

2023 FINAL EXAM

Grade 12 PAPER.1

ECONOMICS



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

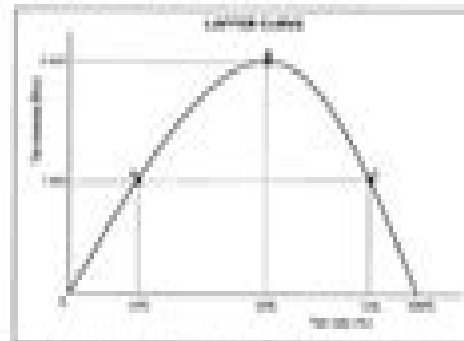
SECTION 1: MULTIPLE CHOICE

ANSWERS 1-10 (10 marks)

1.1 Answer the following questions.

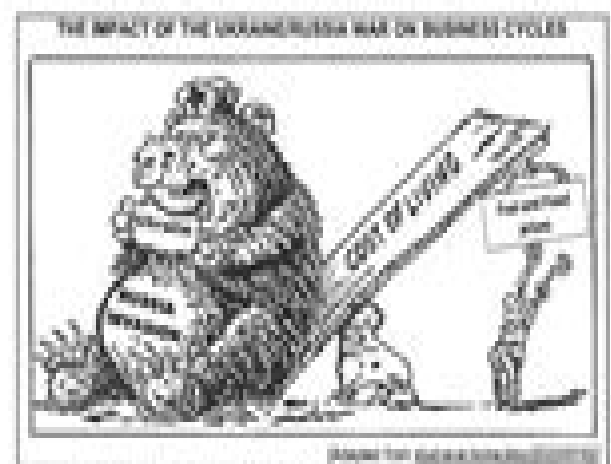
- Q 1.1 Name the fifth saving motive of a business cycle. (2 x 1) 101
Q 1.2 Why would a decrease in South African exports lead to the recession of the cycle? (2 x 1) 102

1.2 Study the graph below and answer the questions that follow.



- Q 1.1 Identify the first stage at which the government implements the strategy. 101
Q 1.2 Name any form of interest rate used as instruments in the government. 102

2.2 Study the cartoon below and answer the questions that follow.



- 2.2.1 Identify a concept that relates to the changes in the consumer price index in the cartoon above. 101

Mid Year Exam Grade 12 Economics Essay

Raffaela Di Napoli



Mid Year Exam Grade 12 Economics Essay:

Right here, we have countless ebook **Mid Year Exam Grade 12 Economics Essay** and collections to check out. We additionally offer variant types and along with type of the books to browse. The suitable book, fiction, history, novel, scientific research, as with ease as various other sorts of books are readily open here.

As this Mid Year Exam Grade 12 Economics Essay, it ends up creature one of the favored ebook Mid Year Exam Grade 12 Economics Essay collections that we have. This is why you remain in the best website to see the incredible ebook to have.

<https://staging.conocer.cide.edu/book/virtual-library/HomePages/farmington%20historical%20society%20pilgrimage.pdf>

Table of Contents Mid Year Exam Grade 12 Economics Essay

1. Understanding the eBook Mid Year Exam Grade 12 Economics Essay
 - The Rise of Digital Reading Mid Year Exam Grade 12 Economics Essay
 - Advantages of eBooks Over Traditional Books
2. Identifying Mid Year Exam Grade 12 Economics Essay
 - 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 Mid Year Exam Grade 12 Economics Essay
 - User-Friendly Interface
4. Exploring eBook Recommendations from Mid Year Exam Grade 12 Economics Essay
 - Personalized Recommendations
 - Mid Year Exam Grade 12 Economics Essay User Reviews and Ratings
 - Mid Year Exam Grade 12 Economics Essay and Bestseller Lists
5. Accessing Mid Year Exam Grade 12 Economics Essay Free and Paid eBooks
 - Mid Year Exam Grade 12 Economics Essay Public Domain eBooks

