 23. Sex Hormones in Fungi; 24. Edible Fungi: Mushrooms and Their Cultivation; 25. Economic Importance of Fungi; 26. Lichens; 27. Prof. Karam Chand Mehta (1892-1950). **UNIT-IV: BRYOPHYTA:** 1. Bryophyta: General Characters and Classification; 2. Hepaticopsida: Marchantiales: *Riccia*; *Marchantia*; *Plagiochasma*; 3. Jungermanniales: *Pellia*; *Porella*; *Frullania*; 4. Anthocerotopsida Anthoceratales: *Anthoceros*; *Notothylus*; 5. Bryopsida (Musci or Mosses) Sphagnobrya: *Sphagnum*; 6. Bryidae (Eubrya): *Funaria*; *Polytrichum*; *Pogonatum*; 7. Evolution of Sporophyte in Bryophytes; 8. Vegetative Reproduction in Bryophytes; 9. Professor Shiv Ram Kashyap (1882-1934); Comparative-Study of Bryophytes; **UNIT-V PTERIDOPHYTA WITH PALAEOBOTANY:** 1. Pteridophyta: General Characters; 2. Pteridophyta: Classification; 3. Palaeobotany and Geological Time Scale; 4. Fossilization and Types of Fossils; 5. Psilophytopsida: Psilotales: *Rhynia*; *Horneophytion*; *Astewxylon*; 6. Psilotopsida: Psilotales: *Psilotum*; 7. Lycopods: Lycopodiaceae: *Lycopodium*; 8. Lepidodendrales: *Lepidodendron*; 9. Isoetales: *Isoetes*; 10. Selaginellales: *Selaginella*; 11. Sphenopsida Calamitales: *Calamites*; 12. Sphenophyllales: *Sphenophyllum*; *Sphenophyllostachys*; 13. Equisetales: *Equisetum*; 14. Eusporangiatae Marattiiales: *Angiopteris*; 15. Ophioglossales: *Ophioglossum*; 16. Osmundales: *Osmunda*; 17. Leptosporangiatae Filicales: *Pteris*; *Dryopteris*; *Adiantum*; *Polypodium*; *Nephrolepis*; 18. Marsileales: *Marsilea*; 19. Salviniales: *Azolla*; *Salvinia*; 20. Stelar System in Pteridophytes; 21. Heterospory and Seed Habit; 22. Apospory and Apogamy; 23. Telome Theory; 24. Prof. Birbal Sahni (1891-1949); Father of Indian Palaeobotany; **UNIT-VI: GYMNOSPERMS:** 1. Gymnosperms: General Characters and Affinities; 2. Gymnosperms: Classification and Distribution; 3. Pteridospermopsida *Lyginopteris*; *Heterangium*; *Glossopteris*; 4. Cycadeoidopsida (Bennettiopsida) Cycadeoidales : *Ptilophyllum*; *Williamsonia*; *Cycadeoidea*; 5. Cycadales: *Cycas*; 6. Coniferales : *Pinus*; 7. Taxales: *Taxus*; 8. Ephedrales: *Ephedra*; 9. Gnetales: *Gnetum*



5th Edition (4th Reprint): 2020-2021

ISBN: 978-93-5078-129-6

Code No.: B-39

PRINTED IN DOUBLE COLOUR

Size: Crown 4vo

Pages: xvi + 1250

Price: ₹895.00

**HINDI EDITION  
IS ALSO AVAILABLE**

**CODE No.: B-21**



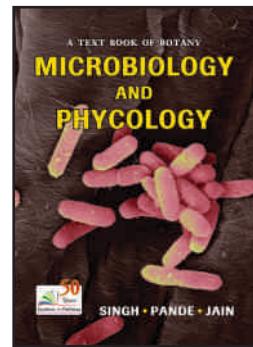
www.rastogipublications.com

# MICROBIOLOGY AND PHYCOLOGY

(MICROBIOLOGY & ALGAE)

(Also Based on undergraduate CBCS Syllabus)

Dr. V. Singh, Dr. P.C. Pande & Dr. D.K. Jain



**CONTENTS:** 1. MICROBIOLOGY: 1. Diversity of Microbes: Introduction; 2. Distribution of Microorganisms in Nature; 3. Isolation and Cultivation of

Microorganisms; 4. Viruses, Viroids and Prions; 5. Acquired Immunodeficiency Syndrome (AIDS); 6. **Bacteria:** Structure and Reproduction; 7. Cyanobacteria, Actinomycetes, Mycoplasmas and Rickettsias; 8. Applied Microbiology; 9. Antibiotics; 10. Infection and Immunity; **ALGAE (PHYCOLOGY):** o Introduction: Cryptogams; 1. **Algae:** General Characters; 2. Classification of Algae; 3. **Cyanophyceae:** General Characters and Classification; 4. **Chroococcales:** Gloeocapsa, Microcystis; 5. **Nostocales:** Oscillatoria, Spirulina, Nostoc, Anabaena, Scytonema, Gloeotrichia, Rivularia; 6. **Chlorophyceae:** General Characters and Classification; 7. **Volvocales:** Chlamydomonas, Volvox; 8. **Chlorococcales:** Chlorella, Hydrodictyon, Scenedesmus; 9. **Ulotrichales:** Ulva; 10. **Cladophorales:** Cladophora; 11. **Chaetophorales:** Fritschella, Coleochaete; 12. **Oedogoniales:** Oedogonium; 13. Conjugales: Zygnema, Cosmarium; 14. Siphonales: Codium, Vaucheria; 15. **Charales:** Chara; 16. **Bacillariophyceae:** General Characters and Classification; 17. **Pennales:** Navicula; 18. **Phaeophyceae:** General Characters and Classification; 19. **Ectocarpales:** Ectocarpus; 20. **Fucales:** Fucus, Sargassum; 21. Dictyotales: Dictyota; 22. **Laminariales:** Laminaria; 23. **Rhodophyceae:** General Characters and Classification; 24. **Nemalionales:** Batrachospermum; 25. **Ceramiales:** Polysiphonia; 26. Origin and Evolution of Sex in Algae; 27. Economic Importance of Algae; 28. Culturing of Algae; 29. Evolutionary Significance of Prochloron; 30. Contributions of Some Phycologists.

1st Edition (Reprint): 2020-2021

Size: Crown 4vo

ISBN: 978-93-5078-132-2

Pages: viii+408

Code No.: B-75

Price: ₹ 355.00

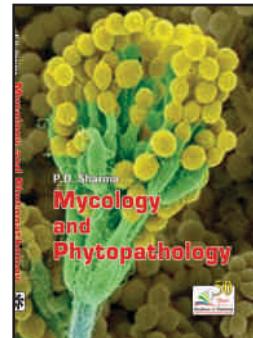
PRINTED IN DOUBLE COLOUR

# MYCOLOGY AND PHYTOPATHOLOGY

(FUNGI AND PLANT PATHOLOGY)

(Also Based on undergraduate CBCS Syllabus)

Dr. P.D. Sharma



**CONTENTS:** 1. Introduction; 2. Allied Fungi : Protozoa : Slime Moulds; 3. Allied Fungi: Minor Straminipila; 4. Allied Fungi : Major Straminipila: Oomycota; 5. Chytridiomycota; 6. Zygomycota; 7. Ascomycota; 8. Basidiomycota; 9. Fungi of Ecological Interest; 10. Symbiotic Associations: Lichens, Mycorrhizae, Insects, Endophytes; 11. Applied Mycology (Fungal Biotechnology); 12. Basic Concepts of Phytopathology; 13. Host-Pathogen Interactions; 14. Environment and Disease: Plant Disease Epidemiology; 15. Methods of Plant Diseases Control; 16. Plant Diseases Caused by Bacteria, Fungi and Viruses; Recommended Readings ; Index.

1st Edition: 2017-18

Size: Crown 4vo

ISBN: 978-93-5078-131-9

Pages: xii+368

Code No.: B-2

Price: ₹ 325.00

PRINTED IN DOUBLE COLOUR

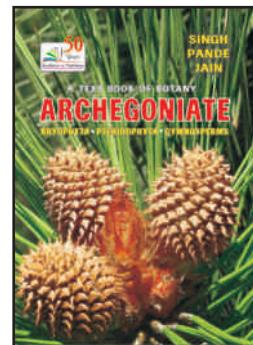


# ARCHEGONIATE

(BRYOPHYTA, PTERIDOPHYTA & GYMNOSPERMS)

(Also Based on undergraduate CBCS Syllabus)

Dr. V. Singh; Dr. P.C. Pande & Dr. D.K. Jain



**CONTENTS:** UNIT-I. BRYOPHYTA: 1. Bryophyta: General Characters and Classification; 2. Hepaticopsida: Marchantiales: *Riccia*; *Marchantia*; *Plagiochasma*; 3. Jungermanniales: *Pellia*; *Porella*; *Frullania*; 4. Anthocerotopsida Anthoceratales: *Anthoceros*; *Notothylus*; 5. Bryopsida (Muscii or Mosses) Sphagnobrya: *Sphagnum*; 6. Bryidae (Eubrya): *Funaria*; *Polytrichum*; *Pogonatum*; 7. Evolution of Sporophyte in Bryophytes; 8. Vegetative Reproduction

in Bryophytes; 9. Professor Shiv Ram Kashyap (1882-1934); Comparative-Study of Bryophytes;

