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Bengaluru**

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

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For V Semester BCA  
As per the Syllabus of  
Bangalore University

# COMPUTER ARCHITECTURE



RASHMI AND VASUDHA



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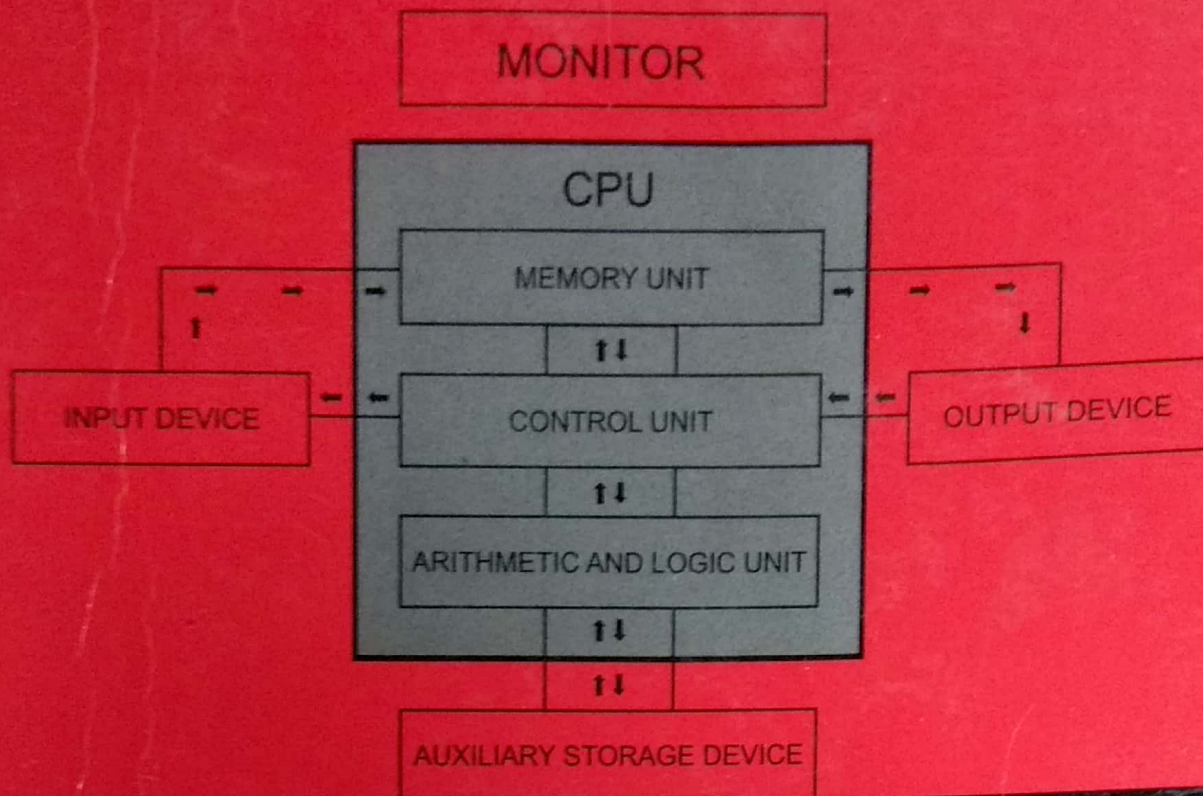
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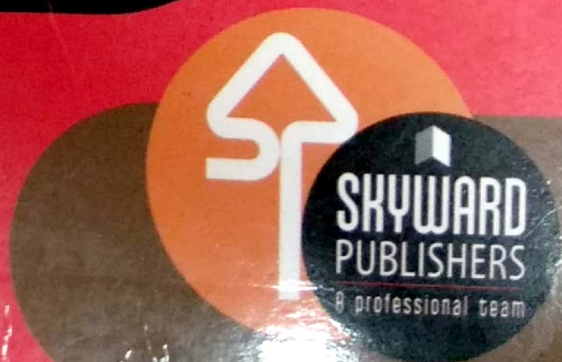
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As per the Syllabus of BCA, BSc, BA, BBM, B.Com, BHM, and other degree courses of Bangalore University.

- Simple and Rich Content.
- 200 Short Questions with Answers.
- 200 Diagrams illustrating the concepts of computers.
- 180 Objective Type Questions with Answers.
- Model and Previous Year Question Papers.

Mithili Devi and Padma Sri





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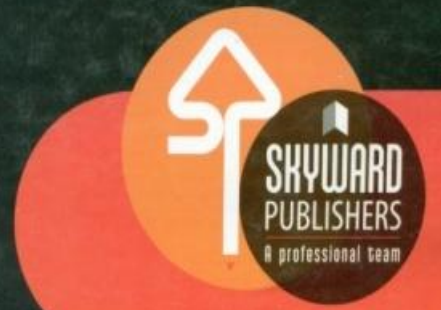


