

Criteria III (Research Publications and Awards)

Key Indicator 3.3- Research Publication and Awards

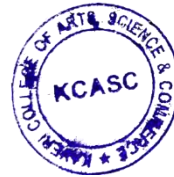
3.3.2. Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years


(2020-21)

List of books and chapters in edited volumes/books published
and papers published in national/ international conference
proceedings

AY 2020-21

Sr. No	Name of the Author	Title of the paper / Title of the book/chapters published
1.	Dr. Jayashri Bangali	Microcontroller Architecture and Programming
		Digital Communication and Networking
		Communication Electronics
		Digital System Design
		Embedded System Design
		Microcontroller and Python Programming
		Wireless Communication and Internet of Things
2	Dr. Shweta Bapat	Know Everything About Corporate Social Responsibility
3	Dr. Sayee Kulkarni	A Value at Risk Approach For Analyzing Stock Movement of BSE Sensex Companies During The Covid 19 Pandemic
4	Mrs. Suvarna Subnis	Discrete Mathematics
		Matrix Algebra
		Linear Algebra
		Graph Theory
5	Ms. Ashwini Kale	Methods of Applied Statistics
		Continuous Probability Distributions & Testing of Hypothesis




PRINCIPAL
Kannada Sangha Pune's
Kaveri College of Arts, Science & Commerce

NEW
SYLLABUS

SECOND YEAR B. Sc.
COMPUTER SCIENCE SEMESTER-III

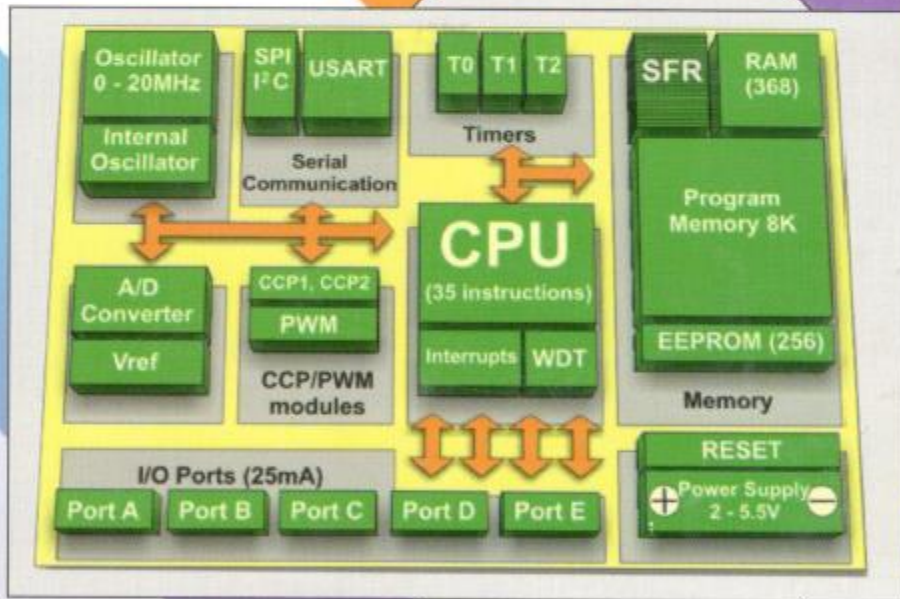
MICROCONTROLLER ARCHITECTURE AND PROGRAMMING

Electronics (ELC-231) : Paper-I

CBCS
2 CREDITS


Dr. J. A. BANGALI
Dr. (Prof.) P. B. BUCHADE

S. R. CHAUDHARI
Dr. (Prof.) M. L. DONGARE



 **NIRALI**
PRAKASHAN
ADVANCEMENT OF KNOWLEDGE




PRINCIPAL
Kannada Sangha Pune
Kavari College of Arts, Science & Commerce

Bangali Man

SPPU New Syllabus

ELC-231

MICROCONTROLLER ARCHITECTURE & PROGRAMMING

[2 Credits]

Electronics Paper-I

For

Second Year B.Sc. Computer Science - Semester-III
New Syllabus as per CBCS Pattern from June 2020

Dr. J. A. Bangali

M. Sc., M. Phil, Ph.D.
Head, Dept. of Electronic Science,
Coordinator, B.Sc. Computer Science,
Kaveri College of Arts, Science & Commerce,
Pune - 411038

S. R. Chaudhari

M. Sc., M.Phil.
Vice Principal and Head,
Dept. of Electronic Science,
Modern College, Shivajinagar,
Pune - 411005.

Prof. (Dr.) P. B. Buchade

M.Sc., M.Phil., Ph.D.
Principal and Head,
Dept. of Electronic Science,
Abasaheb Garware College,
Karve Road, Pune - 411004.

Prof. (Dr.) M. L. Dongare

M.Sc., D.H.E., Ph.D.
Head, Dept. of Electronic Science,
Rayat Shikshan Sanstha's,
S. M. Joshi College,
Hadapsar, Pune - 411028.

Price ₹ 100.00

 **NIRALI**
PRAKASHAN
ADVANCEMENT OF KNOWLEDGE

N5405




PRINCIPAL
Kannada Sangha Pune's
Kaveri College of Arts, Science & Commerce

S.Y.B.Sc : Microcontroller Architecture & Prog. ISBN 978-93-90225-12-5

First Edition : July 2020

© : Authors

The text of this publication, or any part thereof, should not be reproduced or transmitted in any form or stored in any computer storage system or device for distribution including photocopy, recording, taping or information retrieval system or reproduced on any disc, tape, perforated media or other information storage device etc., without the written permission of Authors with whom the rights are reserved. Breach of this condition is liable for legal action.

Every effort has been made to avoid errors or omissions in this publication. In spite of this, errors may have crept in. Any mistake, error or discrepancy so noted and shall be brought to our notice shall be taken care of in the next edition. It is notified that neither the publisher nor the authors or seller shall be responsible for any damage or loss of action to any one, of any kind, in any manner, therefrom.

Published By:

NIRALI PRAKASHAN

Abhyudaya Pragati, 1312, Shivaji Nagar
Off J.M. Road, PUNE - 411005

Tel - (020) 25512336/37/39, Fax - (020) 25511379

Email : niralipune@pragationline.com

Polyplate

Printed By:

RACHANA OFFSETS

S. No. 15, Arihant Marg

Sukhsagar Nagar, Katraj

Tel - (022) 2778 2011

> DISTRIBUTION CENTRES

PUNE

Nirali Prakashan : 119, Budhwar Peth, Jogeshwari Mandir Lane, Pune 411002,
(For orders within Pune) Maharashtra, Tel : (020) 2445 2044, Mobile : 9657703145
Email : niralilocal@pragationline.com

Nirali Prakashan : S. No. 28/27, Dhayari, Near Asian College Pune 411041
(For orders outside Pune) Tel : (020) 24690204; Mobile : 9657703143
Email : bookorder@pragationline.com

MUMBAI

Nirali Prakashan : 385, S.V.P. Road, Rasdhara Co-op. Hsg. Society Ltd.,
Girgaum, Mumbai 400004, Maharashtra;
Mobile : 9320129587 Tel : (022) 2385 6339 / 2386 9976,
Fax : (022) 2386 9976
Email : niralimumbai@pragationline.com

> DISTRIBUTION BRANCHES

JALGAON

Nirali Prakashan : 34, V. V. Golani Market, Navi Peth, Jalgaon 425001,
Maharashtra, Tel : (0257) 222 0395, Mob : 94234 91860;
Email : niralijalgaon@pragationline.com

KOLHAPUR

Nirali Prakashan : New Mahadwar Road, Kedar Plaza, 1st Floor Opp. IDBI Bank,
Kolhapur 416 012, Maharashtra. Mob : 9850046155;
Email : niralikolhapur@pragationline.com

NAGPUR

Nirali Prakashan : Above Maratha Mandir, Shop No. 3, First Floor,
Rani Jhanshi Square, Sitabuldi, Nagpur 440012, Maharashtra
Tel : (0712) 254 7129;
Email : niralinagpur@pragationline.com

DELHI


Nirali Prakashan : 4593/15, Basement, Agarwal Lane, Ansari Road, Daryaganj
Near Times of India Building, New Delhi 110002
Mob : 08505972553, Email : niralidelhi@pragationline.com

BENGALURU

Nirali Prakashan : Maitri Ground Floor, Jaya Apartments, No. 99, 6th Cross,
6th Main, Malleswaram, Bengaluru 560003, Karnataka;
Mob : 9449043034
Email: niralibangalore@pragationline.com

Other Branches : Hyderabad, Chennai

niralipune@pragationline.com | www.pragationline.com

Also find us on  www.facebook.com/niralibooks



PRINCIPAL

Kannada Sangha Pune's
Kaveri College of Arts, Science & Commerce

**Our Text Books for
Second Year B. Sc. : Computer Science
As per New Syllabus CBCS Pattern : Semester-III**

- **DATA STRUCTURES AND ALGORITHMS – I**
(Computer Science : Paper-I)
Dr. Ms. Manisha Bharambe, Mrs. Veena Gandhi
- **SOFTWARE ENGINEERING :** (Computer Science : Paper-II)
Dr. Ms. Manisha Bharambe, Mrs. Veena Gandhi, Dr. A. B. Nimbalkar
- **MICROCONTROLLER ARCHITECTURE AND PROGRAMMING**
(Electronics : Paper-I)
Dr. J. A. Bangali, S. R. Chaudhari,
Dr. (Prof.) P. B. Buchade, Dr. (Prof.) M. L. Dongare
- **DIGITAL COMMUNICATION AND NETWORKING**
(Electronics : Paper-II)
S. R. Chaudhari, Dr. J. A. Bangali,
Dr. (Prof.) M. L. Dongare, Dr. (Prof.) P. B. Buchade,
- **GROUPS AND CODING THEORY :** (Mathematics : Paper-I)
M. D. Bhagat, R. S. Bhamare, N. M. Phatangare,
Dr. S. G. Purane, Dr. A. S. Khairnar, S. D. Manjarekar
- **NUMERICAL TECHNIQUES :** (Mathematics : Paper-II)
M. D. Bhagat, R. S. Bhamare, N. M. Phatangare,
Dr. S. G. Purane, Dr. A. S. Khairnar, S. D. Manjarekar

BOOKS AVAILABLE AT

PRAGATI BOOK CENTER - Email: pbcpune@pragationline.com

- 157 Budhwar Peth, Opp. Ratan Talkies, Next To Balaji Mandir,
Pune 411002 • Mobile : 9657703148
- 676/B Budhwar Peth, Opp. Jogeshwari Mandir, **Pune 411002**
Tel : (020) 2448 7459 • **Mobile : 9657703147 / 9657703149**
- 152 Budhwar Peth, Near Jogeshwari Mandir, **Pune 411002**
Mobile : 8087881795

PRAGATI BOOK CORNER - Email: niralimumbai@pragationline.com

- Apurva Building, Shop No. 1, Bhavani Shankar Road,
Opp. Shardashram Society, Dadar (W), **Mumbai 400028.**
Tel: (022) 2422 3526/6662 5254 • **Mobile : 9819935759**

niralipune@pragationline.com
www.pragationline.com

Also find us on



www.facebook.com/niralibooks



@nirali.prakashan



M. N. N.
PRINCIPAL
Kannada Sangha Pune
Kaveri College of Arts, Science & Commerce

NEW
SYLLABUS

SECOND YEAR B. Sc.
COMPUTER SCIENCE

SEMESTER-III

DIGITAL COMMUNICATION AND NETWORKING

Electronics (ELC-232) : Paper-II

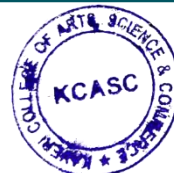
CBCS
2 CREDITS

S. R. CHAUDHARI
Prof. (Dr.) M. L. DONGARE

Dr. J. A. BANGALI
Prof. (Dr.) P. B. BUCHADE



NIRALI
PRAKASHAN
ADVANCEMENT OF KNOWLEDGE



[Signature]
PRINCIPAL
Kannada Sangha Purne's
Kaveri College of Arts, Science & Commerce

SPPU New Syllabus

ELC-232

DIGITAL COMMUNICATION AND NETWORKING

[2 Credits]

Electronics Paper-II

For

Second Year B.Sc. Computer Science - Semester-III

New Syllabus as per CBCS Pattern from June 2020

S. R. Chaudhari

M. Sc., M.Phil.
Vice Principal and Head,
Dept. of Electronic Science,
Modern College, Shivajinagar
Pune - 411005.

Dr. J. A. Bangali

M. Sc., M. Phil, Ph.D.
Head, Dept. of Electronic Science,
Coordinator, B.Sc. Computer Science,
Kaveri College of Arts, Science & Commerce,
Pune - 411038.

Prof. (Dr.) M. L. Dongare

M.Sc., D.H.E., Ph.D.
Head, Dept. of Electronic Science,
Rayat Shikshan Sanstha's,
S. M. Joshi College,
Hadapsar, Pune - 411028.

Prof. (Dr.) P. B. Buchade

M.Sc., M.Phil., Ph.D.
Principal and Head,
Dept. of Electronic Science,
Abasaheb Garware College,
Karve Road, Pune - 411004.

Price ₹ 80.00

 **NIRALI**
PRAKASHAN
ADVANCEMENT OF KNOWLEDGE

N5406



PRINCIPAL

Kannada Sangha, Pune's
Kaveri College of Arts, Science & Commerce

First Edition : August 2020**© : Authors**

The text of this publication, or any part thereof, should not be reproduced or transmitted in any form or stored in any computer storage system or device for distribution including photocopy, recording, taping or information retrieval system or reproduced on any disc, tape, perforated media or other information storage device etc., without the written permission of Authors with whom the rights are reserved. Breach of this condition is liable for legal action.

Every effort has been made to avoid errors or omissions in this publication. In spite of this, errors may have crept in. Any mistake, error or discrepancy so noted and shall be brought to our notice shall be taken care of in the next edition. It is notified that neither the publisher nor the authors or seller shall be responsible for any damage or loss of action to any one, of any kind, in any manner, therefrom.

Published By:**NIRALI PRAKASHAN**Abhyudaya Pragati, 1312, Shivaji Nagar
Off J.M. Road, PUNE – 411005

Tel - (020) 25512336/37/39, Fax - (020) 25511379

Email : niralipune@pragationline.com

Polyplate**Printed By:****RACHANA OFFSETS**S. No. 15, Arihant Marg
Sukhsagar Nagar, Katraj

Tel - (022) 2778 2011

➤ DISTRIBUTION CENTRES**PUNE**

Nirali Prakashan : 119, Budhwar Peth, Jogeshwari Mandir Lane, Pune 411002,
(For orders within Pune) Maharashtra, Tel : (020) 2445 2044, Mobile : 9657703145
Email : niralilocal@pragationline.com

Nirali Prakashan : S. No. 28/27, Dhayari, Near Asian College Pune 411041
(For orders outside Pune) Tel : (020) 24690204; Mobile : 9657703143
Email : bookorder@pragationline.com

MUMBAI

Nirali Prakashan : 385, S.V.P. Road, Rasdhara Co-op. Hsg. Society Ltd.,
Girgaum, Mumbai 400004, Maharashtra;
Mobile : 9320129587 Tel : (022) 2385 6339 / 2386 9976,
Fax : (022) 2386 9976
Email : niralimumbai@pragationline.com

➤ DISTRIBUTION BRANCHES**JALGAON**

Nirali Prakashan : 34, V. V. Golani Market, Navi Peth, Jalgaon 425001,
Maharashtra, Tel : (0257) 222 0395, Mob : 94234 91860;
Email : niralijalgaon@pragationline.com

KOLHAPUR

Nirali Prakashan : New Mahadvar Road, Kedar Plaza, 1st Floor Opp. IDBI Bank,
Kolhapur 416 012, Maharashtra. Mob : 9850046155;
Email : niralikolhapur@pragationline.com

NAGPUR

Nirali Prakashan : Above Maratha Mandir, Shop No. 3, First Floor,
Rani Jhanshi Square, Sitabuldi, Nagpur 440012, Maharashtra
Tel : (0712) 254 7129;
Email : niralinagpur@pragationline.com

DELHI

Nirali Prakashan : Room No. 2 Ground Floor, 4575/15 Omkar Tower,
Agarwal Road, Darya Ganj, New Delhi - 110002.
Mob : 9555778814 / 9818561840
Email : niralidelhi@pragationline.com

BENGALURU

Nirali Prakashan : Maitri Ground Floor, Jaya Apartments, No. 99, 6th Cross,
6th Main, Malleswaram, Bengaluru 560003, Karnataka;
Mob : 9449043034
Email : niralibangalore@pragationline.com

Other Branches : Hyderabad, Chennai**niralipune@pragationline.com | www.pragationline.com****Also find us on  www.facebook.com/niralibooks****PRINCIPAL**Kannada Sangha Pune's
Kavari College of Arts, Science & Commerce

NEW
SYLLABUS

SECOND YEAR B. Sc.

