1. Record Nr. UNINA9910461924903321 Autore Bera R. K (Rasajit Kumar) Titolo Mathematical physics for engineers [[electronic resource] /] / R.K. Bera, A.K. Bandyopadhyay, P.C. Ray Tunbridge Wells,: New Academic Science Limited, c2012 Pubbl/distr/stampa **ISBN** 1-906574-38-3 Descrizione fisica 1 online resource (208 p.) Altri autori (Persone) BandyopadhyayA. K <1950-> (Asis Kumar) Ray. P. C (Pratap Chandra) Soggetti Engineering mathematics Mathematical physics Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. ""Cover "": ""Preface "": ""Contents "": ""Chapter 1 Matrix Algebra "": Nota di contenuto ""1.1 Matrix Algebra ""; ""1.2 Matrix Operations ""; ""1.3 Properties ""; ""1.4 Square Matrices ""; ""1.5 Eigenvalues and Eigenvectors ""; ""Chapter 2 Determinants ""; ""2.1 Homogeneous Linear Equations ""; ""2.2 Properties of the Determinant ""; ""2.3 Applications ""; ""Chapter 3 Vector Derivatives ""; ""3.1 The Gradient ""; ""3.2 The Divergence ""; ""3.3 The Curl ""; ""3.4 The Product Rules ""; ""3.5 Derivatives of the Second Order ""; ""3.6 Applications ""; ""Chapter 4 Gauss, Green and Stokesa€? Theorem "" ""4.1 Line, Surface and Volume Integrals """"4.2 Gaussa€? Divergence Theorem ""; ""4.3 Greena€?s Theorem ""; ""4.4 Stokesa€? Curl Theorem (Relation between Line and Surface Integrals) ""; ""Chapter 5 Dirac Delta Function ""; ""5.1 General Behavior of Delta Function ""; ""5.2 Generalised Fourier Series ""; ""5.3 Fourier Transform and Dirac Delta Function ""; ""Chapter 6 Differential Calculus ""; ""6.1 Operators and Eigenvalues ""; ""6.2 Expectation Value ""; ""6.3 Separation of Variables ""; ""6.4 Wave Function ""; ""6.5 Application of Differential Equations in Wave Mechanics "" ""6.6 Linear Differential Equation with Constant Coefficients """"6.7

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