# Database Management Systems

II Semester BCA

As per the Syllabus of Bangalore University

Ashwini S Diwakar and Latha Raju



March

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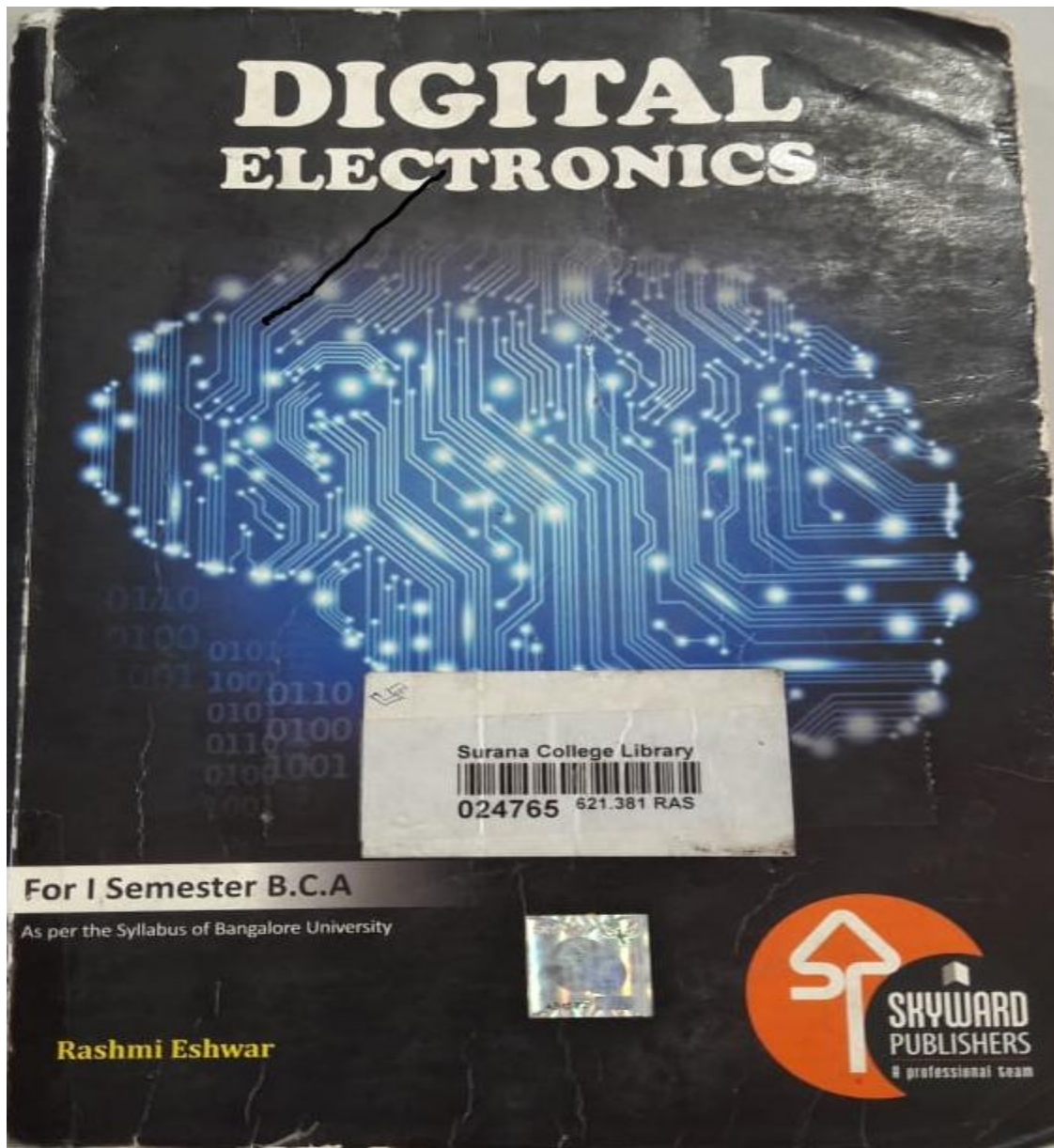
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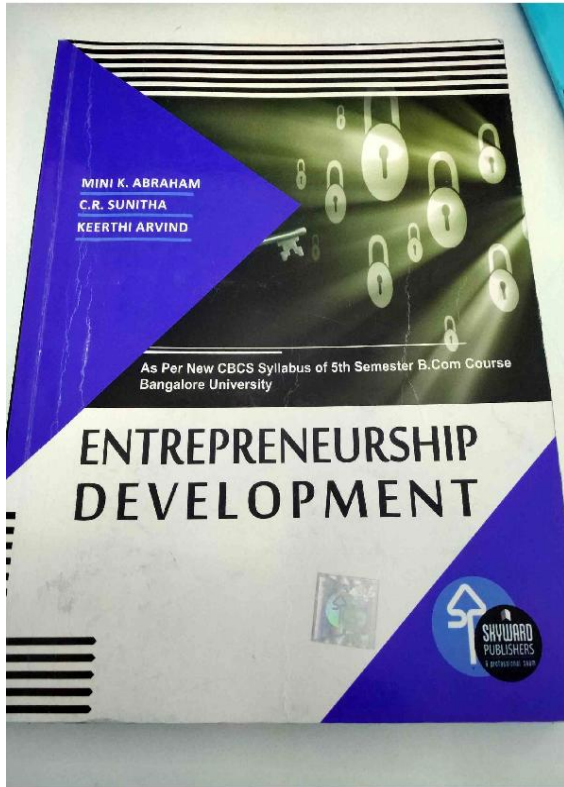
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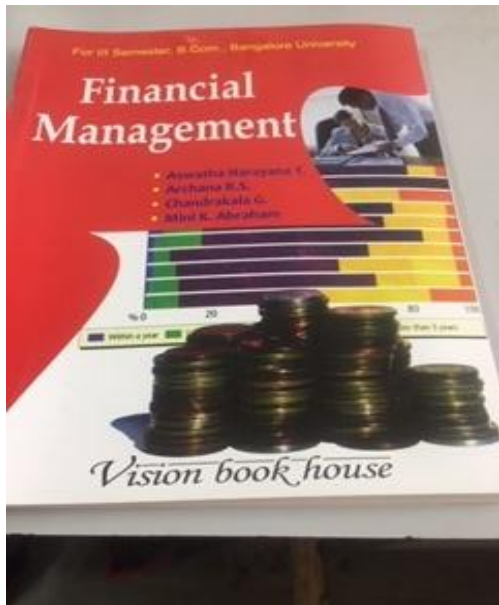
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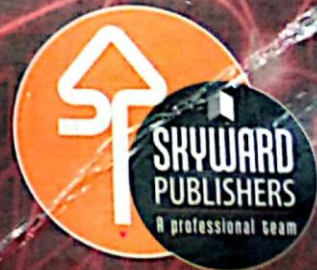


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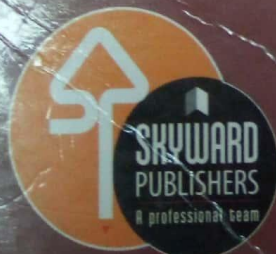
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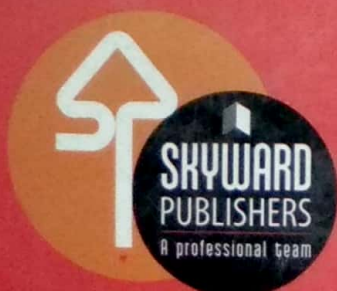
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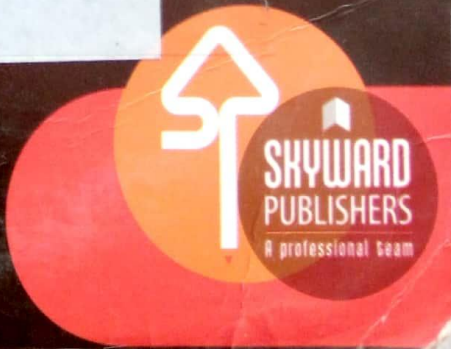


**IV Semester BCA**

As per the syllabus of Bangalore University

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**Vidya and Geetha**





## SALIENT FEATURES OF THE BOOK

- The book is written in a simple manner keeping in mind the level of undergraduate students.
- Commands are explained with lot of examples to provide better understanding.
- Sample outputs are provided with all the commands to illustrate their working.
- Bullet points in every chapter helps in understanding the concepts easily.
- More than 75 shell scripts are included with output.
- Lab manual is provided. Programs are short and simple to understand.
- Practical assignments included to get hands-on experience on UNIX commands.
- Review questions are provided with every chapter.
- Chapter-wise summary is provided for a quick reference.
- Command Index is included which will help to know the commands in a single glance.
- Two model papers and previous year question paper included.
- This book can be used by BCA, BE and MCA students.

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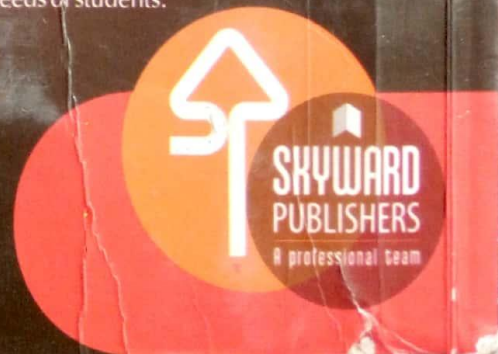
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The authors have written three books for BCA course. Their books have been widely accepted by students.

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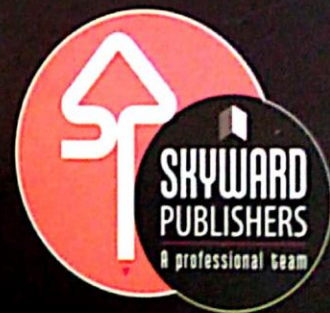


# VISUAL PROGRAMMING

As per New CBCS Syllabus for IV Semester BCA, Bangalore University

Padmageetha B.G

Srikanth. S





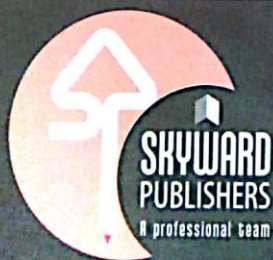
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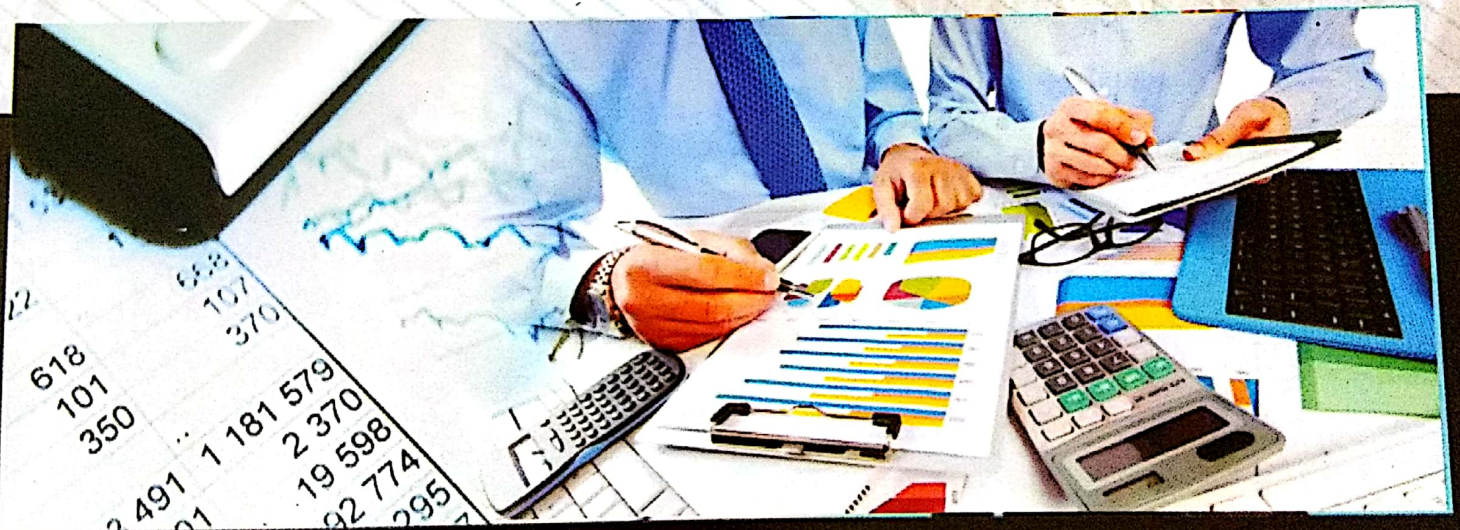
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Syllabus 2014-15