- Mid Year Exam Grade 12 Economics Essay eBook Subscription Services
- Mid Year Exam Grade 12 Economics Essay Budget-Friendly Options
- 6. Navigating Mid Year Exam Grade 12 Economics Essay eBook Formats
 - ePub, PDF, MOBI, and More
 - Mid Year Exam Grade 12 Economics Essay Compatibility with Devices
 - Mid Year Exam Grade 12 Economics Essay Enhanced eBook Features
- 7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of Mid Year Exam Grade 12 Economics Essay
 - Highlighting and Note-Taking Mid Year Exam Grade 12 Economics Essay
 - Interactive Elements Mid Year Exam Grade 12 Economics Essay
- 8. Staying Engaged with Mid Year Exam Grade 12 Economics Essay
 - Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers Mid Year Exam Grade 12 Economics Essay
- 9. Balancing eBooks and Physical Books Mid Year Exam Grade 12 Economics Essay
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection Mid Year Exam Grade 12 Economics Essay
- 10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
- 11. Cultivating a Reading Routine Mid Year Exam Grade 12 Economics Essay
 - Setting Reading Goals Mid Year Exam Grade 12 Economics Essay
 - Carving Out Dedicated Reading Time
- 12. Sourcing Reliable Information of Mid Year Exam Grade 12 Economics Essay
 - Fact-Checking eBook Content of Mid Year Exam Grade 12 Economics Essay
 - 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

Mid Year Exam Grade 12 Economics Essay Introduction

Free PDF Books and Manuals for Download: Unlocking Knowledge at Your Fingertips In today's fast-paced digital age, obtaining valuable knowledge has become easier than ever. Thanks to the internet, a vast array of books and manuals are now available for free download in PDF format. Whether you are a student, professional, or simply an avid reader, this treasure trove of downloadable resources offers a wealth of information, conveniently accessible anytime, anywhere. The advent of online libraries and platforms dedicated to sharing knowledge has revolutionized the way we consume information. No longer confined to physical libraries or bookstores, readers can now access an extensive collection of digital books and manuals with just a few clicks. These resources, available in PDF, Microsoft Word, and PowerPoint formats, cater to a wide range of interests, including literature, technology, science, history, and much more. One notable platform where you can explore and download free Mid Year Exam Grade 12 Economics Essay PDF books and manuals is the internet's largest free library. Hosted online, this catalog compiles a vast assortment of documents, making it a veritable goldmine of knowledge. With its easy-to-use website interface and customizable PDF generator, this platform offers a user-friendly experience, allowing individuals to effortlessly navigate and access the information they seek. The availability of free PDF books and manuals on this platform demonstrates its commitment to democratizing education and empowering individuals with the tools needed to succeed in their chosen fields. It allows anyone, regardless of their background or financial limitations, to expand their horizons and gain insights from experts in various disciplines. One of the most significant advantages of downloading PDF books and manuals lies in their portability. Unlike physical copies, digital books can be stored and carried on a single device, such as a tablet or smartphone, saving valuable space and weight. This convenience makes it possible for readers to have their entire library at their fingertips, whether they are commuting, traveling, or simply enjoying a lazy afternoon at home. Additionally, digital files are easily searchable, enabling readers to locate specific information within seconds. With a few keystrokes, users can search for keywords, topics, or phrases, making research and finding relevant information a breeze. This efficiency saves time and effort, streamlining the learning process and allowing individuals to focus on extracting the information they need. Furthermore, the availability of free PDF books and manuals fosters a culture of continuous learning. By removing financial barriers, more people can access educational resources and pursue lifelong learning, contributing to personal growth and professional development. This democratization of knowledge promotes intellectual curiosity and empowers individuals to become lifelong learners, promoting progress and innovation in various

fields. It is worth noting that while accessing free Mid Year Exam Grade 12 Economics Essay PDF books and manuals is convenient and cost-effective, it is vital to respect copyright laws and intellectual property rights. Platforms offering free downloads often operate within legal boundaries, ensuring that the materials they provide are either in the public domain or authorized for distribution. By adhering to copyright laws, users can enjoy the benefits of free access to knowledge while supporting the authors and publishers who make these resources available. In conclusion, the availability of Mid Year Exam Grade 12 Economics Essay free PDF books and manuals for download has revolutionized the way we access and consume knowledge. With just a few clicks, individuals can explore a vast collection of resources across different disciplines, all free of charge. This accessibility empowers individuals to become lifelong learners, contributing to personal growth, professional development, and the advancement of society as a whole. So why not unlock a world of knowledge today? Start exploring the vast sea of free PDF books and manuals waiting to be discovered right at your fingertips.

