

## New Addition List February 2020

### APPLIED MECHANICS

#### BU/AM

1. Daqaq, Mohammed F.

Dynamics of particles and rigid bodies: a self-learning approach / by Mohammed F. Daqaq. - Hoboken: John Wiley, 2019. xli, 330(Wiley-ASME press series).  
ISBN : 9781119463146. : Rs.7542.15.

\*\*1. Rigid bodies 2. Dynamics, Rigid.I. Title II. Series  
**531.1 DAQ-D** **173812**

### BOOK BANK

#### BU/BB

2. Lipschutz, Seymour

Schaum's outline of theory and problems of linear algebra / by Seymour Lipschutz and Marc Lars Lipson. - 3rd ed. - Chennai: McGraw Hill Education (India), 2005. viii, 424.  
ISBN : 9780070605022. : Rs.695.00 (Each copy).

\*\* 1. Linear Algebra 2. Linear - Outlines.I. Lipson, Marc Lars II. Title  
**512.64 LIP-S** **BB76473 - BB76477**

#### BU/BB

3. Dhar, P. L.

Engineering thermodynamics: a generalised approach / by P. L. Dhar. - New Delhi: Elsevier India, 2014. xiv, 925.  
ISBN : 9788131214695. : Rs.610.00 (Each copy).

\*\*1. Thermodynamics 2. Engineering.I. Title  
**536.7 DHA-E** **BB76478 - BB76481**

#### BU/BB

4. Gutttag, John V.

Introduction to computation and programming using Python: with application to understanding data. - 2nd ed.. - Delhi: Prentice Hall of India, 2016. xv, 447p.  
ISBN : 9788120352926. : Rs.695.00 (Each copy).

\*\* 1. Python - Computer programming language.I. Title  
**681.3.06P GUT-I** **BB76468 - BB76472**

#### BU/BB

5. Necaise, Rance D.

Data structures and algorithms using Python / by Rance D. Necaise. - Delhi: John Wiley, 2016. xviii, 520.  
ISBN : 9788126562169. : Rs.539.00 (Each copy).

\*\*1. Data structures 2. Python - Computer program language.I. Title  
**681.3.06P NEC-D** **BB76482 - BB76486**

**CENTRAL LIBRARY****BU/CL**

6. Lipschutz, Seymour

Schaum's outline of theory and problems of linear algebra / by Seymour Lipschutz and Mare Lars Lipson. - 3rd ed. - New York: McGraw Hill, 2005. viii, 424.

ISBN : 9780070605022. : Rs.695.00 (Each copy).

\*\* 1. Algebra matrices 2. Linear equations 3. Linear mapping.I. Lipson, Marc Lars II. Title

**512.64 LIP-S**

**173827;TB - 173831;TB**

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7. Dhar, P. L.

Engineering thermodynamics: a generalised approach / by P. L. Dhar. - New Delhi: Elsevier India, 2014. xiv, 925.

ISBN : 9788131214695. : Rs.610.00 (Each copy).

\*\*1. Thermodynamics 2. Engineering.I. Title

**536.7 DHA-E**

**173862;TB - 173866;TB**

**BU/CL**

8. Dromey, R. G.

How to solve it by computer / by R. G. Dromey: Pearson India, 2007. xxi, 442.

ISBN : 9788131705629. : Rs.749.00 (Each copy).

\*\* 1. Mathematics - Data processing 2. Problem solving - Data processing 3. Computer programming.I. Title

**681.3 DRO-H**

**173867;TB - 173870;TB**

**BU/CL**

9. Gutttag, John V.

Introduction to computation and programming using Python: with application to understanding data / by John V. Gutttag. - 2nd ed. - Delhi: PHI Learning, 2016. xvii, 447.

ISBN : 9788120352926. : Rs.695.00 (Each copy).

\*\*1. Python - Computer program language 2. Algorithms and data structure 3. Computer programming.I. Title

**681.3.06P GUT-I**

**173822;TB - 173826;TB**

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10. Necaie, Rance D.

Data structures and algorithms using Python / by Rance D. Necaie. - New Delhi: John Wiley, 2016. xviii, 520.

ISBN : 9788126562169. : Rs.539.00 (Each copy).