# CORPORATE

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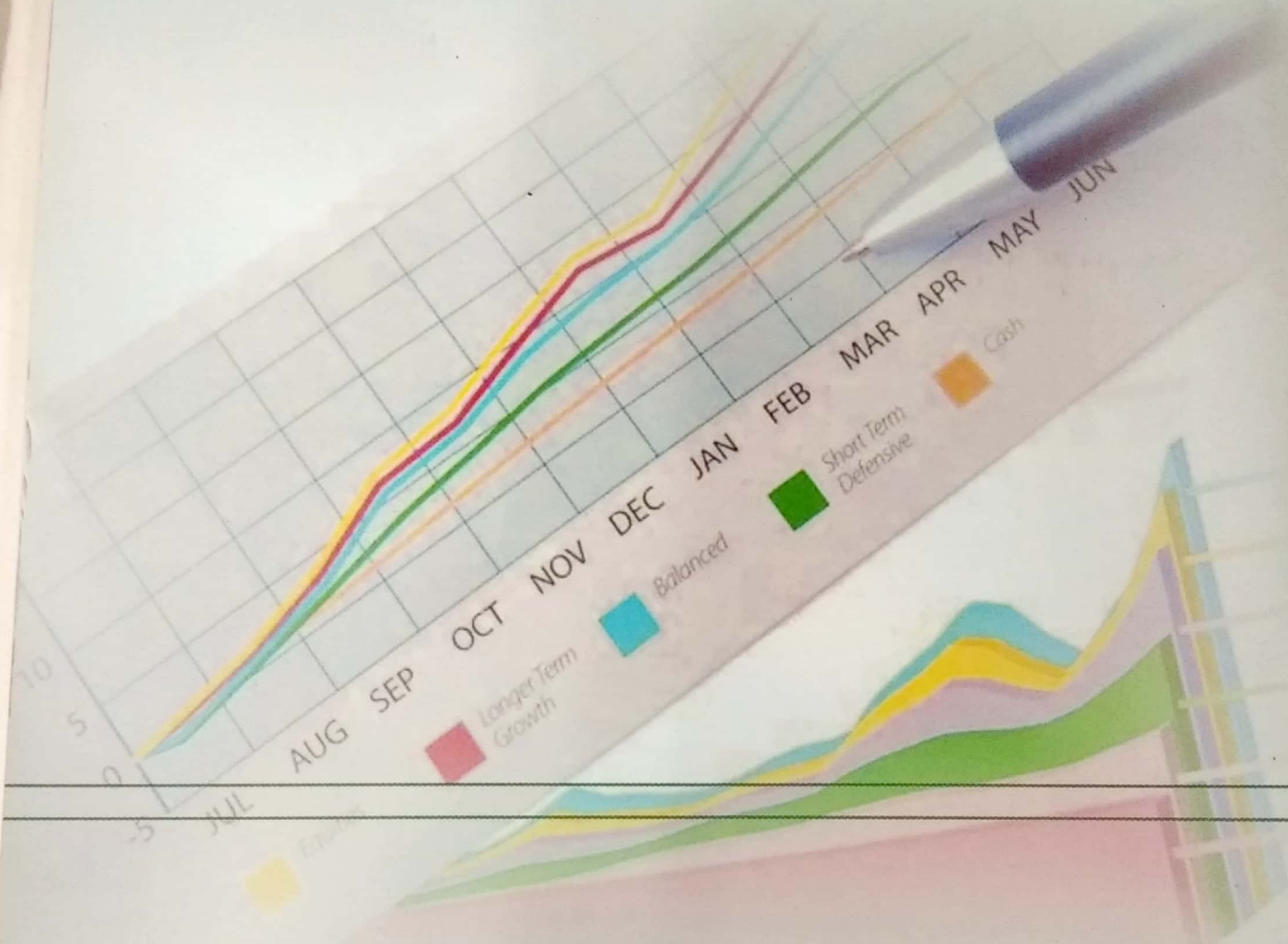
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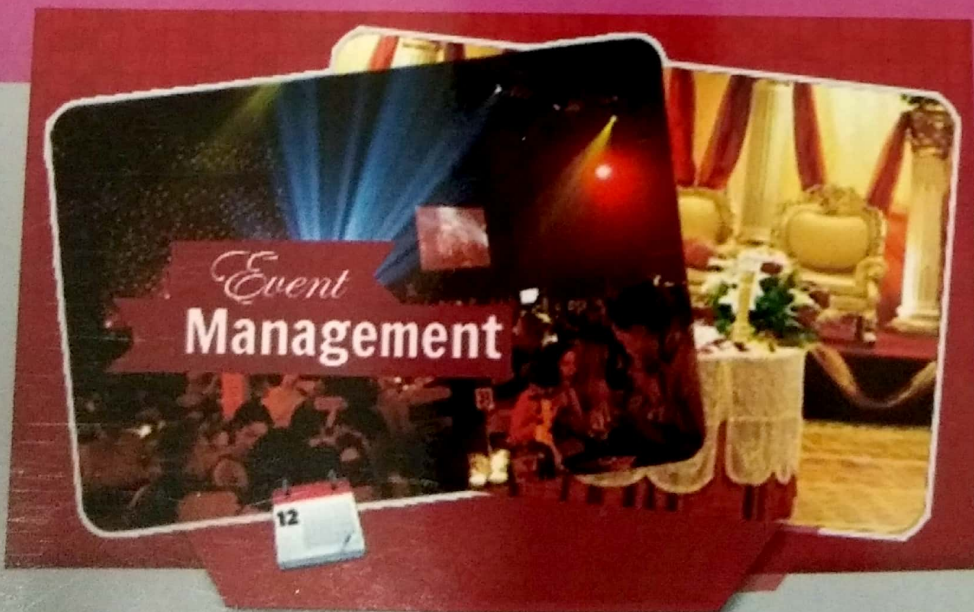
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# EVENT MANAGEMENT

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Mohammed Farooq Pasha  
Muralidhar V.



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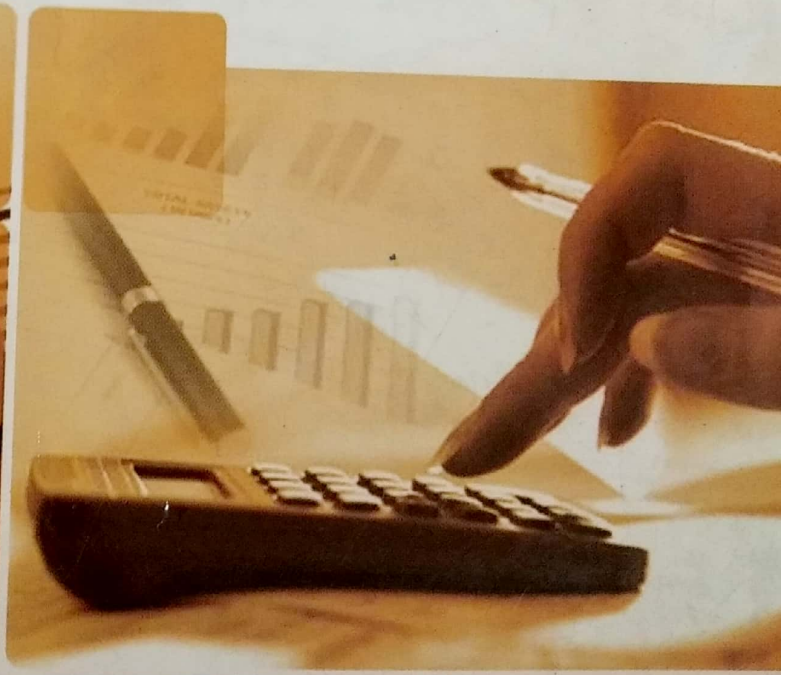
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For BBM, 1st Semester Students of Bangalore University