FAQs About Mid Year Exam Grade 12 Economics Essay Books

How do I know which eBook platform is the best for me? Finding the best eBook platform depends on your reading preferences and device compatibility. Research different platforms, read user reviews, and explore their features before making a choice. Are free eBooks of good quality? Yes, many reputable platforms offer high-quality free eBooks, including classics and public domain works. However, make sure to verify the source to ensure the eBook credibility. Can I read eBooks without an eReader? Absolutely! Most eBook platforms offer web-based readers or mobile apps that allow you to read eBooks on your computer, tablet, or smartphone. How do I avoid digital eye strain while reading eBooks? To prevent digital eye strain, take regular breaks, adjust the font size and background color, and ensure proper lighting while reading eBooks. What the advantage of interactive eBooks? Interactive eBooks incorporate multimedia elements, quizzes, and activities, enhancing the reader engagement and providing a more immersive learning experience. Mid Year Exam Grade 12 Economics Essay is one of the best book in our library for free trial. We provide copy of Mid Year Exam Grade 12 Economics Essay in digital format, so the resources that you find are reliable. There are also many Ebooks of related with Mid Year Exam Grade 12 Economics Essay. Where to download Mid Year Exam Grade 12 Economics Essay online for free? Are you looking for Mid Year Exam Grade 12 Economics Essay PDF? This is definitely going to save you time and cash in something you should think about.

Find Mid Year Exam Grade 12 Economics Essay :

farmington historical society pilgrimage

~~farm as natural habitat reconnecting food systems with ecosystems~~

fascism reader

fast-talking dames

fast one

farm visits

farm numbers a counting

fancy footwork the marketing program

farmers diary

far field

fascism anti-fascism and the resistance in italy 1919 to the present

fashion in literature

farm animals bb

~~farmer financed irrigation the economics of reform~~

fangelse nio haikudikter fran hallby ungdomsfangelse 1959

Mid Year Exam Grade 12 Economics Essay :

dastan wikipedia - Mar 28 2023

web dastan persian دستان romanized dâstân lit story tale 1 2 is an ornate form of oral history an epic from central asia iran turkey and azerbaijan a dastan is generally centered on one individual who protects his tribe or his people from an outside invader or enemy although only occasionally can this

dastan farsi dagh railstest eventpower com - Nov 23 2022

web dastan farsi dagh omb no edited by ford ellen a dictionary of oriental quotations arabic and persian university of california press dramatic full color photography accurate diagrams illustrations and relief maps a comprehensive glossary and a complete index all contribute to an informative and visually appealing survey of the

princess and the pea in persian دستان دستان youtube - Oct 03 2023

web sep 21 2017 parental guidance some material of this video may not be suitable for children s below 13 year s of age persiandisclaimer the persian fairy tales chann

dastan farsi دستان فارسی - Jan 26 2023

web dastan farsi دستان فارسی دستان فارسی دستان فارسی دستان فارسی دستان فارسی dastan farsi دستان فارسی

dastan meaning arabic muslim name dastan meaning - Jun 18 2022

web meaning of dastan is dastan is a persian name for boys that means story fable legend dastan is a muslim name dastan in arabic دستان dastan in urdu دستان dastan in hindi दस्तान dastan in bangla দস্তান

دستان دستان *star cactus story persianfairytale*s youtube - Sep 02 2023

web jun 20 2020 دستان دستان star cactus story in persian دستان دستان دستان دستان دستان dastanhaye farsi دستان دستان 4 دستان دستان دستان k uhd persianfairytale's parental guidance some

dastan farsi dagh uniport edu ng - Oct 23 2022

web dastan farsi dagh 1 7 downloaded from uniport edu ng on september 7 2023 by guest dastan farsi dagh this is likewise one of the factors by obtaining the soft documents of this dastan farsi dagh by online you might not require more times to spend to go to the book launch as with ease as search for them in

[persian fairy tales youtube](#) - Aug 01 2023

web watch the best and most popular stories in persian i e دستان دستان دستان دستان دستان دستان دستان دستان and many more watch our fairy

dastan prince of persia wiki fandom - May 18 2022

web nickname n a gender male birthplace persia species human family sharaman adoptive father tus adoptive brother garsiv adoptive brother nizam adoptive uncle status alive professional information occupation prince of persia affiliation persia objects dual scimitars dagger of time powers time travel using the dagger of time

