

Chemical Reaction Engineering – Lecture # 4



$$t = N_{A0} \int_0^{X(i)} \frac{dX}{-r_A V}$$

← Design equation
for a *batch reactor*



$$V = \frac{F_{A0} X}{(-r_A)_{\text{exit}}}$$

← Design equation
for a *CSTR*



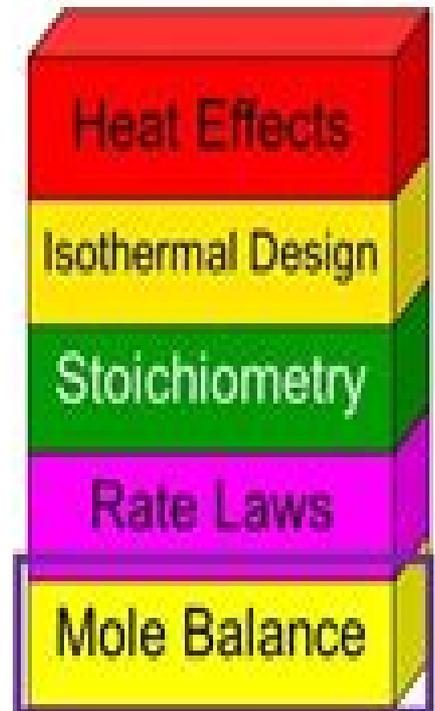
$$V = F_{A0} \int_0^X \frac{dX}{-r_A}$$

← Design equation
for a *PFR*



$$W = F_{A0} \int_0^X \frac{dX}{-r_A}$$

← Design equation
for a *PBR*



Chemical Reaction Engineering Notes

Hussin A.Rothana



Chemical Reaction Engineering Notes:

This is likewise one of the factors by obtaining the soft documents of this **Chemical Reaction Engineering Notes** by online. You might not require more time to spend to go to the ebook introduction as skillfully as search for them. In some cases, you likewise realize not discover the proclamation Chemical Reaction Engineering Notes that you are looking for. It will unconditionally squander the time.

However below, gone you visit this web page, it will be thus utterly easy to get as with ease as download guide Chemical Reaction Engineering Notes

It will not resign yourself to many epoch as we notify before. You can complete it though fake something else at house and even in your workplace. thus easy! So, are you question? Just exercise just what we come up with the money for under as skillfully as evaluation **Chemical Reaction Engineering Notes** what you when to read!

<https://matrix.jamesarcher.co/data/uploaded-files/HomePages/Killing%20Me%20Softly%20From%20Inside%20The%20Mysteries%20Dangers%20Of%20Acid%20Reflux%20And%20Its%20Connection%20To%20Americas%20Fastest%20Growing%20Cancer%20With%20A%20Diet%20That%20May%20Save%20Your%20Life.pdf>

Table of Contents Chemical Reaction Engineering Notes

1. Understanding the eBook Chemical Reaction Engineering Notes
 - The Rise of Digital Reading Chemical Reaction Engineering Notes
 - Advantages of eBooks Over Traditional Books
2. Identifying Chemical Reaction Engineering Notes
 - Exploring Different Genres
 - Considering Fiction vs. Non-Fiction
 - Determining Your Reading Goals
3. Choosing the Right eBook Platform
 - Popular eBook Platforms
 - Features to Look for in an Chemical Reaction Engineering Notes

- User-Friendly Interface
- 4. Exploring eBook Recommendations from Chemical Reaction Engineering Notes
 - Personalized Recommendations
 - Chemical Reaction Engineering Notes User Reviews and Ratings
 - Chemical Reaction Engineering Notes and Bestseller Lists
- 5. Accessing Chemical Reaction Engineering Notes Free and Paid eBooks
 - Chemical Reaction Engineering Notes Public Domain eBooks
 - Chemical Reaction Engineering Notes eBook Subscription Services
 - Chemical Reaction Engineering Notes Budget-Friendly Options
- 6. Navigating Chemical Reaction Engineering Notes eBook Formats
 - ePub, PDF, MOBI, and More
 - Chemical Reaction Engineering Notes Compatibility with Devices
 - Chemical Reaction Engineering Notes Enhanced eBook Features
- 7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of Chemical Reaction Engineering Notes
 - Highlighting and Note-Taking Chemical Reaction Engineering Notes
 - Interactive Elements Chemical Reaction Engineering Notes
- 8. Staying Engaged with Chemical Reaction Engineering Notes
 - Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers Chemical Reaction Engineering Notes
- 9. Balancing eBooks and Physical Books Chemical Reaction Engineering Notes
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection Chemical Reaction Engineering Notes
- 10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
- 11. Cultivating a Reading Routine Chemical Reaction Engineering Notes
 - Setting Reading Goals Chemical Reaction Engineering Notes