# Fundamentals of Accounting

T.K. Srinath ■  
Ganesh. N. K. ■  
Muralidhar V. ■  
Syed Rahmathulla ■





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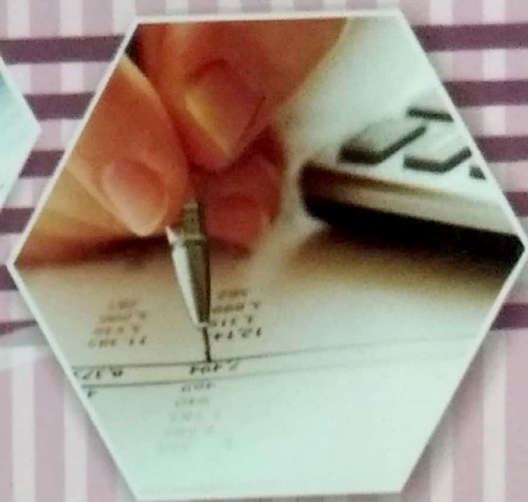
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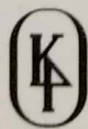
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**Muralidhar V.  
Ganesh N.K.  
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# Enterprise Resource Planning

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# ***Syllabus***

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## **UNIT 1: INTRODUCTION TO ERP 12 Hrs**

Introduction To ERP, Evolution of ERP, What is ERP? Reasons for the growth of ERP, Scenario and Justification of ERP in India, Evaluation of ERP, Various Modules of ERP, Advantage of ERP.

## **UNIT 2: ERP ENVIRONMENT 12 Hrs**

An overview of Enterprise, Integrated Management Information, Business Modeling, ERP for Small Business, ERP for make to order companies, Business Process Mapping for ERP Module Design, Hardware Environment and its Selection for ERP Implementation.

## **UNIT 3: ERP RELATED TECHNOLOGIES 12 Hrs**

ERP and Related Technologies, Business Process Reengineering (BPR), Management Information System (MIS), Executive Information System (EIS), Decision support System (DSS), Supply Chain Management (SCM)

## **UNIT 4: ERP MODULES 12 Hrs**

ERP Modules, Introduction to Finance, Plant Maintenance, Quality Management, Materials Management

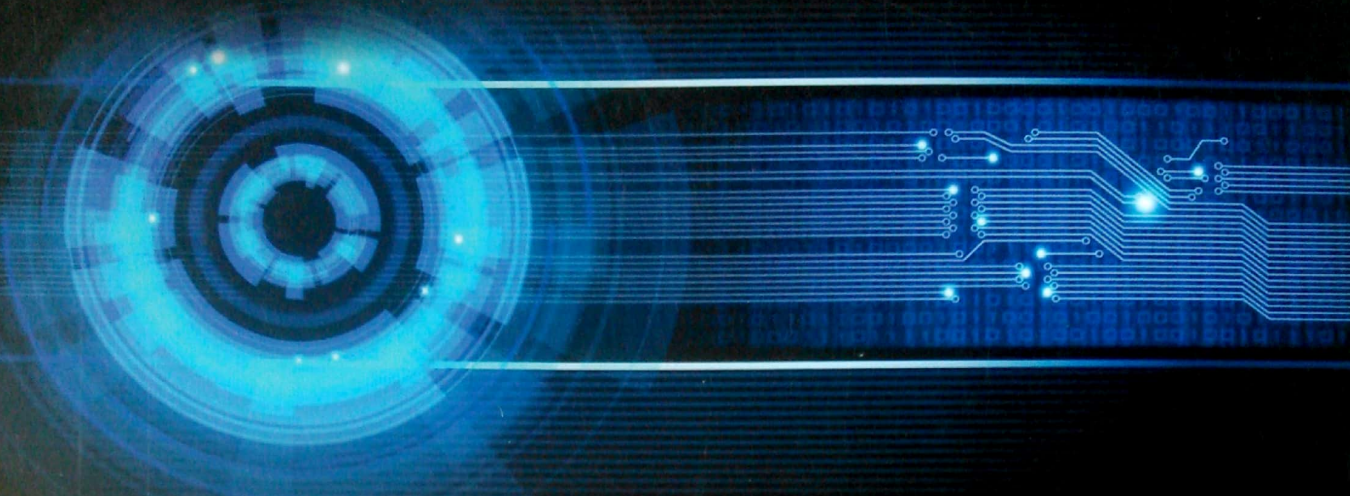
## **UNIT 5: ERP MARKET 12 Hrs**

ERP Market, Introduction, SAP AG, Baan Company, Oracle Corporation, People Soft, JD Edwards World Solutions Company, System Software Associates, Inc. (SSA) QAD, A Comparative Assessment and Selection of ERP Packages and Modules.

### **SKILL DEVELOPMENT:**

1. Prepare a list of companies that provide ERP packages and their features.

As per New CBCS Syllabus for Fifth Semester, BCA,  
Bangalore University w.e.f. 2014-15



# Software Engineering

R. Sreenivas Rao  
Shuaib Ahmed Shariff

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# **Syllabus**

---

## **Unit - I**

**Introduction:** Software Products and Software process, Process models: Waterfall model, Evolutionary Development, Bohemia's Spiral model, Overview of risk management, Process Visibility, Professional responsibility. **Computer based System Engineering:** Systems and their environment, System Procurement, System Engineering Process, System architecture modelling. **Human Factors, System reliability Engineering. Requirements and Specification:** The requirement Engineering Process, The Software requirement document, Validation of Evolution of requirements, Viewpoint – oriented and method based analysis, system contexts, Social and organizational factors. Data flow, Semantic, Objects, models, Requirement Specification, Non functional requirement.

## **Unit - II**

**Software Prototyping:** Prototyping in software process, Prototyping techniques, User interface prototyping. **Software Design:** Design Process, Design Strategies, Design Quality, System Structuring control models, Modular decomposition, Domain Specific architecture.

## **Unit - III**

**Object Oriented & function oriented design:** Objects, object Classes and inheritance Object identification, An object oriented design example, Concurrent Objects, Data flow design Structural decomposition, Detailed Design, A Comparison of design Strategies.

**User interface design:** Design Principles, User System interaction, Information Presentation, User Guidance, Interface Evaluation.

## **Unit - IV**

**Software Reliability and reusability:** Software reliability metrics, Software reliability Specification, Statistical testing, Reliability Growth modeling, Fault avoidance and tolerance, Exception handling and defensive programming , Software development with reuse, Software' development for reuse, Generator based reuse, Application System Portability.

