# Free read Human resource management by gary dessler chapter 1 Copy

this text is designed to provide authoritative and accurate information on hr related responsibilities and personnel management by focusing on practical applications concepts and techniques that all managers can use in business this text is designed to provide authoritative and accurate information on hr related responsibilities and personnel management by focusing on practical applications concepts and techniques that all managers can use in business a review of management concepts and techniques in a traditional management process format this new edition has been revised to reflect changes in managing organizations it also covers globalization deregulation and technological advances directed primarily toward undergraduate courses in human resource management this text also provides practical content to current and aspiring industry professionals fundamentals of human resource management covers a wide range of hr topics and shows readers the importance of human resource management within the restraints of a compact semester offering a wealth of functional examples and applications this text emphasizes the notion that all managers need basic human resource management skills this edition is the first text on the market to build its core around the talent management process which the author defines as the goal oriented and integrated process of planning recruiting developing managing and compensating employees human resource management provides students with an introduction to the daily tools and skills they II need to function as successful managers in both human resources and business in general with a practical approach the text explores the evolution of the field highlighting the introduction of revolutionary new technologies and social media platforms the 16th edition focuses on the positive impacts third edition human technology has had on the hr field for example the ability to yet 2023-08-29

potential employees on the internet has shifted more hr responsibilities to managers leaving hr departments with more time to carry out strategic long term endeavors for boosting employee performance and engagement with a heavy focus on emerging industry trends the text prepares students with everything they need to be successful managers and hr personnel in the 21st century provided by publisher this book is a brief 2 color paperback version of dessler smanagement leading people and organizations in the 21st century 2 e it covers all key topics in management in a traditional planning organizing leading and controlling framework chapter topics include managing in the 21st century managing in a global environment making decisions planning and setting objectives strategic management the fundamentals of organizing designing organizations to manage change staffing the organization being a leader motivating employees today communicating in today s organizations managing groups and teams managing organizational and cultural change and controlling and building commitment for all levels of managers in a variety of fields and industries human resource management provides students with an introduction to the daily tools and skills they II need to function as successful managers in both human resources and business in general with a practical approach thetext explores the evolution of the field highlighting the introduction of revolutionary new technologies and social media platforms the 16th edition focuses on the positive impacts technologyhas had on the hr field for example the ability to vet potential employees onthe internet has shifted more hr responsibilities to managers leaving hrdepartments with more time to carry out strategic long term endeavors forboosting employee performance and engagement with a heavy focus on emergingindustry trends the text prepares students with everything they need to besuccessful managers and hr personnel in the 21st century human resource management provides students with the daily tools and skills they need to function as successful managers in both human resources and business in general with a practical approach the text explores the evolution of the eld highlighting the introduction of revolutionary new third edition human technologies and social media platforms such as linkedin and disease workbook answer kev

cloud computing the fifteenth edition focuses on the positive impacts technology has had on the hr eld the ability to vet potential employees on the internet shifts more hr responsibilities to managers leaving hr departments with more time to carry out strategic long term endeavours for boosting employee performance and engagement with a heavy focus on emerging industry trends the text prepares students with everything they need to be successful managers and hr personnel in the 21st century for courses in management human resource management provides students with the daily tools and skills they need to function as successful managers in both human resources and business in general with a practical approach the text explores the evolution of the field highlighting the introduction of revolutionary new technologies and social media platforms such as linkedin and cloud computing the 15th edition focuses on the positive impacts technology has had on the hr field the ability to vet potential employees on the internet shifts more hr responsibilities to managers leaving hr departments with more time to carry out strategic long term endeavours for boosting employee performance and engagement with a heavy focus on emerging industry trends the text prepares students with everything they need to be successful managers and hr personnel in the 21st century the full text downloaded to your computer with ebooks you can search for key concepts words and phrases make highlights and notes as you study share your notes with friends ebooks are downloaded to your computer and accessible either offline through the bookshelf available as a free download available online and also via the ipad and android apps upon purchase you II gain instant access to this ebook time limit the ebooks products do not have an expiry date you will continue to access your digital ebook products whilst you have your bookshelf installed offers select condensed and thoroughly updated coverage rewritten from the authors best selling big book human resource management 7 e offers an intensive concise and succinct overview of human resource management perfect for modular courses provides users with the essential working vocabulary and knowledge they will need for the human third edition human resources parts of their management jobs global issues in hir disease workbook answer kev