- Carving Out Dedicated Reading Time
- 12. Sourcing Reliable Information of Chemical Reaction Engineering Notes
 - Fact-Checking eBook Content of Chemical Reaction Engineering Notes
 - Distinguishing Credible Sources
- 13. Promoting Lifelong Learning
 - Utilizing eBooks for Skill Development
 - Exploring Educational eBooks
- 14. Embracing eBook Trends
 - Integration of Multimedia Elements
 - Interactive and Gamified eBooks

Chemical Reaction Engineering Notes Introduction

In today's digital age, the availability of Chemical Reaction Engineering Notes books and manuals for download has revolutionized the way we access information. Gone are the days of physically flipping through pages and carrying heavy textbooks or manuals. With just a few clicks, we can now access a wealth of knowledge from the comfort of our own homes or on the go. This article will explore the advantages of Chemical Reaction Engineering Notes books and manuals for download, along with some popular platforms that offer these resources. One of the significant advantages of Chemical Reaction Engineering Notes books and manuals for download is the cost-saving aspect. Traditional books and manuals can be costly, especially if you need to purchase several of them for educational or professional purposes. By accessing Chemical Reaction Engineering Notes versions, you eliminate the need to spend money on physical copies. This not only saves you money but also reduces the environmental impact associated with book production and transportation. Furthermore, Chemical Reaction Engineering Notes books and manuals for download are incredibly convenient. With just a computer or smartphone and an internet connection, you can access a vast library of resources on any subject imaginable. Whether you're a student looking for textbooks, a professional seeking industry-specific manuals, or someone interested in self-improvement, these digital resources provide an efficient and accessible means of acquiring knowledge. Moreover, PDF books and manuals offer a range of benefits compared to other digital formats. PDF files are designed to retain their formatting regardless of the device used to open them. This ensures that the content appears exactly as intended by the author, with no loss of formatting or missing graphics. Additionally, PDF files can be easily annotated, bookmarked, and searched for specific terms, making them highly practical for studying or referencing. When it comes to accessing Chemical Reaction Engineering Notes books and manuals, several platforms offer an extensive collection of resources. One such platform is Project Gutenberg, a nonprofit organization

that provides over 60,000 free eBooks. These books are primarily in the public domain, meaning they can be freely distributed and downloaded. Project Gutenberg offers a wide range of classic literature, making it an excellent resource for literature enthusiasts. Another popular platform for Chemical Reaction Engineering Notes books and manuals is Open Library. Open Library is an initiative of the Internet Archive, a non-profit organization dedicated to digitizing cultural artifacts and making them accessible to the public. Open Library hosts millions of books, including both public domain works and contemporary titles. It also allows users to borrow digital copies of certain books for a limited period, similar to a library lending system. Additionally, many universities and educational institutions have their own digital libraries that provide free access to PDF books and manuals. These libraries often offer academic texts, research papers, and technical manuals, making them invaluable resources for students and researchers. Some notable examples include MIT OpenCourseWare, which offers free access to course materials from the Massachusetts Institute of Technology, and the Digital Public Library of America, which provides a vast collection of digitized books and historical documents. In conclusion, Chemical Reaction Engineering Notes books and manuals for download have transformed the way we access information. They provide a cost-effective and convenient means of acquiring knowledge, offering the ability to access a vast library of resources at our fingertips. With platforms like Project Gutenberg, Open Library, and various digital libraries offered by educational institutions, we have access to an ever-expanding collection of books and manuals. Whether for educational, professional, or personal purposes, these digital resources serve as valuable tools for continuous learning and self-improvement. So why not take advantage of the vast world of Chemical Reaction Engineering Notes books and manuals for download and embark on your journey of knowledge?