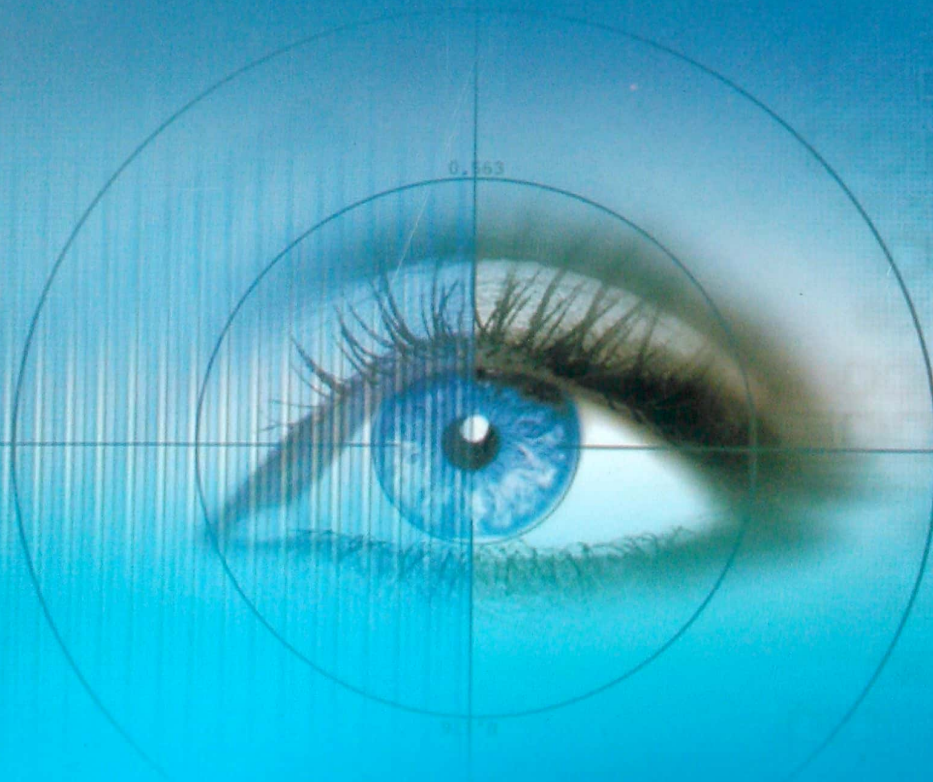
## **Unit - V**

**Software Verification and Validation :** The testing Process, Test Planning and Strategies, Black Box, Structural, interface testing, Program inspections, Mathematically based verification, Static analysis tools, Clean room software development. **Management Issues:** Project management, Quality management, Software cost estimation, Software maintenance.

As per New CBCS Syllabus for Fourth Semester, BCA,  
Bangalore University w.e.f. 2014-15

# Visual Programming

- R. Sreenivas Rao
- Vidhya P.
- Hemanth Kumar K.G.



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# Syllabus

## Unit - I

[12 Hours]

Introduction to Visual Programming: The integrated Development Environment – menu bar, tool bar, form designer, project explorer, properties window, form layout window, The Visual Programming editor. The form object: Properties, events and methods of forms; Properties – Name, Caption, Backcolor, Borderstyle, controlbox, maxbutton, minbutton, moveable, startup position, height, width, left, top, scalemode, window, state; Events – load, unload, Click, Activate, Deactivate, Resize, methods – Show, hide, cls, Unload, print, Controls – Properties and events of different controls such as command buttons, labels, textboxes image controls, timer, horizontal and vertical scroll bars, option buttons, check boxes, frames lists and combo boxes. Predefined Dialog Boxes – MsgBox and InputBO.

## Unit - II

[12 Hours]

Programming: Data types, variables; declaration and scope arithmetic operations, Study of form and code modules, private and public procedures, Main o procedure, Suba and Functions. Mathematical and string Functions; Branching and Looping Statement; If – Then, if – Then – Else and Nested If Statements; Select Case – different forms; For – Next, While – Wend and Do – Loops statements; Arrays – declaration. Static and dynamic arrays. Array and Function, menus and toolbars – Creating menus and toolbars, Working with the menu editor, Designing Multiple Document interface forms. Microsoft common controls.

## Unit - III

[12 Hours]

OOP methods and properties of an object, class Modules, Encapsulation and Inheritance characteristics Dynamic Link Libraries (DLLs) and Windows API; Designing Help files; File handling – Sequential, Random access and Binary files, Database connectivity – DAO and ADO Tables and Queries, ActiveX Data objects.

## Unit – IV

[12 Hours]

Visual C++ Programming: Objects-Classes-VC++Components – Resources – Event Handling – Menus – Dialog Boxes – Importing VBX Controls – Files – MFC File Handling – Document View Architecture – Serialization.

## Unit – V

[12 Hours]

Interfacing Other Applications – Multiple Document Interface (MDI) – Splitter Windows – Exception Handling – Debugging – Object Linking and Embedding (OLE) – Database Application – DLL - ODBC.



For V Semester BBM, Bangalore University

# Computer Application in Business



- Suman M.
- Divakara Reddy N.
- Sreenivas Rao R.

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## ***Syllabus for 5<sup>th</sup> Semester BBM w.e.f 2012-13***

---

### **UNIT 1: INTRODUCTION TO INFORMATION SYSTEM**

Meaning and definition of system, information and information system – business information system – Features of Information system – Uses of Business Information Systems, Users of Information Systems – Components of Business Information Systems.

### **UNIT 2: TYPES OF INFORMATION SYSTEMS**

Management Support Systems (MSS), Management Information systems, Transaction Processing systems, Decision Support Systems (DSS), Group Decision Support System (GDSS), Office Automation system, Process Control systems, Executive Information systems, Levels of management and Information systems.

### **UNIT 3: MS OFFICE**

MS Word – editing a document- Formatting – Spell Checking – Page setup, Using tabs, Tables and other features Mail Merge, MS Excel – building work sheet – data entry in work sheets, auto fill – working with simple problems- formula – statistical analysis, sort, charts, MS Power point – Design, Side Show – Presentation.

### **UNIT 4: DATABASE MANAGEMENT SYSTEMS**

Introduction – Purpose of Database Systems, Views of data, Data Models, Database language, Transaction Management, Storage Management, Database Administrator, Database Users, Overall System Structure, Different types of Database Systems

### **UNIT 5: ACCOUNTING SOFTWARE**

Introduction to Tally, Opening new company, Safety of Accounts or Password, Characteristics, Making Ledger Accounts, writing voucher, voucher entry, making different types of voucher, correcting sundry debtors an sundry creditors accounts, preparation of Trail Balance, Accounts books, Cash Book, Bank Books, Ledger Accounts, Group Summary, Sales Register and Purchase Register, Journal Register, Statement of Accounts, & Balance Sheet.

### **SKILL DEVELOPMENT**

1. Maintain a Record on Practicals.



# COMPUTER APPLICATIONS IN BUSINESS

FOR 4TH SEM BBM COURSE OF  
BANGALORE UNIVERSITY



R. SREENIVAS RAO  
ANAND TANVASHI  
LEENA SINDHU

SUBHAS STORES



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As per New CBCS Syllabus for First Semester, BCA,  
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# Problem Solving Techniques Using C

R. Sreenivas Rao  
Farzana Fathima

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Enter scores H2: 78.23
Enter scores H3: 78.98
323 have the following score
The semester average score
The grade for 323 is B
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Enter student ID, 0 to term
Enter score H1: 50.23
Enter score H2: 60.30
Enter score H3: 45.21
134 have the following score
The semester average score
The grade for 134 is C
Student ID: 3
Enter student ID, 0 to term
Enter score H1: 85.23
Enter score H2: 81.23
Enter score H3: 81.50
134 have the following score
The semester average score
The grade for 134 is A
Student ID: 4 ID, 0 to term
Enter student ID, 34.20
Enter score H1: 74.23
Enter score H2: 78.23
Enter score H3: 10.16
134 have the following scores:
The semester average score for
The grade for 812 is E
Student ID: 5
Enter student ID, 0 to terminate:
Enter student ID, 5
Total number of student: 5
The number of grade A student is: 2
The number of grade B student is: 1
The number of grade C student is: 1
The number of grade D student is: 0
The number of grade E student is: 1
The class average is: 2.88888888
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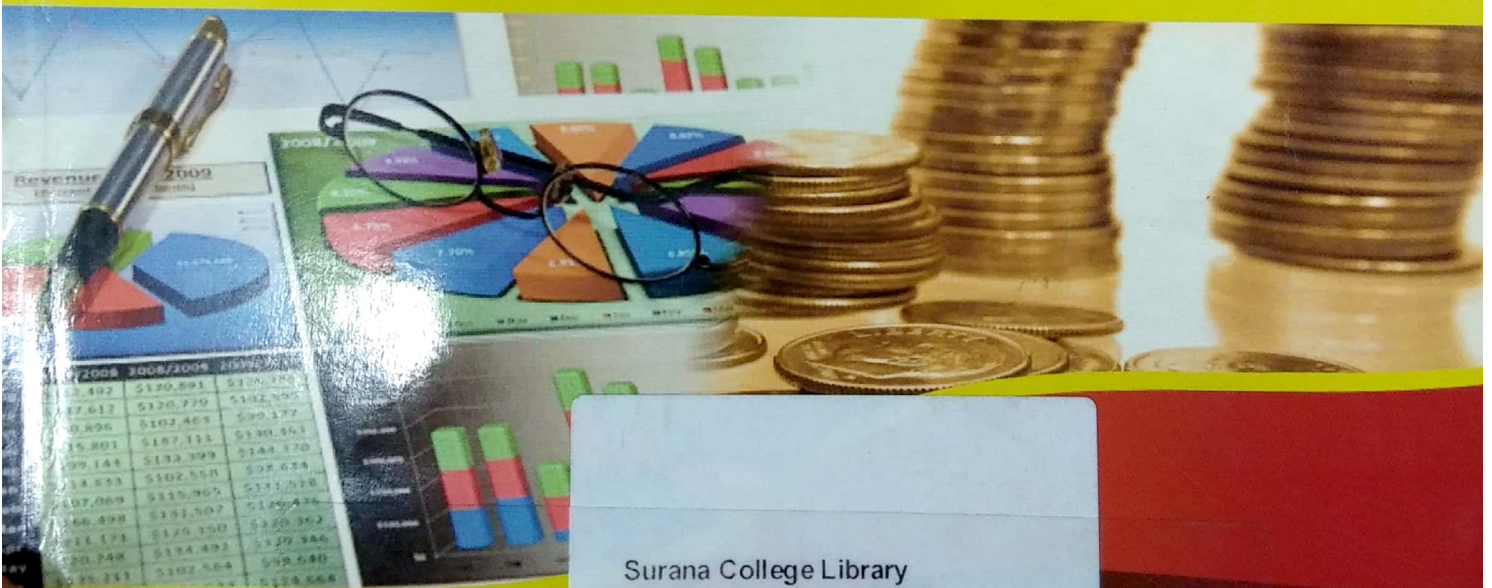