SEMESTER-III

COMMUNICATION ELECTRONICS

ELECTRONIC SCIENCE (EL-231) : Paper-I

Prof. (Dr.) P. B. BUCHADE

Prof. (Dr.) M. L. DONGARE

Dr. J. A. BANGALI

S. R. CHAUDHARI

CBCS
2 CREDITS



 **NIRALI**
PRAKASHAN
ADVANCEMENT OF KNOWLEDGE




PRINCIPAL

Kannada Sangha, Bunt

Kaveri College of Arts, Science & Commerce

SPPU New Syllabus

EL-231

COMMUNICATION ELECTRONICS

[2 Credits]

Electronics Paper-I

For

Second Year B.Sc. Electronic Science- Semester-III
New Syllabus as per CBCS Pattern from June 2020

Prof. (Dr.) P. B. Buchade

M.Sc., M.Phil., Ph.D.
Principal and Head,
Dept. of Electronic Science,
Abasaheb Garware College,
Karve Road, Pune - 411004.

Prof. (Dr.) M. L. Dongare

M.Sc., D.H.E., Ph.D.
Head, Dept. of Electronic Science,
Rayat Shikshan Sanstha's,
S. M. Joshi College,
Hadapsar, Pune - 411028.

Dr. J. A. Bangali

M. Sc., M. Phil, Ph.D.
Head, Dept. of Electronic Science,
Coordinator, B.Sc. Computer Science
Kaveri College of Arts, Science & Commerce
Pune-411038

S. R. Chaudhari

M. Sc., M.Phil.
Vice Principal and Head,
Dept. of Electronic Science,
Modern College, Shivajinagar,
Pune - 411005.

Price ₹ 60.00

 **NIRALI**
PRAKASHAN
ADVANCEMENT OF KNOWLEDGE

N5377



PRINCIPAL

Kannada Sangha Pune's
Kaveri College of Arts, Science & Commerce

S.Y.B.Sc : Communication Electronics

ISBN : 978-93-90225-61-1

First Edition : August 2020
© : Authors

The text of this publication, or any part thereof, should not be reproduced or transmitted in any form or stored in any computer storage system or device for distribution including photocopy, recording, taping or information retrieval system or reproduced on any disc, tape, perforated media or other information storage device etc., without the written permission of Authors with whom the rights are reserved. Breach of this condition is liable for legal action.

Every effort has been made to avoid errors or omissions in this publication. In spite of this, errors may have crept in. Any mistake, error or discrepancy so noted and shall be brought to our notice shall be taken care of in the next edition. It is notified that neither the publisher nor the authors or seller shall be responsible for any damage or loss of action to any one, of any kind, in any manner, therefrom.

Published By:
NIRALI PRAKASHAN

Polyplate

Printed By:
RACHANA OFFSETS

Abhyudaya Pragati, 1312, Shivaji Nagar
Off J.M. Road, PUNE - 411005
Tel - (020) 25512336/37/39, Fax - (020) 25511379
Email : niralipune@pragationline.com

S. No. 15, Arihant Marg
Sukhsagar Nagar, Katraj
Tel - (022) 2778 2011

> DISTRIBUTION CENTRES

PUNE

Nirali Prakashan : 119, Budhwar Peth, Jogeshwari Mandir Lane, Pune 411002, Maharashtra, Tel : (020) 2445 2044, Mobile : 9657703145
(For orders within Pune) Email : niralilocal@pragationline.com

Nirali Prakashan : S. No. 28/27, Dhayari, Near Asian College Pune 411041
(For orders outside Pune) Tel : (020) 24690204; Mobile : 9657703143
Email : bookorder@pragationline.com

MUMBAI

Nirali Prakashan : 385, S.V.P. Road, Rasdhara Co-op. Hsg. Society Ltd.,
Girgaum, Mumbai 400004, Maharashtra;
Mobile : 9320129587 Tel : (022) 2385 6339 / 2386 9976,
Fax : (022) 2386 9976
Email : niralimumbai@pragationline.com

> DISTRIBUTION BRANCHES

JALGAON

Nirali Prakashan : 34, V. V. Golani Market, Navi Peth, Jalgaon 425001,
Maharashtra, Tel : (0257) 222 0395, Mob : 94234 91860;
Email : niralijalgaon@pragationline.com

KOLHAPUR

Nirali Prakashan : New Mahadvar Road, Kedar Plaza, 1st Floor Opp. IDBI Bank,
Kolhapur 416 012, Maharashtra. Mob : 9850046155;
Email : niralikolhapur@pragationline.com

NAGPUR

Nirali Prakashan : Above Maratha Mandir, Shop No. 3, First Floor,
Rani Jhanshi Square, Sitabuldi, Nagpur 440012, Maharashtra
Tel : (0712) 254 7129;
Email : niralinagpur@pragationline.com

DELHI

Nirali Prakashan : 4593/15, Basement, Agarwal Lane, Ansari Road, Daryaganj
Near Times of India Building, New Delhi 110002
Mob : 08505972553, Email : niralidelhi@pragationline.com

BENGALURU

Nirali Prakashan : Maitri Ground Floor, Jaya Apartments, No. 99, 6th Cross,
6th Main, Malleswaram, Bengaluru 560003, Karnataka;
Mob : 9449043034
Email : niralibangalore@pragationline.com

Other Branches : Hyderabad, Chennai

niralipune@pragationline.com | www.pragationline.com

Also find us on  www.facebook.com/niralibooks



PRINCIPAL
Kannada Sangha Pune's
Kavari College of Arts, Science & Commerce

**Our Text Books for Second Year B. Sc.
As per New Syllabus CBCS Pattern : Semester-III**

- **MATHEMATICAL METHODS IN PHYSICS-I** : (Physics : Paper-I)
Dr. S. D. Aghav, V. K. Dhas, Dr. P. S. Tambade, B. M. Laware
- **ELECTRONICS** : (Physics : Paper-II : A)
Dr. P. S. Tambade, B. M. Laware, Dr. S. D. Aghav, V. K. Dhas
- **INSTRUMENTATION** : (Physics : Paper-II : B)
B. M. Laware, Dr. S. D. Aghav, V. K. Dhas, Dr. P. S. Tambade
- **PHYSICAL AND ANALYTICAL CHEMISTRY** (Chemistry : Paper-I)
Dr. V. M. Shinde, Dr. A. V. Nagawade, Dr. G. S. Gugale
- **INORGANIC AND ORGANIC CHEMISTRY** : (Chemistry : Paper-II)
Dr. G. S. Gugale, Dr. V. D. Bobade, Dr. A. D. Natu, Dr. A. V. Nagawade,
Dr. D. R. Thube, Dr. R. A. Pawar, Dr. S. K. Pasale
- **PRACTICAL CHEMISTRY** : (Chemistry : Paper-III)
Dr. G. S. Gugale, Dr. V. M. Shinde, Dr. V. D. Bobade, Dr. R. A. Pawar,
Dr. A. V. Nagawade, Dr. L. R. Patil, Dr. D. R. Thube
- **COMMUNICATION ELECTRONICS** : (Electronics : PAPER-I)
Prof. (Dr.) P. B. Buchade, Prof. (Dr.) M. L. Dongare, S. R. Chaudhari, Dr. J. A. Bangali
- **DIGITAL SYSTEM DESIGN** : (Electronics : Paper-II)
Prof. (Dr.) M. L. Dongare, Prof. (Dr.) P. B. Buchade, S. R. Chaudhari, Dr. J. A. Bangali
- **ANIMAL DIVERSITY-III** : (Zoology : Paper-I)
Dr. Kishore R. Pawar, Dr. Ashok E. Desai
- **APPLIED ZOOLOGY-I** : (Zoology : Paper-II) : Dr. Kishore R. Pawar, Dr. Ashok E. Desai
- **PRACTICAL ZOOLOGY-I** : (Zoology : Paper-I & II) : Dr. Kishore R. Pawar, Dr. Ashok E. Desai
- **TAXONOMY OF ANGIOSPERMS AND PLANT ECOLOGY** (Botany : Paper-I)
Dr. K. N. Dhumal, Dr. B. P. Shinde, Dr. H. S. Patil, Dr. K. S. Bhosale
- **PLANT PHYSIOLOGY** (Botany : Paper-II)
Dr. K. N. Dhumal, Dr. B. P. Shinde, Dr. H. S. Patil, Dr. K. S. Bhosale
- **CALCULUS OF SEVERAL VARIABLES** : (Mathematics : Paper-I)
M. D. Bhagat, N. M. Phatangare, Dr. A. S. Khairnar,
R. S. Bhamare, Dr. S. G. Purane, S. D. Manjarekar
- **NUMERICAL METHODS AND ITS APPLICATIONS** : (Mathematics : Paper-II : A)
M. D. Bhagat, N. M. Phatangare, Dr. A. S. Khairnar,
R. S. Bhamare, Dr. S. G. Purane, S. D. Manjarekar
- **GRAPH THEORY** : (Mathematics : Paper-II : B)
M. D. Bhagat, N. M. Phatangare, Dr. A. S. Khairnar,
R. S. Bhamare, Dr. S. G. Purane, S. D. Manjarekar
- **DISCRETE PROBABILITY DISTRIBUTIONS AND TIME SERIES** : (Statistics : Paper-I)
Dr. P. G. Dixit, Prof. P. S. Kapre
- **CONTINUOUS PROBABILITY DISTRIBUTIONS** (Statistics : Paper-II)
Dr. P. G. Dixit, P. S. Kapre
- **MICROBIOLOGY** : Paper-I : Dr. Pragati S. Abhyankar, Dr. Rajashree B. Patwardhan
- **MICROBIOLOGY** : Paper-II : Dr. Rajashree B. Patwardhan, Dr. Pragati S. Abhyankar
- **GEOGRAPHY-I** : (Geography : Paper-I) : Dr. Jyotiram C. More, Dr. Manojkumar P. Devne
- **GEOGRAPHY-II** : (Geography : Paper-II) : Dr. Jyotiram C. More, Dr. Manojkumar P. Devne

niralipune@pragationline.com

www.pragationline.com

Also find us on



www.facebook.com/niralibooks



@nirali.prakashan



Prakashan
PRINCIPAL

Kannada Sangha Pune
Kaveri College of Arts, Science & Commerce

NEW
SYLLABUS

SECOND YEAR B. Sc.

SEMESTER-III

DIGITAL SYSTEM DESIGN

ELECTRONIC SCIENCE (EL-232) : Paper-II

Prof. (Dr.) M. L. DONGARE
S. R. CHAUDHARI

Prof. (Dr.) P. B. BUCHADE
Dr. J. A. BANGALI

CBCS
2 CREDITS

 **NIRALI**
PRAKASHAN
ADVANCEMENT OF KNOWLEDGE




PRINCIPAL
Kannada Sangha Purne

Kannada College of Arts, Science & Commerce

SPPU New Syllabus

EL-232

DIGITAL SYSTEM DESIGN

[2 Credits]

Electronics Paper-II

For

Second Year B.Sc. Electronic Science- Semester-III
New Syllabus as per CBCS Pattern from June 2020

Prof. (Dr.) M. L. Dongare

M.Sc., D.H.E., Ph.D.
Head, Dept. of Electronic Science,
Rajawade Shikshan Sanstha's,
S. W. Joshi College,
Hadapsar, Pune - 411028.

Prof. (Dr.) P. B. Buchade

M.Sc., M.Phil., Ph.D.
Principal and Head,
Dept. of Electronic Science,
Abasaheb Garware College,
Karve Road, Pune - 411004.

S. R. Chaudhari

M. Sc., M.Phil.
Vice Principal and Head,
Dept. of Electronic Science,
Modern College, Shivajinagar,
Pune - 411005.

Dr. J. A. Bangali

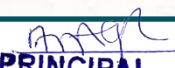
M. Sc., M. Phil, Ph.D.
Head, Dept. of Electronic Science,
Coordinator, B.Sc. Computer Science
Kaveri College of Arts, Science & Commerce
Pune-411038

Price ₹ 90.00

 **NIRALI**
PRAKASHAN
ADVANCEMENT OF KNOWLEDGE

N5378




PRINCIPAL
Kannada Sangha Pune's
Kaveri College of Arts, Science & Commerce

S.Y.B.Sc : Digital System Design

ISBN : 978-93-90225-64-4

First Edition : August 2020

© : **Authors**

The text of this publication, or any part thereof, should not be reproduced or transmitted in any form or stored in any computer storage system or device for distribution including photocopy, recording, taping or information retrieval system or reproduced on any disc, tape, perforated media or other information storage device etc., without the written permission of Authors with whom the rights are reserved. Breach of this condition is liable for legal action.

Every effort has been made to avoid errors or omissions in this publication. In spite of this, errors may have crept in. Any mistake, error or discrepancy so noted and shall be brought to our notice shall be taken care of in the next edition. It is notified that neither the publisher nor the authors or seller shall be responsible for any damage or loss of action to any one, of any kind, in any manner, therefrom.

Published By:

NIRALI PRAKASHAN

Abhyudaya Pragati, 1312, Shivaji Nagar

Off J.M. Road, PUNE - 411005

Tel - (020) 25512336/37/39, Fax - (020) 25511379

Email : niralipune@pragationline.com

Polyplate

Printed By:

RACHANA OFFSETS

S. No. 15, Arihant Marg

Sukhsagar Nagar, Katraj

Tel - (022) 2778 2011

➤ **DISTRIBUTION CENTRES**

PUNE

Nirali Prakashan : 119, Budhwar Peth, Jogeshwari Mandir Lane, Pune 411002,
(For orders within Pune) Maharashtra, Tel : (020) 2445 2044, Mobile : 9657703145

Email : niralilocal@pragationline.com

Nirali Prakashan : S. No. 28/27, Dhayari, Near Asian College Pune 411041
(For orders outside Pune) Tel : (020) 24690204; Mobile : 9657703143

Email : bookorder@pragationline.com

MUMBAI

Nirali Prakashan : 385, S.V.P. Road, Rasdhara Co-op. Hsg. Society Ltd.,
Girgaum, Mumbai 400004, Maharashtra;
Mobile : 9320129587 Tel : (022) 2385 6339 / 2386 9976,
Fax : (022) 2386 9976

Email : niralimumbai@pragationline.com

➤ **DISTRIBUTION BRANCHES**

JALGAON

Nirali Prakashan : 34, V. V. Golani Market, Navi Peth, Jalgaon 425001,
Maharashtra, Tel : (0257) 222 0395, Mob : 94234 91860;

Email : niralijalgaon@pragationline.com

KOLHAPUR

Nirali Prakashan : New Mahadvar Road, Kedar Plaza, 1st Floor Opp. IDBI Bank,
Kolhapur 416 012, Maharashtra. Mob : 9850046155;

Email : niralikolhapur@pragationline.com

NAGPUR

Nirali Prakashan : Above Maratha Mandir, Shop No. 3, First Floor,
Rani Jhanshi Square, Sitabuldi, Nagpur 440012, Maharashtra
Tel : (0712) 254 7129;

Email : niralinagpur@pragationline.com

DELHI

Nirali Prakashan : 4593/15, Basement, Agarwal Lane, Ansari Road, Daryaganj
Near Times of India Building, New Delhi 110002

Mob : 08505972553, Email : niralidelhi@pragationline.com


BENGALURU

Nirali Prakashan : Maitri Ground Floor, Jaya Apartments, No. 99, 6th Cross,
6th Main, Malleswaram, Bengaluru 560003, Karnataka;
Mob : 9449043034