**UNIT-II PTERIDOPHYTA WITH PALAEOBOTANY:** 1. Pteridophyta: General Characters; 2. Pteridophyta: Classification; 3. Palaeobotany and Geological Time Scale; 4. Fossilization and Types of Fossils; 5. Psilophytopsida: Psilophytales: *Rhynia*; *Horneophyton*; *Astewxylon*; 6. Psilotopsida: Psilotales: *Psilotum*; 7. Lycopodsida: Lycopodiales: *Lycopodium*; 8. Lepidodendrales: *Lepidodendron*; 9. Isoetales: *Isoetes*; 10. Selaginellale: *Selaginella*; 11. Sphenopsida Calamitales: *Calamites*; 12. Sphenophyllales: *Sphenophyllum*; *Sphenophyllostachys*; 13. Equisetales: *Equisetum*; 14. Eusporangiatae Marattiales: *Angiopteris*; 15. Ophioglossales: *Ophioglossum*; 16. Osmundales: *Osmunda*; 17. Leptosporangiatae Filicales: *Pteris*; *Dryopteris*; *Adiantum*; *Polypodium*; *Nephrolepis* 18. Marsileales: *Marsilea*; 19. Salvinales: *Azolla*; *Salvinia*; 20. Stelar System in Pteridophytes; 21. Heterospory and Seed Habit; 22. Apospory and Apogamy; 23. Telome Theory; 24. Prof. Birbal Sahni (1891-1949): Father of Indian Palaeobotany;

**UNIT-III GYMNOSPERMS:** 1. Gymnosperms: General Characters and Affinities; 2. Gymnosperms: Classification and Distribution; 3. Pteridospermopsida *Lyginopteris*; *Heterangium*; *Glossopteris*; 4. Cycadeoidopsida (Bennettiopsida) Cycadeoidales : *Ptilophyllum*; *Williamsonia*; *Cycadeoidea*; 5. Cycadales: *Cycas*; 6. Coniferales : *Pinus*; 7. Taxales: *Taxus*; 8. Ephedrales: *Ephedra*; 9. Gnetales: *Gnetum*

1st Edition(Reprint): 2020-2021

Size: Crown 4vo

ISBN: 978-93-5078-133-3

Pages: xii+554

Code No.: B-77

Price: ₹455.00

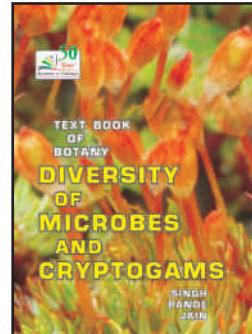
PRINTED IN DOUBLE COLOUR

# A TEXT BOOK OF BOTANY DIVERSITY OF MICROBES AND CRYPTOGAMS

(VIRUSES, BACTERIA, ALGAE, FUNGI,  
BRYOPHYTA AND PTERIDOPHYTA)

(Also Based on undergraduate CBCS Syllabus)

Dr. V. Singh; Dr. P.C. Pande & Dr. D.K. Jain



2nd Reprint (5th Edition): 2019-2020

Size: Crown 4vo

ISBN: 978-81-7133-973-0

Pages: viii+624

Code No.: B-30

Price: ₹510.00

**HINDI EDITION  
IS ALSO AVAILABLE  
CODE No.: B-27**



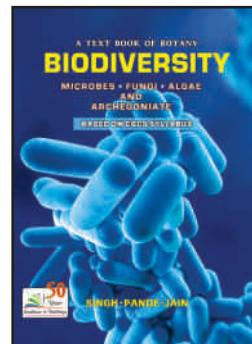
www.rastogipublications.com

# BIODIVERSITY

(MICROBIOLOGY, FUNGI, ALGAE,  
ARCHEGONIATE: BRYOPHYTA,  
PTERIDOPHYTA AND GYMNOSPERMS)

(Based on undergraduate CBCS Syllabus)

Dr. V. Singh, Dr. P.C. Pande & Dr. D.K. Jain



**CONTENTS:** UNIT-I. Microbiology: 1. Viruses, Viroids and Prions; 2. Bacteria: Structure and Reproduction; 3. Economic Importance of Bacteria; UNIT-II. Algae: 4. Algae: General Characters; 5. Classification of Algae; 6. Cyanophyceae: General Characters and Classification; 7. Nostocales: Nostoc; 8. Chlorophyceae: General Characters and Classification; 9. Volvocales: Chlamydomonas; 10. Oedogoniales: Oedogonium; 11. Siphonales: Vaucheria; 12. Phaeophyceae: General Characters and Classification; 13. Ectocarpales: Ectocarpus; 14. Fucales: Fucus; 15. Rhodophyceae: General Characters and Classification; 16. Nemalionales: Batrachospermum; 17. Ceramiales: Polysiphonia; 18. Economic Importance of Algae; UNIT-III. Fungi: 19. Fungi: General Characters; 20. Classification of Fungi; 21. Zygomycetes Mucorales: Rhizopus; 22. Ascomycotina Plectomycetes Eurotiales: Penicillium; 23. Pleosporales: Venturia; 24. Basidiomycotina Uredinales: Puccinia; 25. Agaricales: Agaricus; 26. Deuteromycotina, Moniliales: Alternaria; 27. Lichens; UNIT-IV. Introduction to Archegoniate; 28. Archegoniate Plants : Introduction; UNIT-V. Bryophyta: 29. Bryophyta: General Characters and Classification; 30. Hepaticopsida Marchantiales : Marchantia; 31. Bryopsida (Musci or Mosses), Sphagnobrya: Sphagnum; 32. Bryidae (Eubrya): Funaria; 33. Evolution of Sporophyte in Bryophytes; 34. Vegetative Reproduction in Bryophytes; 35. Professor Shiv Ram Kashyap (1882–1934); UNIT-VI. Pteridophyta: 36. Pteridophyta: General Characters; 37. Pteridophyta: Classification; 38. Palaeobotany and Geological Time Scale; 39. Fossilization and Types of Fossils; 40. Psilophytopsida Psilophytales: Rhynia, Cooksonia; 41. Selaginellales: Selaginella; 42. Equisetales : Equisetum; 43. Leptosporangiatae Filicales: Pteris, Dryopteris; 44. Stelar System in Pteridophytes; 45. Heterospory and Seed Habit; 46. Apospory and Apogamy; 47. Prof. Birbal Sahni (1891–1949): Father of Indian Palaeobotany; UNIT-VII. Gymnosperms: 48. Gymnosperms: General Characters and Affinities; 49. Gymnosperms: Classification and Distribution; 50. Cycadales: Cycas; 51. Coniferales: Pinus; 52. Economic Importance of Gymnosperms

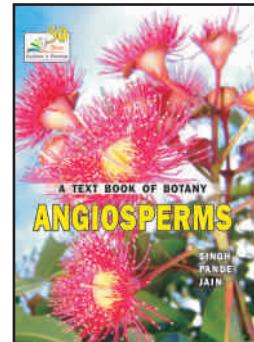
1st Edition(Reprint): 2019-2020	Size: Crown 4vo
ISBN: 978-93-5078-141-8	Pages: xii+564
Code No.: B-78	Price: ₹465.00

PRINTED IN DOUBLE COLOUR



# A TEXT BOOK OF BOTANY ANGIOSPERMS

Dr. V. Singh; Dr. P.C. Pande & Dr. D.K. Jain



## CONTENTS:

- UNIT I** : Anatomy of Angiosperms
- UNIT II** : Taxonomy of Angiosperms
- UNIT III** : Economic Botany
- UNIT IV** : Embryology, Morphology & Morphogenesis

5th Reprint (5th Edition): 2020-2021

ISBN: 978-81-7133-947-1

Code No.: B-44

Size: Crown 4vo

Pages: xii+840

Price: ₹825.00

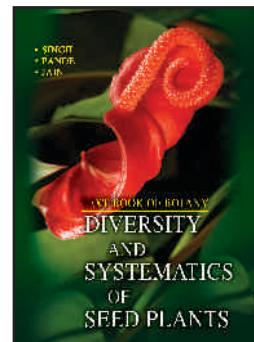
## HINDI EDITION

IS ALSO AVAILABLE

CODE No.: B-45

# DIVERSITY AND SYSTEMATICS OF SEED PLANTS (GYMNOSPERMS AND TAXONOMY)

Dr. V. Singh, Dr. P.C. Pande & Dr. D.K. Jain



**CONTENTS:** **Section-I Gymnosperms:** 1. Gymnosperms: General Characters and Affinities, 2. Gymnosperms: Classification and Distribution, 3. Pteridospermopsida: Lyginopteris; Heterangium; Glossopteris, 4. Cycadeoidospida (Bennettiopsida) Cycadeoidales: *Ptilophyllum*, *Williamsonia*, *Cycadeoidea*, 5. Cycadales: *Cycas*, 6. Coniferales: *Pinus*, 7. Taxales: *Taxus*, 8. Ephedrales: *Ephedra*, 9. Gnetales :*Gnetum* **Section-II Taxonomy:** 1. Origin and Evolution of Angiosperms, 2. History of Taxonomy and Systems of Classification, 3. Plant Identification and Taxonomic Keys, 4. Taxonomic Literature, 5. Plant Nomenclature, 6. Herbarium Techniques, 7. Modern Trends in Plant Taxonomy, 8. Synopsis of Selected Families, 9. Some Important Families of Dicotyledons, 10. Some Important Families of Monocotyledons, 11. Primitive Angiosperms, Botanical Survey of India

3rd Edition (2nd Reprint):

ISBN: 81-7133-957-03

Code No.: B-31

Size: Crown 4vo

Pages: viii+368

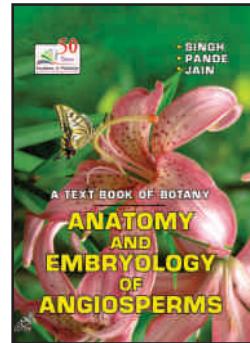
Price: ₹245.00



www.rastogipublications.com

# ANATOMY AND EMBRYOLOGY OF ANGIOSPERMS

(INCLUDING: MORPHOLOGY AND MORPHOGENESIS)  
(Also based on undergraduate CBCS Syllabus)



Dr. V. Singh, Dr. P.C. Pande & Dr. D.K. Jain

**CONTENTS:** Section-I. Structure and Development: 1. Basic Body Plan of A Flowering Plant and Modular Growth; 2. Meristems; 3. Permanent Tissues; 4. Cambium and its Functions; 5. Root : Primary and Secondary Structures; 6. Stem: Primary and Secondary Structures; 7. Stem: Anomalous Structures; 8. Root-Stem Transition; 9. Leaf : Morphology and Anatomy; 10. Branching Patterns and Canopy Architecture; Section-II.: Reproduction; Embryology; 1. Flower: Structure and Development; 2. Microsporangium, Microsporogenesis and Male Gametophyte; 3. Megasporangium, Megasporogenesis and Female Gametophyte; 4. Pollination; 5. Pollen-Pistil Interaction and Self-Incompatibility; 6. Fertilization; 7. Endosperm; 8. Embryogenesis; 9. Polyembryony; 10. Apomixis; 11. Fruit Development and Maturation; 12. Suspended Animation in Seeds (Seed Dormancy); 13. Dispersal of Fruits and Seeds; 14. Vegetative Propagation; 15. Experimental Embryology; 16. Embryology in Relation to Taxonomy; 17. Palynology : An Elementary Idea; 18. Contributions of Some Embryologists; Section-III. Morphology and Morphogenesis: 1. Morphology of Stamen; 2. Morphology of Carpels; 3. Placentation; 4. Morphology of Inferior Ovary; 5. Aims and Scope of Plant Morphogenesis; 6. Polarity; 7. Symmetry.