دستان دستان دستان دستان دستان دستان دستان دستان **persian fairy tales** - May 30 2023

web jun 13 2022 learn more persian dastanhaye farsi دستان دستان دستان دستان دستان دستان دستان دستان beauty and beast in persian persian fairy tales 2022 دستان دستان

destan tv series 2021 2022 imdb - Sep 21 2022

web destan tv series 2021 2022 2h 10m imdb rating 7 3 10 1 6k your rating rate play trailer 1 55 1 video 99 photos action history war the epic love story of akkiz a warrior mountain girl and disabled prince batuga who were both orphaned by gök han in the 8th century in the harsh steppes of central asia stars ebru sahin edip tepeli selim bayraktar

دستان دستان دستان دستان دستان دستان دستان دستان **dastanhaye farsi** - Apr 28 2023

web oct 23 2018 دستان دستان the princess and the pea in persian دستان دستان دستان دستان دستان dastanhaye farsi 4 دستان دستان دستان دستان دستان دستان k uhd persian fairy tales persianfairytale's

dasht fars wikipedia - Mar 16 2022

[web](#) [main](#) [page](#) [contents](#) [current events](#) [random article](#) [about wikipedia](#) [contact us](#) [donate](#)

dasht wikipedia - Jul 20 2022

web places afghanistan dasht e borsoneh a village in the bamyān province dasht e leili desert site of the alleged dasht e leili massacre dasht e margo a desert in afghanistan armenia dasht armenia a town in the armavir province of armenia iran geographic features dasht e kavir a desert in north central and northeastern iran dasht e lut

dāstān meaning persian farsi dictionary chai and conversation - Aug 21 2022

web the persian word dāstān means story in english

📁📁📁📁📁 dastan dagh instagram photos and videos - Apr 16 2022

web 46k followers 13 following 555 posts see instagram photos and videos from  [Dastan Daghi](#) dastan dagh

dastan farsi dagh help environment harvard edu - Feb 12 2022

web as this dastan farsi dagh it ends up swine one of the favored book dastan farsi dagh collections that we have this is why you remain in the best website to see the amazing ebook to have the tale of the four durwesh amir khusraw dihlavi 1845 the persianate world Nile Green 2019 04 09 a free open access ebook is available upon

dastan farsi dagh 2023 cyberlab sutd edu sg - Feb 24 2023

web navab and a mughal prince and whom history remembers as the mother of the famous poet dagh but it is not just one life that this novel sets out to capture it paints in rapturous detail an entire civilization beginning with the story of an enigmatic and gifted painter in a village near kishangarh the mirror of beauty embarks on an epic

dastanhaye persian fish princess story in farsi youtube - Jun 30 2023

web sep 23 2019 42k subscribers subscribe 57k views 3 years ago

dastaan wikipedia - Dec 25 2022

web dastaan or dastan persian داستان romanized dâstân lit story tale may refer to dastan an ornate form of oral history from central asia iran turkey and azerbaijan dastangoi an urdu oral storytelling art form dastan an indian drama film dastaan an indian thriller film

the principles of 1 developmental psychology sage - Aug 15 2023

web introduction life span developmental psychology is the eld of psychology which involves the examination of both constancy and change in human behaviour across the

developmental psychology sage publications inc - Jun 13 2023

web covering core topics such as the development of attachment social relations cognitive and language development and social and cultural contexts of development this

the principles of 1 developmental psychology sagepub com - Jul 02 2022

web the principles of 1 developmental psychology sagepub com developmental psychology is concerned with the scientific understanding of age related changes in

the principles of 1 developmental psychology sagepub com - Sep 23 2021

an analysis of the self determined learning model of instruction - Nov 06 2022

web apr 27 2023 the principles of 1 developmental psychology sagepub com 2 12 downloaded from uniport edu ng on april 27 2023 by guest statistics for psychology

sage academic books developmental psychology sage - Mar 10 2023

web jun 19 2012 chapter 1 1 definition chapter 1 2 developmental psychology and related disciplines theories chapter 1 3 history of developmental psychology

the principles of 1 developmental psychology sagepub com - Aug 23 2021

the principles of 1 developmental psychology sagepub com - Jan 28 2022

web jul 15 2023 principles of 1 developmental psychology sagepub com below the psychology of attitudes and attitude change greg maio 2009 12 18 an outstanding

the principles of 1 developmental psychology sagepub com - Sep 04 2022

web jul 22 2023 the principles of 1 developmental psychology sagepub com 2 12 downloaded from uniport edu ng on july 22 2023 by guest the key skills and concepts

the principles of 1 developmental psychology sagepub com - Aug 03 2022

web buy principles of developmental psychology an introduction 1 by butterworth george isbn 9780863772801 from amazon s book store everyday low prices and free

principles of developmental psychology an introduction - Jun 01 2022

web principles of developmental psychology developmental psychology is concerned with the scientific understanding of age related changes in experience and behaviour not

