

LIBRARY AND INFORMATION RESOURCE CENTRE
LIST OF UG, PG BOOKS ,CDs AND PROJECT REPORTS

UGBOOKS

PGBOOKS

CDS

PROJECTREPORTS

UGBOOKS

512.72 NUMBER THEORY

1] ELEMENTARY NUMBER THEORY

NOIDA : PEARSON , 2015

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512.72 ROS

P. What is Number Theory?

1. The Integers.

Numbers and Sequences.

Sums and Products.

Mathematical Induction.

The Fibonacci Numbers.

2. Integer Representations and Operations.

Representations of Integers.

Computer Operations with Integers.

Complexity of Integer Operations.

3. Primes and Greatest Common Divisors.

Prime Numbers.

The Distribution of Primes.

Greatest Common Divisors.

The Euclidean Algorithm.

The Fundamental Theorem of Arithmetic.

Factorization Methods and Fermat Numbers.

Linear Diophantine Equations.

4. Congruences.

Introduction to Congruences.

Linear Congruences.

The Chinese Remainder Theorem.

Solving Polynomial Congruences.

Systems of Linear Congruences.

Factoring Using the Pollard Rho Method.

5. Applications of Congruences.

Divisibility Tests.

The perpetual Calendar.

Round Robin Tournaments.

Hashing Functions.

Check Digits.

6. Some Special Congruences.

Wilson's Theorem and Fermat's Little Theorem.

Pseudoprimes.

Euler's Theorem.

7. Multiplicative Functions.

The Euler Phi-Function.

The Sum and Number of Divisors.

Perfect Numbers and Mersenne Primes.

Mobius Inversion.

Partitions.

8. Cryptology.

Character Ciphers.

Block and Stream Ciphers.

Exponentiation Ciphers.

Knapsack Ciphers.

Cryptographic Protocols and Applications.

9. Primitive Roots.

The Order of an Integer and Primitive Roots.

Primitive Roots for Primes.

The Existence of Primitive Roots.

Index Arithmetic.

Primality Tests Using Orders of Integers and Primitive Roots.

Universal Exponents.

10. Applications of Primitive Roots and the Order of an Integer.

Pseudorandom Numbers.

The ElGamal Cryptosystem.

An Application to the Splicing of Telephone Cables.

11. Quadratic Residues.

Quadratic Residues and nonresidues.
The Law of Quadratic Reciprocity.
The Jacobi Symbol.
Euler Pseudoprimes.
Zero-Knowledge Proofs.

12. Decimal Fractions and Continued.
Decimal Fractions.
Finite Continued Fractions.
Infinite Continued Fractions.
Periodic Continued Fractions.
Factoring Using Continued Fractions.

13. Some Nonlinear Diophantine Equations.
Pythagorean Triples.
Fermat's Last Theorem.
Sums of Squares.
Pell's Equation.
Congruent Numbers.

14. The Gaussian Integers.
Gaussian Primes.
Unique Factorization of Gaussian Integers.
Gaussian Integers and Sums of Squares.

519 APPLIED MATHEMATICS

2] APPLIED MATHEMATICS IV: INFORMATION TECHNOLOGY

MUMBAI : P JAMNADAS , 2018

519 KUM/KUM

Prerequisite
Prime Numbers
Euclidean Algorithm
Modular Arithmetic
Solvability of Quadratic Congruence
Random Variables
Some standard distributions
Large Sample Tests
Small Sample Tests
Correlation
Regression
Graphs
Eulerian and Hamiltonian Graphs
Trees
Planar Graphs
Some Algebraic Structures
Equivalence Relations and Posets
Lattices