3rd Edition: 2018-2019

Size: Crown 4vo

ISBN: 978-93-5078-155-5

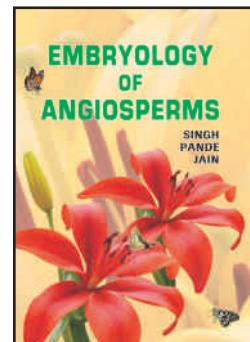
Pages: viii+400

Code No.: B-32

Price: ₹395.00

# EMBRYOLOGY OF ANGIOSPERMS

(INCLUDING: MORPHOLOGY & MORPHOGENESIS)  
(Also based on undergraduate CBCS Syllabus)



Dr. V. Singh, Dr. P.C. Pande & Dr. D.K. Jain

**CONTENTS:** Section-I. Reproduction: Embryology: 1. Flower: Structure and Development; 2. Microsporangium, Microsporogenesis; and Male Gametophyte; 3. Megasporangium, Megasporogenesis; and Female Gametophyte; 4. Pollination; 5. Pollen-Pistil Interaction and Self-Incompatibility; 6. Fertilization; 7. Endosperm; 8. Embryogenesis; 9. Polyembryony; 10. Apomixis; 11. Fruit Development and Maturation; 12. Suspended Animation in Seeds (Seed Dormancy); 13. Dispersal of Fruits and Seeds; 14. Vegetative Propagation; 15. Experimental Embryology; 16. Germline Transformation; 17. Embryology in Relation to Taxonomy; 18. Palynology: An Elementary Idea; 19. Contributions of Some Embryologists; Section-II. Morphology and Morphogenesis: 1. Morphology of Stamen; 2. Morphology of Carpels; 3. Placentation; 4. Morphology of Inferior Ovary; 5. Aims and Scope of Plant Morphogenesis; 6. Polarity; 7. Symmetry.

3rd Edition: 2019-2020

Size: Crown 4vo

ISBN: 978-93-5078-159-3

Pages: viii+235

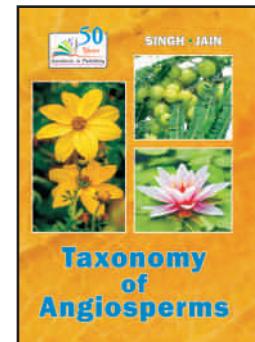
Code No.: B-10

Price: ₹225.00



# TAXONOMY OF ANGIOSPERMS

Dr. V. Singh  
Dr. D.K. Jain



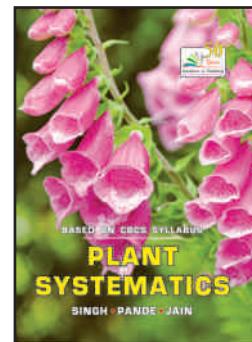
**CONTENTS:** 1. Introduction; 2. Classification: History and Important Systems; 3. Plant Nomenclature; 4. Taxonomic Evidence; 5. Numerical Taxonomy, 6. Field and Herbarium Techniques; 7. Plant Identification; 8. Synopsis of the selected families; 9. Position of the selected families in five major systems of Angiosperm classification; 10. Selected families of Aicotyladons, 11. Selected families of Monocotyledors, Appendix: Illustrated Glossary of Technical Terms, Bibliography; Index.

2nd Edition (10th Reprint): 2018	Size: Demy 8vo
ISBN: 81-7133-849-6	Pages: xii+564
Code No.: B-9	Price: ₹355.00

# PLANT SYSTEMATICS

(Also based on undergraduate CBCS Syllabus)

Dr. V. Singh, Dr. P.C. Pande & Dr. D.K. Jain



**CONTENTS:** 1. Biosystematics: An Introduction; 2. Botanical Gardens and Herbaria; 3. Documentation: Taxonomic Literature; 4. Plant Identification and Taxonomic Keys; 5. Taxonomic Evidences; 6. Taxonomic Hierarchy; 7. Botanical Nomenclature; 8. Systems of Classification; 9. Biometrics, Numerical Taxonomy and Cladistics; 10. Phylogeny of Angiosperms: Terms and Concepts; 11. Origin and Evolution of Angiosperms; 12. Selected Families of Dicotyledones; 13. Selected Families of Monocotyledones.

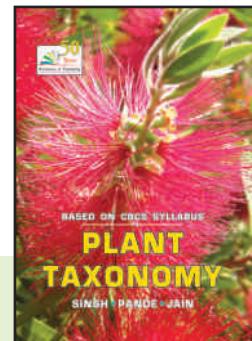
1st Edition: 2019-2020	Size: Crown 4vo
ISBN: 978-93-5078-171-5	Pages: 270
Code No.: B-82	Price: ₹295.00

# PLANT TAXONOMY

(Also based on undergraduate CBCS Syllabus)

Dr. V. Singh, Dr. P.C. Pande & Dr. D.K. Jain

**CONTENTS:** See Above



1st Edition: 2019-2020	Size: Crown 4vo
ISBN: 978-93-5078-170-8	Pages: 270
Code No.: B-88	Price: ₹285.00



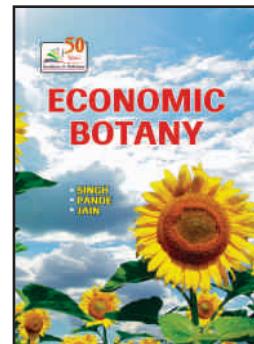
# ECONOMIC BOTANY

(For undergraduate students)

*Dr. V.Singh*

*Dr. P.C. Pande*

*Dr. D.K. Jain*



**CONTENTS:** 1. Origin of Cultivated Plants, 2. Cereals, 3. Millets, 4. Pulse Crops, 5. Vegetables, 6. Fruits, 7. Sugar Producing Plants, 8. Oil Crops, 9. Spices & Condiments. 10. Beverage Plants, 11. Fumitories and Masticatories, 12. Medicinal Plants, 13. Essential Oils; 14. Fibres, 15. Wood, 16. Rubber, 17. Paper, 18. Energy Plantation; 19. Ethnobotany : An Introduction; 20. Conservation of Plant Resources.

3rd Edition: 2018-2019

Size: Crown 4vo

ISBN: 978-81-7133-954-9

Pages: viii+204

Code No.: B-56

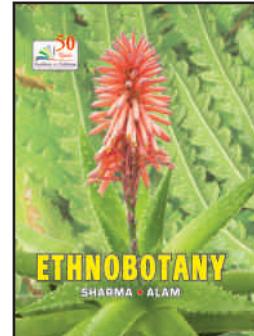
Price: ₹ 235.00

# ETHNOBOTANY

*Dr. Vinay Sharma*

*Dr. Afroz Alam*

New Arrival



**CONTENTS:** 1. Introduction and Definitions of Ethnobotany; 2. Significance of Ethnobotany; 3. Current Trends in Ethnobotany; 4. Research Method in Ethnobotany; 5. Plants in Literature, Folk Religion, Magico-religious Beliefs and Folk Songs of India; 6. Indian Ethnobotany; 7. Ethnobotany and Conservation of Native Plant Genetic Resources; 8. Tribal Societies of India: Demographic Account; 9. Ethnobotany of North Indian States; 10. Tribes of South India; 11. Tribes of Central India; 12. Ethnobotany of West India; 13. Tribes of Eastern India; 14. Tribes of North East India; 15. Andaman And Nicobar Islands

1st Edition: 2018-2019

Size: Crown 4vo

ISBN: 978-93-5078-174-6

Pages: 384

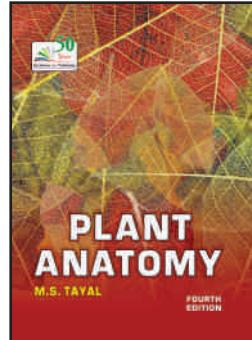
Code No.: B-81

Price: ₹ 395.00



# PLANT ANATOMY

Dr. M.S. Tayal

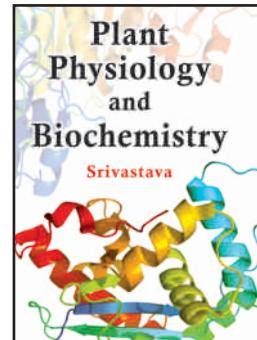


**CONTENTS:** 1. Introduction, 2. The Cell, 3. The Cell Wall, 4. Cell Division, 5. Meristems and the Shoot Apex, 6. Simple Tissue, 7. Xylem, 8. Phloem, 9. Special Tissues, 10. Epidermal Tissue System, 11. Ground and Vascular Tissue System, 12. Vascular Cambium, 13. Periderm, 14. Anatomy of Stem, 15. Anatomy of Root, 16. Anatomy of Leaf, 17. Secondary Growth in Thickness, 18. Anomalous Structure and Secondary Growth, 19. Leaf Fall and Healing of Wounds, 20. Mechanical Tissue in Plants, 21. Ecological Anatomy, Glossary of Technical Terms, Index.