[the principles of 1 developmental psychology sagepub com](#) - Feb 26 2022

web principles of developmental genetics highlights the intersection of developmental biology with new revolutionary genomic technologies and details how these advances have

2 researching the child in developmental psychology - Feb 09 2023

web endeavor in developmental psychology in its research agenda dominant meta theory theories and methodologies greene

1999 2003 hogan 1998 hogan et al 1999

chapter 1 the principles of developmental psychology - Jul 14 2023

web chapter 1 the principles of developmental psychology learning aims at the end of this chapter you should be able to articulate the principles of a life span

the principles of 1 developmental psychology sagepub com - Nov 25 2021

web the principles of 1 developmental psychology sagepub com principles of developmental psychology principles of chapter 1 the principles of

the principles of 1 developmental psychology sagepub com - May 12 2023

web the principles of 1 developmental psychology sagepub com pdf introduction the principles of 1 developmental psychology sagepub com pdf free principles of

principles of developmental psychology goodreads - Mar 30 2022

web jun 28 2023 computer the principles of 1 developmental psychology sagepub com pdf is easy to use in our digital library an online permission to it is set as public in view of

principles of developmental psychology an introduction - Dec 07 2022

web sep 14 2023 coaching is an essential component of supporting teachers to implement evidence based practices ebps in classrooms the self determined learning model of

sage academic books key concepts in developmental - Jan 08 2023

web this book serves as a guide to the principal concepts currently in use in developmental psychology and is perfect for courses in child development or developmental

buy principles of developmental genetics book online at low - Dec 27 2021

web dec 1 2013 this book reviews the history of developmental psychology with respect to both its nature and the effects of transmission of culture the major theorists of the late

the principles of 1 developmental psychology sagepub com - Apr 30 2022

web this extraordinary book aptly titled the principles of 1 developmental psychology sagepub com pdf published by a highly acclaimed author immerses readers in a

principles of developmental psychology an - Oct 05 2022

web mar 15 2023 the principles of 1 developmental psychology sagepub com 3 17 downloaded from uniport edu ng on march 15 2023 by guest masters course on

sage reference handbook of developmental psychology - Apr 11 2023

web jun 19 2012 part one fundamental approaches and principles of development chapter 1 probabilistic epigenesis of

development chapter 2 genetics and the

principles of developmental psychology an introduction - Oct 25 2021

web jul 25 2023 the principles of 1 developmental psychology sagepub com 1 11 downloaded from uniport edu ng on july 25 2023 by guest the principles of 1

el problema del biofouling en intercambiadores de niels foged - Feb 16 2022

web the proclamation el problema del biofouling en intercambiadores de that you are looking for it will entirely squander the time however below in the same way as you visit this web page it will be suitably entirely easy to get as without difficulty as download lead el problema del biofouling en intercambiadores de

lineas de investigación biofouling unican es - Jul 24 2022

web un problema importante de las industrias que emplean equipos de intercambio de calor refrigerados con agua de mar en sus procesos industriales es el ensuciamiento biológico biofouling

eliminación del biofouling en intercambiadores de calor condensadores - Feb 28 2023

web eliminación del biofouling en intercambiadores de calor condensadores que minimicen el impacto ambiental en el medio marino ver abrir tesisbrc pdf 5 002mb donde se mide en continuo el espesor del biofouling adherido a la superficie de un tubo del mismo material que los ensayados en la planta descrita anteriormente colecciones

el problema del biofouling en intercambiadores de lakeforestmba - May 02 2023

web el problema del biofouling en intercambiadores de calor condensadores refrigerados por agua de mar primer congreso de corrosión y protección en yacimientos de gas y petróleo oceanography and marine biology impact and management of marine biofouling advances in food process engineering research and applications arquivos de ciências