\*\*1. Data structures 2. Python - Computer program language.I. Title

**681.3.06P NEC-D**

**173881;TB - 173885;TB**

## CENTRE FOR ENERGY STUDIES

### BU/CES

11. Kim, Kwang-Yong

Design optimization of fluid machinery: applying computational fluid dynamics and numerical optimization / by Kwang-Yong Kim, Abdus Samad and Ernesto Benini. - Singapore: John Wiley, 2019. xiv, 291.  
ISBN : 9781119188292. : Rs.10415.35.

\*\*1. Fluid mechanics 2. Fluid dynamics 3. Computational fluid dynamics.I. Samad, Abdus II. Benini, Ernesto III. Title

**532:681.3 KIM-D 173818**

## CHEMICAL ENGINEERING

### BU/CHE

12. Romatschke, Paul

Relativistic fluid dynamics in and out of equilibrium: and applications to relativistic nuclear collisions / by Paul Romatschke and Ulrike Romatschke. - Cambridge: Cambridge University Press, 2019. viii, 195.  
ISBN : 9781108483681. : Rs.10334.50.

\*\* 1. Fluid dynamics 2. Nuclear collisions 3. Relativistic fluid dynamics.I. Romatschke, Ulrike II. Title

**532.2 ROM-R 173846**

### BU/CHE

13. Coey, J. M. D.

Magnetism and magnetic materials / by J.M.D. Coey. - Singapore: Cambridge, 2018. xiii, 614p.  
ISBN : 9781108717519. : Rs.4226.81.

\*\* 1. Magnetic materials 2. Magnetism 3. Magnetic liquids.I. Title

**537.6 COE-M 173845**

### BU/CHE

14. Thermal transport in carbon-based nanomaterials / edited by Gang Zhang. - Amsterdam: Elsevier, 2017.

xviii, 365p.(Micro and nano technologies series).  
ISBN : 9780323462402. : Rs.12929.40.

\*\*1. Thermal transport theory 2. Carbon 3. Nanostructured materials.I. Zhang, Gang, Ed. II. Title III. Series

**546.26:620.3 -THE 173838;CHE**

### BU/CHE

15. Dey, Arjun

Nanoindentation of natural materials: herarchical and functionally graded microstructures / by Arjun Dey and Anoop Kumar Mukhopadhyay. - Boca Raton: CRC Press, 2019. xxvi, 211p.  
ISBN : 9781498784054. : Rs.14562.25.

\*\*1. Functionally gradient materials - Impact testing 2. Tissues - Analysis 3. Surfaces (Technology) - Testing 4. Nanostructured materials - Testing.I. Mukhopadhyay, Anoop Kumar II. Title

**620.1 DEY-N 173837**

**BU/CHE**

16. Hariharan, Krishnan S.

Mathematical modeling of lithium batteries: from electrochemical models to state estimator algorithms / by Krishnan S. Hariharan, Piyush Tagade and Sanoop Ramachandran. - Switzerland: Springer, 2018. xiv, 211p.(Green energy and technology).

ISBN : 9783319035260. : Rs.9230.25.

\*\*1. Mathematical models 2. Lithium cells 3. Electrical engineering 4. Lithium ion batteries.I. Tagade, Piyush II. Ramachandran, Sanoop III. Title IV. Series

**621.35:519.87 HAR-M 173808**

**BU/CHE**

17. Moving finite element method: fundamentals and applications in chemical engineering / by

Maria do Carmo Coimbra... (et. al). - Boca Raton: CRC Press, 2016.

xxix, 248.

ISBN : 9781138496729. : Rs.5260.26.

\*\*1. Chemical engineering 2. Finite elements method.I. Coimbra, Maria do Carmo II. Title

**66.0:517.9 -MOV 173836;CHE**

**BU/CHE**

18. Slotine, Jean-Jacques E.

Applied nonlinear control / Jean-Jacques E. Slotine and Weiping Li. - New Jersey: Pearson, 1991. xv, 461.

ISBN : 9780130408907. : Rs.17808.13.

\*\*1. Nonlinear control theory 2. Nonlinear systems 3. Automatic control.I. Title

**681.511.4 SLO-A 173942**

**CHEMISTRY****BU/CHY**

19. Lundblad, Roger L.

Biochemistry and molecular biology compendium / by Roger L. Lundblad. - 2nd ed. - Boca Raton: CRC Press, 2020. xiii, 412.

ISBN : 9781138054585. : Rs.14562.25 (Each copy).

