

1. Record Nr.	UNISA996464449103316
Titolo	Sustainability measures for COVID-19 pandemic // Rashmi Agrawal, Mamta Mittal, Lalit Mohan Goyal, editors
Pubbl/distr/stampa	Singapore : , : Springer, , [2021] ©2021
ISBN	981-16-3227-8
Descrizione fisica	1 online resource (278 pages)
Disciplina	616.2414
Soggetti	COVID-19 Pandemic, 2020- COVID-19 Pandemic, 2020- - Economic aspects Sustainability
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Intro -- Preface -- Contents -- About the Editors -- Internet of Things and Web Services for Handling Pandemic Challenges -- 1 Introduction -- 1.1 IoT Process to Combat the Covid-19 Pandemic -- 2 IoT for Handling the Pandemic Challenges -- 2.1 Literature Survey -- 2.2 IoT in Personal Medical Devices -- 2.3 In Smart Home IoT -- 2.4 In IT Sector -- 2.5 Challenges of IoT in the Wake of COVID-19 -- 2.6 Uses of IoT for COVID-19 Pandemic -- 2.7 Practices Involved in IoT for Tracking COVID-19 Patients -- 2.8 Global Technological Advancements to Resolve COVID-19 Cases Rapidly -- 3 Web Services for Handling COVID-19 Pandemic Challenges -- 3.1 Accessing COVID-19 Data -- 3.2 Contact Tracing -- 3.3 Support Work from Home Activities -- 3.4 Overcome Challenges in Critical Sectors -- 3.5 Adoption of Microservices Technology -- 4 Conclusion -- References -- Corona Thwack: Socio-Economic Impact of Covid-19 Pandemic in India -- 1 Introduction -- 1.1 Coronavirus: A Bird's Eye View -- 1.2 Covid-19 Acquisition -- 1.3 Covid-19 Complications -- 1.4 Safety Measures -- 2 Pathogenic Diagnosis -- 3 Corona Cure -- 3.1 Treatment -- 3.2 Vaccine: The Ray of Hope -- 4 Covid-19 Pandemic in India -- 4.1 Cataclysm -- 4.2 History -- 4.3 Initiatives -- 4.4 Creating History -- 5 Socio-Economic Impact of Covid-19 in India -- 5.1 Social Impact -- 5.2 Economic Impact -- 6 Conclusion --

References -- Mathematical Modeling on Double Quarantine Process in the Spread and Stability of COVID-19 -- 1 Introduction -- 2 Mathematical Model -- 2.1 Model Analysis -- 2.2 Calculation of R0 from SIQ1 R Model -- 2.3 Stability Analysis for SIQ1 R Model -- 2.4 Calculation of Basic Reproduction Number from SQH IQ1 R Model -- 2.5 Stability Analysis for SQH IQ1 R Model -- 2.6 Analysis of Global Stability at Endemic Equilibrium -- 3 Discussion of the Result -- 4 Conclusion -- References.

A Study and Novel AI/ML-Based Framework to Detect COVID-19 Virus Using Smartphone Embedded Sensors -- 1 Introduction -- 2 Smart Phones to Detect COVID-19 -- 3 Combating Covid-19 with Artificial Intelligence/Machine Learning -- 4 Proposed Smartphone Based Framework -- 5 Conclusion -- References -- Transmission Modelling on COVID-19 Pandemic and Its Challenges -- 1 Introduction -- 1.1 Nomenclature -- 2 Model Formations and Basic Assumptions -- 2.1 Mathematical Model -- 2.2 Boundedness and Positivity of the Model -- 3 Stability Analysis and Calculation of the Basic Reproduction Number -- 3.1 Calculation of Basic Reproduction Number -- 3.2 Global Stability -- 4 Discussion of the Result -- 5 Conclusion -- References -- Effect of COVID-19 Pandemic on Mental Health: An Under-Realized Sociological Enigma -- 1 COVID-19 Pandemic Effect on Mental Health: Introduction -- 2 Common Psychological Problems Post COVID-19 -- 2.1 Among General Population -- 2.2 Among COVID-19 Patients -- 2.3 Among Close Relatives and Neighbors -- 2.4 Among Healthcare Workers -- 2.5 Among Geriatric Patients with Co-morbidities -- 3 Psychological Imbalance in Home Quarantine -- 3.1 Some Major Risk Factors of Stressor in Quarantine -- 3.2 How to Minimize the Consequence of Home Quarantine -- 4 Psychological Imbalance in Hospital Quarantine -- 4.1 Psychological Problem During Hospital Quarantine Can Be Categories into Two-Part [22] -- 4.2 Exacerbation of Preexisting Psychiatric Conditions -- 4.3 There is Three Risk Factor Related to Exacerbation of Preexisting Psychiatric Condition -- 4.4 How to Minimize the Negative Psychological Effect of Hospital Quarantine -- 5 Psychological Approach to Assess Mental Health Post COVID-19 -- 5.1 Relevance of Yoga on COVID-19 -- 5.2 Use of Digital Platforms -- 5.3 Shielding Measures in Psychiatric Hospitals. 5.4 Rehabilitation of Mental Health in Times of COVID-19 -- 5.5 Coping Mental Health Issues in the Wake of COVID-19 Pandemic -- 6 Steps to Mitigate Pandemic in Future -- 6.1 Awareness of Situation -- 6.2 Eliminating Sparks of Pandemic -- 6.3 Communication of Risk -- 6.4 Scaling up of Potentials -- 7 Conclusion -- References -- Predicting the COVID-19 Outspread in Andhra Pradesh Using Hybrid Deep Learning -- 1 Introduction -- 2 Related Work -- 2.1 Anomaly Detection -- 2.2 Deep Learning Techniques -- 3 Methodology -- 3.1 Deep Learning Classifiers -- 3.2 Data Pre-processing -- 3.3 Feature Selection -- 4 Performance Measures -- 4.1 Experiment Setup -- 4.2 Performance Metrics -- 4.3 Performance Results -- 5 Conclusion -- References -- Mental Health Decline During Corona Virus Outbreak -- 1 Introduction -- 1.1 Worldwide Impact -- 1.2 Effect in India -- 1.3 Mental Effects of the Pandemic/Lockdown -- 2 Investigation of Indian Population (Survey Findings) -- 2.1 Review Methodology and Demographics -- 2.2 Vulnerability of Duration -- 2.3 Dread of Contracting Covid-19 -- 2.4 Dread of Job Steadiness/Layoff -- 2.5 Impact of Covid-19 Related Stress on Lifestyle -- 2.6 Lockdown Fatigue -- 3 Effect of Prolonged Lockdown on Stress Levels -- 3.1 Fall in Work-Life Balance -- 3.2 Postponement of Exams -- 3.3 Pay Cut/Job Loss -- 3.4 Net Impact of Stress Through the Lockdown -- 3.5 Post Unlocks Fears -- 3.6 Net Impact on Emotions at the Beginning of Lockdown --