sections in every chapter emphasize the importance of knowing how the practices may apply in different parts of the world a framework for marketing management is a concise paperback adapted from philip kotler s 1 selling book marketing management a four part organization covers understanding marketing management analyzing marketing opportunities making marketing decisions and managing and delivering marketing programs readers will be able to see how marketing managers have applied key principles in actual company situations making explicit the connection between theory and implementation at leading firms such as ebay ntt docomo caterpillar and starbucks for anyone interested in the field of marketing and its relationship with the consumer note this edition features the same content as the traditional text in a convenient three hole punched loose leaf version student value editions also offer a great value this format costs significantly less than a new textbook before purchasing check with your instructor or review your course syllabus to ensure that you select the correct isbn for student value editions that include mylab tm or mastering tm several versions may exist for each title including customized versions for individual schools and registrations are not transferable in addition you may need a course id provided by your instructor to register for and use mylab or mastering platforms for introductory courses in human resource management foundations in management beyond the hr department fundamentals of human resources management supports human resources training for all students of management not just hr managers the text presents a wide range of hr topics within a single semester of material and a wealth of functional examples and applications fundamentals is also the first text of its kind to make talent management processes a core study this 5th edition has been updated with practical personnel techniques real company examples and new material on business sustainability each chapter touches on important recurring themes in management including employee engagement tactics small global business management employment law features and positive employee relations to help students become stronger and third edition human more effective managers also available with mylab management dispersive managers also available with mylab management dispersive management also available with mylab management also available with also available with also available with mylab management also available w

by combining trusted authors content with digital tools and a flexible platform mylab personalizes the learning experience and improves results for each student note you are purchasing a standalone product mylab tm management does not come packaged with this content students if interested in purchasing this title with mylab management ask your instructor to confirm the correct package isbn and course id instructors contact your pearson representative for more information if you would like to purchase both the loose leaf version of the text and mylab management search for 0134873491 9780134873497 fundamentals of human resource management student value edition plus mylab management with pearson etext access card package 5 e package consists of 0134740564 9780134740560 fundamentals of human resource management student value edition 0134743431 9780134743431 mylab management with pearson etext access card for fundamentals of human resource management managing employee absence maintaining a healthy work life balance and developing ethical and socially responsible codes of behaviour at work many of the most topical areas of debate in organisations are rooted in issues of human resource management the 6th edition of this market leading textbook provides detailed exploration and analysis of these contemporary issues as well as providing comprehensive coverage of all the core elements of hrm there is a range of useful features to engage the reader s interest and assist in learning from the text seven focus on skills sections develop sp this second edition contains a wealth of material on the theory and practice of human resource management in australia the authors draw on engaging material from practitioner experience academic literature and current media sources author griffiths from la trobe university and author lloyd walker from victoria uni of technology for introductory courses in human resource management fundamentals of human resources management supports human resources training for all students of management not just hr managers the text presents a wide range of hr topics within a single semester of material and a wealth of functional examples and applications fundamentals is also the first text of its kind to make talent management processes a core study this fourth 2023-08-29 disease workbook answer kev

edition has been updated with practical personnel techniques real company examples and new material on business sustainability and each chapter now touches on important recurring themes in management including employee engagement tactics small global business management employment law features and positive employee relations the full text downloaded to your computer with ebooks you can search for key concepts words and phrases make highlights and notes as you study share your notes with friends print 5 pages at a time compatible for pcs and macs no expiry offline access will remain whilst the bookshelf software is installed ebooks are downloaded to your computer and accessible either offline through the vitalsource bookshelf available as a free download available online and also via the ipad android app when the ebook is purchased you will receive an email with your access code simply go to bookshelf vitalsource com to download the free bookshelf software after installation enter your access code for your ebook time limit the vitalsource products do not have an expiry date you will continue to access your vitalsource products whilst you have your vitalsource bookshelf installed human resource management introduces you to the daily tools and skills you II need to function as successful managers in both hr and business in general using a practical approach the text explores the evolution of the field highlighting the introduction of revolutionary new technologies and social media platforms with a heavy focus on emerging industry trends and the positive impacts of technology on hr the 17th edition prepares you with everything you need to be effective managers and hr personnel in the 21st century this brief edition on human resources management is intended for undergraduate or graduate courses it offers exercises for every chapter password protected instructor support material and syllabus manager offering a new approach to supervision supervision and leadership in a changing world moves beyond just order giving strategies to address leadership techniques that work with today s workers and teams throughout the book readers learn how to supervise a diverse workforce that is often set in dispersed self managing teams the link between supervision and leadership is explored as well as common supervisory tasks such as planning and setting disease workbook answer kev