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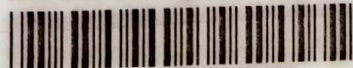
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## BOOK REVIEW

**Chetan S.V.**Lecturer in Psychology,  
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Lecturer in Psychology,  
M.E.S College, Bangalore.

**Book Name:** Core Clinical Cases in Psychiatry  
**Author:** By Tom Clark, Ed Day and Emma C Fergusson  
**Series Editor:** Janesh K Gupta  
**Publisher:** London: Hodder Arnold.  
**Pages:** 149  
**ISBN No.:** 978-1-444-12287-9.  
**Price:** Rs.360.

Psychiatry and Clinical Psychology are closely related fields and share three central areas, among others, viz., psychopathology, psycho-diagnostics and psychotherapy. Since they deal with a variety of cognitive, behavioural and emotional aspects of human beings, theoretical and practical knowledge and expertise are highly essential for professionals entering these fields. Many a times, obtaining practical exposure may be difficult, especially for non-medical students and fresh graduates in India, and it would be a consolation if some practical elements are introduced through a book. 'Core Clinical Cases in Psychiatry' by Clark, Day and Fergusson is one of the few books that deals with clinical case scenarios and nuances of diagnosis, evaluation and treatment in psychiatric practice. The book says, "You've read your textbook and your notes. Now you need to apply your knowledge to real-life clinical situations", thereby suggesting a "problem-solving approach".

Although undergraduate medical students are the target audience for this book, it appears to be highly useful for graduate and post-graduate students of counselling and clinical psychology as well, and it also provides an insight about psychiatry to anyone who is interested in the subject.

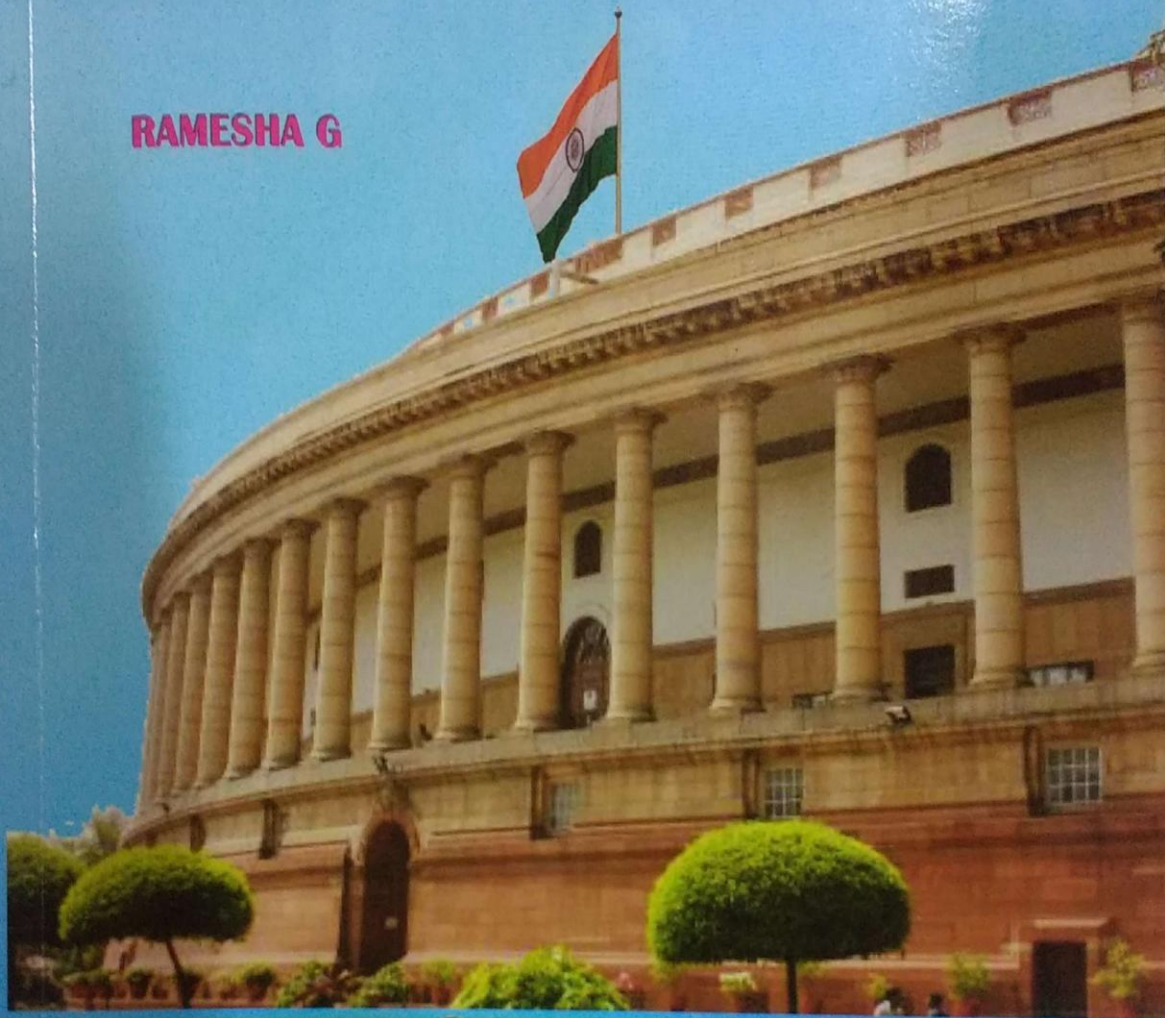
The book contains nine chapters covering most of the areas of psychiatry and each chapter is divided into three main sections, namely, Cases, Key concepts and Objective Structured Clinical Examination (OSCE) counselling cases. Every chapter considers between five and seven cases, and each case requires the reader to answer five questions (except for Chapter 4, as it is specifically concerned with managing chronic disorders). The first question deals with differential diagnosis, the second with history and clinical features and the third with etiological factors. The fourth question is related to the treatment options in terms of physical, psychological & social treatments and the fifth question asks about the prognosis. The key concepts provide necessary theoretical information for better understanding of the cases presented. The OSCE counseling cases explore different approaches in common clinical situations and involve discussions with patients or their caregivers or liaison with other medical specialties. The answers for all the questions asked for each case and the OSCE counseling cases are discussed at the end of every chapter.