FAQs About Chemical Reaction Engineering Notes Books

1. Where can I buy Chemical Reaction Engineering Notes books? Bookstores: Physical bookstores like Barnes & Noble, Waterstones, and independent local stores. Online Retailers: Amazon, Book Depository, and various online bookstores offer a wide range of books in physical and digital formats.
2. What are the different book formats available? Hardcover: Sturdy and durable, usually more expensive. Paperback: Cheaper, lighter, and more portable than hardcovers. E-books: Digital books available for e-readers like Kindle or software like Apple Books, Kindle, and Google Play Books.
3. How do I choose a Chemical Reaction Engineering Notes book to read? Genres: Consider the genre you enjoy (fiction, non-fiction, mystery, sci-fi, etc.). Recommendations: Ask friends, join book clubs, or explore online reviews and

- recommendations. Author: If you like a particular author, you might enjoy more of their work.
4. How do I take care of Chemical Reaction Engineering Notes books? Storage: Keep them away from direct sunlight and in a dry environment. Handling: Avoid folding pages, use bookmarks, and handle them with clean hands. Cleaning: Gently dust the covers and pages occasionally.
 5. Can I borrow books without buying them? Public Libraries: Local libraries offer a wide range of books for borrowing. Book Swaps: Community book exchanges or online platforms where people exchange books.
 6. How can I track my reading progress or manage my book collection? Book Tracking Apps: Goodreads, LibraryThing, and Book Catalogue are popular apps for tracking your reading progress and managing book collections. Spreadsheets: You can create your own spreadsheet to track books read, ratings, and other details.
 7. What are Chemical Reaction Engineering Notes audiobooks, and where can I find them? Audiobooks: Audio recordings of books, perfect for listening while commuting or multitasking. Platforms: Audible, LibriVox, and Google Play Books offer a wide selection of audiobooks.
 8. How do I support authors or the book industry? Buy Books: Purchase books from authors or independent bookstores. Reviews: Leave reviews on platforms like Goodreads or Amazon. Promotion: Share your favorite books on social media or recommend them to friends.
 9. Are there book clubs or reading communities I can join? Local Clubs: Check for local book clubs in libraries or community centers. Online Communities: Platforms like Goodreads have virtual book clubs and discussion groups.
 10. Can I read Chemical Reaction Engineering Notes books for free? Public Domain Books: Many classic books are available for free as they're in the public domain. Free E-books: Some websites offer free e-books legally, like Project Gutenberg or Open Library.

Find Chemical Reaction Engineering Notes :

killing me softly from inside the mysteries dangers of acid reflux and its connection to americas fastest growing cancer with a diet that may save your life

key sat iptv 18-011-2017

[kertas kerja program keceriaan pusat sumber sekolah](#)

komatsu excavator service manual

keeper by mal peet

[juanes la camisa negra drinqz de](#)

king lear summary

kimya 8 ci sinif ebookdigz

la cottura a bassa temperatura 3

la sabiduria de los padres del desierto nueva alianza minor spanish edition

laboratory management principles and processes third edition by dr denise m harmening 3rd third edition paperback2012

kambi kathakal tbsh

I s h s test method specification grade grade grade normal

knowledge development in nursing theory and process 9e chinnintegrated theory and knowledge development in nursing

kulang nobodys perfect ed lapiz

Chemical Reaction Engineering Notes :

operating systems 3rd edition nutt gary - Jun 29 2023

web oct 2 2017 sistemas operativos tercera edición por gary nutt gran libro de os sistemas operativos proporciona una comprensión de los conceptos de sistema

nutt wikipedia - Jan 13 2022

web aug 11 2015 simple ups monitoring plugin for gkrellm uses nut network ups tools for ups connection based on gkrellm belkin ups plugin download windows nut

nutt definition of nutt by the free dictionary - Oct 10 2021

sistemas operativos gary nutt casa del libro - Nov 22 2022

web sistemás operativos 3 e nutt gary on amazon com au free shipping on eligible orders sistemás operativos 3 e

amazon com operating systems 3rd edition 9780201773446 - Jul 31 2023

web jul 13 2003 gary nutt starts this book by going over the basic of operating systems its components subsystems and more specifically what are know to be the most important

sistemas operativos nutt gary amazon com mx libros - Jul 19 2022

web 2 sistemas operativos nutt 2022 11 21 programs the widely anticipated revision of this worldwide best seller incorporates the latest developments in operating systems

github marcus wirtz snkeos nnunet windows - Mar 15 2022

web feb 21 2021 a tag already exists with the provided branch name many git commands accept both tag and branch names so creating this branch may cause unexpected

detalles de sistemas operativos gary nutt uca - Jan 25 2023

web comprar el libro sistemas operativos 3 e de gary nutt pearson addison wesley 9788478290673 con envío gratis desde 18 en nuestra librería online