519.3 OPERATIONS RESEARCH

3] CASE STUDIES IN OPERATIONS RESEARCH: APPLICATIONS OF OPTIMAL DECISION MAKING

INTERNATIONAL SERIES IN OPERATIONS RESEARCH AND MANAGEMENT SCIENCE
NEEW YORK : SPRINGER , 2015

R

519.3 MUR

26210

- 1 Intelligent Modeling Essential to Get Good Results: Container Storage Inside a Container Terminal
Katta G. Murty
- 2 Diesel Locomotive Fueling Problem (LFP) in Railroad Operations Bodhibrata Nag and Katta G. Murty
- 3 Organizing National Elections in India to Elect the 543 Members of the Lok Sabha Bodhibrata Nag and Katta G. Murty
- 4 Procurement, Production and Marketing at Supply-Driven Milk and Milk Products Cooperative
Omkar D. Palsule-Desai and Katta G. Murty
- 5 DSS (Decision Support System) for Allocating Appointment Times to Calling Patients at a Medical Facility Adel Alaeddini and Katta G. Murty
- 6 Transportation–Location Problem for a Solar Stove Distributing Nonprofit Organization Gemma Berenguer, Amber Richter and Zuo-Jun (Max) Shen
- 7 Designing Earth Dams Optimally G. S. R. Murthy, Katta G
- 9 Optimizing the Design of Water Distribution Networks Using Mathematical Cristiana Bragalli, Claudia D’Ambrosio, Jon Lee, Andrea Lodi and Paolo Toth
- 10 Wood Inventory Management in Paper Industry G. S. R. Murthy, A. L. N. Murthy and Katta G. Murty
- 11 Optimizing the Design of Heat Exchanger Networks in Crude Oil Refineries
Majid M. Al-Gwaiz and Katta G. Murty
- 12 Optimizing the Allocation of Cuboidal Boxes to Cuboidal Compartments for Storage in a Warehouse . .
G. S. R. Murthy, A. L. N. Murthy and Katta G. Murty
- 13 Optimal Intake and Routing of Floating Oil Rigs in the North Sea Dag Haugland and Bjørn Peter Tjøstheim
- 14 Addressing the Peak Power Problem Through Thermal Energy Storage Wesley Cole, JongSuk Kim, Kriti Kapoor and Thomas Edgar
- 15 Optimal Flight Planning for a Jet Aircraft Harris McClamroch and Taeyoung Lee
- 16 Freight Transport by Rail Katta G. Murty, Bodhibrata Nag and Omkar D. Palsule-Desai
- 17 Cutting Stock Problems in the Paper and Sheet Metal Industries G. S. R. Murthy and Katta G. Murty
- 18 Inventory Management in Blood Banks Harshal Lowalekar and N. Ravichandran
- 19 Assembling Cells in Wet Cell Traction Batteries that Power
Forklifts G. S. R. Murthy and Katta G. Murty
- 20 Giving Appointments to Patients for Surgeries, and Scheduling Surgeries to Operating Rooms in a Day Katta G. Murty, Weidong Chen and Mary Goulet Duck
- 21 The Satellite Downlink Scheduling Problem: A Case Study of RADARSAT-2 Daniel Karapetyan, Snezana Mitrovic-Minic, Krishna T. Malladi and Abraham P. Punnen
- 22 An Integer Programming Model for the Ferry Scheduling Problem Daniel Karapetyan and Abraham P. Punnen

658.562 QUALITY CONTROL

4] QUALITY MANAGEMENT AND RELIABILITY

NEW DELHI : KHANNA PUBLISHERS , 2014

658.562 SHA

26204

*Quality concepts *Inspection *Acceptance sampling and O.C. Curves *Measurement and testing
*Quality planning *Quality improvement *Organist for quality *ISO-9000 quality management system
*Control of quality and quality assurance *Quality information systems *Total quality management
*Statistical concept *Probability theory *Correlation and regression analysis *Process capability
*Theoretical (Probability) Distribution *Statistical Process Control and Control Chart *Reliability
engineering *Designing for reliability *Value engineering *Maintenance - A reliability improvement
measure *Equipment replacement *Life-testing and reliability *System reliability *Reliability improvement
*Objective type questions

PGBOOKS

004.11 HIGH PERFORMANCE COMPUTING

1] HIGH PERFORMANCE COMPUTING: PARADIGM AND INFRASTRUCTURE

WILEY INTERSCIENCE

NEW JERSEY : JOHN WILEY , 2006

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004.11 YAN/GUO

PART 1. PROGRAMMING MODEL.
PART 2. ARCHITECTURAL AND SYSTEM SUPPORT.
PART 3. SCHEDULING AND RESOURCE MANAGEMENT.
PART 4. CLUSTERS AND GRID COMPUTING.
PART 5. PEER-TO-PEER COMPUTING.
PART 6. WIRELESS AND MOBILE COMPUTING.
PART 7. HIGH PERFORMANCE APPLICATIONS.