4th Revised Edition: 2020-2021	Size: Crown 4vo
ISBN: 81-7133-770-8	Pages: viii+306
Code No.: B-7	Price: ₹245.00

# PLANT PHYSIOLOGY AND BIOCHEMISTRY

Prof. H.S. Srivastava  
Dr. N. Shankar



**CONTENTS: Plant Physiology:** 1. Historical Perspective and Application of Plant Physiology; 2. Cell Structure and Function; 3. Physical Properties of Molecules; 4. Absorption and Translocation of Water; 5. Loss of Water from Plants; 6. Phloem Transport; 7. Mineral Uptake; 8. Role of Minerals; 9. Assimilation of Nitrogen and Sulfur; 10. Primary Processes of Photosynthesis; 11. Carbon Dioxide Assimilation in Dark Reactions of Photosynthesis; 12. Environmental Effects of Photosynthesis; 13. Respiration; 14. Factors Affecting Respiration; 15. Fat Metabolism; 16. Auxins; 17. Gibberellins; 18. Cytokinins; 19. Abscisic Acid; 20. Ethylene; 21. Polyamines; 22. Phytochrome; 23. Seed Germination and Dormancy; 24. Flowering; 25. Plant Movements: The Organization in Space; 26. Stress Physiology; **Biochemistry:** 1. Enzymes and Coenzymes; 2. Amino Acids; 3. Proteins; 4. Carbohydrates; 5. Lipids; 6. Nucleic Acid.

8th Reprint (1st Edition): 2019-2020	Size: Demy 8vo
ISBN: 81-7133-798-8	Pages: viii+512
Code No.: B-28	Price: ₹475.00

**ALSO AVAILABLE**  
**PLANT PHYSIOLOGY**  
**Code: B-12, Price: ₹285.00**

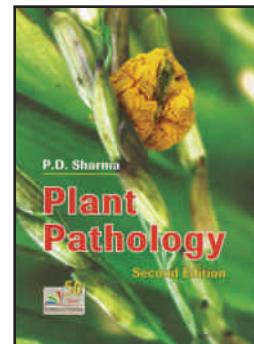


[www.rastogipublications.com](http://www.rastogipublications.com)

# PLANT PATHOLOGY

Dr. P.D. Sharma

**CONTENTS:** 1. Introduction; 2. Genetics of Plant Disease; 3. Tactics of Attack Among Pathogens; 4. Defense Tactics Among Plants; 5. Effect of Environment on Disease Development; 6. Epidemiology, Assessment and Forecasting of Plant Diseases; 7. Methods of Plant Disease Control; 8. Mechanisms of Biological Control; 9. Non-Parasitic Diseases Caused by Environmental Factors; 10. Diseases Caused by Bacteria and Mollicutes; 11. Phytopathogenic Fungi and Fungal-like Organisms; 12. Diseases Caused by Fungal-like Organisms; 13. Diseases Caused by Chytridiomycota and Zygomycota; 14. Diseases Caused by Ascomycota; 15. Diseases Caused by Deuteromycetes; 16. Diseases Caused by Basidiomycota; 17. Diseases Caused by Viruses and Viroids; 18. Diseases Caused by Nematodes and Protozoa; 19. Diseases Caused by Flowering Plants and Green Algae; Appendix : Biological Control of Insects and Weeds; Glossary; Suggested Readings; Index



2nd Revised Edition: 2018-2019

ISBN: 978-93-5078-119-7

Code No.: B-48

Size: Crown 4vo

Pages: xx+616

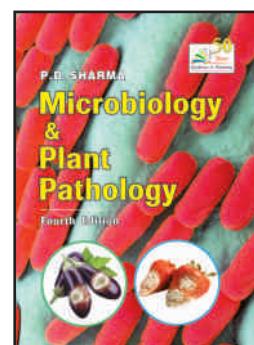
Price: ₹525.00

WITH MULTI COLOURED PLATES

## MICROBIOLOGY AND PLANT PATHOLOGY

Dr. P.D. Sharma

**CONTENTS: MICROBIOLOGY:** 1. Introduction; 2. Microscopy, Sterilisation, Growth Measurement and Culture Methods; 3. Structure of Microorganisms: Two Basic Cell Types; 4. Microbial Nutrition and Growth; 5. Microbial Metabolism; 6. Microbial Genetics; 7. Control of Microbial Growth; 8. The Microbial World: Diversity, Status and Classification; 9. Acellular Microorganisms: Viruses, Virusoids, Viroids and Prions; 10. Microbiology of Air (Aeromicrobiology); 11. Microbiology of Water; 12. Soil Microbiology; 13. Microbiology of Extreme Environments; 14. Microbial Bioremediation of Polluted Environments; 15. Microbiology of Solid Waste, Sewage and Industrial Wastes; 16. Microbe Plant Associations: Phytosphere; 17. Microbial Biofertilisers and Biopesticides; 18. Microbial Biodegradation of Agricultural Produce and Pesticides; 19. Microbiology of Foods, Milk and Dairy Products; 20. Industrial Microbiology; 21. Biohydrometallurgy: Bioleaching and Biomining; 22. Infection and Disease; 23. General and Specific (Immune) Resistance; 24. Immunity and Serology; 25. Immune Disorders; 26. Bacterial Human Diseases; 27. Viral Human Diseases; 28. Human Diseases Caused by Protozoa, Fungi and Helminths; Index



**Plant Pathology:** 1. Introduction; 2. Host-Parasite Interactions: Mechanisms of Attack and Defense; 3. Genetics of Disease Resistance; 4. Environment and Disease: Plant Disease Epidemiology; 5. Methods of Plant Diseases Control (Plant Disease Management); 6. Biopesticides in Plant Protection; 7. Biotechnology and Plant Pathology; 8. Fungal Plant Diseases; 9. Bacterial Plant Diseases; 10. Viral and Nematodal Plant Diseases; Index

4th Revised Edition: 2019-2020

ISBN: 978-81-7133-994-5

Code No.: B-5

Size: Crown 4vo

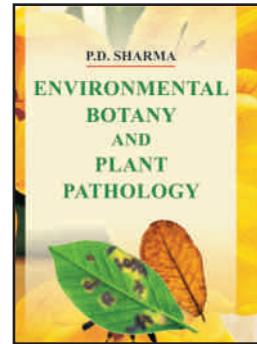
Pages: xxvi+796

Price: ₹655.00



# **ENVIRONMENTAL BOTANY AND PLANT PATHOLOGY**

*Dr. P.D. Sharma*



**CONTENTS: UNIT-I: Ecology, Environmental Factors and Natural Resources:** 1. Ecology, Environment, Climatic and Topographic Factors; 2. Soil Resource : Types, Properties and Problems, and Mineral Resources of Earth; 3. Water Resource; 4. Water Regimes and Ecological Adaptations in Plants; 5. Plant Succession; 6. Ecosystem : Structure and Function; 7. Forest Resource; 8. Energy Resources : Crisis and Solutions;

**UNIT-II Environmental Pollution:** 9. Air Pollution; 10. Water Pollution; 11. Soil, Solid Waste, Radioactive, Thermal and Noise Pollution; 12. Greenhouse Effect, Global Warming and Climate Change;

**UNIT-III: Biodiversity and Phytogeography:** 13. Biodiversity and Characteristics of Biotic Communities; 14. Population Characteristics, Dynamics and Regulation; 15. Phytogeography : Basic Principles and Vegetation of India

**UNIT-IV: Plant Pathology:** 16. Introduction; 17. Some Common Fungal, Bacterial and Viral Plant Diseases;

1st Edition (1st Reprint): 2019-2020	Size: Crown 4vo
ISBN: 978-93-5078-054-1	Pages: viii+440
Code No.: B-70	Price: ₹455.00

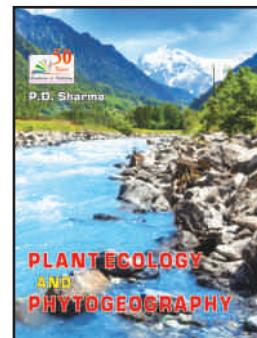
**HINDI EDITION  
IS ALSO AVAILABLE  
CODE No.: B-70H**

# **PLANT ECOLOGY AND PHYTOGEOGRAPHY**

(Also based on undergraduate CBCS Syllabus)

*Dr. P.D. Sharma*

**New Arrival**



**CONTENTS: Evolution :** 1. Introduction; 2. Ecological Factors: Light, Temperature, Soil, Water; 3. Ecological Adaptations to Water Extremes; 4. Population: Structure, Growth and Regulation; 5. Population Interactions; 6. Community Characteristics and Ecological Succession; 7. Ecosystem Structure, Rate Functions and Biogeochemical Cycles; 8. Biodiversity and Wildlife Conservation; 9. Phytogeography: Basic Principles, Biogeographic Zones and Vegetation of India; 10. Practical Exercises; Glossary; Index

1st Edition (Reprint): 2019-2020	Size: Crown 4vo
ISBN: 978-93-5078-185-2	Pages: viii+340
Code No.: BC-69	Price: ₹355.00



# **PLANT METABOLISM**

(Also based on undergraduate CBCS Syllabus)

**Releasing:  
October 2020**

*Dr. S.N. Gupta*

**CONTENTS:** 1. Concepts of Metabolism; 2. Enzymes; 3. Carbon Assimilation-I (History and Pigments); 4. Carbon Assimilation-II (Light Reaction); 5. Carbon Assimilation-III (Dark Reaction and Carbohydrate Metabolism); 6. Carbon Oxydation (Respiration); 7. ATP-Synthesis; 8. Lipid Metabolism; 9. Nitrogen Metabolism; 10. Signal Transduction

---

1st Edition: 2020-2021

Code No.: B-90

Size: Crown 4vo

Price: ₹ 225.00

# **ANALYTICAL TECHNIQUES IN PLANT SCIENCES**

(Also based on undergraduate CBCS Syllabus)

**Releasing:  
September 2020**

*Dr. S.V.S. Rana*

**CONTENTS:** 1. Microscopy; 2. Centrifugation; 3. Radio-isotopes Techniques; 4. Spectrophotometry; 5. Chromatography; 6. Mass Spectrometry; 7. Biostatistics; 8. Polymerase Chain Reaction (PCR); 9. Practical Exercise.