Email : niralibangalore@pragationline.com

Other Branches : Hyderabad, Chennai

niralipune@pragationline.com | www.pragationline.com

Also find us on  www.facebook.com/niralibooks



PRINCIPAL

Kannada Sangha Pune

Kannada College of Arts, Science & Commerce

**Our Text Books for Second Year B. Sc.
As per New Syllabus CBCS Pattern : Semester-III**

- **MATHEMATICAL METHODS IN PHYSICS-I** : (Physics : Paper-I)
Dr. S. D. Aghav, V. K. Dhas, Dr. P. S. Tambade, B. M. Laware
- **ELECTRONICS** : (Physics : Paper-II : A)
Dr. P. S. Tambade, B. M. Laware, Dr. S. D. Aghav, V. K. Dhas
- **INSTRUMENTATION** : (Physics : Paper-II : B)
B. M. Laware, Dr. S. D. Aghav, V. K. Dhas, Dr. P. S. Tambade
- **PHYSICAL AND ANALYTICAL CHEMISTRY** (Chemistry : Paper-I)
Dr. V. M. Shinde, Dr. A. V. Nagawade, Dr. G. S. Gugale
- **INORGANIC AND ORGANIC CHEMISTRY** : (Chemistry : Paper-II)
Dr. G. S. Gugale, Dr. V. D. Bobade, Dr. A. D. Natu, Dr. A. V. Nagawade,
Dr. D. R. Thube, Dr. R. A. Pawar, Dr. S. K. Pasale
- **PRACTICAL CHEMISTRY** : (Chemistry : Paper-III)
Dr. G. S. Gugale, Dr. V. M. Shinde, Dr. V. D. Bobade, Dr. R. A. Pawar,
Dr. A. V. Nagawade, Dr. L. R. Patil, Dr. D. R. Thube
- **COMMUNICATION ELECTRONICS** : (Electronics : PAPER-I)
Prof. (Dr.) P. B. Buchade, Prof. (Dr.) M. L. Dongare, S. R. Chaudhari, Dr. J. A. Bangali
- **DIGITAL SYSTEM DESIGN** : (Electronics : Paper-II)
Prof. (Dr.) M. L. Dongare, Prof. (Dr.) P. B. Buchade, S. R. Chaudhari, Dr. J. A. Bangali
- **ANIMAL DIVERSITY-III** : (Zoology : Paper-I)
Dr. Kishore R. Pawar, Dr. Ashok E. Desai
- **APPLIED ZOOLOGY-I** : (Zoology : Paper-II) : Dr. Kishore R. Pawar, Dr. Ashok E. Desai
- **PRACTICAL ZOOLOGY-I** : (Zoology : Paper-I & II) : Dr. Kishore R. Pawar, Dr. Ashok E. Desai
- **TAXONOMY OF ANGIOSPERMS AND PLANT ECOLOGY** (Botany : Paper-I)
Dr. K. N. Dhupal, Dr. B. P. Shinde, Dr. H. S. Patil, Dr. K. S. Bhosale
- **PLANT PHYSIOLOGY** (Botany : Paper-II)
Dr. K. N. Dhupal, Dr. B. P. Shinde, Dr. H. S. Patil, Dr. K. S. Bhosale
- **CALCULUS OF SEVERAL VARIABLES** : (Mathematics : Paper-I)
M. D. Bhagat, N. M. Phatangare, Dr. A. S. Khairnar,
R. S. Bhamare, Dr. S. G. Purane, S. D. Manjarekar
- **NUMERICAL METHODS AND ITS APPLICATIONS** : (Mathematics : Paper-II : A)
M. D. Bhagat, N. M. Phatangare, Dr. A. S. Khairnar,
R. S. Bhamare, Dr. S. G. Purane, S. D. Manjarekar
- **GRAPH THEORY** : (Mathematics : Paper-II : B)
M. D. Bhagat, N. M. Phatangare, Dr. A. S. Khairnar,
R. S. Bhamare, Dr. S. G. Purane, S. D. Manjarekar
- **DISCRETE PROBABILITY DISTRIBUTIONS AND TIME SERIES** : (Statistics : Paper-I)
Dr. P. G. Dixit, Prof. P. S. Kapre
- **CONTINUOUS PROBABILITY DISTRIBUTIONS** (Statistics : Paper-II)
Dr. P. G. Dixit, P. S. Kapre
- **MICROBIOLOGY** : Paper-I : Dr. Pragati S. Abhyankar, Dr. Rajashree B. Patwardhan
- **MICROBIOLOGY** : Paper-II : Dr. Rajashree B. Patwardhan, Dr. Pragati S. Abhyankar
- **GEOGRAPHY-I** : (Geography : Paper-I) : Dr. Jyotiram C. More, Dr. Manojkumar P. Devne
- **GEOGRAPHY-II** : (Geography : Paper-II) : Dr. Jyotiram C. More, Dr. Manojkumar P. Devne

niralipune@pragationline.com

www.pragationline.com

Also find us on



www.facebook.com/niralibooks



@nirali.prakashan



PRINCIPAL

Kannada Sangha Pune's
Kaveri College of Arts, Science & Commerce

NEW
SYLLABUS

SECOND YEAR B. Sc.
COMPUTER SCIENCE

SEMESTER-IV

EMBEDDED SYSTEM DESIGN

Electronics (ELC-241) : Paper-I

Dr. J. A. BANGALI
Prof. (Dr.) M. L. DONGARE

S. R. CHAUDHARI,
Prof. (Dr.) P. B. BUCHADE

CBCS
2 CREDITS



 **NIRALI**
PRAKASHAN
ADVANCEMENT OF KNOWLEDGE




PRINCIPAL
Kannada Sangha Pune's
Kaveri College of Arts, Science & Commerce

SPPU New Syllabus

EMBEDDED SYSTEM DESIGN

[ELC - 241]

For

S.Y.B.Sc. (Computer Science) Semester - IV
Electronics - (Paper - I)

New Syllabus as per CBCS Pattern Credit - 2
June 2020

Dr. J. A. Bangali

M. Sc., M. Phil, Ph.D.
Head, Dept. of Electronic Science,
Co-ordinator, B.Sc. Computer Science
Kaveri College of Arts, Science & Commerce
Pune-411038

S. R. Chaudhari

M. Sc., M.Phil.
Vice principal and Head,
Dept. of Electronic Science,
Modern College, Shivajinagar,
Pune - 411005.

Prof. (Dr.) M. L. Dongare

M.Sc., D.H.E., Ph.D.
Vice Principal, Head, Dept. of Electronic Science,
Rayat Shikshan Sanstha's,
S. M. Joshi College,
Hadapsar, Pune - 411028.

Prof. (Dr.) P. B. Buchade

M.Sc., M.Phil., Ph.D.
Principal and Head,
Dept. of Electronic Science,
Abasaheb Garware College,
Karve Road, Pune - 411004.

Price ₹ 140.00

 **NIRALI**
PRAKASHAN
ADVANCEMENT OF KNOWLEDGE

N5546




PRINCIPAL

Kannada Sangha Pune's
Kaveri College of Arts, Science & Commerce

Embedded System Design

ISBN 978-93-90506-47-7

First Edition : January 2021

© : Authors

The text of this publication, or any part thereof, should not be reproduced or transmitted in any form or stored in any computer storage system or device for distribution including photocopy, recording, taping or information retrieval system or reproduced on any disc, tape, perforated media or other information storage device etc., without the written permission of Authors with whom the rights are reserved. Breach of this condition is liable for legal action.

Every effort has been made to avoid errors or omissions in this publication. In spite of this, errors may have crept in. Any mistake, error or discrepancy so noted and shall be brought to our notice shall be taken care of in the next edition. It is notified that neither the publisher nor the authors or seller shall be responsible for any damage or loss of action to any one, of any kind, in any manner, therefrom.

Published By :

NIRALI PRAKASHAN

Abhyudaya Pragati, 1312, Shivaji Nagar,
Off J.M. Road, PUNE - 411005
Tel - (020) 25512336/37/39, Fax - (020) 25511379
Email : niralipune@pragationline.com

Polyplate

Printed By :

YOGIRAJ PRINTERS AND BINDERS

Works: Sr. No. 10\1, Ghule Industrial Estate,
Nanded Village Road,
TAL-HAVELI, DIT-PUNE 411041.
Mobile - 9850046517, 9404225254

DISTRIBUTION CENTRES**PUNE**

Nirali Prakashan : 119, Budhwar Peth, Jogeshwari Mandir Lane, Pune 411002, Maharashtra
(For orders within Pune) Tel : (020) 2445 2044, 66022708, Fax : (020) 2445 1538; Mobile : 9657703145

Email : bookorder@pragationline.com, niralilocal@pragationline.com

Nirali Prakashan : S. No. 28/27, Dhyari, Near Pari Company, Pune 411041
(For orders outside Pune) Tel : (020) 24690204 Fax : (020) 24690316; Mobile : 9657703143

Email : dhyari@pragationline.com, bookorder@pragationline.com

MUMBAI

Nirali Prakashan : 385, S.V.P. Road, Rasdhara Co-op. Hsg. Society Ltd.,
Girgaum, Mumbai 400004, Maharashtra; Mobile : 9320129587
Tel : (022) 2385 6339 / 2386 9976, Fax : (022) 2386 9976
Email : niralimumbai@pragationline.com

DISTRIBUTION BRANCHES**JALGAON**

Nirali Prakashan : 34, V. V. Golani Market, Navi Peth, Jalgaon 425001,
Maharashtra, Tel : (0257) 222 0395, Mob : 94234 91860

KOLHAPUR

Nirali Prakashan : New Mahadvar Road, Kedar Plaza, 1st Floor Opp. IDBI Bank, Kolhapur 416 012,
Maharashtra. Mob : 9850046155; Email : niralikolhapur@pragationline.com

NAGPUR

Nirali Prakashan : Above Maratha Mandir, Shop No. 3, First Floor,
Rani Jhanshi Square, Sitabuldi, Nagpur 440012, Maharashtra
Tel : (0712) 254 7129; Email : niralinagpur@pragationline.com

DELHI

Nirali Prakashan : Room. No. 2 Ground Floor, 4575/15 Omkar Tower,
Agarwal Road, Darya Ganj, New Delhi - 110002.
Mob : 9555778814 / 9818561840 - Email : niralidelhi@pragationline.com


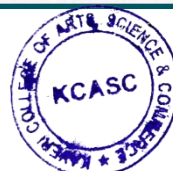
BENGALURU

Nirali Prakashan : Maitri Ground Floor, Jaya Apartments, No. 99, 6th Cross, 6th Main,
Malleswaram, Bengaluru 560 003, Karnataka. Mob : +91 9449043034
Email : niralibangalore@pragationline.com

Other Branches : Hyderabad, Chennai

Note: Every possible effort has been made to avoid errors or omissions in this book. In spite this, errors may have crept in. Any type of error or mistake so noted, and shall be brought to our notice, shall be taken care of in the next edition. It is notified that neither the publisher, nor the author or book seller shall be responsible for any damage or loss of action to any one of any kind, in any manner, therefrom. The reader must cross check all the facts and contents with original Government notification or publications.

niralipune@pragationline.com | www.pragationline.com

Also find us on  www.facebook.com/niralibooks**PRINCIPAL**Kannada Sangha Pune's
Kaveri College of Arts, Science & Commerce

**Our Text Books for
Second Year B. Sc. : Computer Science
As per New Syllabus CBCS Pattern : Semester-IV**

- **Data Structures and Algorithms – II** : (Computer Science : Paper-I)
Dr. Ms. Manisha Bharambe, Mrs. Veena K. Gandhi
- **Computer Network** : (Computer Science : Paper-II)
Mrs. Veena K. Gandhi
- **Embedded System Design** : (Electronics : Paper-I)
Dr. J. A. Bangali, S. R. Chaudhari,
Prof. (Dr.) M. L. Dongare, Prof. (Dr.) P. B. Buchade
- **Wireless Communication and Internect of Things** : (Electronics : Paper-II)
S. R. Chaudhari, Dr. J. A. Bangali,
Prof. (Dr.) P. B. Buchade, Prof. (Dr.) M. L. Dongare,
- **Computational Geometry**: (Mathematics : Paper-I)
M. D. Bhagat, R. S. Bhamare, N. M. Phatangare,
Dr. S. G. Purane, Dr. A. S. Khairnar
- **Operation Research** : (Mathematics : Paper-II)
M. D. Bhagat, R. S. Bhamare, N. M. Phatangare,
Dr. A. S. Khairnar, Dr. S. G. Purane

BOOKS AVAILABLE AT

PRAGATI BOOK CENTER - Email: pbcpune@pragationline.com

- 157 Budhwar Peth, Opp. Ratan Talkies, Next To Balaji Mandir,
Pune 411002 • Mobile : 9657703148
- 676/B Budhwar Peth, Opp. Jogeshwari Mandir, **Pune 411002**
Tel : (020) 2448 7459 • **Mobile : 9657703147 / 9657703149**
- 152 Budhwar Peth, Near Jogeshwari Mandir, **Pune 411002**
Mobile : 8087881795

PRAGATI BOOK CORNER - Email: niralimumbai@pragationline.com

- Apurva Building, Shop No. 1, Bhavani Shankar Road,
Opp. Shardashram Society, Dadar (W), **Mumbai 400028.**
Tel: (022) 2422 3526/6662 5254 • **Mobile : 9819935759**

niralipune@pragationline.com | www.pragationline.com

niralipune@pragationline.com

www.pragationline.com

Also find us on

www.facebook.com/niralibooks [@nirali.prakashan](https://www.instagram.com/nirali.prakashan)



Prakash
PRINCIPAL
Kannada Sangha Pune
Kavari College of Arts, Science & Commerce

NEW
SYLLABUS

S. Y. B.Sc.

SEMESTER-IV

MICROCONTROLLER AND PYTHON PROGRAMMING

ELECTRONIC SCIENCE (EL-242) : Paper-II

Prof. (Dr.) P. B. BUCHADE
S. R. CHAUDHARI

Prof. (Dr.) M. L. DONGARE
Dr. J. A. BANGALI

CBCS
2 CREDITS



 **NIRALI**
PRAKASHAN
ADVANCEMENT OF KNOWLEDGE




PRINCIPAL

Kannada Sangha Pune
Kaveri College of Arts, Science & Commerce

SPPU New Syllabus

EL-242

MICROCONTROLLER AND PYTHON PROGRAMMING

[2 Credits]

Electronics P-II

For

Second Year B.Sc. - Semester-IV

As Per New Revised Choice Based Credit System
(CBCS) Syllabus w.e.f. June 2020

Prof. (Dr.) P. B. Buchade

M.Sc., M.Phil., Ph.D.
Principal and Head,
Dept. of Electronic Science,
Abasaheb Garware College,
Kharve Road, Pune - 411004.

Prof. (Dr.) M. L. Dongare

M.Sc., D.H.E., Ph.D.
Vice Principal, Head, Dept. of
Electronic Science,
Rayat Shikshan Sanstha's,
S. M. Joshi College,
Hadapsar, Pune - 411028.

S. R. Chaudhari

M. Sc., M.Phil.
Vice principal and Head,
Dept. of Electronic Science,
Modern College, Shivajinagar,
Pune - 411005.

Dr. J. A. Bangali

M. Sc., M. Phil, Ph.D.
Head, Dept. of Electronic Science,
Co-ordinator, B.Sc. Computer Science
Kaveri College of Arts,
Science & Commerce, Pune-411038.

Price ₹ 70.00

 **NIRALI**
PRAKASHAN
ADVANCEMENT OF KNOWLEDGE

N5517



PRINCIPAL
Kannada Sangha Pune's
Kaveri College of Arts, Science & Commerce

First Edition : January 2021

© : Authors

The text of this publication, or any part thereof, should not be reproduced or transmitted in any form or stored in any computer storage system or device for distribution including photocopy, recording, taping or information retrieval system or reproduced on any disc, tape, perforated media or other information storage device etc., without the written permission of Authors with whom the rights are reserved. Breach of this condition is liable for legal action.