goals organizing jobs and work interviewing and screening employees and appraising and managing performance note you are purchasing a standalone product mylab management does not come packaged with this content students if interested in purchasing this title with mylab management ask your instructor for the correct package isbn and course id instructors contact your pearson representative for more information management of human resources the essentials fifth canadian edition recognizes that human resources are now among the most important organizational assets and thus brings both human resources and non human resources readers into a current and comprehensive discussion about human resources today the term human resources refers to the employee employer relationship in the workplace the knowledge skills assets and competencies employees bring to their work help the organization achieve its objectives these resources provide a source of competitive advantage for organizations in a hyper competitive global environment if you would like to purchase both the physical text and mylab management search for 0134860810 9780134860817 management of human resources the essentials fifth canadian edition plus mymanagementlab with pearson etext access card package 5 e package consists of 013430506x 9780134305066 management of human resources the essentials fifth canadian edition 5 e 0134882962 9780134882963 mymanagementlab with pearson etext standalone access card for management of human php□□□ human resource management provides a comprehensive review of personnel management concepts and practices focusing on the high performance organization it offers practical applications to help managers deal with personnel related responsibilities the present book provides a comprehensive view third edition human on human resource management it would be an ideal textbook for 2023-08-29

mba m com pgdm and other postgraduate courses beginning with introductory perspectives of hrm and its evolutive aspects the book elucidates in an easily comprehensible manner the concepts of human resource planning job analysis and collection of job data job design recruitment selection and barriers to effective selection psychological testing and interviews placement and induction procedure training and management development techniques and problems associated with performance appraisal career planning promotions transfer and demotions employee compensation incentives benefits and services industrial relations and disputes employee grievances employee welfare safety and health collective bargaining and global human resource management the book is the first of its kind as it provides learning objectives in the beginning of every chapter numerous exhibits and examples that would help sustain the interest of readers key terms and questions following each chapter a small hr dictionary in the end of the book surely the book will provide a rewarding and refreshing experience to its readers management organization courses with an applied approach to the essential management concepts and techniques the book blends traditional management concepts with a practical and applied management skills emphasis

<u>Human Resource Management</u> 2013 this text is designed to provide authoritative and accurate information on hr related responsibilities and personnel management by focusing on practical applications concepts and techniques that all managers can use in business

**Management** 1998-02 this text is designed to provide authoritative and accurate information on hr related responsibilities and personnel management by focusing on practical applications concepts and techniques that all managers can use in business

Human Resource Management (Arab World Edition) 2012-05-01 a review of management concepts and techniques in a traditional management process format this new edition has been revised to reflect changes in managing organizations it also covers globalization deregulation and technological advances Dessler 2010 directed primarily toward undergraduate courses in human resource management this text also provides practical content to current and aspiring industry professionals fundamentals of human resource management covers a wide range of hr topics and shows readers the importance of human resource management within the restraints of a compact semester offering a wealth of functional examples and applications this text emphasizes the notion that all managers need basic human resource management skills this edition is the first text on the market to build its core around the talent management process which the author defines as the goal oriented and integrated process of planning recruiting developing managing and compensating employees

Human Resource Management 2011 human resource management provides students with an introduction to the daily tools and skills they II need to function as successful managers in both human resources and business in general with a practical approach the text explores the evolution of the field highlighting the introduction of revolutionary new technologies and social media platforms the 16th edition focuses on the positive impacts technology has had on the hr field for example the ability to vet potential employees on the internet has shifted more hr responsibilities to managers leaving hr departments with more

time to carry out strategic long term endeavors for boosting employee performance and engagement with a heavy focus on emerging industry trends the text prepares students with everything they need to be successful managers and hr personnel in the 21st century provided by publisher Management 2001 this book is a brief 2 color paperback version of dessler smanagement leading people and organizations in the 21st century 2 e it covers all key topics in management in a traditional planning organizing leading and controlling framework chapter topics include managing in the 21st century managing in a global environment making decisions planning and setting objectives strategic management the fundamentals of organizing designing organizations to manage change staffing the organization being a leader motivating employees today communicating in today s organizations managing groups and teams managing organizational and cultural change and controlling and building commitment for all levels of managers in a variety of fields and industries