\*\* 1. Biochemistry 2. Molecular biology 3. Physiology.I. Title

**577 LUN-B 173819, 173820;CHY**

**CIVIL ENGINEERING****BU/CE**

20. Bhattacharya, Subhamoy

Design of foundations for offshore wind turbines / by Subhamoy Bhattacharya. - Hoboken: John Wiley, 2019. xv, 371p.

ISBN : 9781119128120. : Rs.9337.90.

\*\*1. Offshore wind power plants - Design and construction 2. Offshore structures - Foundations.I. Title

**621.548.4 BHA-D 173839**

**BU/CE**

21. Au, Siu-Kui

Operational modal analysis: modeling, bayesian inference, uncertainty laws / by Siu-Kui Au. - Singapore: Springer, 2017. xxiii, 542.  
ISBN : 9789811041174. : Rs.16045.20.

\*\* 1. Structural analysis (Engineering) 2. Modal analysis 3. Probabilities 4. Geotechnical engineering.I. Title

**624.04 AU-O** **173817**

**BU/CE**

22. Greenwood, John H.

Durability of geosynthetics / by John H. Greenwood, Hartmut F. Schroder and Wim Voskamp; edited by Aad van den Thoon. - 2nd (Rev.) ed. - Boca Raton: CRC Press, 2016. 352.  
ISBN : 9789053675991. : Rs.11274.00.

\*\* 1. Geosynthetics 2. Polymer.I. Schroder, Hartmut F. II. Voskamp, Wim III. Thoon, Aad van den, Ed. IV. Title

**624.13 GRE-D** **173813**

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23. Thomas, Alun

Sprayed concrete lined tunnels / by Alun Thomas. - 2nd ed. - Boca Raton: CRC Press, 2020. xxxiv, 274.  
ISBN : 9780367209759. : Rs.10334.50.

\*\*1. Tunnel lining 2. Tunneling 3. Structural engineering 4. Underground construction 5. Cement.I. Title

**624.191.81 THO-S** **173821**

**COMPUTER SCIENCE & ENGINEERING****BU/CSE**

24. Korte, Bernhard

Combinatorial optimization: theory and algorithms / by Bernhard Korte and Jens Vygen. - 6th ed. - Berlin: Springer, 2018. xxi, 698(Algorithms and combinatorics, 21).  
ISBN : 9783662560389. : Rs.6413.60.

\*\*1. Combinatorial analysis 2. Mathematical optimization 3. Computer science.I. Vygen, Jens II. Title III. Series

**519.16 KOR-C** **173938**

**BU/CSE**

25. Shiryaev, Albert N.

Probability-2 / by Albert N. Shiryaev. - 3rd ed. - New York: Springer, 2018. x, 348(Graduate texts in mathematics).  
ISBN : 9780387722078. : Rs.5216.75.

\*\*1. Probability.I. Title II. Series

**519.2 SHI-P** **173853**

## HUMANITIES & SOCIAL SCIENCES

### BU/HSS

26. Carr, Alan

Positive psychology: the science of happiness and human strengths / by Alan Carr. -  
2nd ed. - New York: Routledge, 2011. xiv, 411.  
ISBN : 9781138998834. : Rs.995.00 (Each copy).

\*\* 1. Positive illusions 2. Happiness 3. Emotional intelligence.I. Title

**159.9.019.4 CAR-P** **173833, 173834;HSS**

### BU/HSS

27. Cross-cultural psychology: contemporary themes and perspectives / edited by Kenneth D.

Keith. - 2nd ed. - Hoboken: John Wiley, 2019.

xvii, 734.

ISBN : 9781119438403. : Rs.3938.00.

\*\*1. Psychological Science 2. Social psychology 3. Ethnopsychology.I. Keith, Kenneth  
D., Ed. II. Title

**159.922.4 -CRO** **173832;HSS**

### BU/HSS

28. Netton, Ian Richard

Islam, Christianity and the realms of the miraculous: a comparative exploration / by Ian  
Richard Netton. - Edinburgh: Edinburgh University Press, 2019. xii, 292(Edinburgh  
studies in classical Islamic history and culture).

ISBN : 9780748699063. : Rs.7611.20 (Each copy).

\*\* 1. Miracles 2. Christianity 3. Islam.I. Title II. Series

**2-145.55 NET-I** **173800, 173801;HSS**

### BU/HSS

29. Benjamin, Ruha

Race after technology: abolitionist tools for the new Jim code / by Ruha Benjamin. -  
Cambridge: Polity Press, 2019. x, 285p.