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### HIGHLIGHTS OF THIS BOOK

- 👉 Simplified the Concepts
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- 👉 Previous year Question Papers Solved (CBCS Syllabus)



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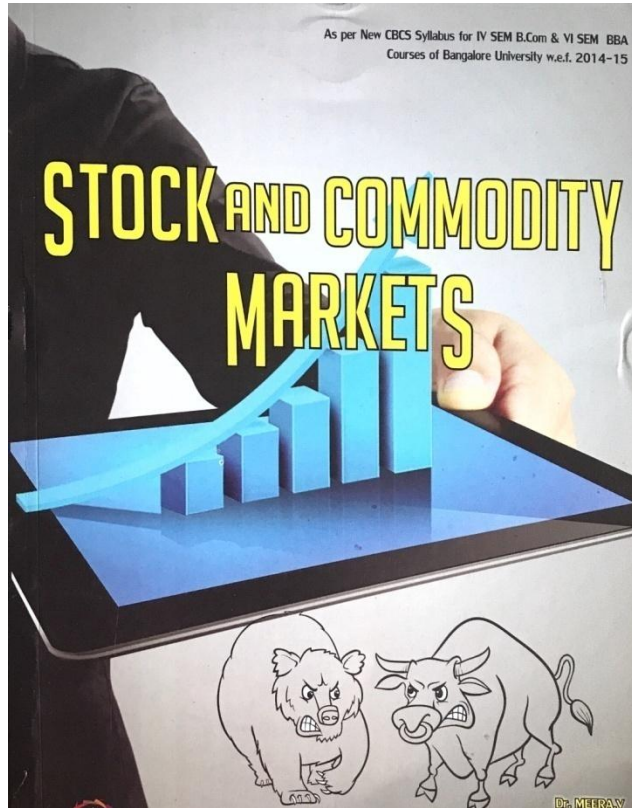
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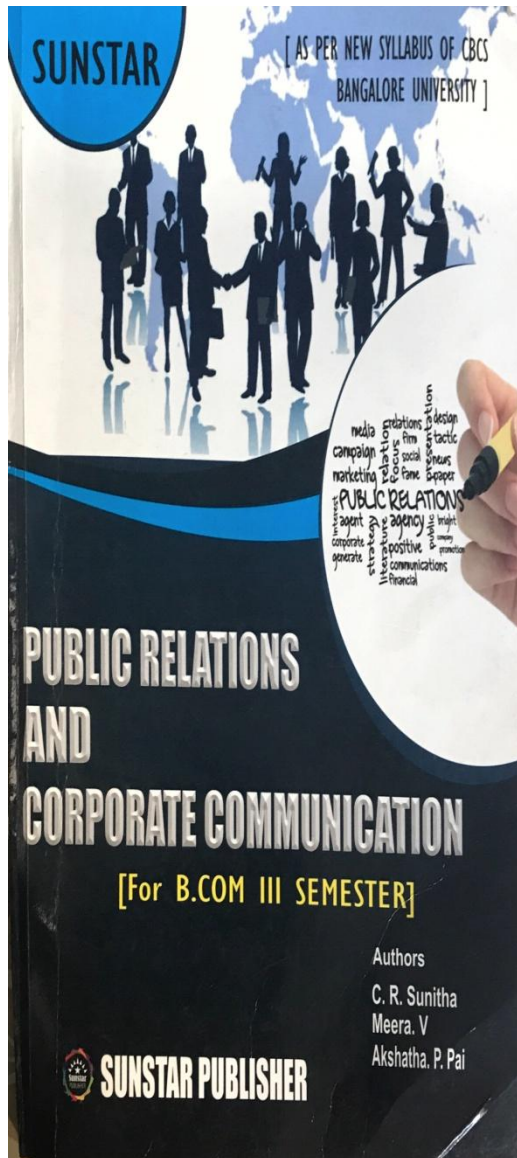
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# DATA STRUCTURES

Mithili Devi. N  
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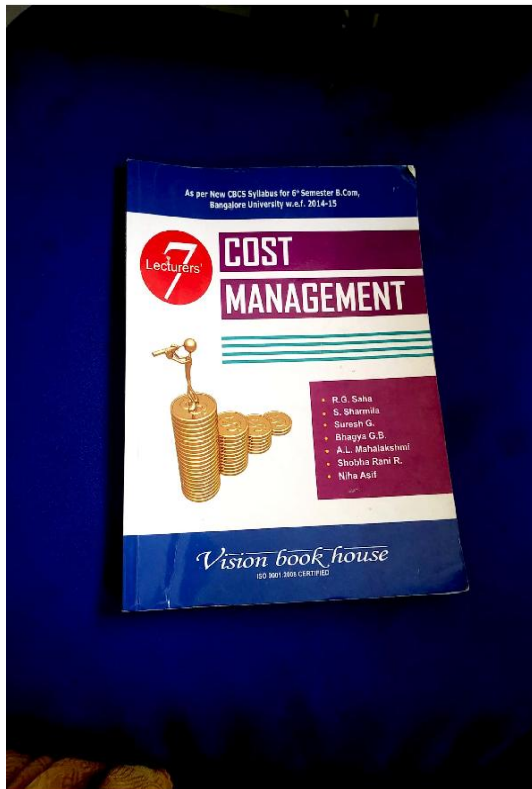
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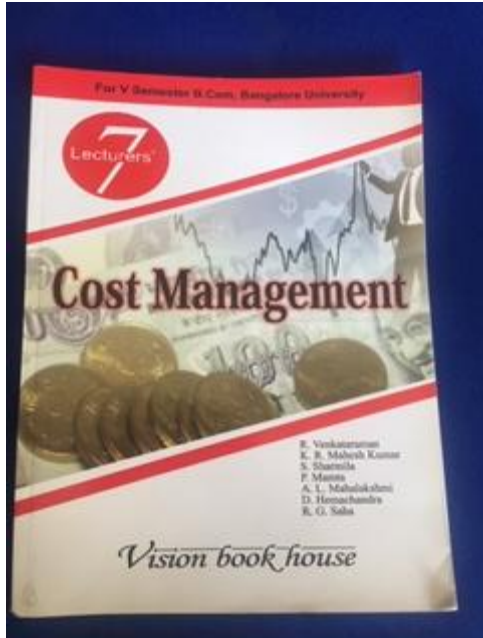
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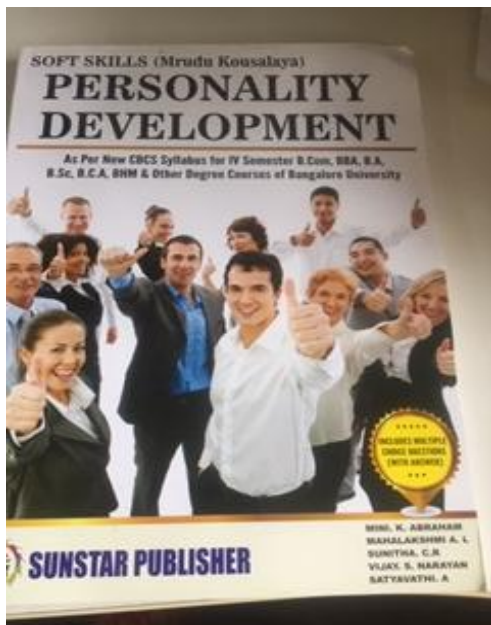
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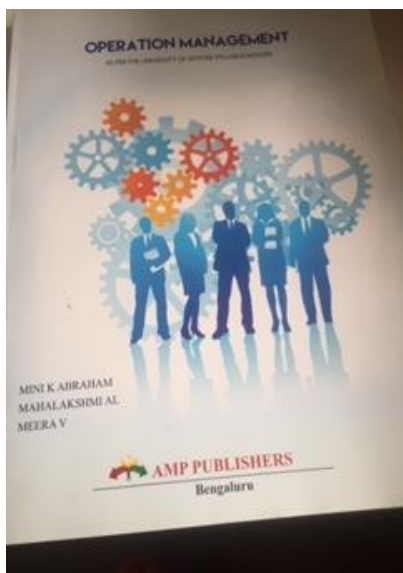