Every effort has been made to avoid errors or omissions in this publication. In spite of this, errors may have crept in. Any mistake, error or discrepancy so noted and shall be brought to our notice shall be taken care of in the next edition. It is notified that neither the publisher nor the authors or seller shall be responsible for any damage or loss of action to any one, of any kind, in any manner, therefrom.

Published By:

NIRALI PRAKASHAN

Abhyudaya Pragati, 1312, Shivaji Nagar
Off J.M. Road, PUNE - 411005
Tel - (020) 25512336/37/39, Fax - (020) 25511379
Email : niralipune@pragationline.com

Polyplate

YOGIRAJ PRINTERS AND BINDERS

Printed By:
Works: Sr. No. 101, Ghule Industrial Estate,
Nanded Village Road,
TAL-HAVELI, DIT-PUNE 411041
Mobile - 9850046517, 9404233041

➤ **DISTRIBUTION CENTRES****PUNE**

- Nirali Prakashan** : 119, Budhwar Peth, Jogeshwari Mandir Lane, Pune 411002,
(For orders within Pune) Maharashtra, Tel : (020) 2445 2044, Mobile : 9657703145
Email : niralilocal@pragationline.com
- Nirali Prakashan** : S. No. 28/27, Dhayari, Near Asian College Pune 411041
(For orders outside Pune) Tel : (020) 24690204; Mobile 9657703143
Email : bookorder@pragationline.com

MUMBAI

- Nirali Prakashan** : 385, S.V.P. Road, Rasdhara Co-op. Hsg. Society Ltd.,
Girgaum, Mumbai 400004, Maharashtra,
Mobile : 9320129587 Tel : (022) 2385 6339 / 2386 9976,
Fax : (022) 2386 9976
Email : niralimumbai@pragationline.com

➤ **DISTRIBUTION BRANCHES****JALGAON**

- Nirali Prakashan** : 34, V. V. Golani Market, Navi Peth, Jalgaon 425001,
Maharashtra, Tel : (0257) 222 0395, Mob : 94234 91860;
Email : niralijalgaon@pragationline.com

KOLHAPUR

- Nirali Prakashan** : New Mahadhar Road, Kedar Plaza, 1st Floor Opp. IDBI Bank,
Kolhapur-416 012, Maharashtra. Mob : 9850046155;
Email : niralikolhapur@pragationline.com

NAGPUR

- Nirali Prakashan** : Above Maratha Mandir, Shop No. 3, First Floor,
Rani Jhanshi Square, Sitabuldi, Nagpur 440012, Maharashtra
Tel : (0712) 254 7129;
Email : niralinagpur@pragationline.com

DELHI

- Nirali Prakashan** : Room. No. 2 Ground Floor, 4575/15 Omkar Tower,
Agarwal Road, Darya Ganj, New Delhi - 110002.
Mob : 9555778814 / 9818561840
Email : niralidelhi@pragationline.com

BENGALURU

- Nirali Prakashan** : Maitri Ground Floor, Jaya Apartments, No. 99, 6th Cross,
6th Main, Malleswaram, Bengaluru 560003, Karnataka;
Mob : 9449043034
Email : niralibangalore@pragationline.com

Other Branches : Hyderabad, Chennai

niralipune@pragationline.com | www.pragationline.com

Also find us on  www.facebook.com/niralibooks

PRINCIPAL

Kannada Sangha Pune's

Kannara College of Arts, Science & Commerce

Our Text Books for Second Year B. Sc. As per New Syllabus CBCS Pattern : Semester-IV

- **OSCILLATIONS, WAVES AND SOUND** : (Physics : Paper-I)
Dr. P. S. Tambade, Dr. S. D. Aghav, B. M. Laware, V. K. Dhas,
- **OPTICS** : (Physics : Paper-II)
V. K. Dhas, B. M. Laware, Dr. S. D. Aghav, Dr. P. S. Tambade
- **PHYSICAL AND ANALYTICAL CHEMISTRY** (Chemistry : Paper-I)
Dr. V. M. Shinde, Dr. G. S. Gugale, Dr. A. R. Pawar, Dr. R. P. Patil
- **INORGANIC AND ORGANIC CHEMISTRY** : (Chemistry : Paper-II)
Dr. G. S. Gugale, Dr. A. V. Nagawade, Dr. D. R. Thube, Dr. V. D. Bobade, Dr. S. K. Pasale
- **ANALOG CIRCUIT DESIGN** : (Electronics : Paper-I)
Prof. (Dr.) M. L. Dongare, Prof. (Dr.) P. B. Buchade, Dr. J. A. Bangali, S. R. Chaudhari
- **MICROCONTROLLER AND PYTHON PROGRAMMING** : (Electronics : Paper-II)
Prof. (Dr.) P. B. Buchade, Prof. (Dr.) M. L. Dongare, S. R. Chaudhari, Dr. J. A. Bangali
- **ANIMAL DIVERSITY-IV** : (Zoology : Paper-I)
Dr. Kishore R. Pawar, Dr. Ashok E. Desai
- **APPLIED ZOOLOGY-II** : (Zoology : Paper-II)
Dr. Kishore R. Pawar, Dr. Ashok E. Desai
- **PLANT ANATOMY AND EMBRYOLOGY** (Botany : Paper-I)
Dr. K. N. Dhumal, Dr. B. P. Shinde, Dr. H. S. Patil, Dr. K. S. Bhosale
- **PLANT BIOTECHNOLOGY** (Botany : Paper-II)
Dr. K. N. Dhumal, Dr. B. P. Shinde, Dr. H. S. Patil, Dr. K. S. Bhosale
- **LINEAR ALGEBRA** : (Mathematics : Paper-I)
M. D. Bhagat, R. S. Bhamare, N. M. Phatangare, Dr. A. S. Khairnar, Dr. S. G. Purane
- **VECTOR CALCULUS** : (Mathematics : Paper-II : A)
M. D. Bhagat, R. S. Bhamare, N. M. Phatangare, Dr. A. S. Khairnar, Dr. S. G. Purane
- **DYNAMICAL SYSTEMS** : (Mathematics : Paper-II : B)
M. D. Bhagat, R. S. Bhamare, N. M. Phatangare, Dr. S. G. Purane, Dr. A. S. Khairnar
- **TEST OF SIGNIFICANCE AND STATISTICAL METHODS** : (Statistics : Paper-I)
Dr. P. G. Dixit, Prof. P. S. Kapre
- **SAMPLING DISTRIBUTIONS AND EXACT TESTS** : (Statistics : Paper-II)
Dr. P. G. Dixit, Prof. P. S. Kapre
- **BACTERIAL GENETICS** : Paper-I
Dr. Pragati S. Abhyankar, Dr. Rajashree B. Patwardhan
- **AIR, WATER AND SOIL MICROBIOLOGY** : Paper-II
Dr. Rajashree B. Patwardhan, Dr. Pragati S. Abhyankar
- **ENVIRONMENTAL GEOGRAPHY-II** : (Geography : Paper-I)
Dr. Sanjay Dagu Pagar, Dr. Rakesh Vasanttrao Patil,
Dr. Kishor Gajanan Dhanwate, Dr. Ganesh Madhav Gangurde
- **GEOGRAPHY OF MAHARASHTRA (HUMAN)** : (Geography : Paper-II)
Dr. Jyotiram C. More, Dr. Kishor G. Dhanwate,
Dr. Amit E. Sonawane, Dr. Sunil D. Thakare
- **GEOLOGY** : (Geology : Paper-VII & VIII)
Dr. U. D. Kulkarni

niralipune@pragationline.com

www.pragationline.com

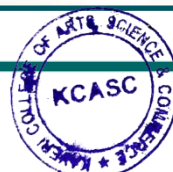
Also find us on



www.facebook.com/niralibooks



@nirali.prakashan



PRINCIPAL

Kannada Sangha Pune
Kaveri College of Arts, Science & Commerce

NEW
SYLLABUS

SECOND YEAR B. Sc.
COMPUTER SCIENCE

SEMESTER-IV

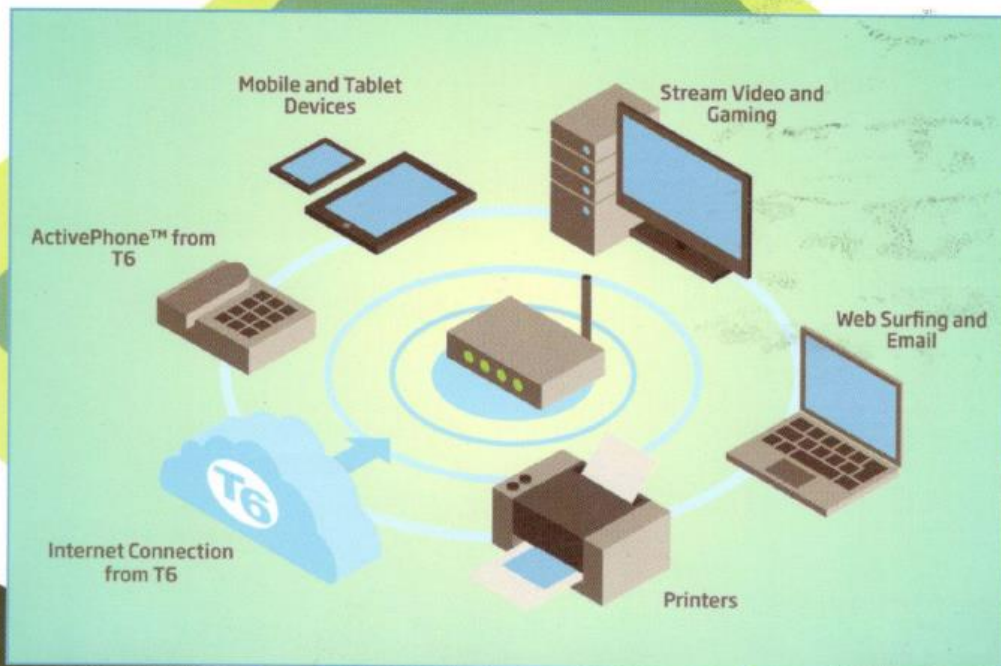
WIRELESS COMMUNICATION AND INTERNET OF THINGS

Electronics (ELC-242) : Paper-II

S. R. CHAUDHARI
Prof. (Dr.) M. L. DONGARE

Dr. J. A. BANGALI
Prof. (Dr.) P. B. BUCHADE

CBCS
2 CREDITS



NIRALI
PRAKASHAN
ADVANCEMENT OF KNOWLEDGE



PRINCIPAL

Karnada Sangha Pune
Kaveri College of Arts, Science & Commerce

SPPU New Syllabus

ELC-242

WIRELESS COMMUNICATION AND INTERNET OF THINGS

[2 Credits]

Electronics Paper-II

For

Second Year B.Sc. Computer Science

Electronics - Semester-IV

New Syllabus as per CBCS Pattern from June 2020

S. R. Chaudhari

M. Sc., M.Phil.
Vice Principal and Head,
Dept. of Electronic Science,
Modern College, Shivajinagar,
Pune - 411005.

Dr. J. A. Bangali

M. Sc., M. Phil, Ph.D.
Head, Dept. of Electronic Science,
Co-ordinator, B.Sc. Computer Science
Kaveri College of Arts, Science & Commerce
Pune-411038

Prof. (Dr.) P. B. Buchade

M.Sc., M.Phil., Ph.D.
Principal and Head,
Dept. of Electronic Science,
Abasaheb Garware College,
Karve Road, Pune - 411004.

Prof. (Dr.) M. L. Dongare


M.Sc., D.H.E., Ph.D.
Head, Dept. of Electronic Science,
Rayat Shikshan Sanstha's,
S. M. Joshi College,
Hadapsar, Pune - 411028.

Price ₹ 100.00

 **NIRALI**
PRAKASHAN
ADVANCEMENT OF KNOWLEDGE

N5547




PRINCIPAL
Kannada Sangha Pune
Kaveri College of Arts, Science & Commerce

First Edition : February 2021

© : Authors

The text of this publication, or any part thereof, should not be reproduced or transmitted in any form or stored in any computer storage system or device for distribution including photocopy, recording, taping or information retrieval system or reproduced on any disc, tape, perforated media or other information storage device etc., without the written permission of Authors with whom the rights are reserved. Breach of this condition is liable for legal action.

Every effort has been made to avoid errors or omissions in this publication. In spite of this, errors may have crept in. Any mistake, error or discrepancy so noted and shall be brought to our notice shall be taken care of in the next edition. It is notified that neither the publisher nor the authors or seller shall be responsible for any damage or loss of action to any one, of any kind, in any manner, therefrom.

Published By :
NIRALI PRAKASHAN

Abhyudaya Pragati, 1312, Shivaji Nagar,
Off J.M. Road, PUNE – 411005
Tel - (020) 25512336/37/39, Fax - (020) 25511379
Email : niralipune@pragationline.com

Polyplate

Printed By :
YOGIRAJ PRINTERS AND BINDERS

Works: Sr. No. 10\1, Ghule Industrial Estate,
Nanded Village Road,
TAL-HAVELI, DIT-PUNE 411041.
Mobile - 9850046517, 9404225254

DISTRIBUTION CENTRES**PUNE**

- Nirali Prakashan** : 119, Budhwar Peth, Jogeshwari Mandir Lane, Pune 411002, Maharashtra
(For orders within Pune) Tel : (020) 2445 2044, Fax : (020) 2445 1538; Mobile : 9657703145
Email : bookorder@pragationline.com, niralilocal@pragationline.com
- Nirali Prakashan** : S. No. 28/27, Dhyari, Near Pari Company, Pune 411041
(For orders outside Pune) Tel : (020) 24690204 Fax : (020) 24690316; Mobile : 9657703143
Email : dhyari@pragationline.com, bookorder@pragationline.com

MUMBAI

- Nirali Prakashan** : 385, S.V.P. Road, Rasdhara Co-op. Hsg. Society Ltd.,
Girgaum, Mumbai 400004, Maharashtra; Mobile : 9320129587
Tel : (022) 2385 6339 / 2386 9976, Fax : (022) 2386 9976
Email : niralimumbai@pragationline.com

DISTRIBUTION BRANCHES**JALGAON**

- Nirali Prakashan** : 34, V. V. Golani Market, Navi Peth, Jalgaon 425001,
Maharashtra, Tel : (0257) 222 0395, Mob : 94234 91860

KOLHAPUR

- Nirali Prakashan** : New Mahadvar Road, Kedar Plaza, 1st Floor Opp. IDBI Bank
Kolhapur 416 012, Maharashtra. Mob : 9850046155

NAGPUR

- Nirali Prakashan** : Above Maratha Mandir, Shop No. 3, First Floor,
Rani Jhanshi Square, Sitabuldi, Nagpur 440012, Maharashtra
Tel : (0712) 254 7129

DELHI

- Nirali Prakashan** : Room No. 2, Ground Floor, 4575/15 Onkar Tower, Aggarwal Road, Daryaganj
New Delhi 110002 Mob : +91 9555778814 / +91 9818561840
Email : niralidelhi@pragationline.com


BENGALURU

- Nirali Prakashan** : Maitri Ground Floor, Jaya Apartments, No. 99, 6th Cross, 6th Main,
Malleswaram, Bengaluru 560003, Karnataka; Mob : 9449043034
Email: niralibangalore@pragationline.com

Other Branches : Hyderabad, Chennai

Note: Every possible effort has been made to avoid errors or omissions in this book. In spite this, errors may have crept in. Any type of error or mistake so noted, and shall be brought to our notice, shall be taken care of in the next edition. It is notified that neither the publisher, nor the author or book seller shall be responsible for any damage or loss of action to any one of any kind, in any manner, therefrom. The reader must cross check all the facts and contents with original Government notification or publications.