---

1st Edition: 2020-2021

Code No.: B-93

Size: Crown 4vo

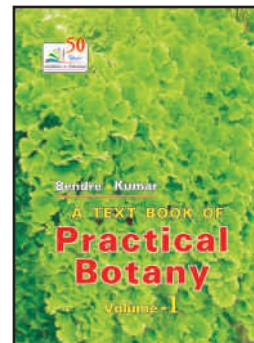
Price: ₹ 225.00



# A TEXT BOOK OF PRACTICAL BOTANY

## VOL.1

Dr. Ashok Bendre  
Dr. Ashok Kumar



**CONTENTS:** 1. Microscope : Primary Instrument of a Biologist; 2. Laboratory Ethics and Techniques; 3. Collection of Herbarium; 4. Microbiology; 5. Phycology; 6. Mycology; 7. Lichens and Mycorrhiza; 8. Plant Pathology; 9. Bryophyta; 10. Pteridophyta; 11. Gymnosperms; 12. Palaeobotany; Appendix

10th Revised Edition: 2019-2020  
ISBN: 81-7133-923-5  
Code No.: B-14

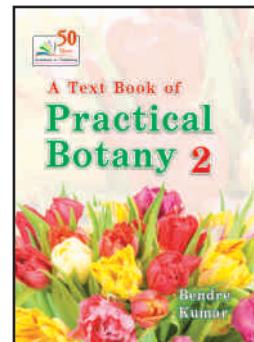
Size: Crown 4vo  
Pages: viii + 364  
Price: ₹355.00

**HINDI EDITION  
IS ALSO AVAILABLE  
CODE No.: B-23**

# A TEXT BOOK OF PRACTICAL BOTANY

## VOL.2

Dr. Ashok Bendre  
Dr. Ashok Kumar



**CONTENTS:** 1. Introduction; 2. The Method of Studying Angiospermic Plant; 3. Description of Plants; 4. Plants and Human Welfare; 5. Embryology of Angiosperms; 6. Anatomy; 7. Illustrated Glossary of Anatomical Terms; 8. Ecology; 9. Biostatistics (Biometry); 10. Cytology and Genetics; 11. Experiments in Plant Physiology; Appendix; Index.

7th Edition (Reprint): 2019-2020  
ISBN: 81-7133-877-1  
Code No.: B-15

Size: Crown 4vo  
Pages: xii + 452  
Price: ₹485.00

**HINDI EDITION  
IS ALSO AVAILABLE  
CODE No.: B-24**

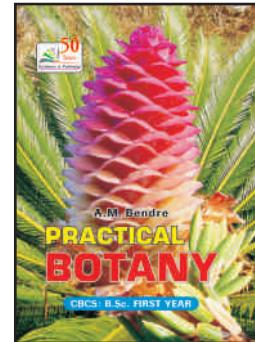


# C.B.C.S.: B.Sc 1st Year PRACTICAL BOTANY

(HONS./MAJOR STUDENTS)

Microbiology, Phycology, Mycology and Phytopathology,  
Archegoniate, Biomolecules and Cell Biology  
(Based on undergraduate CBCS Syllabus)

Dr. Ashok Bendre



1st Edition: 2019-2020

ISBN: 978-93-5078-157-9

Code No.: B-84

Size: Crown 4vo

Pages: iv + 224

Price: ₹215.00

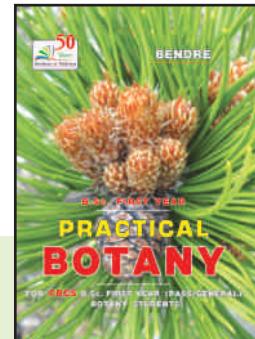
# C.B.C.S.: B.Sc 1st Year PRACTICAL BOTANY

(Biodiversity, Ecology and Taxonomy)  
(Based on undergraduate CBCS Syllabus)

Dr. Ashok Bendre

New Arrival

(FOR PASS STUDENTS)



1st Edition: 2018-2019

ISBN: 81-7133-828-3

Code No.: B-87

Size: Crown 4vo

Pages: 260

Price: ₹225.00

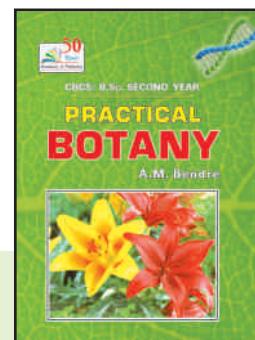
# C.B.C.S.: B.Sc 2nd Year PRACTICAL BOTANY

(Anatomy, Economic, Botany, Genetics,  
Molecular Biology and Plant Systematics)  
(Based on undergraduate CBCS Syllabus)

Dr. Ashok Bendre

New Arrival

(FOR HONS./MAJOR STUDENTS)



1st Edition: 2018-2019

ISBN: 81-7133-828-3

Code No.: B-86

Size: Crown 4vo

Pages: 276

Price: ₹295.00

# C.B.C.S.: B.Sc 3rd Year PRACTICAL BOTANY

(Embryology, Plant Physiology,  
Plant Metabolism and Plant Biotechnology)

Dr. Ashok Bendre

(FOR HONS./MAJOR STUDENTS)

Releasing Shortly



# **HISTORY OF POLITICAL THOUGHT**

(For B.A.(Hons), M.A. & Competitive Examinations)

Prof. Sukhbir Singh

(In Two Volumes)

**Code: P-14 : Vol.-I: Plato to Burke (5 ed.) Price: Rs. 305.00**

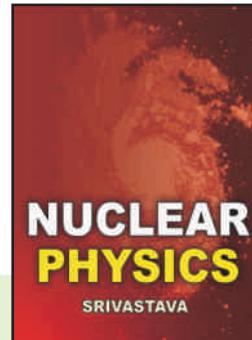
**Code: P-15 : Vol.-II: Plato to Burke (4 ed.) Price: Rs. 275.00**

## **NUCLEAR PHYSICS**

Prof. B.B. Srivastava

1st Edition:  
ISBN: 81-7133-828-3  
Code No.: PH-1

Size: Crown 4vo  
Pages: xvi + 628  
Price: ₹355.00

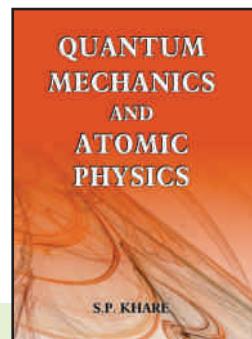


## **QUANTUM MECHANICS AND ATOMIC PHYSICS**

Prof. S.P. Khare

1st Edition: 2014-2015  
ISBN: 978-93-5078-067-1  
Code No.: PH-03

Size: Crown 4vo  
Pages: 360  
Price: ₹245.00

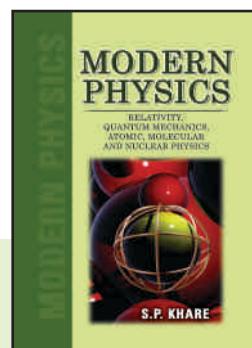


## **MODERN PHYSICS**

Prof. S.P. Khare

1st Edition: 2006  
ISBN: 81-7133-872-0  
Code No.: PH-2

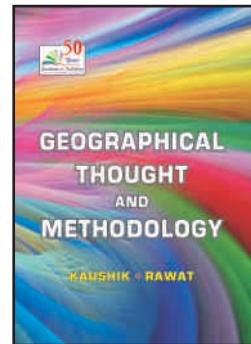
Size: Demy 8vo  
Pages: xvi + 360  
Price: ₹145.00



[www.rastogipublications.com](http://www.rastogipublications.com)

# **GEOGRAPHIC THOUGHT AND METHODOLOGY**

**Dr. S.D. Kaushik  
Dr. D.S. Rawat**



**CONTENTS:** 1. Introduction: Concise Account of the Evolution of Geography; 2. Geographical Knowledge in Ancient Civilization: Ancient India and Chinese Geography; 3. Greek and Roman Geography; 4. Dark Age and Arab Geography; 5. Discoveries, Renaissance and Geography; 6. Early Foundation of Modern Scientific Geography : Varenius, Hommayer and Kant 7. The Geography of Humboldt and Ritter; 8. Post-Darwin New Geography: Davis (Landscape Evolution Model) and Ratzel (*Anthropogeographie*); 9. German Geography; 10. French School of Geography; 11. British and Russian Geography; 12. American Geography before Quantitative Revolution (1850-1950); 13. Positivism and Quantitative Revolution in Geography; 14. New Directions : Behavioural, Humanistic and Geography as Human Ecology; 15. New Critical Revolution and Postmodern Geography; 16. Development of Geography in Modern India; 17. Dualism in Geography; 18. Paradigms in Geography; 19. Environmentalism: Changing Paradigms of Man-Environment Relationship (Determinism, Possibilism, Neo-Determinism, Gaianism, Deep Ecology and Sustainable Development); 20. Concept and Classification of Regions; 21. Regionalization and Regional Planning; 22. Theoretical Geography: The Science of Spatial Organisation and Spatial Analysis; 23. Models in Human Geography; 24. Geography as Human Ecology—Systems and System Analysis; 25. Behavioural Geography; 26. Humanistic Geography; 27. Social Relevance Revolution: Welfare, Radical and Gender Geography; 28. Postmodernism in Geography; 29. Geography: Its Definition, Concepts, Nature and Purpose; 30. Place of Geography in Classification of the Sciences, Scope and Elementary Introduction of Research Methodology

