

Bput 2012 Back Paper Question

If you have mastered the fundamentals of the PL/SQL language and are now looking for an in-depth, practical guide to solving real problems with PL/SQL stored procedures, then this is the book for you.

This text aims to provide the fundamentals necessary to understand semiconductor device characteristics, operations and limitations. Quantum mechanics and quantum theory are explored, and this background helps give students a deeper understanding of the essentials of physics and semiconductors.

This book presents high-quality papers from the Third International Conference on Smart Computing and Informatics (SCI 2018 – 19), organized by the School of Computer Engineering and School of Computer Application, Kalinga Institute of Industrial Technology Deemed to be University, Bhubaneswar, from 21 to 22 December 2018. It includes advanced and multi-disciplinary research on the design of smart computing and informatics, focusing on innovation paradigms in system knowledge, intelligence and sustainability that have the potential to provide realistic solutions to various problems in society, the environment and industry. The papers featured provide a valuable contribution to the deployment of emerging computational and knowledge transfer approaches, optimizing solutions in varied disciplines of science, technology and health care.

The book addresses the needs of researchers on the fundamentals as well as more advanced knowledge on microgrids and their evolution. This book covers newly emerging trends in fields such as Computer Science, Energy, Electrical Engineering, and Electronics and brings the reader up-to-date on the new emerging fields that play an important role in the power infrastructure. This book provides knowledge on decision making for newly evolving trends in microgrid design. It discusses techniques on how to improve the existing power quality and reduce load shedding and power imbalances. The book presents the emerging fields that now play an important role in microgrid design such as Data Science, Machine Learning, AI, and IT. The readership includes researchers, academia, practicing engineers, consumers, power companies and policy makers located across the globe.

Practical Solutions
Elementary Differential Equations
Digital Design
Basic Principles
Robots and Empire
Mastering Oracle PL/SQL

The National Education Technology Plan (NETP) sets a national vision and plan for learning enabled by technology through building on the work of leading education researchers; district, school, and higher education leaders; classroom teachers; developers; entrepreneurs; and nonprofit organizations. The principles and examples provided in this document align to the Activities to Support the Effective Use of Technology (Title IV A) of Every Student Succeeds Act as authorized by Congress in December 2015.

Basic Electronics: For BPUT has been designed as a comprehensive textbook for first-year students of Biju Patnaik University of Technology, Orissa. It lays a strong foundation in the important concepts of electronics by breaking down complex topics into simple and manageable units. The circuit diagrams, tables and solved examples used to illustrate theoretical concepts make this book an ideal self-study guide for students. This book is mapped to the syllabus prescribed by BPUT and the addition of three solved university question papers will benefit students greatly.

MicrogridsDesign, Challenges, and ProspectsCRC Press
This book comprises select proceedings of the international conference ETAEERE 2020, and focuses on contemporary issues in energy management and energy efficiency in the context of power systems. The contents cover modeling, simulation and optimization based studies on topics like medium voltage BTB system, cost optimization of a ring frame unit in textile industry, rectenna for RF energy harvesting, ecology and energy dimension in infrastructural designs, study of AGC in two area hydro thermal power system, energy-efficient and reliable depth-based routing protocol for underwater wireless sensor network, and power line communication. This book can be beneficial for students, researchers as well as industry professionals.
Principles of Compiler Design
Select Proceedings of ETAEERE 2020
Taxonomy of Educational Objectives
Basic Electronics: For BPUT
Semiconductor Physics and Devices
Advances in Power Systems and Energy Management

This is a concise presentation of the concepts underlying the design of digital communication systems, without the detail that can overwhelm students. Many examples, from the basic to the cutting-edge, show how the theory is used in the design of modern systems and the relevance of this theory will motivate students. The theory is supported by practical algorithms so that the student can perform computations and simulations. Leading edge topics in coding and wireless communication make this an ideal text for students taking just one course on the subject. Fundamentals of Digital Communications has coverage of turbo and LDPC codes in sufficient detail and clarity to enable hands-on implementation and performance evaluation, as well as 'just enough' information theory to enable computation of performance benchmarks to compare them against. Other unique features include space-time communication and geometric insights into noncoherent communication and equalization.