3.7 City Wise Comparison -- 4 Net Change in Stress Levels in Top Cities, in Comparison to the Whole Country -- 4.1 Top 5 Coping Mechanisms to Deal with Stress During Lockdown -- 4.2 Meditations by Government and Other Organizations -- 4.3 Utilization Surge on Therapy Platforms-27 -- 5 Sample Case Studies -- 5.1 Case 1- Difficulty in Adjusting to Life at Home [21] -- 5.2 Case 2-Compulsive Cleaning.  
5.3 Case 3-Irrational Fear -- 5.4 Case 4-Violent Behavior Toward Parents -- 5.5 Recommendations -- 5.6 Management Strategies -- 6 Conclusion -- References -- Social Challenges and Consequences of COVID-19 -- 1 Introduction -- 2 Total Lockdown -- 3 India's Overstretched Healthcare System -- 4 The Human Face of COVID-19 -- 5 Themes from the Story of the Patient -- 6 The Indigenous Communities -- 7 Developmental Sport and Stability -- 8 The Effect on the Economy -- 9 Challenges in Socio-Culture -- 10 Urban Migrant Workers Plight -- 11 Dissemination of Misinformation -- 12 The Way Forward -- 13 Social Unrest Management -- 14 Completion -- References -- Economic Impact and Measures of Corona Regime -- 1 Introduction -- 2 Beginning of Economic Slowdown -- 3 International Trade Plunged as the Virus Spread and Projections by Various Agencies -- 4 Growth in Trade of Medical Products -- 5 Impact on Major Economies During the Period -- 6 Turbulence in Global Financial Markets -- 7 Impact of COVID-19 on Indian Economy -- 8 Policy Responses Taken so Far -- 9 Some of the Immediate Measures Included -- 10 How the Story Looks Like Now? -- 11 Debt Sustainability Issues -- 12 Rising Unemployment -- 13 China Leading the New Growth Phases -- 14 Inequality of Income -- 15 Slowdown of Globalization -- 16 Conclusion -- References -- Modeling the Impact of Various Treatment and Prevention Tact's on COVID-19 Worldwide -- 1 Introduction -- 1.1 Bats-Hosts-Reservoir-People -- 1.2 SIR Model -- 1.3 SEIR Model -- 2 Formulation of Mathematical Model -- 3 Basic Reproduction Number -- 4 Summary and Conclusion -- References -- Understanding Emotional Health Sustainability Amidst COVID-19 Imposed Lockdown -- 1 Introduction -- 2 Related Works -- 3 Data and Methodology -- 3.1 Dataset -- 3.2 Two-Way Emotion Characterization -- 3.3 Internet Portal -- 4 Results and Discussion. 5 Reflections -- References -- Industry 4.0 Technologies and Their Applications in Fighting COVID-19 -- 1 Introduction -- 1.1 Industry 4.0 Overview -- 1.2 Industry 4.0 Technologies -- 2 COVID-19 Challenges -- 2.1 Review of Literature -- 2.2 COVID-19 Challenges in Lockdown Phase -- 2.3 After Lockdown: Unlock 5.0 -- 3 Industry 4.0 Applications in COVID-19 Challenges -- 3.1 Face Mask Detection System for COVID-19 -- 3.2 COVID-19 Self-test Software -- 3.3 Keep Track COVID-19 Positive Patient -- 3.4 Social Distancing Analysis System for COVID-19 -- 3.5 Care of Old Age -- 3.6 COVID-19 Data Analysis -- 4 Conclusion -- References -- Internet of Medical Things (IoMT) Enabled TeleCOVID System for Diagnosis of COVID-19 Patients -- 1 Introduction -- 2 Related Works -- 3 Materials and Methods -- 3.1 Dataset -- 3.2 Proposed Design -- 4 Results and Analysis -- 4.1 Results and Analysis of Activity Detection System -- 4.2 Results of the TeleCOVID Diagnostic System -- 5 Conclusion -- References.

---