niralipune@pragationline.com | www.pragationline.com

Also find us on  www.facebook.com/niralibooks



PRINCIPAL

Kannada Sangha Pune's
Kaveri College of Arts, Science & Commerce

**Our Text Books for
Second Year B. Sc. : Computer Science
As per New Syllabus CBCS Pattern : Semester-IV**

- **Data Structures and Algorithms – II** : (Computer Science : Paper-I)
Dr. Ms. Manisha Bharambe, Mrs. Veena K. Gandhi
- **Computer Network** : (Computer Science : Paper-II)
Mrs. Veena K. Gandhi
- **Embedded Systems Design** : (Electronics : Paper-I)
Dr. J. A. Bangali, S. R. Chaudhari,
Prof. (Dr.) P. B. Buchade, Prof. (Dr.) M. L. Dongare
- **Wireless Communication and Internet of Things** : (Electronics : Paper-II)
S. R. Chaudhari, Dr. J. A. Bangali,
Prof. (Dr.) M. L. Dongare, Prof. (Dr.) P. B. Buchade
- **Computational Geometry**: (Mathematics : Paper-I)
M. D. Bhagat, R. S. Bhamare, N. M. Phatangare,
Dr. S. G. Purane, Dr. A. S. Khairnar
- **Operation Research** : (Mathematics : Paper-II)
M. D. Bhagat, R. S. Bhamare, N. M. Phatangare,
Dr. A. S. Khairnar, Dr. S. G. Purane

BOOKS AVAILABLE AT

PRAGATI BOOK CENTER - Email: pbcpune@pragationline.com

- 157 Budhwar Peth, Opp. Ratan Talkies, Next To Balaji Mandir,
Pune 411002 • Mobile : 9657703148
- 676/B Budhwar Peth, Opp. Jogeshwari Mandir, **Pune 411002**
Tel : (020) 2448 7459 • **Mobile : 9657703147 / 9657703149**
- 152 Budhwar Peth, Near Jogeshwari Mandir, **Pune 411002**
Mobile : 8087881795

PRAGATI BOOK CORNER - Email: niralimumbai@pragationline.com

- Apurva Building, Shop No. 1, Bhavani Shankar Road,
Opp. Shardashram Society, Dadar (W), **Mumbai 400028.**
Tel: (022) 2422 3526/6662 5254 • **Mobile : 9819935759**

niralipune@pragationline.com | www.pragationline.com

niralipune@pragationline.com

www.pragationline.com

Also find us on



www.facebook.com/niralibooks



@nirali.prakashan



PRINCIPAL

Kannada Sangha Pune
Kavari College of Arts, Science & Commerce

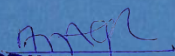
FOREWORD BY SIR DR. HUZ

**KNOW
EVERYTHING
ABOUT
CORPORATE
SOCIAL
RESPONSIBILITY**

RUSEN KUMAR
DR. SHWETA BAPAT
DR. RANA SINGH

X




PRINCIPAL
Kannada Sangha Purne's
Kannara College of Arts, Science & Commerce



Xpress Publishing
An imprint of Notion Press

No.8, 3rd Cross Street, CIT Colony, Mylapore
Chennai, Tamil Nadu - 600004, INDIA

Published by Notion Press 2020

Copyright © Rusen Kumar

All Rights Reserved.

ISBN 978-1-63606-361-4

This book has been published with all efforts taken to make the material error-free after the consent of the author. However, the author and the publisher do not assume and hereby disclaim any liability to any party for any loss, damage, or disruption caused by errors or omissions, whether such errors or omissions result from negligence, accident, or any other cause.

No part of this book may be used, reproduced in any manner whatsoever without written permission from the author, except in the case of brief quotations embodied in critical articles and reviews.

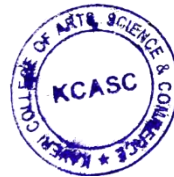


[Signature]
PRINCIPAL

Kannada Sangha Pune
Kaveri College of Arts, Science & Commerce

INDEX

PRAISES FOR THE BOOK	xiii
THE AUTHOR - <i>Rusen Kumar</i>	xvii
THE AUTHOR - <i>Dr. Shweta M. Bapat</i>	xix
THE AUTHOR - <i>Dr. Rana Singh</i>	xxi
AUTHOR'S NOTE	xxiii
FOREWORD - <i>Sir Dr. Huz</i>	xxv
INTRODUCTION - <i>Prof. Dr. Colin Coulson-Thomas</i>	xxvii
MESSAGE - <i>Dr. Bhaskar Chatterjee</i>	xxxii
MESSAGE - <i>Prof. (Dr.) Shiv K. Tripathi</i>	xxxiii
ABOUT THE BOOK	xxxv
ACKNOWLEDGEMENTS	xxxvii




PRINCIPAL
Kannada Sangha Pune's
Kaveri College of Arts, Science & Commerce

DR. SHWETA M. BAPAT



Dr. Shweta M. Bapat, management faculty by profession is a doctorate in Corporate Social Responsibility from renowned University of Pune (Now known as SPPU) and has a Master's degree in Management. She is Head of the Department of Human Resource Management at Kaveri College of Arts, Science and Commerce Pune.

In her 18 years of rich experience, she has successfully carried out different responsibilities and played various roles like President, Business Ethics Foundation Pune, An External Expert for an International conference on Business Economics and Sustainable Development organized by NISM, Mumbai and TERI-SAS New Delhi, A member of CSR Experts committee of ICSI, New Delhi, A Mentor at CRB tech solutions, guest speaker and panellist at various seminars/ webinars and conferences.

She has publication of 5 text books as co-author, various articles at national and local platforms and various research papers at her credit. She has won Best Research Paper Award, Best Achievement Awards, Best Teacher Award and an Award for Excellence in Human Resource Management from different renowned institutes.




PRINCIPAL
Kannada Sangha Pune
Kaveri College of Arts, Science & Commerce

PRAISES FOR THE BOOK

Congratulations to the authors on their most useful work! Timely yet timeless, extensive yet concise, this book provides clarity on the executive floor about core concepts of sustainability.

— **Ernst von Kimakowitz**

Founding director, Humanistic Management Center, Humanistic Management Network, Researcher, University of Lucerne, Switzerland

There is no better person in India, than Rusen Kumar to co-write this invaluable book, which is a comprehensive guide to everything CSR related in India. Rusen is one of India's important voices on this topic and there is so much we can learn from him.

— **Sangeeta Waldron**

Award-Winning Publicist
Author & Founder of Serendipity PR & Media, UK

Very timely and apt! This has come at a time, when identifying linkages between Business, CSR and Sustain-ability has become even more important. Kudos to the authors in explaining these linkages so lucidly!

— **Mukesh Kumar**

Chief Programme Executive-CSR,
Indian Institute of Corporate Affairs (IICA), India

Corporate Social Responsibility has become a complex field. This book provides a truly unique and fresh overview of all of the essential insights. Leaders in the field need no book than this one.

— **Prof. Dr. Wolfgang Amann**

Professor of Strategy and Leadership, Academic Director of Custom, Open, Certificate, and Degree Programs, HEC Paris

XpressPublishing
An imprint of Notion Press

Price ₹499

ISBN 978-1-63606-361-4

90000



PRINCIPAL

Kannada Sangha Pune
Kavali College of Arts, Science & Commerce

ISBN: 978-93-5493-533-6

IMC 2021
April 23-24

International Management Conference 2021

Post COVID Management Strategies: Recovery, Resilience & Adaptation



Organised by

IIM BODH
GAYA

Indian Institute of Management Bodh Gaya



[Signature]
PRINCIPAL
Kannada Sangha Pune's
Kaveri College of Arts, Science & Commerce

ISBN: 978-93-5493-533-6

Title: Post COVID Management Strategies: Recovery, Resilience and Adaptation.

Books of Abstracts

Editors:

Dr. Chandan Parsad, Dr. Raveesh K., Dr. Vinita S. Sahay

© 2022, IIM Bodh Gaya

978-93-5493-533-6

Published By: Self-Published (IIM Bodh Gaya)

Publisher's address:

IIM Bodh Gaya

Uravela, Prabandh Vihar,

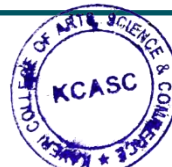
Bodh Gaya, 824234, Bihar, India

conference@iimbh.ac.in

For more information visit: www.iimbh.ac.in

Printer's Details: Soft Copy (e-copy)

Edition: 1st Edition (2021-2022)



try to create an uncorrelated forest of trees whose prediction by committee is more accurate than that of any individual tree. The current set of determinants were able to predict firm's profitability to a greater extent. We deduct that manufacturing firms were more profitable than service firms in long term however were indifferent in short term profitability indicator.

Keywords: Profitability, Strategic Factors, Return on Assets, Net Profit Margin, Random Forest Model, Decision Tree

FA-08: Digital financial literacy and the literate youth post-COVID-19: An empirical study from India

Zahid Bashir, IIT Roorkee, India

Sujata Kar, IIT Roorkee, India

Abstract: With a structurally ingrained digital divide on the one hand, and the increasing ubiquity of the internet and the latest technological devices on the other, it has become imperative to exploit the significant driver i.e., digital financial literacy (DFL), of the techno-centric world for the development and growth of financial systems. The COVID-19 has made the usefulness and need for digital financial literacy even more noticeable than ever. This has bought a change in the focus of researchers from traditional financial literacy to DFL and the information-communication between the digital financial services (DFS) providers and the individuals. In response, we aim to investigate the relationship between DFL and the usage of DFS among the highly-educated youth of India post-COVID-19. Albeit, a significantly low DFL level is found among the respondents but a positive correlation is seen between DFL and the investment in DFS and vice-versa. Findings suggest that digital literacy campaigns by government and other concerned institutions through social-media platforms could provide a boosting mechanism that would create awareness, trust and improve the overall efficiency of digital financial services, the financial system and, personal financial well-being.

Keywords: Digital financial services (DFS), Digital financial literacy (DFL), COVID-19, Demographic variables, Multinomial logistic model, India

FA-09: A value at risk approach for analyzing stock movement of BSE sensex companies during the Covid 19 pandemic

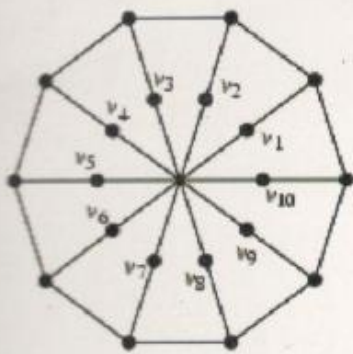
Sayee Kulkarni, Asst. Professor, Kannada Sangha Pune's, Kaveri College of Arts, Science and Commerce

Vijayalakshmi Srinivas, Director, Progressive Education Society's Modern Institute of Business Management, Pune

Abstract: Value at Risk is a tool for analyzing the risk and volatility of a stock on the basis of the variability of returns. It is a measure that quantifies the level of financial risk. The pandemic has turned our lives upside down. Subsequently the Indian stock markets were not immune to this volatility. The

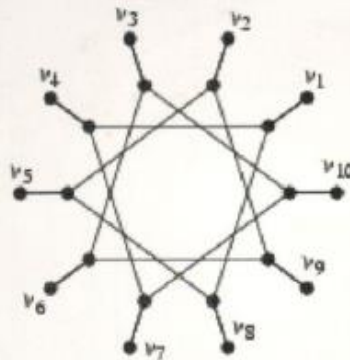
Strictly as per the New Choice Based Credit System Syllabus of Savitribai Phule Pune University

NEW
SYLLABUS
2019
PATTERN



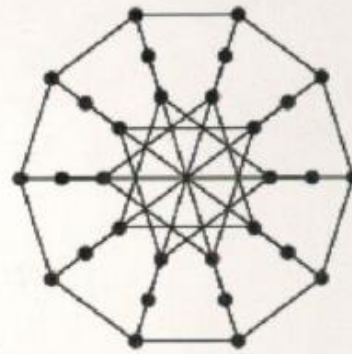
G_1

\cup



G_2

=



Levi graph

Paper Code MTC - 112

DISCRETE MATHEMATICS

F.Y.B.Sc. (Computer Science) - Mathematics

CBCS (2019) Semester - I Paper - II

Salient Features of Book

- ✦ Topic wise rich question bank
- ✦ Important question highlighted
- ✦ Previous year solved question paper of SPPU



Shivaji A. Tarate
Kishor A. Kshirsagar
Kailas L. Vairal
Suvarna G. Sabnis
Prajakta V. Deshpande



PRINCIPAL

Kannada Sangha Pune's
Kaveri College of Arts, Science & Commerce

BOOK NAME: Discrete Mathematics
ISBN: 978-81-847527-7-4

A Text Book Of Discrete Mathematics

For

F.Y. B.Sc. (Computer Science) Semester – I, Mathematics Paper- II

Strictly as per New Choice Based Credit System Syllabus
Of Savitribai Phule Pune University

Mr. Shivaji A. Tarate
M.Sc. (Mathematics), SET, B.Ed
Asst. Prof. in Mathematics
New Arts, Commerce And Science
College, Ahmednagar- 414001,
Maharashtra, India

Mr. Kishor A. Kshirsagar
M.Sc. (Mathematics), SET, B.Ed
Asst. Prof. in Mathematics
New Arts, Commerce And
Science College,
Ahmednagar- 414001,
Maharashtra India

Mrs. Suvarna G. Sabnis (Adkar)
M.Sc., B.Ed
Asst. Prof. in Mathematics
Kaveri College Of Arts, Science And
Commerce
Pune- 411038,
Maharashtra, India

Mrs. Prajakta V. Deshpande
M.Sc.
Asst. Prof (Ex) in Mathematics
New Arts, Commerce And Science
College, Ahmednagar- 414001,
Maharashtra, India

Mr. Kailas L. Vairal
M.Sc. (Mathematics), SET, B.Ed
Asst. Prof. in Mathematics
P.V.P Collage Pravaranagar
Ahmednagar
Maharashtra, India



PRINCIPAL
Kannada Sangha Pune's
Kaveri College of Arts, Science & Commerce

BOOK NAME: Discrete Mathematics

ISBN: 978-81-947857-7-4

First Edition: August 2020

Copyright © with Parijat Publication All rights reserved

No part of this publication may be reproduced, distributed or transmitted in any s
or by any means,
Including photocopying, recording, or other electronic or mechanical methods,
without the prior written
Permission of the publisher, except in case of brief quotations embodied in reviews
and certain other non-commercial uses permitted by copyright law.

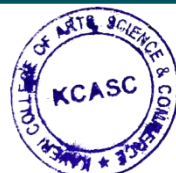
Published by :

**Parijat Prakashan : 40 Budhwar Peth Appa Balwant Chowk Jogeshwari Lane
Vishveshwar Society Pune - 411002**

**Printer: Yogiraj Builders, S.No. 10/2A, Ghule Industrial Estate, Nanded Village
Road , Tal. Haveli, Pune- 411041**

Price: 150/-

(Note: Every possible effort has been made to present the information strictly according to the new approved syllabus in this book. Necessary care has been taken to verify the information presented in the book. It is notified that neither the author nor the publisher or seller of the book shall be responsible for any mistake or discrepancy that may have somehow crept in. If any mistake or discrepancy is noticed in the book could be notified to us on our mail parijatprakashan.pune@gmail.com shall be considered for the next editions.)