1st English Edition: 2017-18	Size: Crown 4vo
ISBN: 978-93-5078-168-5	Pages: 444
Code No.: G-38	Price: ₹375.00

**HINDI GEOGRAPHY TEXT BOOKS  
ON VARIOUS TOPICS  
FOR  
B.A. & M.A. CLASSES  
ARE ALSO AVAILABLE.**

***PLEASE ASK FOR OUR  
GEOGRAPHY (HINDI) CATALOGUE***



# C.B.S.E. TEXT BOOKS FOR XI & XII CLASSES

FOR CBSE AND VARIOUS STATE BOARDS OF EDUCATION

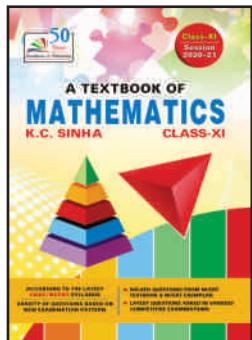
(In accordance with the latest CBSE/NCERT Guidelines)

## A TEXT BOOK OF MATHEMATICS

DR. K.C. SINHA

**Class XI** : Price : ₹ 695.00

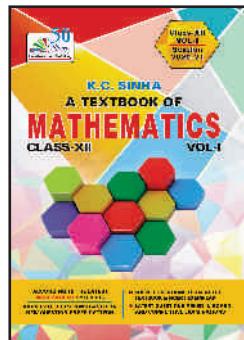
14th Edition; Title Code No. : **CBSE-2**



Class XI

**Class XII Vol. 1** : Price : ₹ 495.00

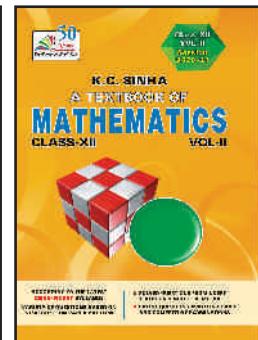
13th Edition; Title Code No. : **CBSE-4**



Class XII-Vol.-1

**Class XII Vol. 2** : Price : ₹ 595.00

13th Edition; Title Code No. : **CBSE-5**



Class XII Vol.-2

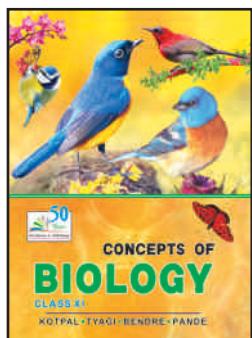
ALSO USEFUL FOR  
JEE/ENGINEERING ENTRANCE EXAMINATIONS

## THOROUGHLY REVISED EDITIONS

Released: January 2020

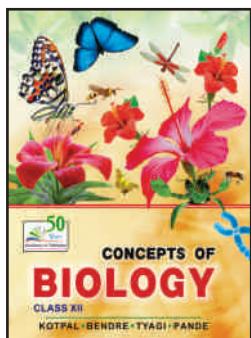
## CONCEPTS OF BIOLOGY

R.L. KOTPAL • A. M. BENDRE  
K.N. TYAGI • P.C. PANDE



Class XI

With Multi Coloured Plates



Class XII

With Multi Coloured Plates

**Class XI** : Price ₹ 825.00 [6th Revised Edition]  
Title Code No. : **CBSE-1**

**Class XII** : Price ₹ 725.00 [5th Revised Edition]  
Title Code No. : **CBSE-3**

BASED ON CBSE/NCERT PATTERN

ALSO USEFUL FOR  
NEET/MEDICAL ENTRANCE EXAMINATIONS

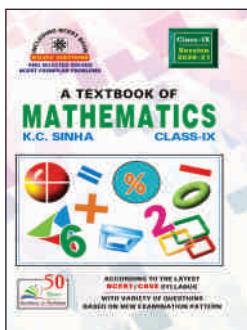
PRINTED IN DOUBLE COLOUR



# C.B.S.E. TEXT BOOKS: FOR CLASSES IX & X

## FOR CBSE AND VARIOUS STATE BOARDS OF EDUCATION

(Based on Latest CBSE/NCERT Guidelines & Pattern)



## A TEXT BOOK OF MATHEMATICS

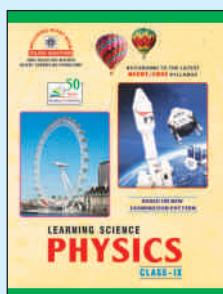
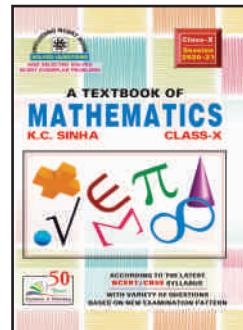
DR. K.C. SINHA

**Class IX : 4th Edition: 2020-21**

Price: ₹ 495.00; CBSE-17

**Class X : 5th Edition: 2020-21**

Price: ₹ 585.00; CBSE-16

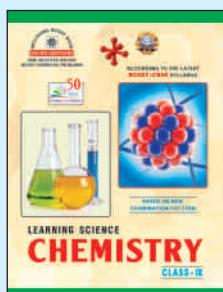
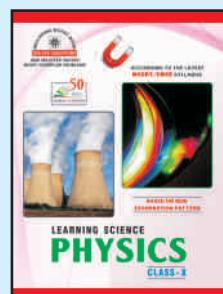


## PHYSICS

M.J.A. BAIG (PGT)

**Class IX : CBSE-20** Price: ₹ 355.00

**Class X : CBSE-21** Price: ₹ 335.00



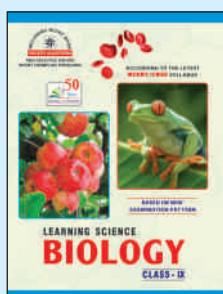
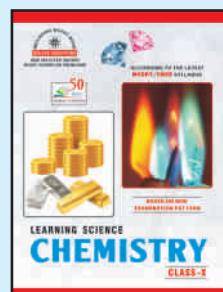
## CHEMISTRY

S.P. VERMA

Formerly, Principal  
Kendriya Vidyalaya Sangathan, New Delhi

**Class IX : CBSE-22** Price: ₹ 365.00

**Class X : CBSE-23** Price: ₹ 435.00



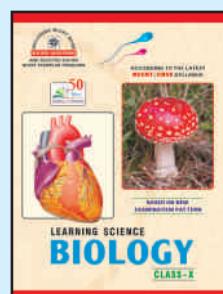
## BIOLOGY

DR. P.C. PANDE & DR. D.K. JAIN

Formerly, Head of Botany Dept.  
Meerut College Meerut.

**Class IX : CBSE-24** Price: ₹ 435

**Class X : CBSE-25** Price: ₹ 435



**LATEST EXAM REFRESHERS : FOR C.B.S.E. CLASS-X EXAM : 2021**  
**WRITTEN BY EXPERIENCED AUTHORS**

**BASED ON LATEST EXAM PATTERN**

**SCIENCE**

(with *Class-X Solved CBSE Examination Paper:2020*)

No of Pages: 560 • Price: ₹ 445.00

**MATHEMATICS**

(FOR STANDARD & BASIC COURSES)

(with *Class-X Solved CBSE Examination Paper:2020*)

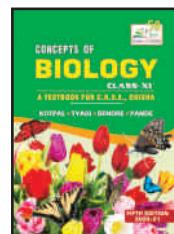
No of Pages: 620 • Price: ₹ 475.00

**TEXT BOOKS FOR C.H.S.E, ODISHA: CLASSES XI & XII**  
(ACCORDING TO THE NEW REVISED SYLLABUS)  
**WITH MULTICOLOUR PLATES**