Fundamentals of Human Resource Management 2013-01-01 human resource management provides students with an introduction tothe daily tools and skills they II need to function as successful managers in both human resources and business in general with a practical approach thetext explores the evolution of the field highlighting the introduction of revolutionary new technologies and social media platforms the 16th edition focuses on the positive impacts technologyhas had on the hr field for example the ability to vet potential employees onthe internet has shifted more hr responsibilities to managers leaving hrdepartments with more time to carry out strategic long term endeavors forboosting employee performance and engagement with a heavy focus on emergingindustry trends the text prepares students with everything they need to besuccessful managers and hr personnel in the 21st century

Human Resource Management 2020 human resource management provides students with the daily tools and skills they need to function as successful managers in both human resources and business in general with a practical approach the text explores the evolution of the eld highlighting the introduction of

revolutionary new technologies and social media platforms such as linkedin and cloud computing the fifteenth edition focuses on the positive impacts technology has had on the hr eld the ability to vet potential employees on the internet shifts more hr responsibilities to managers leaving hr departments with more time to carry out strategic long term endeavours for boosting employee performance and engagement with a heavy focus on emerging industry trends the text prepares students with everything they need to be successful managers and hr personnel in the 21st century

A Framework for Management 2002 for courses in management human resource management provides students with the daily tools and skills they need to function as successful managers in both human resources and business in general with a practical approach the text explores the evolution of the field highlighting the introduction of revolutionary new technologies and social media platforms such as linkedin and cloud computing the 15th edition focuses on the positive impacts technology has had on the hr field the ability to vet potential employees on the internet shifts more hr responsibilities to managers leaving hr departments with more time to carry out strategic long term endeavours for boosting employee performance and engagement with a heavy focus on emerging industry trends the text prepares students with everything they need to be successful managers and hr personnel in the 21st century the full text downloaded to your computer with ebooks you can search for key concepts words and phrases make highlights and notes as you study share your notes with friends ebooks are downloaded to your computer and accessible either offline through the bookshelf available as a free download available online and also via the ipad and android apps upon purchase you II gain instant access to this ebook time limit the ebooks products do not have an expiry date you will continue to access your digital ebook products whilst you have your bookshelf installed

Enhanced ebook for Human Resource Management [Global Edition] 2021-06-25 offers select condensed and thoroughly updated coverage rewritten from the authors best selling big book human resource management 7 e offers an intensive concise and

succinct overview of human resource management perfect for modular courses provides users with the essential working vocabulary and knowledge they will need for the human resources parts of their management jobs global issues in hr sections in every chapter emphasize the importance of knowing how the practices may apply in different parts of the world A Framework for Human Resource Management 2004 a framework for marketing management is a concise paperback adapted from philip kotler s 1 selling book marketing management a four part organization covers understanding marketing management analyzing marketing opportunities making marketing decisions and managing and delivering marketing programs readers will be able to see how marketing managers have applied key principles in actual company situations making explicit the connection between theory and implementation at leading firms such as ebay ntt docomo caterpillar and starbucks for anyone interested in the field of marketing and its relationship with the consumer Human Resource Management, 15e 2016-03-28 note this edition features the same content as the traditional text in a convenient three hole punched loose leaf version student value editions also offer a great value this format costs significantly less than a new textbook before purchasing check with your instructor or review your course syllabus to ensure that you select the correct isbn for student value editions that include mylab tm or mastering tm several versions may exist for each title including customized versions for individual schools and registrations are not transferable in addition you may need a course id provided by your instructor to register for and use mylab or mastering platforms for introductory courses in human resource management foundations in management beyond the hr department fundamentals of human resources management supports human resources training for all students of management not just hr managers the text presents a wide range of hr topics within a single semester of material and a wealth of functional examples and applications fundamentals is also the first text of its kind to make talent management processes a core study this 5th edition has been updated with practical personnel