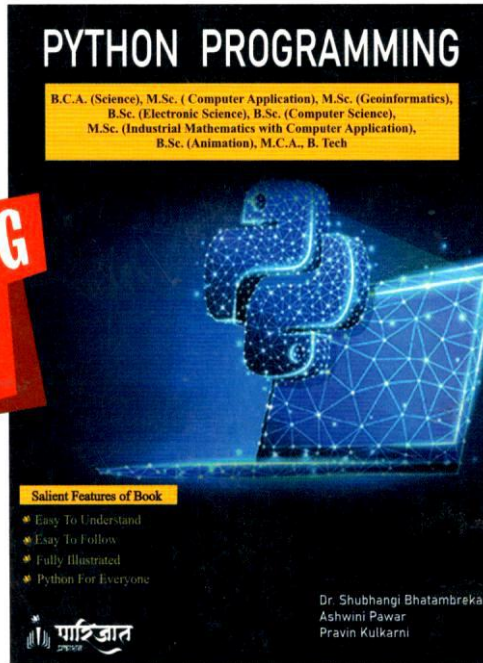
[Signature]
PRINCIPAL

Kannada Sangha Pune's
Kavari College of Arts, Science & Commerce

ALL TEXT BOOKS OF FIRST YEAR B.Sc. (COMPUTER SCIENCE)

- ✿ Problem Solving Using Computer & C Programming
- ✿ Database Management System
- ✿ Matrix Algebra
- ✿ Discrete Mathematics
- ✿ Descriptive Statistics
- ✿ Mathematical Statistics
- ✿ Semiconductor Devices & Basic Electronic Systems
- ✿ Principles Of Digital Electronics

**COMING
SOON**



Book Available At

YASH BOOKS Amber Chambers, 28/A, Budhwar Peth, Appa Balwant Chowk, Pune-411002. Tel: 020-24489248 Email: yash_books@yahoo.com	SAKSHAM BOOKS 31, Budhwar Peth, Near Jogeshwari Lane, Pune-411002. Mob: 9923667298; 9673704163.	UNNATI BOOK CENTRE 27 B, Budhwar Peth, Shrinivas Chambers, Appa Balwant Chowk, Pune- 411002. Tel: 020-24480940 Email: unnatibookcentre@gmail.com	MAYURESH BOOK DEPOT Near Jogeshwari Mandir, Appa Balwant Chowk, Budhwar Peth, Pune-411002. Mob: 7720910008.	PARIJAT DISTRIBUTION 40, Budhwar Peth, Appa Balwant Chowk, Jogeshwari Lane, Vishveshwar Society, Pune – 411002 Mob: 9370010756 Email: parijatprakashan.pune@gmail.com
--	---	--	---	--


 - parijatprakashan.pune@gmail.com

 - Parijat Prakashan

Price: 150/-
ISBN 978-81-947857-7-4

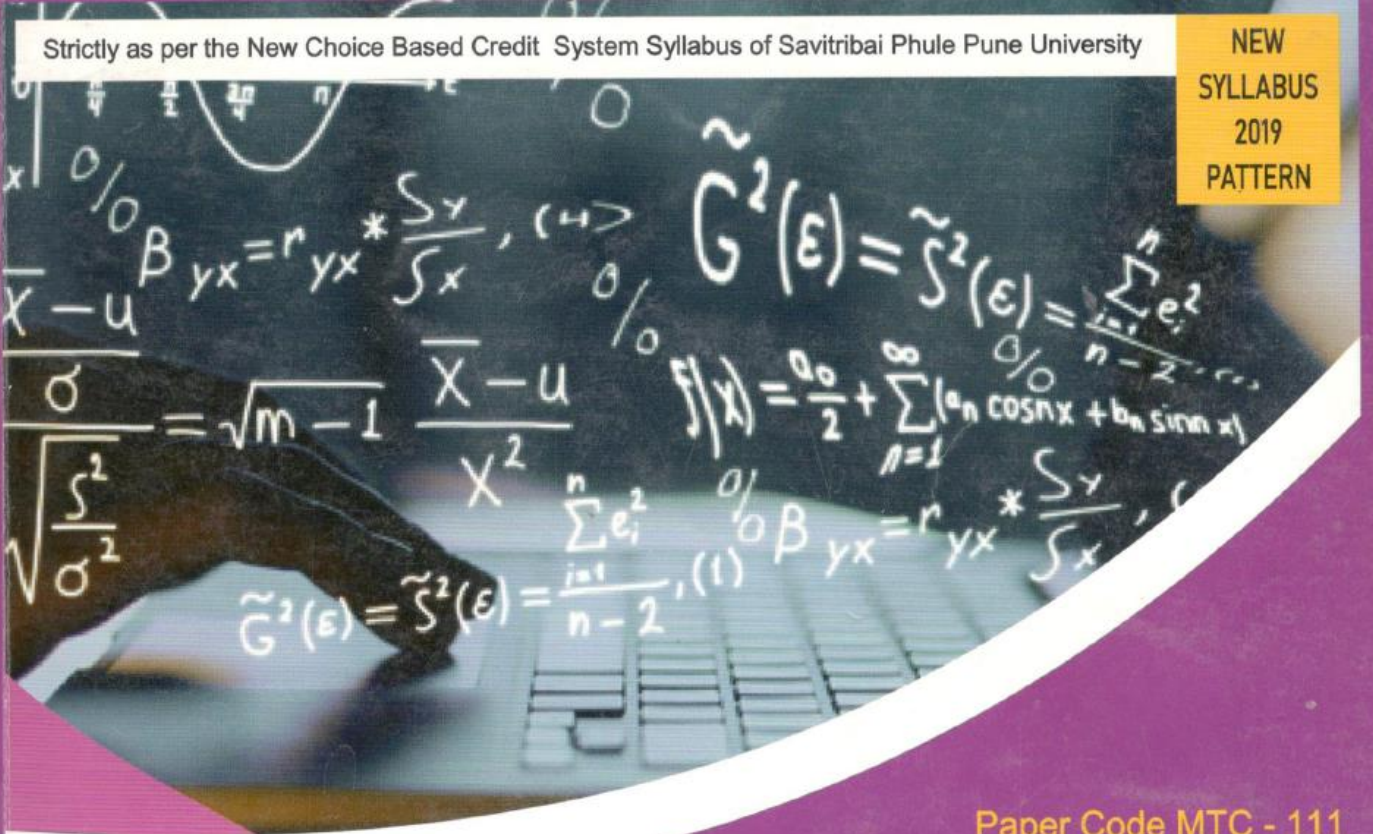
9 788194 785774




PRINCIPAL
Kannada Sangha Pune's
Kaveri College of Arts, Science & Commerce

Strictly as per the New Choice Based Credit System Syllabus of Savitribai Phule Pune University

NEW
SYLLABUS
2019
PATTERN



Paper Code MTC - 111

MATRIX ALGEBRA

F.Y.B.Sc. (Computer Science) - Mathematics

CBCS (2019) Semester - I Paper - I

Salient Features of Book

- ✦ Topic wise rich question bank
- ✦ Important question highlighted
- ✦ Previous year solved question paper of SPPU



Shivaji A. Tarate
Kishor A. Kshirsagar
Suvarna G. Sabnis
Prajakta V. Deshpande
Kailas L. Vairal



PRINCIPAL

Kannada Sangha Pune's

Kannada College of Arts, Science & Commerce

A Text Book Of
Matrix Algebra
For

F.Y.B.Sc, (Computer Science) Semester – I, Mathematics Paper- I

**Strictly as per New Choice Based Credit System Syllabus
Of Savitribai Phule Pune University**

Mr. Shivaji A. Tarate

M.Sc. (Mathematics), SET, B.Ed
Asst. Prof. in Mathematics
New Arts, Commerce And Science
College, Ahmednagar- 414001,
Maharashtra, India

Mr. Kishor A. Kshirsagar

M.Sc. (Mathematics), SET, B.Ed
Asst. Prof. in Mathematics
New Arts, Commerce And Science
College, Ahmednagar- 414001,
Maharashtra India

Mr. Kailas L. Vairal

M.Sc. (Mathematics), SET, B.Ed
Asst. Prof. in Mathematics
P.V.P College Pravaranagar
Ahmednagar
Maharashtra, India

Mrs. Suvarna G. Sabnis (Adkar)

M.Sc., B.Ed
Asst. Prof. in Mathematics
Kaveri College Of Arts, Science And
Commerce
Pune- 411038
Maharashtra, India

Mrs. Prajakta V. Deshpande

M.Sc.
Asst. Prof (Ex) in Mathematics
New Arts, Commerce And Science
College,
Ahmednagar- 414001
Maharashtra, India



सावित्री
प्रकाशन



PRINCIPAL

Kaveri College of Arts, Science & Commerce

BOOK NAME: Matrix Algebra

ISBN: 978-81-947857-8-1

First Edition: August 2020

Copyright © with Parijat Publication All rights reserved

No part of this publication may be reproduced, distributed or transmitted in any form or by any means,

Including photocopying, recording, or other electronic or mechanical methods, without the prior written

Permission of the publisher, except in case of brief quotations embodied in reviews and certain other non-commercial uses permitted by copyright law.

Published by :

**Parijat Prakashan : 40 Budhwar Peth Appa Balwant Chowk Jogeshwari Lane
Vishveshwar Society Pune - 411002**

**Printer: Yogiraj Builders, S.No. 10/2A, Ghule Industrial Estate, Nanded Village
Road , Tal. Haveli, Pune- 411041**

Price: 170/-

(Note: Every possible effort has been made to present the information strictly according to the new approved syllabus in this book. Necessary care has been taken to verify the information presented in the book. It is notified that neither the author nor the publisher or seller of the book shall be responsible for any mistake or discrepancy that may have somehow crept in. If any mistake or discrepancy is noticed in the book could be notified to us on our mail parijatprakashan.pune@gmail.com shall be considered for the next editions.)



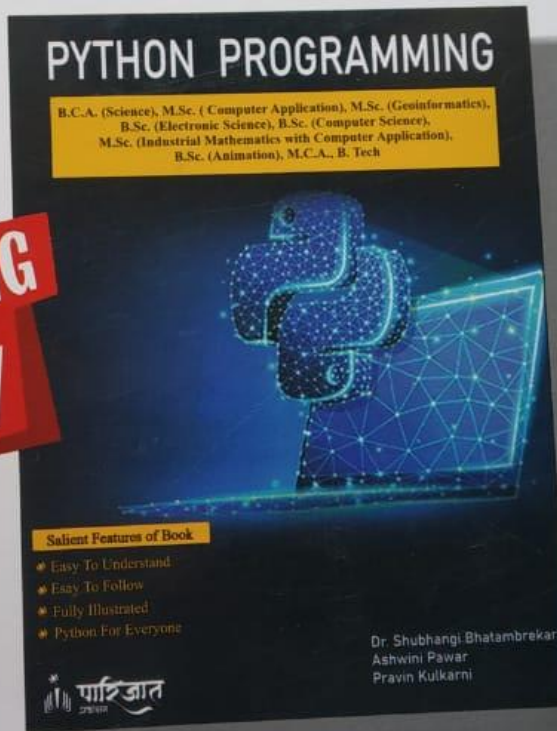
Principal

**Kannada Sangha Pune's
Kavari College of Arts, Science & Commerce**

ALL TEXT BOOKS OF FIRST YEAR B.Sc. (COMPUTER SCIENCE)

- ✦ Problem Solving Using Computer & C Programming
- ✦ Database Management System
- ✦ Matrix Algebra
- ✦ Discrete Mathematics
- ✦ Descriptive Statistics
- ✦ Mathematical Statistics
- ✦ Semiconductor Devices & Basic Electronic Systems
- ✦ Principles Of Digital Electronics

**COMING
SOON**



Book Available At

YASH BOOKS

Amber Chambers, 28/A, Budhwar Peth,
Appa Balwant Chowk, Pune-411002.
Tel: 020-24489248
Email: yash_books@yahoo.com

SAKSHAM BOOKS

31, Budhwar Peth, Near Jogeshwari
Lane, Pune-411002.
Mob: 9923667298; 9673704163.

UNNATI BOOK CENTRE

27 B, Budhwar Peth, Shrinivas
Chambers, Appa Balwant Chowk, Pune-
411002.
Tel: 020-24480940 Email:
unnatibookcentre@gmail.com

MAYURESH BOOK DEPOT

Near Jogeshwari Mandir, Appa Balwant
Chowk, Budhwar Peth, Pune-411002.
Mob: 7720910008.

PARIJAT DISTRIBUTION


40, Budhwar Peth, Appa Balwant
Chowk, Jogeshwari Lane, Vishveshwar
Society,
Pune – 411002
Mob: 9370010756 Email:
parijatprakashan.pune@gmail.com


Price: 170/-

ISBN 978-81-947857-8-1



9 788194 785781

 - parijatprakashan.pune@gmail.com

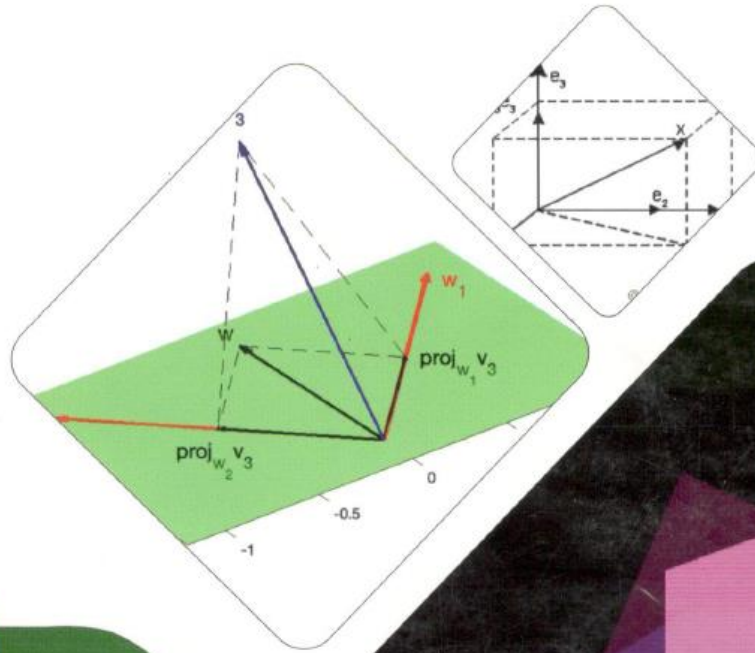
 - Parijat Prakashan




PRINCIPAL

Kannada Sangha, Pune
Kavari College of Arts, Science & Commerce

Strictly as per the New Choice Based Credit System Syllabus of Savitribai Phule Pune University



NEW
SYLLABUS
2019
PATTERN

Paper Code MTC-121

Linear Algebra

F.Y.B.Sc. (Computer Science) - Mathematics

CBCS (2019) Semester - II Paper - I

KCASC LIBRARY



S10753

Key Features

- Topic wise rich question bank.
- Important question highlighted.
- Previous year solved question paper of SPPU.

Kailas L. Vairal
Dr. Suprabha D. Kulkarni
Suvarna G. Sabnis
Prajakta V. Deshpande
Kanchan S. Khanchane
Vaibhavari T. Dhokrat



PRINCIPAL

Kannada Sangha Pune
Kaveri College of Arts, Science & Commerce

A Text Book of
Linear Algebra
For



F.Y. B.Sc. (Computer Science) Semester – II, Mathematics Paper- I

**Strictly as per New Choice Based Credit System Syllabus
of Savitribai Phule Pune University Year (2019-20)**

Dr. Suprabha Dattaraj Kulkarni

M.Sc., Ph.D. (Mathematics)
SET, ADCSSAA, B.Ed.
Associate Professor
Head Dept. of Mathematics
Pemraj Sarda College,
Ahmednagar – 414001
Maharashtra, India

Mr. Kailas L. Vairal

M.Sc. (Mathematics), SET, B.Ed.
Asst. Prof. in Mathematics
Padmashri Vikhe Patil College of
Arts, Science and Commerce,
Pravaranagar, Loni – 413713
Maharashtra, India

Mrs. Suvarna G. Sabnis (Adkar)

M.Sc., B.Ed.
Asst. Prof. in Mathematics
Kaveri College of Arts, Science & Commerce
Pune – 411038
Maharashtra, India

Mrs. Prajakta V. Deshpande

M.Sc.
Asst. Prof (Ex.) in Mathematics
Kaveri College of Arts, Science &
Commerce
Pune – 411038
Maharashtra, India

Mrs. Kanchan S. Khachane (Kshirsagar)

M.Sc. (Mathematics), B.Ed.
Asst. Prof. in Mathematics
K.V.N. Naik College,
Nashik – 422005
Maharashtra, India

Smt. Vibhavari Tukaram Dhokrat

M.Sc. M.Phil., SET, B.Ed.
Asst. Prof. in Mathematics
M.V.P. Samaj's K.K. Wagh, College,
Pimpalgaon Basvant (Nashik) – 422209
Maharashtra, India



KAVERI COLLEGE OF ARTS, SCIENCE & COMMERCE
LIBRARY

Accession No.: 10753

Date: 23-02-2022

512-5
VAI



PRINCIPAL

Kannada Sangha Pune's
Kaveri College of Arts, Science & Commerce



BOOK NAME: Linear Algebra

ISBN: 978-93-90769-03-2

First Edition: 2021

Copyright © with Parijat Publication. All rights reserved. No part of this publication may be reproduced, distributed or transmitted in any form or by any means, Including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the publisher, except in case of brief quotations embodied in reviews and certain other non-commercial uses permitted by copyright law.