This book presents best selected papers presented at the International Conference on Advances in Energy Technology (ICAET 2020) organized by Gandhi Institute for Education and Technology (GIET), Bhubaneswar, India, during 17–18 January 2020. The proceeding targets the current research works that may lead to sustainable development of new products and techniques. Carefully reviewed works from the submission are selected to include in the book. It is broadly having four divisions based on the tracks – energy systems, energy technology, green technology, and renewable energy. Emphasis is mainly given on inclusion of original research works within the scope.

A volume of five parts, this book is a culmination of selected research papers from the second version of the international conferences on Urban Planning & Architectural Design for sustainable Development (UPADSD) and Urban Transit and Sustainable Networks (UTSN) of 2017 in Palermo and the first of the Resilient and Responsible Architecture and Urbanism Conference (RRAU) of 2018 in the Netherlands. This book, not only discusses environmental challenges of the world today, but also informs the reader of the new technologies, tools, and approaches used today for successful planning and development as well as new and upcoming ones. Chapters of this book provide in-depth debates on fields of environmental planning and management, transportation planning, renewable energy generation and sustainable urban land use. It addresses long-term issues as well as short-term issues of land use and transportation in different parts of the world in hopes of improving the quality of life. Topics within this book include: (1) Sustainability and the Built Environment (2) Urban and Environmental Planning (3) Sustainable Urban Land Use and Transportation (4) Energy Efficient Urban Areas & Renewable Energy Generation (5) Quality of Life & Environmental Management Systems. This book is a useful source for academics, researchers and practitioners seeking pioneering research in the field.

Demonstrates the principles involved in planning and designing an effective syllabus. This book examines important concepts, such as needs analysis, goal-setting, and content specification, and serves as a useful introduction for teachers who want to gain an understanding of syllabus design in order to modify the syllabuses with which they work.

**Advances in High Performance Computing
Quantum Mechanics in Chemistry
Fundamentals of Digital Communication
Introduction to Fluid Mechanics and Fluid Machines**

**Proceedings of the Third International Conference on Smart Computing and Informatics, Volume 2
Financial Markets and Institutions**

Introduction 2. Synthesis Of Some Official Medicinal Compounds 3. Assay Of Some Official Compounds 4. Monograph Analysis Of The Following Compounds 5. Identification And Estimation Of Drug Metabolites From Biological Fluids 6. Determination Of Partition Coefficient Of Compounds For Qsar Analysis 7. I.R. Spectra Of Some Official Medicinal Compounds

AI, Edge, and IoT Smart Agriculture integrates applications of IoT, edge computing, and data analytics for sustainable agricultural development and introduces Edge of Thing-based data analytics and IoT for predictability of crop, soil, and plant disease occurrence for improved sustainability and increased profitability. The book also addresses precision irrigation, precision horticulture, greenhouse IoT, livestock monitoring, IoT ecosystem for agriculture, mobile robot for precision agriculture, energy monitoring, storage management, and smart farming. The book provides an overarching focus on sustainable environment and sustainable economic development through smart and e-agriculture. Providing a medium for the exchange of expertise and inspiration, contributions from both smart agriculture and data mining researchers around the world provide foundational insights. The book provides practical application opportunities for the resolution of real-world problems, including contributions from the data mining, data analytics, Edge of Things, and cloud research communities working in the farming production sector. The book offers broad coverage of the concepts, themes, and instruments of this important and evolving area of IOT-based agriculture, Edge of Things and cloud-based farming, Greenhouse IOT, mobile agriculture, sustainable agriculture, and big data analytics in agriculture toward smart farming. Integrates sustainable agriculture, Greenhouse IOT, precision agriculture, crops monitoring, crops controlling to prediction, livestock monitoring, and farm management Presents data mining techniques for precision agriculture, including weather prediction, plant disease prediction, and decision support for crop and soil selection Promotes the importance and uses in managing the agro ecosystem for food security Emphasizes low energy usage options for low cost and environmental sustainability