005.8 COMPUTER SECURITY

2] SCENE OF THE CYBERCRIME

BURLINGTON : ELSEVIER , 2008

R

005.8 CRO

Facing the cybercrime problem head on
The evolution of cybercrime
Understanding the people on the scene
Understanding the technology
The computer investigation process
Computer forensic software and hardware
Acquiring data, duplicating data and recovering deleted files

Updated on 03/04/2018

iPod, Cell phone, PDA and Blackberry forensics
Understanding E-mail and Internet crimes
Understanding network intrusions and attacks
Passwords, vulnerabilities and exploits
Understanding cybercrime prevention
Implementing system security
Implementing cybercrime detection techniques
Collecting and preserving digital evidence
Building the cybercrime case
Becoming an expert witness

CDS

004 COMPUTER

1] DIGIT:(DVD):MARCH 2018 (DIG)

PARWATAY,SIDDHARTH Ed.

NAVI MUMBAI : NINE DOT NINE INTERACTIVE , 2018

004 PAR

*Linux distros

Liri OS

Kall Linux Light

*Video lectures

Executive systems of the brain

What is sound

Auditory structures

*Indie Games

*Webcam tools

Camspace

Netcam Studio

Yawcam

*Free Music Albums

005.431 LINUX

2] OPEN SOURCE FOR YOU (DVD): MARCH2018 (OSFY)

CHOPRA, RAHUL Ed.

NEW DELHI : EFY ENTERPRISES , 2018

005.432 CHO

3097

*Kali Linux 2018.1

3] CSI

BORIVLI : ST FRANCIS INSTITUTE OF TECHNOLOGY , 2018

R **STF** CSI-SFIT Annual Magazine 2017-18

4] IRIS - 2K18

BORIVLI : ST FRANCIS INSTITUTE OF TECHNOLOGY , 2018 R **STF**

PROJECTREPORTS

DIGITAL COMMUNICATION

1] AN OPTIMIZED HDL IMPLEMENTATION OF SHA-256 ARCHITECTURE

PADHI,MEELU BISHNUCHARAN

Project Guide : Mr RAVINDRA CHAUDHARI
2017
621.382 PAD
1511

DATABASE

2] DYNAMIC QUERY FORMS USING RANKING MODELS FOR DATABASE QUERIES

KOSHTI,SPHURTI KHANDU

Project Guide : Dr A K SEN
2016
005.76 KOS
1515

WIRELESS TECHNOLOGY

3] HIGH SPEED UWB TRANSCEIVER USING PROLATE SPHEROIDAL WAVE FUNCTION

JADHAV,PRIYANKA PRAKASH

Project Guide : DR JOANNE GOMES
2016
621.38456 JAD
1512

IMAGE INPAINTING

4] IMAGE INPAINTING SCEMES

MARATHA,PRIYANKA

Project Guide : Mr RAVINDRA CHAUDHARI
2016
006.601 MAR
1513

IMAGE PROCESSING

5] IMAGE OBJECT SALIENCY DETECTION

SHINDE,APARNA NAMDEO

Project Guide : DR DEEPAK JAYASWAL
2017
006.37 SHI
1516

ST.FRANCIS INSTITUTE OF TECHNOLOGY (ENGG COLLEGE)
SVP ROAD, MT.POINSUR, BORIVALI (WEST), MUMBAI 4001303

JPEG COMPRESSION

6] IMAGE SPLICING FORGERY LOCALIZATION

PATIL,BHAVIKA A

Project Guide : DR DEEPAK JAYASWAL

2017

621.388 PAT

1510

WIRELESS COMMUNICATION

7] MULTI-FEATURED FRACTAL MICROSTRIP PATCH ANTENNA FOR WIRELESS COMMUNICATION APPLICATIONS

VICHARE,DEEPIKA PRAMOD

Project Guide : DR UDAY PANDIT KHOT

2017

621.3845 VIC

1514