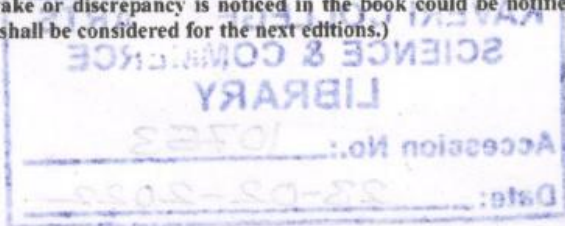
Publish by:

Parijat Prakashan: 40, Budhwar Peth, Appa Balwant Chowk, Jogeshwari Lane, Vishveshwar Society, Pune - 411002

Printer: S. S. Arts, S. No. 75, Yash Heights, Railkar Mula Pune- 41

Price: 155/-

(Note: Every possible effort has been made to present the information strictly according to the new approved syllabus in this book. Necessary care has been taken to verify the information presented in the book. It is notified that neither the author nor the publisher or seller of the book shall be responsible for any mistake or discrepancy that may have somehow crept in. If any mistake or discrepancy is noticed in the book could be notified to us on our mail parijatprakashan.pune@gmail.com shall be considered for the next editions.)



PRINCIPAL

**Kannada Sangha Pune's
Kavari College of Arts, Science & Commerce**

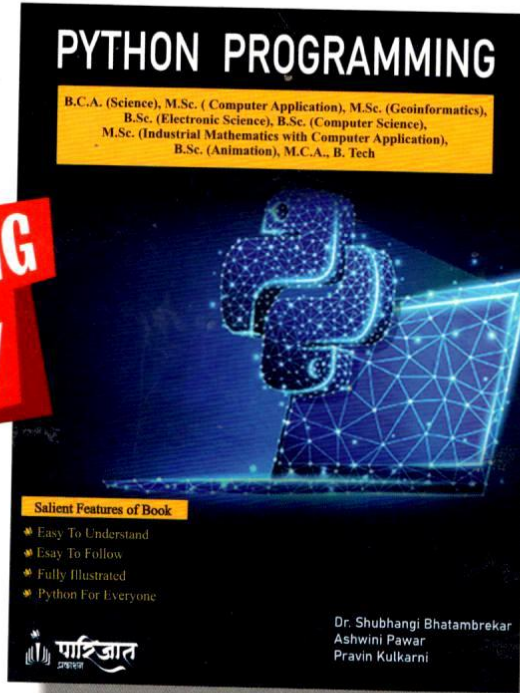


40, Budhwar Peth, Appa Balwant Chowk,
Jogeshwari Lane, Vishveshwar Society, Pune – 411002
Mobile: +91 9370010756

ALL TEXT BOOKS OF FIRST YEAR B.Sc. (COMPUTER SCIENCE)

- Advanced 'C' Programming
- Relational Database Management System
- Linear Algebra
- Graph Theory
- Basic of Computer Organisation
- Advanced 'C' Programming
- Methods of Applied Statistics
- Continuous Probability Distributions & Testing of Hypothesis

**COMING
SOON**



Book Available At

YASH BOOKS Amber Chambers, 28/A, Budhwar Peth, Appa Balwant Chowk, Pune-411002. Tel: 020-24489248	SAKSHAM BOOKS 31, Budhwar Peth, Near Jogeshwari Lane, Pune-411002. Mob: 9923667298;	UNNATI BOOK CENTRE 27 B, Budhwar Peth, Shrinivas Chambers, Appa Balwant Chowk, Pune- 411002. Tel: 020-24480940 Email: unnatibookcentre@gmail.com	MAYURESH BOOK DEPOT Near Jogeshwari Mandir, Appa Balwant Chowk, Budhwar Peth, Pune-411002. Mob: 7720910008.	PARIJAT DISTRIBUTION 40, Budhwar Peth, Appa Balwant Chowk, Jogeshwari Lane, Vishveshwar Society, Pune – 411002 Mob: 9370010756 Email:
--	--	--	--	---

- parijatprakashan.pune@gmail.com

- Parijat Prakashan

**Price
155/-**

ISBN 978-81-947857-2-8



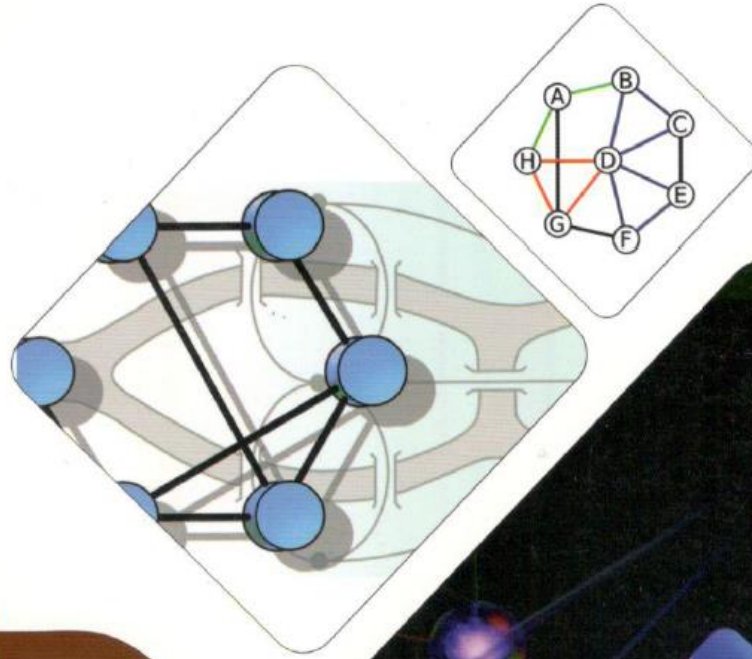
9 788194 785728



PRINCIPAL
Kannada Sangha, Pune

Kannada College of Arts, Science & Commerce

Strictly as per the New Choice Based Credit System Syllabus of Savitribai Phule Pune University



NEW
SYLLABUS
2019
PATTERN

Paper Code MTC-122

Graph Theory

F.Y.B.Sc. (Computer Science)- Mathematics


CBCS (2019) Semester - II Paper - II

Salient Features of Book

- ✦ Topic wise rich question bank.
- ✦ Important question highlighted.
- ✦ Previous year solved question paper of SPPU.

Kailas L. Vairal
Dr. Suprabha D. Kulkarni
Suvarna G. Sabnis
Prajakta V. Deshpande
Kanchan S. Khanchane
Vaibhavari T. Dhokrat




PRINCIPAL
Kannada Sangha Pune's
Kavari College of Arts, Science & Commerce

BOOK NAME: Graph Theory
ISBN: 978-81-90769-03-9

A Text Book of Graph Theory

For

F.Y. B.Sc. (Computer Science) Semester – II, Mathematics Paper- II

**Strictly as per New Choice Based Credit System Syllabus of
Savitribai Phule Pune University Year (2019-20)**

Dr. Suprabha Dattaraj Kulkarni

M.Sc., Ph.D. (Mathematics)
SET, ADCSSAA, B.Ed.
Associate Professor
Head Dept. of Mathematics
Pemraj Sarda College,
Ahmednagar – 414001
Maharashtra, India

Mr. Kailas L. Vairal

M.Sc. (Mathematics), SET, B.Ed.
Asst. Prof. in Mathematics
Padmashri Vikhe Patil College of
Arts, Science and Commerce,
Pravaranagar, Loni – 413713
Maharashtra, India

Mrs. Suvarna G. Sabnis (Adkar)

M.Sc., B.Ed.
Asst. Prof. in Mathematics
Kaveri College of Arts, Science & Commerce
Pune – 411038
Maharashtra, India

Mrs. Prajakta V. Deshpande

M.Sc.
Asst. Prof (Ex.) in Mathematics
Kaveri College of Arts, Science &
Commerce
Pune- 411038
Maharashtra, India

Mrs. Kanchan S. Khachane (Kshirsagar)

M.Sc. (Mathematics), B.Ed.
Asst. Prof. in Mathematics
K.V.N. Naik College,
Nashik- 422005
Maharashtra, India

Smt. Vibhavari Tukaram Dhokrat

M.Sc. M.Phil., SET, B.Ed.
Asst. Prof. in Mathematics
M.V.P. Samaj's K.K. Wagh, College,
Pimpalgaon Basvant (Nashik) – 422209
Maharashtra, India



(Signature)
PRINCIPAL

Kaveri College of Arts, Science & Commerce

BOOK NAME: Graph Theory

ISBN: 978-93-90769-04-9

First Edition: 2021

Copyright © with Parijat Publication. All rights reserved. No part of this publication may be reproduced, distributed or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the publisher, except in case of brief quotations embodied in reviews and certain other non-commercial uses permitted by copyright law.

Publish by:

Parijat Prakashan: 40, Budhwar Peth, Appa Balwant Chowk, Jogeshwari Lane, Vishveshwar Society, Pune - 411002

Printer: S. S. Arts, S. No. 75, Yash Heights, Railkar Mula Pune- 41

Price: 155/-

(Note: Every possible effort has been made to present the information strictly according to the new approved syllabus in this book. Necessary care has been taken to verify the information presented in the book. It is notified that neither the author nor the publisher or seller of the book shall be responsible for any mistake or discrepancy that may have somehow crept in. If any mistake or discrepancy is noticed in the book could be notified to us on our mail parijatprakashan.pune@gmail.com shall be considered for the next editions.)



PRINCIPAL

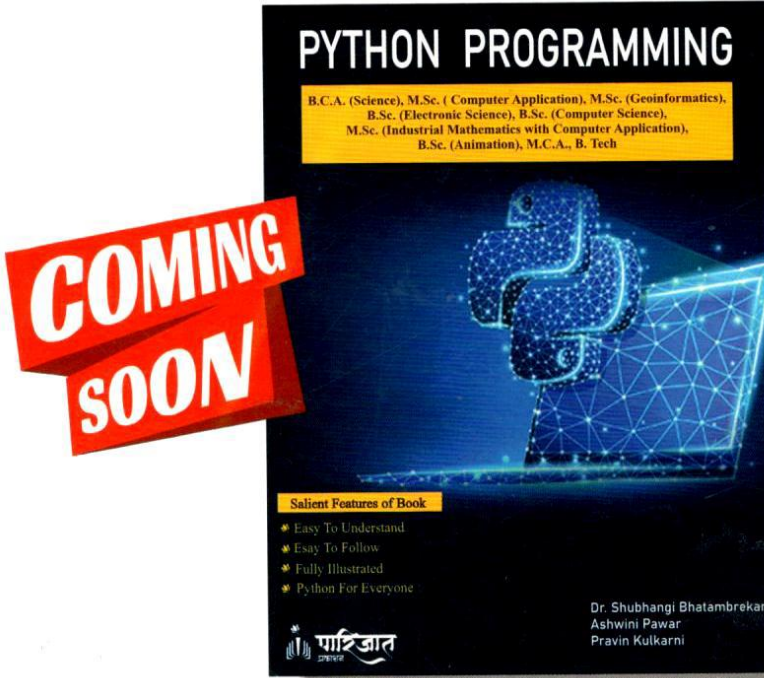
Kannada Sangha Pune
Kaveri College of Arts, Science & Commerce



40, Budhwar Peth, Appa Balwant Chowk,
Jogeshwari Lane, Vishveshwar Society, Pune – 411002
Mobile: +91 9370010756

ALL TEXT BOOKS OF FIRST YEAR B.Sc. (COMPUTER SCIENCE)

- ✦ Advanced 'C' Programming
- ✦ Relational Database Management System
- ✦ Linear Algebra
- ✦ Graph Theory
- ✦ Basic of Computer Organisation
- ✦ Advanced 'C' Programming
- ✦ Methods of Applied Statistics
- ✦ Continuous Probability Distributions & Testing of Hypothesis



Book Available At

YASH BOOKS
Amber Chambers, 28/A,
Budhwar Peth, Appa Balwant
Chowk, Pune-411002.
Tel: 020-24489248

SAKSHAM BOOKS
31, Budhwar Peth, Near
Jogeshwari Lane,
Pune-411002.
Mob: 9923667298;

UNNATI BOOK CENTRE
27 B, Budhwar Peth, Shrinivas
Chambers, Appa Balwant Chowk, Pune-
411002.
Tel: 020-24480940
Email: unnatibookcentre@gmail.com

MAYURESH BOOK DEPOT
Near Jogeshwar Mandir, Appa
Balwant Chowk, Budhwar Peth,
Pune-411002.
Mob: 7720910008.

PARIJAT DISTRIBUTION
40, Budhwar Peth, Appa Balwant
Chowk, Jogeshwari Lane,
Vishveshwar Society,
Pune – 411002
Mob: 9370010756 Email:

✉ - parijatprakashan.pune@gmail.com

📘 - Parijat Prakashan

Price
155/-

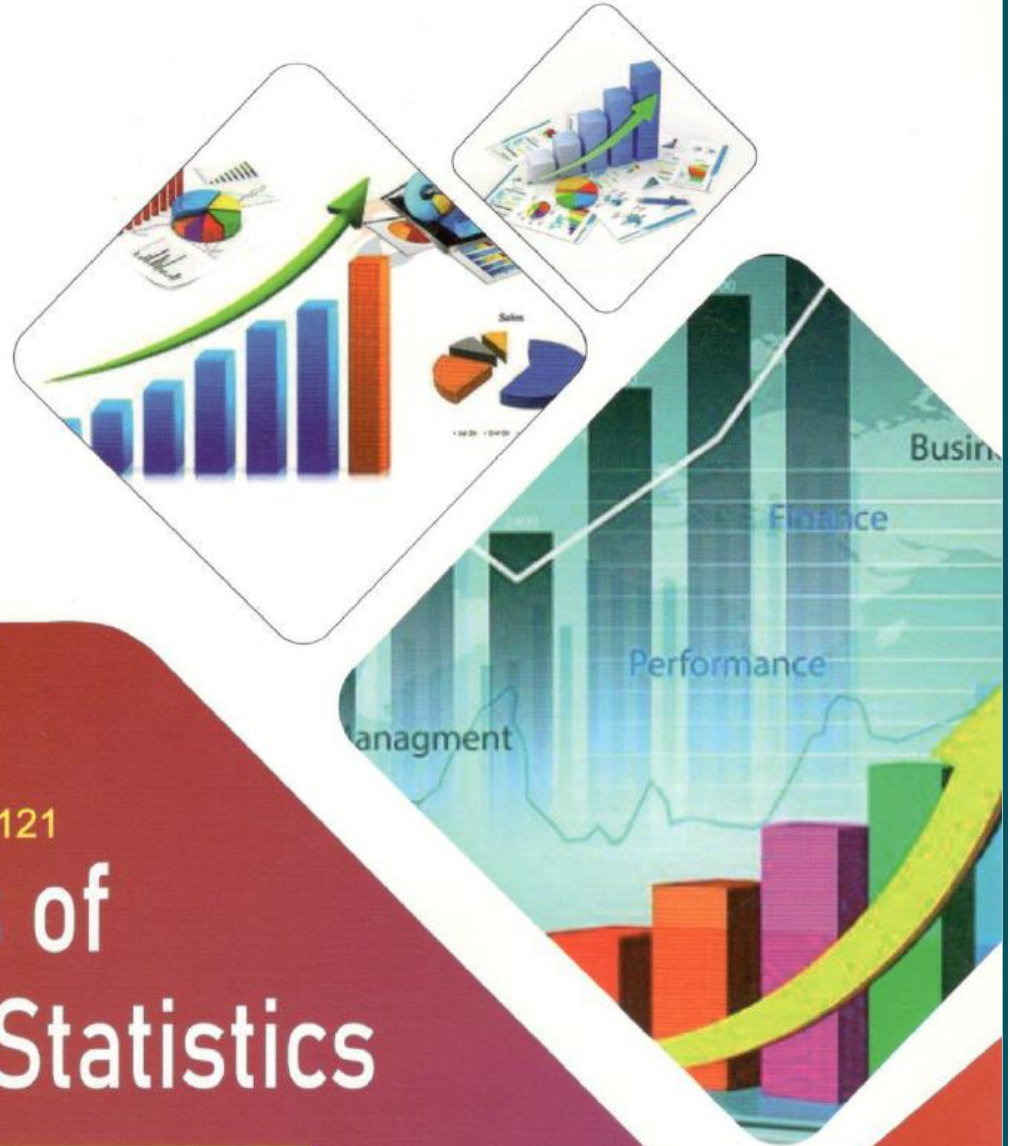


PRINCIPAL

Kannada Sangha Pune's

Kannari College of Arts, Science & Commerce

Strictly as per the New Choice Based Credit System Syllabus of Savitribai Phule Pune University



NEW
SYLLABUS
2019
PATTERN

Paper Code CSST-121

Methods of Applied Statistics

F.Y.B.Sc. (Computer Science) - Statistics

CBCS (2019) Semester - II Paper - I

Salient Features of Book

- ✦ In depth coverage of each topic.
- ✦ Topic wise rich question bank.
- ✦ Solved question paper 2020 SPPU.
- ✦ Specimen question paper as per university pattern for practice.