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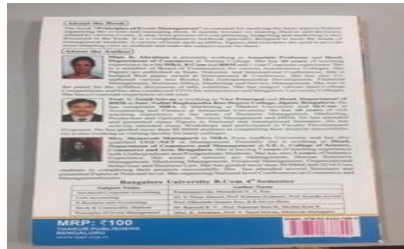
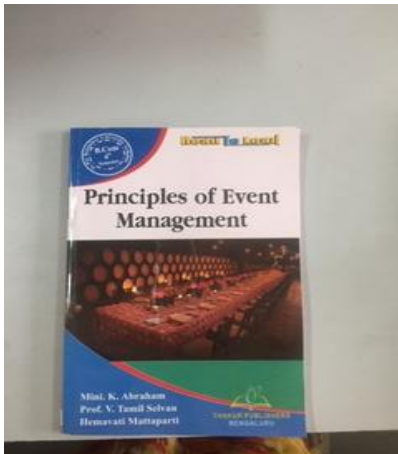
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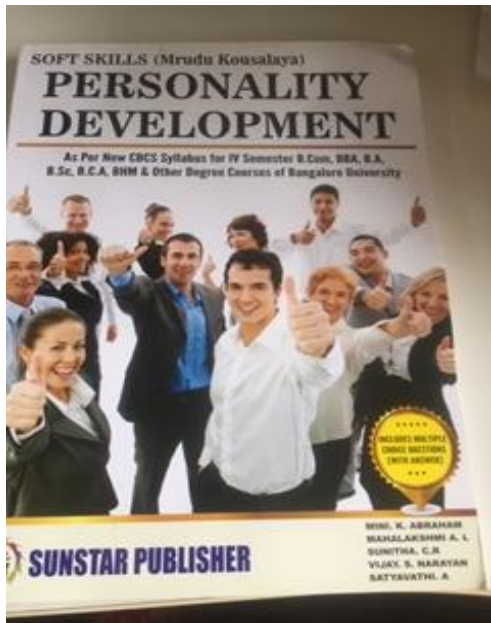
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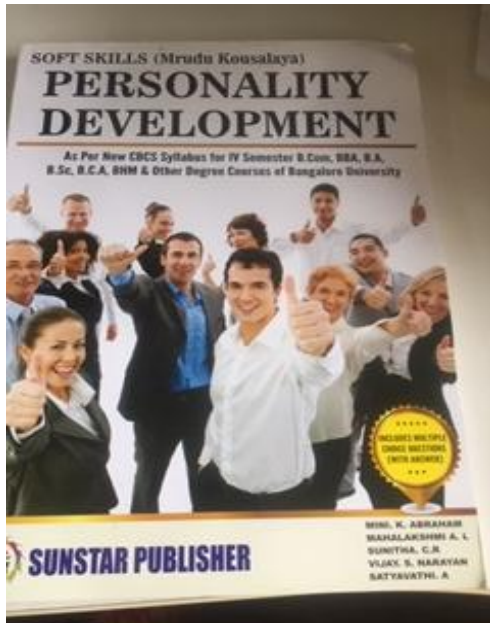






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# Entrepreneurship and Innovation

As Per New CBCS Syllabus for  
VI Semester B.A/ BCA / B.Sc / B.Sc (FAD) /  
5 Years Integrated Course in Biological Science  
of Bangalore University

Sukanya Hegde  
C R Sunitha  
Swapna Rajashekar Reddy





## ABOUT THE AUTHORS



**Sukanya Hegde- MBA, M.Com, DEM, LIII**, is the Founder and Director at NIMS Management Institutions Pvt. Limited. Her ambition to help the unemployed youth and women through suitable jobs and training in the late 90's is the reason for Knowledjobs existence today. Sukanya is driven by her responsibility for the society. She has trained and placed thousands of needy men and women. Through her extensive corporate network, social network, television and radio programs, Sukanya Hegde is also a noted educationist, trainer, counselor and a career guide. She is the Principal at INIMS Degree College affiliated to Bangalore University and Director at Knowledjobs HR Solutions Private Limited. She holds a Masters in

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# Entrepreneurship & Innovation

(As per New CBCS Syllabus VI Semester BA/BCA/B.Sc(FAD)/  
5 Years Integrated course in Biological Science of Bangalore University)

By

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Principal  
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**Dedicated to**

**Almighty God, Our Parents,  
Our Teachers & Students**

**-C.R. Sunitha**

**Dedicated to**

**My Mother Smt. Meera and Father Shri Kamudas Desai**

**Dedicated in the memory of my**

**Mother in Law Smt. Savitri Hegde**

**-Sukanya Hegde**



## **ACKNOWLEDGEMENT**

I am pleased to author this book. I would like to thank many people for rendering their assistance to complete this book.

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I personally thank my colleagues for supporting and motivating me to do this work.

I also thank my family for being co-operative throughout this tedious process.

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**C.R.Sunitha**

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I like to thank the almighty who endowed his grace and mercy in carrying out this work. I would like to extend my thanks to my colleagues for supporting me to complete this work

I thank my family for being co-operative throughout this process.

**Swapna Rajashekar Reddy**

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## **ABOUT THE BOOK**

Many changes that affect business can occur within any sector at any given time and thus the organizations must have the ability and flexibility to innovate and respond effectively.

One of the key to successful business is being able to come up with new ideas to keep operations, products and services fresh.

The objective of the book is to focus on Entrepreneurship, traits, innovation, creativity, enterprise and so on.

This book also highlights on the various other topics like Business plan, its format, feasibility study, finance and its related areas.

An attempt is made to disclose various facts relating various topics and to assist students to enhance their knowledge and is student friendly. We do not claim the originality of the book. We have made use of the various manual, publications, reports, and sites for the latest data. Yet this book has the originality in its content and presentation. This book is is drafted as per the University syllabus.



# SYLLABUS

## 1. Overview of Entrepreneurship

(19 Hrs)

Concept of Entrepreneurship and Entrepreneur-Nature and Importance-Benefits and potential risks of Entrepreneurship-Traits, qualities and competencies of an Entrepreneur - Types of Entrepreneurs - Role of technology in contemporary business environment - Ethics and Entrepreneurship. Govt. of India initiatives like Make in India, Start - up India, Mudra Bank etc.

## 2. Overview of Innovation

(14 Hrs)

Meaning and Importance - Difference with Creativity, Invention and Discovery - Process - Typology - Innovation in Action like lateral thinking, out of box thinking, Disruptive ideas - Case Studies on Innovative business ideas like Red bus, Flip kart, Ola, Big Basket etc.,

## 3. New Venture Creation

(9 Hrs)

New Ideas and opportunities: Developing business ideas, evaluating the opportunity - Feasibility analysis - Developing business model.

Business plan - Meaning, significance and contents - Formulation and Presentation - Common errors - Preparation of project report.

Sources of finance: Traditional and Non-traditional sources - Venture capitalists, Angel investors, Private equity cash.



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Dr. Nagaratna Hegde**

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१.१.२. विचाराणाम् आदानप्रदानमाध्यमं भाषा ।	
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# OPERATION RESEARCH

As per New CBCS Syllabus for IV Semester BCA, Bangalore University

K. Balaji



## SYLLABUS

<b>Unit 1: Operations Research &amp; Linear Programming Problems</b>	<b>13 hours</b>
Linear Programming Problems: Origin and development of operations research, Linear Programming Problem –formulation of Linear Programming problem, Graphical solution, Theory of simplex method, Use of artificial variables and their solution.	
<b>Unit 2: Transportation Problem</b>	<b>13 hours</b>
Transportation Problem: Mathematical formulation of transportation problem, Initial basic Feasible solution, North West corner rule, Matrix minima method, Vogel's approximation method, MODI method to find optimal solution.	
<b>Unit 3: Assignment Problem</b>	<b>13 hours</b>
Assignment Problem: Mathematical formulation of an Assignment problem, Assignment algorithm, Hungarian Method to solve Assignment Problem.	
<b>Unit 4: CPM / PERT</b>	<b>13 hours</b>
Network Analysis: Basic components of Network, Rules for drawing Network diagram, Time calculation in Networks, Critical Path Method and PROJECT Evaluation and Review Techniques, Algorithm and Flow chart for CPM and PERT.	
<b>Unit 5: Game Theory</b>	<b>13 hours</b>
Theory of Games: Two –person Zero –sum Games, the maximin and Minimax principle, Saddle point and value of the Game, Game without saddle points, mixed strategies, solution for 2X2 games, Graphical method Dominance property.	

### ABOUT THE AUTHOR



K. Balaji, is currently serving as Assistant Professor in the department of computer applications - SURANA COLLEGE, Bangalore. He has over 11 years of teaching experience in teaching post graduate students. His subject area expertise includes Operations Research, Data Mining, Database Management Systems, Network Management, Information Security, Computer Graphics and many more.

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