The rapid increase in new power electronic devices and converters for electric transportation and smart grid technologies requires a deep analysis of their component performances, considering all of the different environmental scenarios, overload conditions, and high stress operations. Therefore, evaluation of the reliability and availability of these devices becomes fundamental both from technical and economical points of view. The rapid evolution of technologies and the high reliability level offered by these components have shown that estimating reliability through the traditional approaches is difficult, as historical failure data and/or past observed scenarios demonstrate. With the aim to propose new approaches for the evaluation of reliability, in this book, eleven innovative contributions are collected, all focused on the reliability assessment of power electronic devices and related components.

This open access book provides the first comprehensive collection of papers that provide an integrative view on cybersecurity. It discusses theories, problems and solutions on the relevant ethical issues involved. This work is sorely needed in a world where cybersecurity has become indispensable to protect trust and confidence in the digital infrastructure whilst respecting fundamental values like equality, fairness, freedom, or privacy. The book has a strong practical focus as it includes case studies outlining ethical issues in cybersecurity and presenting guidelines and other measures to tackle those issues. It is thus not only relevant for academics but also for practitioners in cybersecurity such as providers of security software, governmental CERTs or Chief Security Officers in companies.

Specifications Grading

Geotechnical Engineering
Challenges and New Trends in Power Electronic Devices Reliability
The Classification of Educational Goals
Hybrid Artificial Intelligence and IoT in Healthcare
Science fiction-roman.

The Iitians: The Story Of A Remarkable Indian Institution And How Its Alumni Are Reshaping The World Iit (Indian Institute Of Technology) Is India S Biggest And Most Powerful Brand, And Arguably The Toughest And Most Influential Engineering School In The World. Since The First Iit Was Set Up In The 1950s, Thousands Of Initiates Have Walked Out Of The Campus Gates In Kharagpur, Mumbai, Chennai And Elsewhere To Become Leaders In Their Chosen Fields. In India They Head Many Of The Biggest And Most Admired Professionally Managed Companies. Abroad, They Lead Giant Corporations, And Their Feats Figure In The Folklore Of Silicon Valley. The Power That The Alumni Of This One Bunch Of Undergraduate Schools Wilds In Business, Academe And Research Is Comparable To That Of Cambridge And Oxford In The Heyday Of The British Empire. Sandipan Deb, Himself An Iitian, Delves Into His Own Experience And Those Of Scores Of Alumni To Try And Explain What Makes Iitians Such Outstanding Achievers. In Part It May Be That They Cannot Be Anything Else: Only One In Every Hundred Applicants Gets Admitted. Harvard, In Comparison, Takes One In Eight. The Unique Village-Like Campuses Peopled Only By The Super-Bright And The Intensely Competitive Hone The Iitians Skills Further. No Wonder Then That When They Leave The Campus, Iitians Look Upon Themselves As Special People, Capable Of Competing In Their Field With The Best In The World. And, As Their Record Shows, Succeeding.

Advanced graduate-level text looks at symmetry, rotations, and angular momentum addition; occupation number representations; and scattering theory. Uses concepts to develop basic theories of chemical reaction rates. Problems and answers.

Financial Markets and Institutions, 5e offers a unique analysis of the risks faced by investors and savers interacting through financial institutions and financial markets, as well as strategies that can be adopted for controlling and managing risks. Special emphasis is put on new areas of operations in financial markets and institutions such as asset securitization, off-balance-sheet activities, and globalization of financial services.

