# PARADIGM OF 'C' LANGUAGE

Dr. K.P. YADAV Director (Academic & Research) – CSE Dept. IIMT College of Engineering, G.Noida, Uttar Pradesh, INDIA.

### PARADIGM OF 'C' LANGUAGE

Copyright © Publishing Rights® : Dr. K.P. Yadav : VSRD Academic Publishing A Division of Visual Soft India Pvt. Ltd.

### ISBN-13: 978-93-86258-23-6 FIRST EDITION, FEBRUARY 2017, INDIA

Typeset, Printed & Published by: VSRD Academic Publishing (A Division of Visual Soft India Pvt. Ltd.)

**Disclaimer:** The author(s) are solely responsible for the contents of the papers compiled in this book. The publishers or its staff do not take any responsibility for the same in any manner. Errors, if any, are purely unintentional and readers are requested to communicate such errors to the Editors or Publishers to avoid discrepancies in future.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the Publishers & Author.

Printed & Bound in India

### VSRD ACADEMIC PUBLISHING

A Division of Visual Soft India Pvt. Ltd.

#### **REGISTERED OFFICE**

154, Tezabmill Campus, Anwarganj, KANPUR–208003 (UP) (IN) Mb: 99561 27040, Web: www.vsrdpublishing.com, Email: vsrdpublishing@gmail.com

#### MARKETING OFFICE (NORTH INDIA)

Basement-2, Villa-10, Block-V, Charmwood Village, FARIDABAD–121009 (HY)(IN) Mb: 98999 36803, Web: www.vsrdpublishing.com, Email: vsrdpublishing@gmail.com

#### MARKETING OFFICE (SOUTH INDIA)

340, FF, Adarsh Nagar, Oshiwara, Andheri(W), MUMBAI–400053 (MH)(IN) Mb: 99561 27040, Web: www.vsrdpublishing.com, Email: vsrdpublishing@gmail.com

## PREFACE

This book provides a comprehensive study and concpt clearing for B. Tech./ BCA/MCA/ PGDCA students. It is our intent to give the students the best available latest information and concepts on the subject. The organization of the book is organized in such a way that it makes strong foundation and depth knowledge of programming skills through 'C' language.

Since high technology changes rapidly, we have presented the material in a generic manner, unbiased toward particular machine implementations. To pace with technology changes, frequent updates with newer editions become a necessity, and we plan to make revisions every year in future.

22 Jan., 2017

🗷 Dr. K.P.Yadav

# ACKNOWLEDGEMENT

I would like to thank people who guided and supported me during this process. Without their contributions, this work would not have been possible.

I express my sincere gratitude to Prof. Raghu Raj Singh, Director KNIT Sultanpur and Dr. Yashpal Singh, Associate Professor & HOD, BIET Jhanshi, Shri R. P. Yadav, Joint Director Govt. ITI along with my friends, and colleagues for their constructive and insightful help in solving many of the issues. I recognize their efforts, time and significant contributions in making of all this possible.

I am extremely thankful to the renowned authors and researchers whose valuable works have been consulted and discussed in my book.

Last and definitely not the least, I express my deep sense of appreciation to my family members : wife, son, and daughter for their support, cooperation and patience during the completion of my book.

🔊 Dr. K.P.Yadav

# CONTENTS

CHAPTER 1 : ALGORITHMS AND PROGRAM DEVELOPMENT	1
CHAPTER 2 : INTRODUCTION TO 'C'	7
CHAPTER 3 : CONTROL FLOW	27
CHAPTER 4 : ARRAYS AND STRINGS	41
CHAPTER 5 : FUNCTIONS	57
CHAPTER 6 : POINTERS	67
CHAPTER 7 : STRUCTURES AND UNIONS	79
CHAPTER 8 : FILE HANDLING AND I/O	92
REFERENCES	