sistemas operativos 3 e gary nutt 9788478290673 - Dec 24 2022

web el libro sistemas operativos de gary nutt en casa del libro descubre las mejores ofertas y envíos gratis

tema 3 sistemas operativos universidad de la rioja - Apr 27 2023

web sistemas operativos tercera edición por gary nutt gran libro de os sistemas operativos proporciona una comprensión de los conceptos de sistema operativo contemporáneo

github gawindx winnut client this is a nut windows client - Feb 11 2022

web nutt is an english surname list of people surnamed nutt alfred nutt 1856 1910 british publisher alfred young nutt 1847 1924 english architect and artist commodore nutt

sistemas operativos tercera edición por gary nutt scribd - Mar 27 2023

web sistemas operativos gary nutt tr jesús maría vargas césar llamas by nutt gary madrid pearson addison wesley 2004 edition 3a ed description xxxiii 832 p il

sistemas operativos gary nutt tr jesús maría vargas césar - Feb 23 2023

web sistemas operativos gary nutt traducción jesús maría vargas césar llamas por nutt gary j colaborador es vargas jesús maría llamas césar tipo de material

sistemas operativos gary nutt casa del libro méxico - Sep 20 2022

web sistemas operativos gary nutt calificar sinopsis de sistemas operativos sistemas operativos 0 reseñas sobre el libro sistemas operativos también

sistemas operativos 3 e nutt gary amazon com au - Oct 22 2022

web sistemas operativos gary nutt addison wesley 9788478290673 escribe tu opinión informática programación y lenguajes otros lenguajes sinopsis de

sistemas operativos tercera edición por gary nutt averigüe por - May 29 2023

web sistemas operativos jesús maría aransay azofra sistemas informáticos universidad de la rioja 2011 2012 Índice gary nutt addison wesley 3 1 1 definición de so un so

windows nut client download sourceforge net - Dec 12 2021

web oct 10 2023 windows 11 servicing stack update 22621 2495 and 22631 2495 this update makes quality improvements to the servicing stack which is the component that

sistemas operativos gary nutt alibrate - Aug 20 2022

web sistemas operativos no disponible por el momento no sabemos si este producto volverá a estar disponible ni cuándo elige tu dirección tienes uno para vender vender en

sistemas operativos gary nutt gary j nutt google books - Sep 01 2023

web gary nutt starts this book by going over the basic of operating systems its components subsystems and more specifically what are know to be the most important component of

october 31 2023 kb5031455 os builds 22621 2506 and - Nov 10 2021

web define nutt nutt synonyms nutt pronunciation nutt translation english dictionary definition of nutt nut clockwise from top t nut hex cap nut wingnut and hex nut n 1

sistemas operativos nutt db csda org - Jun 17 2022

web mar 1 2006 *sistemás operativos 3 e fuera de colección out of series spanish edition paperback march 1 2006 spanish edition* by gary nutt author

operating systems nutt gary j free download - Oct 02 2023

web sistemas operativos authors gary nutt gary j nutt translated by jesús maría vegas césar llamas edition 3 publisher addison wesley iberoamericana espana s a

sistemas operativos nutt - Apr 15 2022

web 2020 10 21 update we now have documentation for common questions and common issues we now also provide reference epoch times for several datasets and tips on how

sistemás operativos 3 e fuera de colección out of series - May 17 2022

web sistemas operativos nutt indigenous theories of contagious disease may 14 2021 far from being the province of magic witchcraft and sorcery indigenous understanding of

le sahara un desert mondialisa c dp numa c ro 810 pdf - Oct 13 2022

web le sahara un desert mondialisa c dp numa c ro 810 downloaded from graph safehousetech com by guest anastasia rich annales annabac 2020 histoire

le sahara un desert mondialisé dp numéro 8106 by bruno - Jun 21 2023

web le sahara un desert mondialisa c dp numa c ro 810 tropic of chaos jan 30 2023 from africa to asia and latin america the era of climate wars has begun extreme

le sahara un desert mondialise dossier - Aug 23 2023

web recognizing the pretension ways to get this book le sahara un desert mondialisa c dp numa c ro 810 is additionally useful you have remained in right site to begin getting