**Modern Pharmaceutics
Microgrids
The Ethics of Cybersecurity
Urban and Transit Planning
The IITians
Electromagnetic Theory**

This book is useful for IGNOU MCA students. A perusal of past questions papers gives an idea of the type of questions asked, the paper pattern and so on. it is for this benefit, we provide these IGNOU MCS-031: Design and Analysis of Algorithm Notes. Students are advised to refer these solutions in conjunction with their reference books. It will help you to improve your exam preparations. This book covers Algorithm definition and specification – Design of Algorithms, and Complexity of Algorithms, Asymptotic Notations, Growth of function, Recurrences, Performance analysis – Elementary Data structures:- stacks and queues – trees – dictionaries – priority queues –sets and disjoint set union – graphs – basic traversal and search techniques. Divide – and – conquer:- General method – binary search – merge sort – Quick sort. The Greedy method:-General method – knapsack problem – minimum cost spanning tree – single source shortest path. Dynamic Programming – general method – multistage graphs – all pair shortest path – optimal binary search trees – 0/1 Knapsack – traveling salesman problem – flow shop scheduling. Backtracking:- general method – 8-Queens problem – sum of subsets – graph coloring – Hamiltonian cycles – knapsack problem – Branch and bound:- The Method – 0/1 Knapsack problem – traveling salesperson. Parallel models:-Basic concepts, performance Measures, Parallel Algorithms: Parallel complexity, Analysis of Parallel Addition, Parallel Multiplication and division, parallel. Evaluation of General Arithmetic Expressions, First-Order Linear recurrence. Published by MeetCoogle

This text provides a proven approach to algorithms and data structures using the Java programming languages as the implementation tool.

This book covers applications for hybrid artificial intelligence (AI) and Internet of Things (IoT) for integrated approach and problem solving in the areas of radiology, drug interactions, creation of new drugs, imaging, electronic health records, disease diagnosis, telehealth, and mobility-related problems in healthcare. The book discusses the convergence of AI and the hybrid approaches in healthcare which optimizes the possible solutions and better treatment. Internet of Things (IoT) in healthcare is the next-gen technologies which automate the healthcare facility by mobility solutions are discussed in detail. It also discusses hybrid AI with bio-inspired techniques, genetic algorithm, neuro-fuzzy algorithms, and soft computing approaches which significantly improves the prediction of critical cardiovascular abnormalities and other healthcare solutions to the ongoing challenging research.

Keeping in view the limited time at the disposal of engineering students preparing for university examination, the book contains fairly large number of solved examples taken from various recently examination papers of different universities and Engineering colleges so that they may not find any difficulty while answering these problems in their final examination.Latest question papers upto summer 2006 of A.M.I.E. have been added for the readers to understand the latest trend.

Smart Intelligent Computing and Applications
Practical Medicinal Chemistry
Proceedings of ICAET 2020
MCS-013: Discrete Mathematics
MCS-031: Design and Analysis of Algorithms
Design, Challenges, and Prospects

Most of the papers in this volume were presented at the NATO Advanced Research Workshop High Performance Computing: Technology and Application, held in Cetraro, Italy from 24 to 26 of June, 1996. The main purpose of the Workshop was to discuss some key scientific and technological developments in high performance computing, identify significant trends and define desirable research objectives. The volume structure corresponds, in general, to the outline of the workshop technical agenda: general concepts and emerging systems, software technology, algorithms and applications. One of the Workshop innovations was an effort to extend slightly the scope of the meeting from scientific/engineering computing to enterprise-wide computing. The papers on performance and scalability of database servers, and Oracle DBMS reflect this attempt We hope that after reading this collection of papers the readers will have a good idea about some important research and technological issues in high performance computing. We wish to give our thanks to the NATO Scientific and Environmental Affairs Division for being the principal sponsor for the Workshop. Also we are pleased to acknowledge other institutions and companies that supported the Workshop: European Union: European Commission DGIII-Industry, CNR: National Research Council of Italy, University of Calabria, Alenia Spazio, Centro Italiano Ricerche Aerospaziali, ENEA: Italian National Agency for New Technology, Energy and the Environment, Fujitsu, Hewlett Packard-Convex, Hitachi, NEC, Oracle, and Silicon Graphics-Cray Research. Editors January 1997 vii LIST OF CONTRIBUTORS Ecole Nonnale Su ç rieuse de Lyon, 69364 Abarbanel. Robert M.