ISBN : 9781509526406. : Rs.1440.39.

\*\*1. Whites - Social conditions 2. African Americans - Social conditions 3. Race relations  
4. Information technology - Social aspects.I. Title

**316.422.44(73) BEN-R** **173934**

### BU/HSS

30. Moussawi, Ibrahim

Shi'ism and the democratisation process in Iran: with a focus on Wilayat al-Faqib / by  
Ibrahim Moussawi. - London: Saqi Books, 2011. 215p.

ISBN : 9780863564703. : Rs.3329.90 (Each copy).

\*\* 1. Shi'ah - Doctrines - Iran 2. Islam and politics - Iran 3. Wilayat al-Faqih.I. Title

**323.233(55) MOU-S** **173804, 173805;HSS**

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31. Dusek, Val

Philosophy of technology: an introduction / by Val Dusek. - Malden: John Wiley, 2006. v, 244.

ISBN : 9781405111638. : Rs.3754.40.

\*\*1. Technology - Philosophy.I. Title

**6:101.1 DUS-P 173932;HSS**

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32. Philosophy of technology : the technological condition: an anthology / edited by Robert C. Scharff and Val Dusek. - 2nd ed. - Chichester: John Wiley, 2014.

xv, 719(Blackwell philosophy anthologies).

ISBN : 9781118547250. : Rs.4656.90.

\*\*1. Technology - Philosophy.I. Scharff, Robert C., Ed. II. Dusek, Val, Ed. III. Title IV. Series

**6:101.1 -PHI 173933;HSS**

**BU/HSS**

33. Fraser, T. G.

Making the modern Middle East / by T.G.Fraser, Andrew Mango and Robert McNamara. - London: Gingko Library, 2017. x, 454.

ISBN : 9781909942998. : Rs.1426.15 (Each copy).

\*\*1. Middle East 2. Diplomatic relations 3. Politics and government.I. Mango, Andrew II. McNamara, Robert III. Title

**904(5-15) FRA-M 173802, 173803;HSS**

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34. Ashis Nandy: a life in dissent / edited by Ramin Jahanbegloo and Ananya Vajpeyi. - New Delhi: Oxford, 2018.

xiv, 367.

ISBN : 9780199483945. : Rs.750.00 (Each copy).

\*\*1. Sociologists 2. Intellectual life.I. Jahanbegloo, Ramin, Ed. II. Vajpeyi, Ananya, Ed. III. Title

**929NAN -ASH 173849, 173850;HSS**

**IIT HOSPITAL****BU/IITH**

35. Kumar and Clark's clinical medicine / edited by Parveen Kumar and Michael Clark. - 9th ed. - Edinburgh: Elsevier, 2017.

xiv, 1437.

ISBN : 9780702065996. : Rs.3016.86.

\*\*1. Clinical pharmacology 2. Clinical medicine.I. Kumar, Praveen, Ed. II. Clark, Michael, Ed. III. Title

**616 -KUM 173835;IITH**

## MATERIAL SCIENCE AND ENGINEERING

### BU/MSE

36. Chapra, Steven C.

Applied numerical methods: with MATLAB for engineers and scientists / by Steven C. Chapra. - 4th ed. - Chennai: McGraw Hill Education (India), 2019. xiv, 673.  
ISBN : 97893353167288. : Rs.885.00 (Each copy).

\*\* 1. MATLAB - Computer programming language 2. Numerical methods.I. Title  
**517.949:681.3.06M CHA-A                    173814, 173815;TB - 173816;TB**

## MATHEMATICS

### BU/MA

37. Laughlin, James Mc

Topics and methods in q-series / by James Mc Laughlin. - Singapore: World Scientific, 2018. x, 890(Monographs in number theory,8).  
ISBN : 9789813223363. : Rs.6300.80.

\*\*1. q-series 2. Hypergeometric series.I. Title II. Series  
**511 LAU-T                                        173855;MA**

### BU/MA

38. Guo, Enli

Geometry of spherically symmetric finsler manifolds / by Enli Guo and Xiaohuan Mo. - Singapore: Springer, 2018. xiii, 154(Springer briefs in mathematics).  
ISBN : 9789811315978. : Rs.4409.10.