**CONCEPTS OF  
BIOLOGY: Class-XI**

R.L. KOTPAL • A.M. BENDRE  
K.N. TYAGI • P.C. PANDE

5th Edition: 2020-2021; No of Pages: 1006  
Code No.: CHSE-9 Price : ₹675.00



**INTRODUCTORY BOTANY  
Class-XI**

A.M. BENDRE • P.C. PANDE

5th Edition: 2020-2021; No of Pages: 512  
Code No.: CHSE-3 Price : ₹325.00

**INTRODUCTORY ZOOLOGY  
Class-XI**

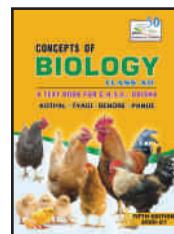
R.L. KOTPAL • K.N. TYAGI

5th Edition: 2020-2021; No of Pages: 492  
Code No.: CHSE-4 Price : ₹295.00

**CONCEPTS OF  
BIOLOGY: Class-XII**

R.L. KOTPAL • A.M. BENDRE  
K.N. TYAGI • P.C. PANDE

5th Edition: 2020-2021; No of Pages: 716  
Code No.: CHSE-10 Price : ₹595.00



**INTRODUCTORY BOTANY  
Class-XII**

A.M. BENDRE • P.C. PANDE

5th Edition: 2020-2021; No of Pages:  
Code No.: CHSE-5 Price : ₹305.00

**INTRODUCTORY ZOOLOGY  
Class-XII**

R.L. KOTPAL • K.N. TYAGI

5th Edition: 2020-2021; No of Pages:  
Code No.: CHSE-6 Price : ₹305.00



## SOME OF OUR STOCKISTS IN VARIOUS STATES

### ODISHA

**A.K. Mishra Agencies (P) Ltd.**  
Banka Bazar, Cuttack

**Kitab Mahal Agencies**  
Badambari, College Square, Cuttack.

**Kitab Mahal Book Sellers**  
J&K Tower, College Square, Cuttack.

**Shri Madhab Book Store**  
P/5, Labour Colony, Monalisa Hotel  
Badambari, Cuttack .

**S.S. Books**  
Mini Jayshree Plaza, Near Axis Bank,  
Badambari, Cuttack .

**Padmalaya Booksellers**  
31-A, Janpath, Bhubaneswar.

**Amit Book Depot**  
5, Satya Nagar, Opp. Central School No.1,  
Bhubaneswar.

**Pragnya Book Store**  
Janpath, Unit-III, Bhubaneswar.

**Bharti Book House**  
Cr. No. 106, Capital Hat, Bhubaneswar.

**Sri Ram Books**  
14, Industrial Estate, Unit-III,  
Bank Site of Gurudwara, Bhubaneswar-1.

**Bijoy Book Store**  
Bus Stand, Barraks, Berhampore.

**Student Book Centre**  
Uditnagar, Near Out-Post, Rourkela.

**Prasant's Books & Publishers**  
NAC Market, Shop No. 14, Koel Nagar, Rourkela.

**Sri Shakti Pustak Bhandar**  
Gaiety Talkies Road, Sambalpur.

**Book Fair**  
Opp. G.M. College, Sambalpur.

### WEST BENGAL

**International Book Trust**  
54, College Street, Kolkata-73

**Techno World Book Sellers**  
YMCA Building, M.G. Road, Kolkata.

**Katha 'o' Kahani**  
Shop No. 13 Bankim Chaterjee Street, Kolkata.

**Vidyashree Pustakalaya**  
College More, Near Siliguri College)  
Siliguri.

### ASSAM & N.E. STATES

**Book Emporium**  
Jaswanta Road, Pan Bazar, Gauhati (Assam).

**Ashok Book Stall**  
Jaswanta Road, Pan Bazar, Gauhati (Assam).

**UBS Publishers & Distributors Pvt. Ltd**  
1st Floor, H.No. 4, Kanklata Path,  
Lachit Nagar, Bharalupar, Gauhati (Assam).

**Student Emporium**  
New Market, Dibrugarh (Assam).

**National Library**  
New Market, Dibrugarh (Assam).

**M/s Vidya Bharti Book Sellers**  
New Market, Dibrugarh (Assam).

**Naveen Pustakalaya**  
J.B. College Road, Jorhat ( Assam).

**Nirodsankakoti Book Sellers**  
N.P.A. Near Bar Library Complex, Jorhat ( Assam).

**New Book Stall**  
Boarding Road, Sibsagar ( Assam).

**Bani Mandir**  
Pasighat (Arunachal).

**Meghalaya Book Stall**  
Mawkhar Police Point,  
Bara Bazar, Shillong(Meghalaya).

**M/s R.K. Book House**  
Poona Bazar, Imphal (Manipur).

**Sucheta Books Centre**  
Pologround Road, Imphal (Manipur).

**Universal Book Centre**  
Amra Complex, Mapal Kangjeibung,  
Poana Bazar, Imphal (Manipur).

### GUJARAT

**Atul Book Stall**  
Gandhi Road, Ahemdabad.

**Himanshu Book Co.**  
Etlis Bridge, Ashram Road, Ahemdabad.

**Manish Book Depot**  
Opp. M.S. University, Shivaji Ganj, Baroda.

### MAHARASHTRA

**Students Agencies (India) Pvt. Ltd.**  
102, Konark Ashram; 156-Tardeo Rd, Mumbai.

**Sterling Book House**  
181 Dr. D.N. Road, Fort, Mumbai - I.

**Sri Samarth Book Depot**  
S.B. College Road, Aurangabad.



**Chhaya Book Centre**  
S.B. College Road, Aurangpura,  
*Aurangabad (M.S.)*

**Popular Book Centre**  
Jhunjhunwala Dharamshala, *Amravati.*

**Central Book Stall**  
Sitabuldi, *Nagpur.*

**Verma Book Centre**  
Appa Balwant Road, *Pune.*

**Universal Book Stall**  
216, Narayan Peth,  
*Pune-411030*

**Pragati Book Centre**  
157, Budhwar Peth,  
*Pune - 411002 (M.S.).*

**Prashant Book House**  
17, Stadium Shopping Center,  
Opp. S.B.I., *Jalgaon (M.S.)*

## TAMILNADU

**TBH Publishers & Distributors**  
Nallathambi Street, Wallajah Road, *Chennai.*

**Blackie Books**  
Old No. 37/2, New No. 18,  
Oil Monger Street, Behind Zambazar  
Police Station, Royapetta, *Chennai.*