For sophomore courses on digital design in an Electrical Engineering, Computer Engineering, or Computer Science department. & Digital Design, fourth edition is a modern update of the classic authoritative text on digital design.& This book teaches the basic concepts of digital design in a clear, accessible manner. The book presents the basic tools for the design of digital circuits and provides procedures suitable for a variety of digital applications.

Linda Nilson puts forward an innovative but practical and tested approach to grading--the specifications grading paradigm--which restructures assessments to streamline the grading process and greatly reduce grading time, empower students to choose the level of attainment they want to achieve, reduce antagonism between the evaluator and the evaluated, and increase student receptivity to meaningful feedback, thus facilitating the learning process - all while upholding rigor. In addition, specs grading increases students' motivation to do well by making expectations clear, lowering their stress and giving them agency in determining their course goals. Among the unique characteristics of the schema, all of which simplify faculty decision making, are the elimination of partial credit, the reliance on a one-level grading rubric and the "bundling" of assignments and tests around learning outcomes. Successfully completing more challenging bundles (or modules) earns a student a higher course grade. Specs grading works equally well in small and large class settings and encourages "authentic assessment." Used consistently over time, it can restore credibility to grades by demonstrating and making transparent to all stakeholders the learning outcomes that students achieve.

This book is useful for IGNOU BCA & MCA students. A perusal of past questions papers gives an idea of the type of questions asked, the paper pattern and so on, it is for this benefit, we provide these IGNOU MCS-013: Discrete Mathematics Notes. Students are advised to refer these solutions in conjunction with their reference books. It will help you to improve your exam preparations. This book covers Discrete Mathematical Structures, Formal Methods: Introduction and Analogy, Abstraction. Fundamentals: Sets & Relations- Sets, Types of Sets, Multi Sets, Operations on Sets, Relations and Properties of Relations, Representation of Relations, Equivalence Relation, Closures of Relations, Methods of Proof-Direct Proofs, Indirect Proofs, Mathematical Induction, Method of Contradiction. Combinatorics: Permutations and Combinations, Pigeon Hole Principle, Principle of Inclusion and Exclusion, Generating Functions. Mathematical Logic, Posets and Lattices: Partial Order Set, Bounding Elements, Well Ordered Set, Topological Sorting, Lattices, Principle of Duality, Bounded, Distributed, and Complemented Lattices, Proposition and Propositional Calculus. Graphs and Group Theory: Basic Introduction of Graphs- Types of Graphs, Path and Circuits, Eulerian Path and Circuits, Hamiltonian Path and Circuits, Shortest Path Algorithms, Group. Definitions and Properties, Coset& Subgroup, Normal subgroup, Homomorphism of groups, Cyclic Group, Permutation Group. Finite State Machines and Languages: Grammar and Languages- Phrase structure Grammar, Types of Grammars and Languages, Finite State Machines and Languages, Minimization of Finite State Machines. Published by MeetCoogle

Reimagining the Role of Technology in Education
IBM FlashSystem 5200 Product Guide
Fundamentals of Corporate Finance

Applied Fluid Mechanics Lab Manual

Restoring Rigor, Motivating Students, and Saving Faculty Time

The Story of a Remarkable Indian Institution and how Its Alumni are Reshaping the World

Basic knowledge about fluid mechanics is required in various areas of water resources engineering such as designing hydraulic structures and turbomachinery. The applied fluid mechanics laboratory course is designed to enhance civil engineering students' understanding and knowledge of experimental methods and the basic principle of fluid mechanics and apply those concepts in practice. The lab manual provides students with an overview of ten different fluid mechanics laboratory experiments and their practical applications. The objective, practical applications, methods, theory, and the equipment required to perform each experiment are presented. The experimental procedure, data collection, and presenting the results are explained in detail. LAB