\*\* 1. Mathematics 2. Mathematics - Geometry - Differential 3. Numerical Analysis.I. Mo, Xiaohuan II. Title III. Series  
**514.113.6 GUO-G                                173937**

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39. Bajnok, Bela

Additive combinatorics: a menu of research problems / by Bela Bajnok. - Boca Raton: CRC Press, 2018. xix, 390(Discrete mathematics and its applications).  
ISBN : 9780815353010. : Rs.6569.96.

\*\* 1. Combinatorial analysis 2. Computer science-Mathematics 3. Additive combinatorics.I. Title II. Series  
**519.146 BAJ-A                                    173854**

### BU/MA

40. Wagner, Stephan

Introduction to chemical graph theory / by Stephan Wagner and Hua Wang. - Boca Raton: CRC Press, 2019. x, 259(Discrete mathematics and its applications).  
ISBN : 9781138325081. : Rs.9484.20.

\*\* 1. Graph theory 2. Chemistry - Mathematics.I. Wang, Hua II. Title III. Series  
**519.173 WAG-I                                    173807**



**BU/MA**

41. Prentice, Ross L.

Statistical analysis of multivariate failure time data: a marginal modeling approach / by Ross L. Prentice and Shanshan Zhao. - Boca Raton: CRC Press, 2019. xv, 224(Monographs on statistics and applied probability, 163).  
ISBN : 9781482256574. : Rs.7039.31.

\*\* 1. Multivariate analysis 2. Time data modeling 3. Failure time data analysis.I. Zhao, Shanshan II. Title III. Series

**519.23 PRE-S** **173806**

**PHYSICS****BU/PH**

42. Balakrishnan, V.

Mathematical physics: with applications, problems & solutions / by V. Balakrishnan. - New Delhi: Ane Books, 2020. xxvi, 852.  
ISBN : 9789388264822. : Rs.995.00.

\*\*1. Fluid dynamics 2. Linear analytic.I. Title

**53:51 BAL-M** **173811**

**BU/PH**

43. Guidry, Mike

Modern general relativity: black holes, gravitational waves, and cosmology / by Mike Guidry. - New York: Cambridge University Press, 2019. xxv,598.  
ISBN : 9781107197893. : Rs.4696.56 (Each copy).

\*\* 1. Physics 2. Astronomy 3. General relativity - Physics 4. Quantum black holes.I. Title

**530.12 GUI-M** **173843, 173844;PH**

**BU/PH**

44. Saleh, Bahaa E. A.

Fundamentals of photonics / by Bahaa E. A. Saleh and Malvin Carl Teich. - 3rd ed. - Hoboken: John Wiley, 2019. (Wiley series in pure and applied optics).  
Pt I: Optics (xxvi, 558p.) (1287-1370p.).  
Pt.II: Photonics (xxvi, 559-1286p.) (1287-1370p.).  
ISBN : 9781119506874 (Set). : Rs.13958.42 (Set price).

\*\*1. Fourier optics 2. Wave optics 3. Fourier transform 4. Linear system.I. Teich, Malvin Carl II. Title III. Series

**535.14 SAL-F** **173809 - 173810**

**BU/PH**

45. Davidson, P. A.

Introduction to electrodynamics / by P.A. Davidson. - Oxford: Oxford University Press, 2019. xxii, 582.  
ISBN : 9780198798132. : Rs.2400.00.

\*\*1. Electrodynamics 2. Quantum electrodynamics.I. Title

**538.3 DAV-I** **173842**

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## TEXTILE TECHNOLOGY

### BU/TT

46. Nanofluids and their engineering applications / edited by K.R.V. Subramanian, Tubati Nageswara Rao and Avinash Balakrishnan. - Boca Raton: CRC Press, 2020.

xviii, 497.

ISBN : 9781138605268. : Rs.13622.75.

\*\*1. Nanofluids.I. Subramanian, K.R.V., Ed. II. Rao, Tubati Nageswara, Ed. III. Balakrishnan, Avinash, Ed. IV. Title

**532:620.3 -NAN**

**173851;TT**

### BU/TT

47. Markova, Ivana

Textile fiber microscopy: a practical approach / by Ivana Markova. - Hoboken: John Wiley, 2019. xxvii, 212p.

ISBN : 9781119320050. : Rs.7901.30.

\*\*1. Cellulosic fibers 2. Animal fibers 3. Synthetic fibers 4. Nano fibers.I. Title

**677.1/.5:543.456 MAR-T**

**173840;TT**