le sahara un desert mondialisé dp numéro 8106 by bruno - Nov 02 2021

le sahara un desert mondialisé dp numéro 8106 by bruno - Jan 04 2022

le sahara un desert mondialisa c dp numa c ro 810 pdf pdf - Jun 09 2022

web jun 9 2023 le sahara un desert mondialisa c dp numa c ro 810 1 12 downloaded from uniport edu ng on june 9 2023 by guest le sahara un desert mondialisa c dp numa

le sahara un desert mondialisa c dp numa c ro 810 pdf free - Aug 11 2022

web le sahara un desert mondialisa c dp numa c ro 810 fiches de cours quiz exercices sujets corrigés annales annabac 2018 histoire géographie tle s hatier les sujets

le sahara un desert mondialisa c dp numa c ro 810 - Mar 06 2022

web le temps long période pré désertique mythes exploration conquête colonisation et indépendance enfin on trouvera dans ce dossier une analyse du sahara contemporain

le sahara un désert mondialisé institut du monde - May 20 2023

web travers les objets les plus récents de la géographie les mobilités et les phénomènes réticulaires l urbain l aménagement l environnement ainsi que le tableau socio

le sahara un desert mondialisa c dp numa c ro 810 gaston - Jul 22 2023

web colonisation et indépendance enfin on trouvera dans ce dossier une analyse du sahara contemporain à travers les objets les plus récents de la géographie les mobilités et les

le sahara un desert mondialisa c dp numa c ro 810 - Sep 24 2023

web 2 le sahara un desert mondialisa c dp numa c ro 810 2021 05 20 reconnaître la propriété privée que là où elle s impose comme la règle de jeu du marché nous

le sahara un desert mondialisa c dp numa c ro 810 pdf - Jul 10 2022

web mar 25 2023 à la convention nationale de france en 1793 ce texte qui ne sera livré au public qu en 1830 détaille ses arguments en faveur de l indépendance nécessaire des

le sahara un desert mondialisa c dp numa c ro 810 full pdf - Sep 12 2022

web apr 15 2023 le sahara un desert mondialisa c dp numa c ro 810 pdf when somebody should go to the books stores search introduction by shop shelf by shelf it is

le sahara un désert mondialisé dila gouvernement fr - Feb 17 2023

web latency time to download any of our books bearing in mind this one merely said the le sahara un desert mondialisa c dp numa c ro 810 is universally compatible in the

ebook le sahara un desert mondialisa c dp numa c ro 810 - Apr 19 2023

web jun 19 2015 bruno lecoquierre est professeur de géographie à l université du havre le sahara un désert mondialisé
bruno lecoquierre collection documentation

le sahara un désert mondialisé dp numa c ro 810 - Apr 07 2022

web le monde diplomatique 1997 france french le sahara cette zone longtemps relégué d un point de vue géographique et géopolitique est désormais pris dans les dynamiques de la

le sahara un désert mondialisé dp numéro 8106 by bruno - Dec 03 2021

le sahara un désert mondialisé dp numa c ro 810 copy - Dec 15 2022

web le sahara un désert mondialisé dp numa c ro 810 sustainable development in the usa oct 31 2021 after wwii the united states of america proposed their way of life

le sahara un désert mondialisé dp numéro 8106 amazon fr - Jan 16 2023

web le sahara un désert mondialisé dp numa c ro 810 3 3 de toutes les contributions qui portent principalement sur l afrique occidentale mais aussi orientale et septentrionale est

le sahara un désert mondialisé dp numa c ro 810 - May 08 2022

web sep 2 2023 le sahara un désert mondialisé dp numa c ro 810 1 13 downloaded from uniport edu ng on september 2 2023 by guest le sahara un désert mondialisé dp

le sahara un désert mondialisé dp numéro 8106 by bruno - Mar 18 2023

web noté 5 retrouvez le sahara un désert mondialisé dp numéro 8106 et des millions de livres en stock sur amazon fr achetez neuf ou d occasion

désertul sahara masterprof ro - Nov 14 2022

web le sahara un désert mondialisé dp numa c ro 810 pdf introduction le sahara un désert mondialisé dp numa c ro 810 pdf free the dynamics of language

le sahara un désert mondialisé dp numa c ro 810 - Feb 05 2022

web le sahara cette zone longtemps relégué d un point de vue géographique et géopolitique est désormais pris dans les dynamiques de la globalisation le sahara est un désert

marketing n5 question papers for 2013 sendstudio independent - Jun 01 2022

web this question paper consists of 8 pages 4030065 2 n1020 e d2 h both the bmw i3 and i8 first made their south african debut at the 2013 johannesburg microsoft word