Fundamentals of Corporate Finance's applied perspective cements students' understanding of the modern-day core principles by equipping students with a problem-solving methodology and profiling real-life financial management practices--all within a clear valuation framework. KEY TOPICS: Corporate Finance and the Financial Manager;Introduction to Financial Statement Analysis;The Valuation Principle: The Foundation of Financial Decision Making;The Time Value of Money;Interest Rates;Bonds;Valuing Stocks;Investment Decision Rules;Fundamentals of Capital Budgeting;Risk and Return in Capital Markets;Systematic Risk and the Equity Risk Premium;Determining the Cost of Capital;Risk and the Pricing of Options;Raising Equity Capital;Debt Financing;Capital Structure;Payout Policy;Financial Modeling and Pro Forma Analysis;Working Capital Management;Short-Term Financial Planning;Risk Management;International Corporate Finance; Leasing;Mergers and Acquisitions;Corporate Governance MARKET: Appropriate for Undergraduate Corporate Finance courses.

This Book Is The Outcome Of The Authors Long Teaching Experience And Has Been Designed To Meet The Needs Of Civil Engineering Curricula For The Courses In Soil Mechanics And Foundation Engineering Of Indian Universities. The Book Has Been Written Mainly In The S.I. Units, Although Some Problems And Examples In The M.K.S. System Have Been Included For Convenience During The Period Of Transition.The Concepts Have Been Developed Systematically In Lucid Language, Sufficient Number Of Well-Graded Numerical Examples And Problems For Solution Have Been Included, And The Answers For The Latter Have Been Given At The End Of The Book. Summary Of Main Points And Chapter-Wise References Have Been Given At The End Of Each Chapter. References Are Made To The Relevant Indian Standard At Appropriate Places.The Book Covers The Syllabus In Geotechnical Engineering For The Degree And Diploma Students In Civil Engineering And Is Designed To Be Useful To Practicing Engineers As Well.

"Completely revised and expanded throughout. Presents a comprehensive integrated, sequenced approach to drug dosage formulation, design, and evaluation. Identifies the pharmacodynamic and physicochemical factors influencing drug action through various routes of administration."

Engineering Mathematics (Amie Diploma Stream)

AI, Edge and IoT-based Smart Agriculture

Future Ready Learning

Operations Strategy

Data Structures and Algorithm Analysis in Java

Maccarthy on Cross-examination

This IBM® Redbooks® Product Guide publication describes the IBM FlashSystem® 5200 solution, which is a next-generation IBM FlashSystem control enclosure. It is an NVMe end-to-end platform that is targeted at the entry and midrange market and delivers the full capabilities of IBM FlashCore® technology. It also provides a rich set of software-defined storage (SDS) features that are delivered by IBM Spectrum® Virtualize, including the following features: Data reduction and deduplication Dynamic tiering Thin provisioning Snapshots Cloning Replication Data copy services Transparent Cloud Tiering IBM HyperSwap® including 3-site replication for high availability (HA) Scale-out and scale-up configurations further enhance capacity and throughput for better availability. The IBM FlashSystem 5200 is a high-performance storage solution that is based on a revolutionary 1U form factor. It consists of 12 NVMe Flash Devices in a 1U storage enclosure drawer with full redundant canister components and no single point of failure. It is designed for businesses of all sizes, including small, remote, branch offices and regional clients. It is a smarter, self-optimizing solution that requires less management, which enables organizations to overcome their storage challenges. Flash has come of age and price point reductions mean that lower parts of the storage market are seeing the value of moving over to flash and NVMe--based solutions. The IBM FlashSystem 5200 advances this transition by providing incredibly dense tiers of flash in a more affordable package. With the benefit of IBM FlashCore Module compression and new QLC flash-based technology becoming available, a compelling argument exists to move away from Nearline SAS storage and on to NVMe. With the release of IBM FlashSystem 5200 Software V8.4, extra functions and features are available, including support for new Distributed RAID1 (DRAID1) features, GUI enhancements, Redirect-on-write for Data Reduction Pool (DRP) snapshots, and 3-site replication capabilities. This book is aimed at pre-sales and post-sales technical support and marketing and storage administrators.