Dr. Sangita Birajdar
Dr. Jayashree Muley
Shital Jagdale
Ashwini Kale




PRINCIPAL
Kavayitri College of Arts, Science & Commerce

PREFACE

A Text Book of Methods of Applied Statistics For

F.Y. B.Sc. (Computer Science) Semester –II, Statistics Paper I

**Strictly as per New Choice Based Credit System Syllabus
of Savitribai Phule Pune University Year (2019-20)**

Dr. Sangita S. Birajdar

M.Sc., M.Ed., Ph.D. (Statistics)
Asst. Prof. in Statistics
MIT Arts, Commerce & Science
College, Alandi
Pune- 412105
Maharashtra, India

Dr. Jayashree P. Muley

M.Sc., M.B.A (Fin) Ph.D.,
IQAC Coordinator
Ex- Vice Principal
Asst. Prof. in Statistics
KE's Pratibha College
of Commerce & Computer Studies,
Chinchwad,
Pune- 411019,
Maharashtra, India

Mrs. Shital K. Jagdale

M.Sc.
Asst. Prof. in Statistics
SVPM's College of Commerce,
Science & Computer
Education, Malegaon
BK, Baramati- 413115

Ms. Ashwini P. Kale

M.Sc. (Statistics)
Asst. Prof. in Statistics
Kaveri College of Arts, Science &
Commerce
Pune- 411038,
Maharashtra, India



PRINCIPAL
Kannada Sangha Pune
Kaveri College of Arts, Science & Commerce

BOOK NAME: Methods of Applied Statistics

ISBN: 978-93-90769-06-3

First Edition: 2021

Copyright © with Parijat Publication All rights reserved. No part of this publication may be reproduced, distributed or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the publisher, except in case of brief quotations embodied in reviews and certain other non-commercial uses permitted by copyright law.

Publish by:

Parijat Prakashan: 40, Budhwar Peth, Appa Balwant Chowk, Jogeshwari Lane, Vishveshwar Society, Pune - 411002

Printer: S. S. Arts, S. No. 75, Yash Heights, Railkar Mula Pune- 41

Price: 180/-

(Note: Every possible effort has been made to present the information strictly according to the new approved syllabus in this book. Necessary care has been taken to verify the information presented in the book. It is notified that neither the author nor the publisher or seller of the book shall be responsible for any mistake or discrepancy that may have somehow crept in. If any mistake or discrepancy is noticed in the book could be notified to us on our mail parijatprakashan.pune@gmail.com shall be considered for the next editions.)



PRINCIPAL
Kannada Sangha Pune
Kaveri College of Arts, Science & Commerce

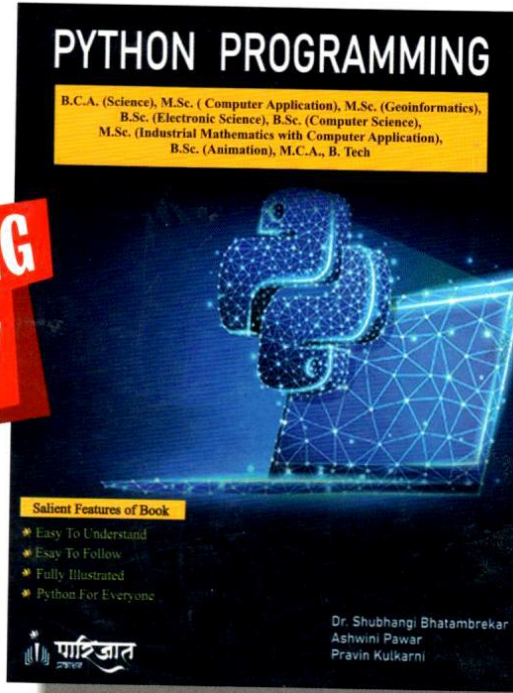


40, Budhwar Peth, Appa Balwant Chowk,
Jogeshwari Lane, Vishveshwar Society, Pune – 411002
Mobile: +91 9370010756

ALL TEXT BOOKS OF FIRST YEAR B.Sc. (COMPUTER SCIENCE)

- Advanced 'C' Programming
- Relational Database Management System
- Linear Algebra
- Graph Theory
- Basic of Computer Organisation
- Advanced 'C' Programming
- Methods of Applied Statistics
- Continuous Probability Distributions & Testing of Hypothesis

**COMING
SOON**



Book Available At

YASH BOOKS Amber Chambers, 28/A, Budhwar Peth, Appa Balwant Chowk, Pune-411002. Tel: 020-24489248	SAKSHAM BOOKS 31, Budhwar Peth, Near Jogeshwari Lane, Pune-411002. Mob: 9923667298;	UNNATI BOOK CENTRE 27 B, Budhwar Peth, Shrinivas Chambers, Appa Balwant Chowk, Pune- 411002. Tel: 020-24480940 Email: unnatibookcentre@gmail.com	MAYURESH BOOK DEPOT Near Jogeshwari Mandir, Appa Balwant Chowk, Budhwar Peth, Pune-411002. Mob: 7720910008.	PARIJAT DISTRIBUTION 40, Budhwar Peth, Appa Balwant Chowk, Jogeshwari Lane, Vishveshwar Society, Pune – 411002 Mob: 9370010756 Email:
--	--	--	--	---

✉ - parijatprakashan.pune@gmail.com

📘 - Parijat Prakashan

**Price
180/-**

ISBN 978-81-947857-2-9



9 788194 785729

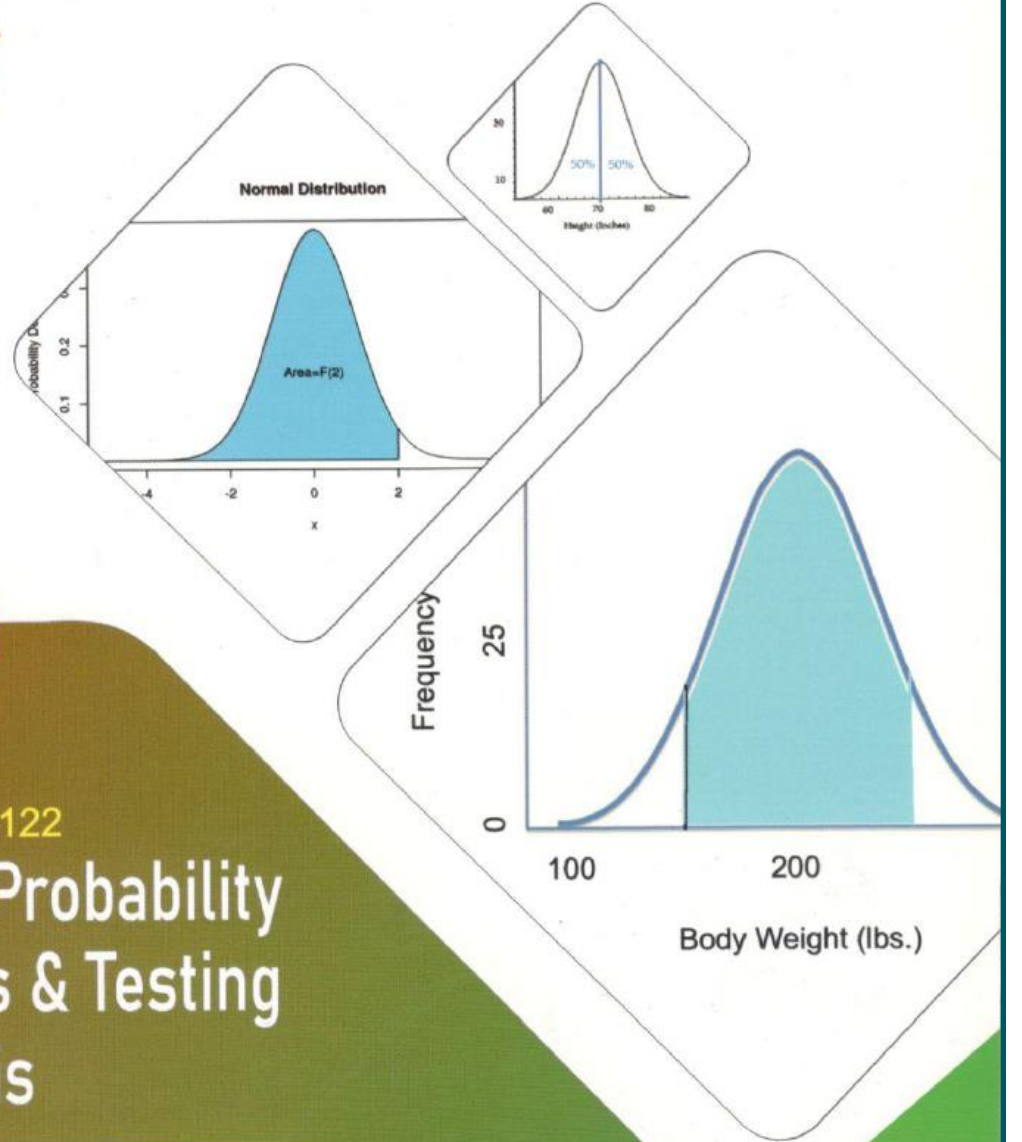


PRINCIPAL

Kannada Sangha Pune's

Kannada Sangha Pune's
Kannada College of Arts, Science & Commerce

Strictly as per the New Choice Based Credit System Syllabus of Savitribai Phule Pune University



NEW
SYLLABUS
2019
PATTERN

Paper Code CSST-122

Continuous Probability Distributions & Testing of Hypothesis

F.Y.B.Sc. (Computer Science) - Statistics

CBCS (2019) Semester - II Paper - II

Salient Features of Book

- ✦ In depth coverage of each topic.
- ✦ Topic wise rich question bank.
- ✦ Solved question paper 2020 SPPU.
- ✦ Specimen question paper as per university pattern for practice.

Dr. Sangita Birajdar
Dr. Jayashree Muley
Shital Jagdale
Ashwini Kale



PRINCIPAL

Kannada Sahitya Akademi
Kannara College of Arts, Science & Commerce

A Text Book of
**Continuous Probability
Distributions & Testing of
Hypothesis**
For

F.Y. B.Sc. (Computer Science) Semester – II, Statistics Paper- II

**Strictly as per New Choice Based Credit System Syllabus of
Savitribai Phule Pune University Year (2019-20)**


Dr. Sangita S. Birajdar
M.Sc., M.Ed., Ph.D. (Statistics)
Asst. Prof. in Statistics
MIT Arts, Commerce & Science
College, Alandi
Pune- 412105
Maharashtra, India

Dr. Jayashree P. Muley
M.Sc., M.B.A (Fin) Ph.D.,
IQAC Coordinator
Ex- Vice Principal
Asst. Prof in Statistics
KE's Pratibha College
of Commerce & Computer
Studies, Chinchwad,
Pune- 411019,
Maharashtra, India

Mrs. Shital K. Jagdale
M.Sc.
Asst. Prof. in Statistics
SVPM's College of Commerce,
Science & Computer
Education, Malegaon
BK, Baramati- 413115
Maharashtra, India

Ms. Ashwini P. Kale
M.Sc. (Statistics)
Asst. Prof. in Statistics
Kaveri College of Arts, Science &
Commerce
Pune- 411038,
Maharashtra, India




PRINCIPAL
Kannada Sangha Pune
Kaveri College of Arts, Science & Commerce

BOOK NAME: Continuous Probability Distributions & Testing Of Hypothesis

ISBN: 978-93-90769-07-0

First Edition: 2021

Copyright © with Parijat Publication. All rights reserved. No part of this publication may be reproduced, distributed or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the publisher, except in case of brief quotations embodied in reviews and certain other non-commercial uses permitted by copyright law.

Publish by:

Parijat Prakashan: 40, Budhwar Peth, Appa Balwant Chowk, Jogeshwari Lane, Vishveshwar Society, Pune - 411002

Printer: S. S. Arts, S. No. 75, Yash Heights, Railkar Mula Pune- 41

Price: 230/-

(Note: Every possible effort has been made to present the information strictly according to the new approved syllabus in this book. Necessary care has been taken to verify the information presented in the book. It is notified that neither the author nor the publisher or seller of the book shall be responsible for any mistake or discrepancy that may have somehow crept in. If any mistake or discrepancy is noticed in the book could be notified to us on our mail parijatprakashan.pune@gmail.com shall be considered for the next editions.)



PRINCIPAL

Kannada Sangha Pune's
Kavari College of Arts, Science & Commerce

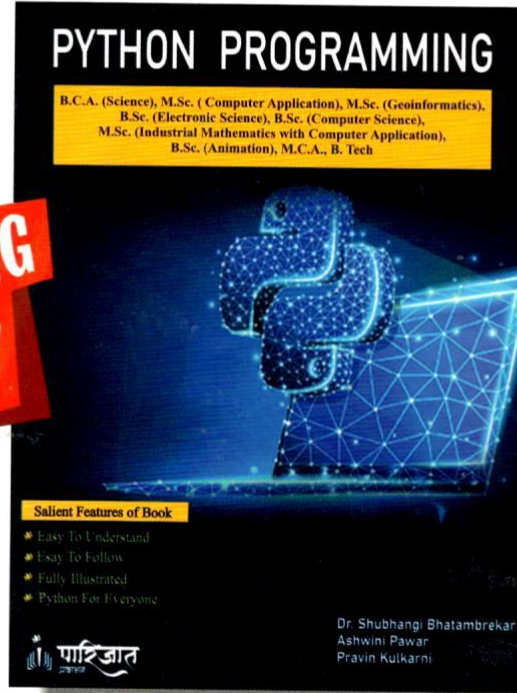


40, Budhwar Peth, Appa Balwant Chowk,
Jogeshwari Lane, Vishveshwar Society, Pune – 411002
Mobile: +91 9370010756

ALL TEXT BOOKS OF FIRST YEAR B.Sc. (COMPUTER SCIENCE)

- 🌸 Advanced 'C' Programming
- 🌸 Relational Database Management System
- 🌸 Linear Algebra
- 🌸 Graph Theory
- 🌸 Basic of Computer Organisation
- 🌸 Advanced 'C' Programming
- 🌸 Methods of Applied Statistics
- 🌸 Continuous Probability Distributions & Testing of Hypothesis

**COMING
SOON**



Book Available At

YASH BOOKS
Amber Chambers, 28/A,
Budhwar Peth, Appa Balwant
Chowk, Pune-411002.
Tel: 020-24489248

SAKSHAM BOOKS
31, Budhwar Peth, Near
Jogeshwari Lane,
Pune-411002.
Mob: 9923667298;

UNNATI BOOK CENTRE
27 B, Budhwar Peth, Shrinivas
Chambers, Appa Balwant Chowk, Pune-
411002.
Tel: 020-24480940
Email: unnatibookcentre@gmail.com

MAYURESH BOOK DEPOT
Near Jogeshwari Mandir, Appa
Balwant Chowk, Budhwar Peth,
Pune-411002.
Mob: 7720910008.

PARIJAT DISTRIBUTION
40, Budhwar Peth, Appa Balwant
Chowk, Jogeshwari Lane,
Vishveshwar Society,
Pune – 411002
Mob: 9370010756 Email:

✉ - parijatprakashan.pune@gmail.com

📘 - Parijat Prakashan

**Price
230/-**

ISBN 978-81-947857-2-9



9 788194 785729



Prakashan
PRINCIPAL
Kannada Sangha, Pune
Kannada College of Arts, Science & Commerce