**National Book House**  
Opp. Ghosha Hospital, Triplicane, *Chennai.*

**Sarvodaya Ilakkiya Pannai**  
West Veli Street, *Madurai.*

**Cheran Book House**  
137, Big Bazar Street, *Coimbatore.*

**T.B.H. Publishers & Distributors**  
88, N.G. Narayanaswamy Street  
New Siddhapudar, *Coimbatore .*

**Ajanta Book Centre**  
127, Cherry Road, *Salem.*

## KERALA

**Modern Book Centre**  
M.G. Road, *Trivendrum.*

**Academic Book House**  
Pulimoodu Jn. *Trivendrum.*

**Cosmo Books**  
Link Road, *Calicut (Kozhikode).*

**Orient Book House**  
Convent Junction, *Ernakulam (Cochin).*

**Athulya Books**  
V.K. Complex, Fort Road,  
*Cannur (Kerala).*

## KARNATAKA

**Sapna Book House (P) Ltd.**  
Third Main Road, Gandhi Nagar, *Bangalore.*

**Bharat Book Depot & Prakashan**  
Pune - Bangalore Road, *Dharwar.*

**National Book Stall**  
Koppikar Road, *Hubli*

**School Book Company**  
Car Street, *Mangalore.*

**Sri Sidhilingeshwara Book Depot**  
Main Road, *Gulbarga.*

## ANDHRA PRADESH

**Book Selection Centre**  
Near Shalimar Theatre, Ramkot, *Hyderabad.*

**Rajkamal Book Distributors**  
Sultan Bazar, *Hyderabad.*

**Shah Book House Pvt. Ltd.**  
Bank Street (Devika Mahel), *Hyderabad (A.P.).*

**JBD Educationalis Pvt. Ltd.**  
D.No. 30-15-138, Krishna Garden Street,  
Dabagardens, *Visakhapatnam (A.P.)*

## JAMMU & KASHMIR

**Kashmir Book Depot,**  
Budshaw Chowk, *Srinagar.*

**Kapoor Sons**  
Lal Chowk, *Srinagar.*

**Mamta Book Depot**  
S.P. College Road, Behind Women's  
College, *Srinagar.*

**Vee Kumar & Bros.,**  
*Pucca Danga, Jammu.*

**Sahitya Sangam**  
Kachi Chawni, *Jammu.*

**Universal Booksellers**  
*Pucca Danga,Jammu.*

**Harnam Dass & Bros.**  
*Pucca Danga, Jammu.*

**Radha Kishan Anand & Co.**  
*Pucca Danga, Jammu.*

**Kitab Mahal, Book Sellers**  
*Pucca Danga, Jammu.*

## DELHI

**Mittal Book Distributors**  
2/44, Ansari Road, Daryaganj, *New Delhi*

**UBS Publishers & Distributors Ltd.**  
B-3B, Sector-63, Noida-201306 U.P.

**UDH Publishers & Distributors**  
4762-63/23 Ansari Road, Daryaganj, *New Delhi*

**Kashyap Book Depot**  
M-15 Shree Balaji Market,  
2604 Nai Sarak *Delhi*



## **PUNJAB**

**Variety Book Store**  
S.C.O. 69 Sector - 17D, Chandigarh

**Kasturi Lal & Sons**  
Hall Bazar, Amritsar

**C.D. Mehra & Sons**  
Hall Bazar, Amritsar

**Gupta Book Shop**  
Opp. DAV College Gate, Jullunder City

**Loyal Book Depot**  
Chaura Bazar, Ludhiana

## **JHARKHAND**

**Bokaro Students Friends**  
C-8 Centre Sector-4,  
Bokaro Steel City (Jharkhand)

**Khandelwal Book Depot**  
Khandelwal Chowk, Hazaribagh (Jharkhand)

**Agarwal Book Distributors**  
Pustak Path, Upper Bazar, Ranchi (Jharkhand)

**Crown Books Publishers & Distributors**  
Ayran Tower, East Jail Road, Ranchi (Jharkhand)

**Gyan Ganga Limited**  
Opp. Ranchi Women's College, Arts Faculty,  
Gate, Circular Road, Ranchi (Jharkhand)

## **BIHAR**

**Amit Book Depot**  
Opp. Patna College, Ashok Rajpath, Patna (Bihar)

**Nova Publishers & Distributors**  
B.M. Dass Road, Patna (Bihar)

**Vikas Book Depot**  
Khazanchi Road, Patna (Bihar)

**Vinayaka Book Distributors**  
1st Floor, Book Palace Building,  
Chauhatte, Ashok Rajpath, Patna (Bihar)

**UBS Publishers & Distributors**  
Western Side, Annapurna Complex  
Naya Tola, Patna (Bihar)

**Gyan Ganga Limited**  
5/5 Baby Home, North S.K. Puri,  
Boring Road, Patna (Bihar)

**Bokaro Students Friends Pvt. Ltd.**  
Annapurna Complex (M.B.D. House),  
Naya Tola, Patna

**Novelty & Company**  
Ashok Raj Path, Patna (Bihar)

**Saraswati Nikunj**  
Khalifabagh Chowk, Near Shah Market,  
Bhagalpur (Bihar)

**Gyan Kendra**  
T-Model School Lane, G.B. Road, Gaya (Bihar)

**Kiran Book Depot**  
G.B. Road, Gaya (Bihar)



**Pustak Bhandar**  
Deepak Market, Motijheel, Muzaffarpur

**Rachna Books & Stationary**  
Khan Kah Chowk, Darbhanga

**Akash Book Depot**  
Arvind Market, Tower Chowk, Darbhanga

## **RAJASTHAN**

**Swastik Prakashan**  
213, Radha Damodar Ki Gali, Loha Mandi, Chaura Rasta,  
Jaipur (Rajasthan)

**Prerna Book House**  
17, Bhagwan Das Market, Chaura Rasta, Jaipur (Rajasthan)

**Gupta Book Company**  
325, Chaura Rasta, Jaipur (Rajasthan)

**Singhal Book Company**  
Jalori Gate, Jodhpur (Rajasthan)

**Students Book Depot**  
Arya Samaj Road, Kota (Rajasthan)

**Rajasthan Book Store**  
25, Bopa Road, Udaipur (Rajasthan)

**The Diligent Distributor**  
12, Vasant Vihar, Udaipur (Rajasthan)

## **M.P. & CHATTISGARH**

**Kailash Pustak Sadan**  
Hamidia Marg, Bhopal

**Shiv Shakti Book Centre**  
624, M.G. Road, Khajuri Bazar, Indore

**Universal Book Service**  
718, Marhatal, Jabalpur

**Agarwal Traders & Publishers**  
Satti Bazar, Raipur (C.G.)

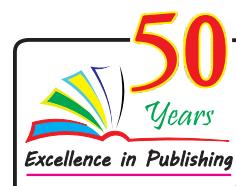
**Central Book House**  
Sadar Bazar Raipur (C.G.)

## **NEPAL**

**National Book Centre**  
Bhota Hity, Kathmandu (Nepal)

**M.K. Publishers & Distributors**  
Bhota Hity, Kathmandu (Nepal)

**Heritage Publishers & Distributors P. Ltd.**  
Bhota Hity, Kathmandu (Nepal)



**THIS IS A LIST OF OUR STOCKISTS  
FOR FEW STATES IN INDIA**

*Our Publications are also available online at:*  
[www.rastogipublications.com](http://www.rastogipublications.com)  
[www.amazon.in](http://www.amazon.in)  
[www.flipkart.com](http://www.flipkart.com)

---

**E-BOOKS OF OUR SEVERAL POPULAR TITLES  
SHALL ALSO BE RELEASED SHORTLY**



**RASTOGI  
PUBLICATIONS**

---

**'GANGOTRI', SHIVAJI ROAD, MEERUT- 250 002, INDIA**

**Phones : (0 121) 2516080, 2515142**

**Mobile : 9412700277, 9412708462**

**(11am to 6pm - Sunday Closed)**

e-mail : [info@rastogipublications.com](mailto:info@rastogipublications.com)

[salespromo@rastogi publications.com](mailto:salespromo@rastogi publications.com)

[website : www.rastogipublications.com](http://www.rastogipublications.com)

---

---

**THIS CATALOGUE IS BEING RELEASED ON 15TH JULY, 2020**

---



[www.rastogipublications.com](http://www.rastogipublications.com)

---

## To Esteemed Teachers

---

We are pleased to forward herewith our latest catalogue for your kind perusal. We hope you will find our many publications suitable and useful for your students.

We request you to please go through the contents of the books, if found useful kindly recommend the same to your students and also for college library. If you require complimentary copy of any of our publication please send the information in the following format for processing your request of complimentary copy :

1. Name : ..... (Mobile : .....  
Email : ..... )
2. Department : ..... College with address : .....  
.....
3. No. of students : B.Sc. I ..... B.Sc. II ..... B.Sc. III .....  
Course : Pass/General/Hons.
4. Residential Address : .....  
.....
5. Book/s required (with code) : .....
6. Nearest bookseller for availability : .....  
.....

Please also ask your nearest bookseller for the availability of these books.

We also request you to forward this e-mail to your colleagues/friends from other colleges of your area, so that they may also get useful information about our latest/revised publications.

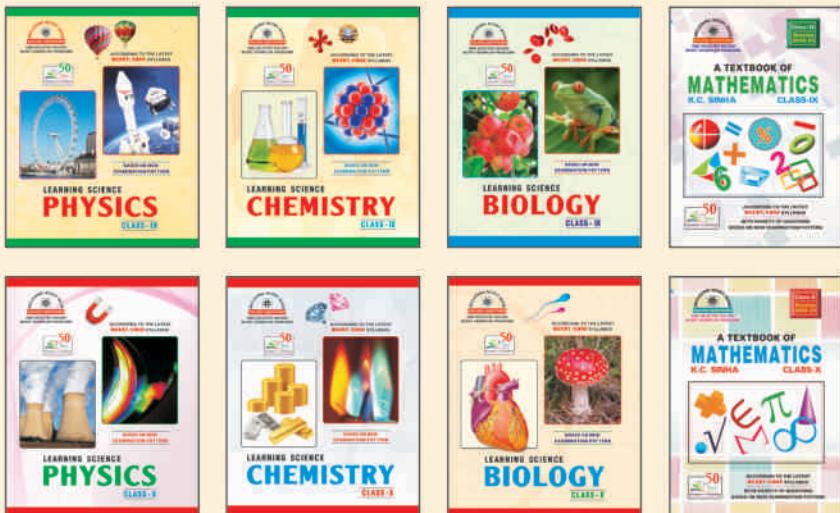
**WE THANK YOU FOR YOUR VALUABLE PATRONAGE  
AND KIND COOPERATION.**

Please send your mail at :  
[teachersmail@rastogipublications.com](mailto:teachersmail@rastogipublications.com)



**TEXTBOOKS FOR CBSE AND  
VARIOUS STATE BOARDS OF EDUCATION  
(BASED ON NCERT GUIDELINES & LATEST PATTERN)**

**FOR CLASSES IX & X**



**FOR CLASSES XI & XII**



**Most Useful For Various Competitive Examinations**



**RASTOGI PUBLICATIONS**

'GANGOTRI', SHIVAJI ROAD, MEERUT- 250 002, INDIA

Phones : (0121) 2515142; 2516080

Mobile : 9412700277/9412708462 (11AM to 6PM, Sunday Closed)

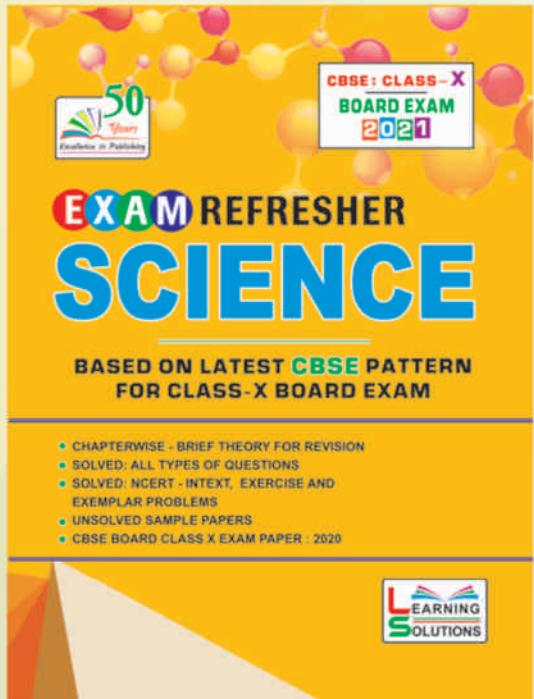
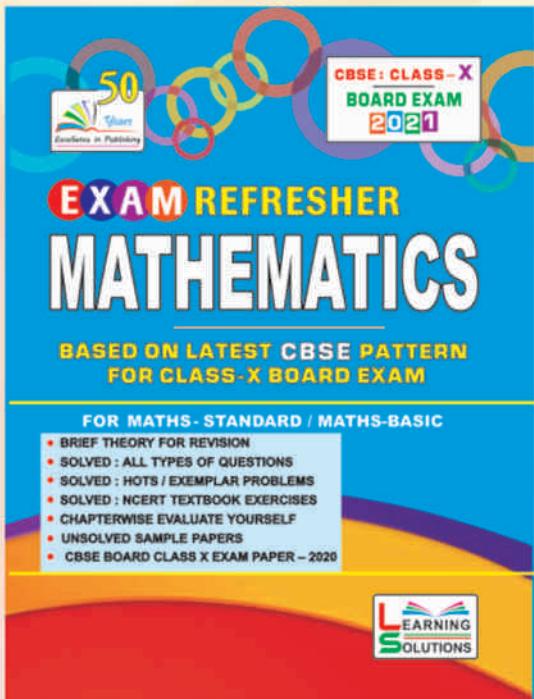
e-mail : [info@rastogipublications.com](mailto:info@rastogipublications.com) / [salespromo@rastogi publications.com](mailto:salespromo@rastogi publications.com)

website : [www.rastogipublications.com](http://www.rastogipublications.com)



## EXAM REFRESHERS: FOR CBSE CLASS-X

(Based on Latest Pattern)



WRITTEN / EDITED BY: WELL REPUTED AND  
LONG EXPERIENCED CBSE TEACHING FACULTIES



## RASTOGI PUBLICATIONS

'GANGOTRI', SHIVAJI ROAD, MEERUT - 250 002, INDIA

Phones : (0121) 2515142, 2516080 Mobile : 9412700277/9412708462 (11AM to 6PM, Sunday Closed)

e-mail : [info@rastogipublications.com](mailto:info@rastogipublications.com) / [salespromo@rastogipublications.com](mailto:salespromo@rastogipublications.com)

website : [www.rastogipublications.com](http://www.rastogipublications.com)