Homework help! Worked-out solutions to select problems in the text.

Learn how to look good on cross, even when the witness is not cooperating. Learn how to manage and effectively minimize the witness's involvement, without appearing controlling, extracting, and insulting. Filled with illustrative cross examinations from actual cases, this book is your key to employing these proven techniques in your own practice. Using the three themes that run through out the book--looking good, telling a story, and using short statements--you can take control of your cross examinations and achieve the results you desire.

Operation Strategy Second Edition Nigel Slack and Michael Lewis Ideal for Advanced Undergraduate and Postgraduate students, this book builds on concepts from Strategic Management, Operations Management, Marketing and HRM to give students a comprehensive understanding of Operations Strategy. Features Comprehensive and accessible with authoritative authorship and an excellent blend of theory and practice A European context Engaging case studies Teaching resources including an Instructor's Manual with extensive case notes and PowerPoint slides atwww.pearsoned.co.uk/slack. What's New? This new edition has been focused to concentrate on the most significant topics in the subject, with 10 chapters replacing the previous 15. New material has been added and coverage of some older topics has been revised (see new table of contents). End-of-chapter case exercises have been replaced by a major end-of-book section of 'Harvard-type' cases. New to the Instructor's resources online: additional cases and a set of questions and answers for class use / exam use. New coverage of hot topics, such as the implications of ERP and Six Sigma on ops strategy, agility and it's inter-relationship with lean, supply management issues, operations strategy for competitive advantage and SCM, and implementation.

A Culmination of Selected Research Papers from IEREK Conferences on Urban Planning, Architecture and Green Urbanism, Italy and Netherlands (2017)

Syllabus Design

Self-Tracking

Advances in Energy Technology

In 1865 James Clerk Maxwell (1831 - 1879) published this work, "A Dynamical Theory of the Electromagnetic Field" demonstrating that electric and magnetic fields travel through space as waves moving at the speed of light. He proposed that light is an undulation in the same medium that is the cause of electric and magnetic phenomena. The unification of light and electrical phenomena led him to predict the existence of radio waves. Maxwell is also regarded as the founding scientist of the modern field of electrical engineering. His discoveries helped usher in the era of modern physics, laying the foundation for such fields as special relativity and quantum mechanics. Many physicists regard Maxwell as the 19th-century scientist having the greatest influence on 20th-century physics. His contributions to physics are considered by many to be of the same magnitude as the ones of Isaac Newton and Albert Einstein. In this original treatise Maxwell introduces the best of his mind in seven parts, to include: Part i. introductory. Part ii. on electromagnetic induction. Part iii. general equations of the electromagnetic field. Part iv. mechanical actions in the field. Part v. theory of condensers. Part vi. electromagnetic theory of light. Part vii. calculation of the coefficients of electromagnetic induction

What happens when people turn their everyday experience into data: an introduction to the essential ideas and key challenges of self-tracking. People keep track. In the eighteenth century, Benjamin Franklin kept charts of time spent and virtues lived up to. Today, people use technology to self-track: hours slept, steps taken, calories consumed, medications administered. Ninety million wearable sensors were shipped in 2014 to help us gather data about our lives. This book examines how people record, analyze, and reflect on this data, looking at the tools they use and the communities they become part of. Gina Neff and Dawn Nafus describe what happens when people turn their everyday experience—in particular, health and wellness-related experience—into data, and offer an introduction to the essential ideas and key challenges of using these technologies. They consider self-tracking as a social and cultural phenomenon, describing not only the use of data as a kind of mirror of the self but also how this enables people to connect to, and learn from, others. Neff and Nafus consider what's at stake: who wants our data and why; the practices of serious self-tracking enthusiasts; the design of commercial self-tracking technology; and how self-tracking can fill gaps in the healthcare system. Today, no one can lead an entirely untracked life. Neff and Nafus show us how to use data in a way that empowers and educates.