techniques real company examples and new material on business sustainability each chapter touches on important recurring themes in management including employee engagement tactics small global business management employment law features and positive employee relations to help students become stronger and more effective managers also available with mylab management by combining trusted authors content with digital tools and a flexible platform mylab personalizes the learning experience and improves results for each student note you are purchasing a standalone product mylab tm management does not come packaged with this content students if interested in purchasing this title with mylab management ask your instructor to confirm the correct package isbn and course id instructors contact your pearson representative for more information if you would like to purchase both the loose leaf version of the text and mylab management search for 0134873491 9780134873497 fundamentals of human resource management student value edition plus mylab management with pearson etext access card package 5 e package consists of 0134740564 9780134740560 fundamentals of human resource management student value edition 0134743431 9780134743431 mylab management with pearson etext access card for fundamentals of human resource management

Human Resource Management, eBook, Gobal Edition 1999 managing employee absence maintaining a healthy work life balance and developing ethical and socially responsible codes of behaviour at work many of the most topical areas of debate in organisations are rooted in issues of human resource management the 6th edition of this market leading textbook provides detailed exploration and analysis of these contemporary issues as well as providing comprehensive coverage of all the core elements of hrm there is a range of useful features to engage the reader s interest and assist in learning from the text seven focus on skills sections develop sp Essentials of Human Resource Management 2005-04-12 this second edition contains a wealth of material on the theory and practice of human resource management in australia the authors draw on engaging material from practitioner experience academic

literature and current media sources author griffiths from la trobe university and author lloyd walker from victoria uni of technology A Framework for Marketing Management 2001 for introductory courses in human resource management fundamentals of human resources management supports human resources training for all students of management not just hr managers the text presents a wide range of hr topics within a single semester of material and a wealth of functional examples and applications fundamentals is also the first text of its kind to make talent management processes a core study this fourth edition has been updated with practical personnel techniques real company examples and new material on business sustainability and each chapter now touches on important recurring themes in management including employee engagement tactics small global business management employment law features and positive employee relations the full text downloaded to your computer with ebooks you can search for key concepts words and phrases make highlights and notes as you study share your notes with friends print 5 pages at a time compatible for pcs and macs no expiry offline access will remain whilst the bookshelf software is installed ebooks are downloaded to your computer and accessible either offline through the vitalsource bookshelf available as a free download available online and also via the ipad android app when the ebook is purchased you will receive an email with your access code simply go to bookshelf vitalsource com to download the free bookshelf software after installation enter your access code for your ebook time limit the vitalsource products do not have an expiry date you will continue to access your vitalsource products whilst you have your vitalsource bookshelf installed Instructor's Resource CD-ROM [to Accompany] Management, Second Edition [by] Gary Dessler 2018-01-09 human resource management introduces you to the daily tools and skills you II

Second Edition [by] Gary Dessler 2018-01-09 human resource management introduces you to the daily tools and skills you ll need to function as successful managers in both hr and business in general using a practical approach the text explores the evolution of the field highlighting the introduction of revolutionary new technologies and social media platforms with a heavy focus on emerging industry trends and the positive impacts of technology on hr the 17th edition prepares you with everything

you need to be effective managers and hr personnel in the 21st century

**Fundamentals of Human Resource Management** 2005 this brief edition on human resources management is intended for undergraduate or graduate courses it offers exercises for every chapter password protected instructor support material and syllabus manager

Human Resource Management 2004 offering a new approach to supervision supervision and leadership in a changing world moves beyond just order giving strategies to address leadership techniques that work with today s workers and teams throughout the book readers learn how to supervise a diverse workforce that is often set in dispersed self managing teams the link between supervision and leadership is explored as well as common supervisory tasks such as planning and setting goals organizing jobs and work interviewing and screening employees and appraising and managing performance