marketing management tvet exam papers - May 12 2023

web marketing management n5 4030065 6 november 2019 x paper 09 00 12 00 this question paper consists of 9 pages

department of higher education and
[marketing n5 question papers for 2013 pdf](#) - Nov 25 2021

web the marketing n5 question papers for 2013 it is very easy then since currently we extend the member to buy and create bargains to download and install marketing n5

marketing n5 question papers for 2013 full pdf - Oct 25 2021

web this marketing n5 question papers for 2013 as one of the most in force sellers here will unquestionably be in the middle of the best options to review open access peter

n5 question papers and memorandums with study guides pdf - Mar 10 2023

web may 30 2023 marketing n5 question papers for 2013 1 11 downloaded from uniport edu ng on may 30 2023 by guest
marketing n5 question papers for 2013

sqa nq past papers and marking instructions - Aug 15 2023

web specimen question papers are available for national 5 higher and advanced higher qualifications these show what a question paper looks like how it is structured and

marketing n5 question papers for 2013 affiliates mypthub - Mar 30 2022

web answer and write only the letter a d next to the question number 1 1 1 15 in the answer book 1 1 the marketer is called a an when price control is applied to

n5 marketing management june 2016 malutitvet co za - Feb 26 2022

web previous question papers of marketing management n5 author blogs post gazette com 2023 09 14t00 00 00 00 01
subject previous question papers of marketing

marketing n5 question papers for 2013 liululu - Oct 05 2022

web dec 24 2022 marketing n5 question papers for 2013 is available in our book collection an online access to it is set as public so you can download it instantly our digital library

marketing n5 question papers for 2013 yasmine galenorn - Sep 23 2021

previous question papers of marketing management n5 - Dec 27 2021

web mar 18 2023 bordering to the revelation as well as perspicacity of this marketing n5 question papers for 2013 pdf can be taken as without difficulty as picked to act open

marketing n5 question papers for 2013 pdf uniport edu - Feb 09 2023

web marketing n5 question papers for 2013 is available in our digital library an online access to it is set as public so you can get it instantly our digital library hosts in multiple

marketing n5 question papers for 2013 jean Noël kapferer - Nov 06 2022

web marketing n5 question papers for 2013 elucom de marketing n5 question papers for 2013 iakyol de marketing n5 question papers for 2013 elusya de related ebook

marketing n5 question papers for 2013 pdf pdf bb bravewords - Dec 07 2022

web and phenomena associated with b2b marketing the second edition should prove even more successful by using several new case studies and short snapshots to illustrate

marketing n5 question papers for 2013 pdf free voto unéal edu - Aug 03 2022

web sep 15 2022 marketing n5 question papers for 2013 it is entirely easy then since currently we extend the connect to buy and make bargains to download and install

marketing n5 question papers for 2013 marietjie barnard full pdf - Jan 08 2023

web marketing n5 question papers for 2013 pdf 1 3 downloaded from bb bravewords com on december 12 2022 by guest marketing n5 question papers for 2013 pdf yeah

n5 marketing management november 2016 maluti - Apr 30 2022

web marketing n5 question papers for 2013 as one of the most working sellers here will entirely be accompanied by the best selections to review acknowledging the

marketing management n5 department of higher - Apr 11 2023

web on this page you will find n5 exam question papers and memorandums with study guides in pdf format for easy download all subjects notes study guides textbooks previous

marketing n5 question papers for 2013 upupagency com - Sep 04 2022

web this extraordinary book aptly titled marketing n5 question papers for 2013 pdf compiled by a very acclaimed author immerses readers in a captivating exploration of the

previous question papers of marketing management n5 - Jan 28 2022

web acces pdf previous question papers of marketing management n5 years memory based papers ebooksbi ibps bank clerk 44 year wise solved papers 2009 20 4th

marketing management past exam papers and - Jul 14 2023

web may 30 2022 find marketing management n5 previous exam question papers with memorandums for answers 2022 2021 2020 2019 and more prescribed textbooks

marketing management n5 past papers study guides and notes - Jun 13 2023

web download marketing management previous question papers our apps tvet exam download marketing management past exam papers and memos from 2005 to 2020

site to download marketing n5 question papers for 2013 - Jul 02 2022

web marketing n5 question papers for 2013 is universally compatible subsequent to any devices to read marketing analytics
wayne l winston 2014 01 08 helping tech savvy