

Computer Applications in Statistics

(Elements of Statistics)

B. C. A. (Sem. - II)



*As Per
New Syllabus
June 2013*

Prin. Dr. Nitin L. Ghorpade

Prof. Dr. M. M. Jadhav

Prof. Dr. Sadashiv L. Shiragave

Prof. Mrs. Sarika Y. Thakare



SUCCESS PUBLICATIONS

Dr. M. M. Jadhav

This Reference Book of Computer Applications in Statistics
is useful for Pune University & other Universities also.

Computer Applications in Statistics

(Elements of Statistics)

B.C.A. (Sem. - II)

Prin. Dr. Nitin Laxman Ghorpade

Prof. Ramkrishna More Arts, Commerce and Science College, Akurdi, Pune.

• • • • •

Prof. Dr. M. M. Jadhav

Shri Shiv Chhatrapati College Junnar, Pune

• • • • •

Prof. Dr. Sadashiv L. Shiragave

Daund Taluka Arts & Commerce College Daund, Dist - Pune.

• • • • •

Prof. Mrs. Sarika Yogesh Thakare

Indira College of Commerce and Science, Tathawade, Pune.

• • • • •

2013

Price 120/-



SUCCESS PUBLICATIONS

Published by
Mr. Rajesh M. Patne
Success Publications

Radha Krishna Apartment, 535, Shaniwar Peth,
Appa Balwant Chowk, Opp. Prabhat Talkies, Pune - 411 030.
Ph. 24433374, 24434662, 64011289. Mobile : 9325315464.

•••••
Copy Right
With the Publishers

•••••
Printed at
Success Publications

S.No. 30/27, Laxmi Industrial Estate, Near Prabhat News Paper,
Dhayari, Pune-41. Mobile : 9028211751, 9822782186

•••••
Edition
Dec, 2013

•••••
Edited By
Miss. Shilpa Konde Deshmukh

•••••
Typesetting, Layout
Miss. Varsha Lokhande, Miss. Sujata Limgude, Mr. Satish Chaware

•••••
Cover Designing
Mr. Narendra Gumate

•••••
ISBN NO. - 978-93-83414-71-0

No part of this book may be reproduced or copied in any form or by any means [graphic, electronic or mechanical, including photocopying, recording, taping, or information retrieval systems] or reproduced on any disc, tape, perforated media or other information storage device, etc., without the written permission of the publishers.

Every effort has been made to avoid errors or omissions in this book. In spite of this errors may creep in. Any mistake, error or discrepancy noted may be brought to our Notice which shall be taken care of in the next edition. It is Notified that publisher shall not be responsible for any damage or loss of action to anyone of any kind in any manner, therefrom. It is suggested to all the readers, always refer original references wherever necessary.

**Prin. Dr. Nitin Laxman Ghorpade**

M.Com., B.Ed., SET, M.Phil, Ph.D.

Prof. Ramkrishna More Arts, Commerce and Science College, Akurdi, Pune.

Dr. Nitin Laxman Ghorpade is having first class throughout his academic career. His teaching experience covers a span of 21 years at UG and PG level. He is a Principal of Ramkrishna More Arts, Commerce and Science College, Akurdi, Pune. He is chairman of board of studies in statistics & computer application. He is a Research Guide in Pune University. He attended a number of workshops, Seminar, Conferences at National & International level. He has to his credit many text books on commerce subject and one reference book in Accountancy subject. He has to his credit many research papers, articles in National & International reputed journal and conferences. He has won 21 awards for his contribution in relevant field. He is a very popular teacher among the students and staff.

**Prof. Dr. M. M. Jadhav**

M.Com., M.Phil, Ph.D.,

Shri Shiv Chhatrapati College Junnar, Pune

Prof. Dr. M. M. Jadhav had throughout first class Academic Career. He has more than 27 years teaching experience. He attended a number of workshops, Seminar organised by Pune University. He is popular teacher for mathematics, Advanced Costing, and insurance and transport. He has presented several papers at different National & International Level Seminars. He is a research guide for Business Administration, Co-operation and Rural Development and Company Law & Secretarial Practice. He is a faculty member of Commerce. He is a member of B.O.S. He is an Author of several text books for various courses. He is a very popular teacher among the students and staff.

**Prof. Dr. Sadashiv L. Shiragave**

M.Com., M.A., M.Phil., D.H.E., LL.B., Ph.D.

Daund Taluka Arts & Commerce College Daund, Dist - Pune.

Prof. Dr. Sadashiv Laxman Shiragave is the Head of the Department of Business Practices in Daund Taluka Arts & Commerce College Daund, Dist. Pune. He is renowned and popular Professor of Accountancy & Mathematics & Statistics. He is the author of number of books for F.Y./S.Y./T.Y.B.Com. Dr. Sadashiv L. Shiragave is the Member of Board of Studies of Business Practices & Commerce Faculty in Pune University. He is working as a Associate Professor for thirty years. He has attended & participated various National & International Seminars. His Five Research Papers are Published in International Journals. He worked as the Chairman & Member of number of committees in Pune University. At present he is the Chairman of Maharashtra Veers Shiv Sabha, Branch Daund. He has been awarded as 'Best Teacher' by Dr. Manibhai Manav Seva Trust of Urali Kanchan.

**Prof. Mrs. Sarika Yogesh Thakare**

B.Sc, M.Sc, P.G.D.B.M., M.B.S.

Indira College of Commerce and Science, Tathawade, Pune.

Prof. Mrs. Sarika Yogesh Thakare is having throughout first class Academic Career. Her teaching experience covers a span of more than 10 years at graduate level. She is currently working as a Lecturer in Indira College of Commerce and Science, Tathawade, Pune. She has a vast and rich experience in the field of Statistics. She participated in various International, National and State Level Seminars/workshop/Conferences and presented several Research Papers. She is a winner of "Best Paper Presentation Award" at State Level Technical Paper Conference. She is very popular teacher among the students and staff.



SUCCESS PUBLICATIONS

Address : Radha Krishna Apartment, 535, Shaniwar Peth,
Appa Balwant Chowk, Opp. Prabhat Theatre, Pune - 30.
Ph. No. 24433374, 24434662, 64011289, **Mobile :** 9325315464
E-mail : sharpgroup31@rediffmail.com
Website : www.sharpmultinational.com

**PT-
0213**

ISBN 978-93-83414-71-0