Human Resource Management 1999 note you are purchasing a standalone product mylab management does not come packaged with this content students if interested in purchasing this title with mylab management ask your instructor for the correct package isbn and course id instructors contact your pearson representative for more information management of human resources the essentials fifth canadian edition recognizes that human resources are now among the most important organizational assets and thus brings both human resources and non human resources readers into a current and comprehensive discussion about human resources today the term human resources refers to the employee employer relationship in the workplace the knowledge skills assets and competencies employees bring to their work help the organization achieve its objectives these resources provide a source of competitive advantage for organizations in a hyper competitive global environment if you would like to purchase both the physical text and mylab management search for 0134860810 9780134860817 management of human resources the essentials fifth canadian edition plus mymanagementlab with pearson etext access card package 5 e package consists of 013430506x 9780134305066

management of human resources the essentials fifth canadian edition 5 e 0134882962 9780134882963 mymanagementlab with pearson etext standalone access card for management of human resources the essentials fifth canadian edition 5 e Human Resource Management in Canada, Canadian Seventh Edition, Gary Dessler, Nina D. Cole, Virginia L. (Gini) Sutherland. ODDOO ODDOO W DOODDOO ODDOO ODDOO W DOODDOO W ADDONAN DE DOCUMENTA DE CONTRA DE CONTRA DE COMENTA DE COMO DE COMENTA DE COMO DE COMENTA DE COMENT \_\_\_\_\_\_ Human Resource Management 11Th Ed. 2015-06-01 human resource management provides a comprehensive review of personnel management concepts and practices focusing on the high performance organization it offers practical applications to help managers deal with personnel related responsibilities Fundamentals of Human Resource Management, eBook, Global Edition 2023-06-20 the present book provides a comprehensive view on human resource management it would be an ideal textbook for mba m com pgdm and other postgraduate courses beginning with introductory perspectives of hrm and its evolutive aspects the book elucidates in an easily comprehensible manner the concepts of human resource planning job analysis and collection of job data job design recruitment selection and barriers to effective selection psychological testing and interviews placement and induction procedure training and management development techniques and problems associated with performance appraisal career planning promotions transfer and demotions employee compensation incentives benefits and services industrial relations and disputes employee grievances employee welfare safety and health collective bargaining and global human resource management the book is the first of its kind as it provides learning objectives in the beginning of every chapter numerous exhibits and examples that would help sustain the interest of readers key terms and guestions following each chapter a small hr dictionary in the end of the book surely the

book will provide a rewarding and refreshing experience to its readers

**Human Resources Management, Global Edition** 2012-07 management organization courses with an applied approach to the essential management concepts and techniques the book blends traditional management concepts with a practical and applied management skills emphasis

A Framework for Human Resource Management 1986 Organization Theory 2000-10-31

Phlip/Cw-Website - Dessler 1999

Human Resource Management in Canada, Canadian Seventh Edition, Gary Dessler, Nina D. Cole, Virginia L. (Gini) Sutherland [transparency]. Black and White Transparencies 1992-01-01

Human Resource Management in Canada, Gary Dessler, Alvin Turner, Canadian Fifth Edition. Instructor's Resource Manual with Transparency Masters 1976

Organization and Management 2011-03

Supervision and Leadership in a Changing World 2018-01-26

Management of Human Resources 2007-05

Management 1988

Personnel Management 2006-07-26

**Human Resource Management** 2008

Human Resource Management, 10/e 2007-11

**Human Resource Management 2003-03** 

Management 2009

Human Resource Management 2013-01-01

Fundamentals of Human Resource Management Plus MyMangementLab with Pearson EText

- physical therapy documentation examples Full PDF
- mack truck electrical system documentation .pdf
- geography paper2 memorandum final exam grade 11 (Read Only)
- chapter 26 cold war conflicts crossword puzzle [PDF]
- solid state electrochemistry Copy
- college keyboarding 18th edition Full PDF
- thermal radiation heat transfer solution manual (2023)
- <u>usborne sticker atlas of britain and northern ireland usborne</u> sticker atlases (PDF)
- creating money attracting abundance sanaya roman [PDF]
- nuer english dictionary by ray huffman .pdf
- mcgraw hill answer key operations management chapter17 [PDF]
- siemens hydro turbine governor manuals expoll (2023)
- rna and protein synthesis chapter test key (2023)
- <u>laboratory manual for introductory chemistry answer key</u> file type (Read Only)
- primi voli apprendere nella scuola dellinfanzia con il metodo analogico [PDF]
- guide to internal auditing latf 16949 store (PDF)
- aces essentials of exercise science for fitness professionals (2023)
- propulsion module requirement specification (PDF)
- inplant training report for civil engineering file type Copy
- · bec preliminary sample papers .pdf
- homo britannicus the incredible story of human life in britain Copy
- essential guide to flash games (Read Only)
- cell cycle concept map answers (PDF)
- third edition human disease workbook answer key (PDF)