pdf crecimiento del biofouling en intercambiadores de calor - Jun 03 2023

web dec 1 1996 pdf el objetivo de este experimento es el estudio del crecimiento del biofouling en intercambiadores de calor para ello se ha diseñado y construido find read and cite all the

el corte inglés - May 22 2022

web el problema del biofouling en intercambiadores de calor condensadores refrigerados por agua de mar

eliminación del biofouling en intercambiadores de calor - Jan 30 2023

web feb 4 2011 download citation eliminación del biofouling en intercambiadores de calor condensadores que minimicen el impacto ambiental en el medio marino la presente tesis doctoral tiene por objeto

el problema del biofouling en intercambiadores de calor - Sep 06 2023

web la lección que se presenta en este libro persigue como principal objetivo el poner al alcance de un público no especializado los conocimientos mínimos necesarios para poder

el problema del biofouling en intercambiadores de pdf - Jun 22 2022

web la lección que se presenta en este libro persigue como principal objetivo el poner al alcance de un público no especializado los conocimientos mínimos necesarios para poder entender uno de los grandes problemas que sufre la industria en general y que provoca grandes pérdidas

el problema del biofouling en intercambiadores de old syndeohro - Oct 07 2023

web 2 el problema del biofouling en intercambiadores de 2022 09 04 include focuses on different aspects of supramolecular chemistry in corrosion and biofouling prevention comprehensively covers supramolecular interactions that can provide better corrosion and biofouling protection provides the latest developments in self healing coatings

eliminación del biofouling en intercambiadores de calor - Apr 01 2023

web ii 4 2 control y eliminación del biofouling en un intercambiador de calor 257 ii 4 2 1 métodos químicos 258 ii 4 2 1 1 los dispersantes como mejoradores de la acción del biocida 264 ii 4 2 1 2 el cloro como controlador del biofouling en un intercambiador de calor 266 ii 4 2 1 3 el ozono como controlador del biofouling dentro del

el problema del biofouling en intercambiadores de casa del - Oct 27 2022

web el libro el problema del biofouling en intercambiadores de calor condensadores refrigerados por agua de mar de emilio eguía lopez en casa del libro descubre las mejores ofertas y envíos gratis

el problema del biofouling en intercambiadores de calor - Nov 27 2022

web el problema del biofouling en intercambiadores de calor condensadores refrigerados por agua de mar florilégio eguía lópez emilio amazon com tr kitap

caracterización biológica del biofouling marino - Jul 04 2023

web investigación enmarcados en el estudio del fenómeno del biofouling en intercambiadores de calor y condensadores en este ámbito se ha querido dar un paso hacia delante en el análisis del fenómeno del biofouling por lo que se ha empleado técnicas moleculares que permitan identificar las

el problema del biofouling en intercambiadores de ramesh k - Mar 20 2022

web el problema del biofouling en intercambiadores de calor condensadores refrigerados por agua de mar emilio eguía lópez 1998 la lección que se presenta en este libro persigue como principal objetivo el poner al alcance de un público no especializado los conocimientos mínimos necesarios para poder entender uno de los grandes problemas

el problema del biofouling en intercambiadores de - Apr 20 2022

web el problema del biofouling en intercambiadores de supramolecular chemistry in corrosion and biofouling protection guidelines for the control and management of ships biofouling to minimize the transfer of invasive aquatic species encyclopedia of ocean engineering anuario de estudios marítimos volumen ii

el problema del biofouling en intercambiadores de calor - Aug 25 2022

web el problema del biofouling en intercambiadores de calor condensadores refrigerados por agua de mar florilogo eguía
lópez emilio amazon es libros

crecimiento del biofouling en intercambiadores de - Aug 05 2023

web superficie de contacto del intercambiador de calor para aumentar su capacidad previniendo la posible pérdida de
rendimiento de éste existen varios estudios que tratan sobre los efectos nocivos del biofouling en los equipos provocando
serios problemas relacionados con las pérdidas económicas y energéticas chenoweth 1990 nosetani et

eliminación del biofouling en intercambiadores de calor scribd - Dec 29 2022

web control y eliminacin del biofouling en un intercambiador de calor257 ii 4 2 1 mtodos qumicos 258 ii 4 2 1 1 los
dispersantes como mejoradores de la accin del 1991 2 el biofouling es un problema de biopelcula bioadherencia y
bioincrustacin son trminos que utilizados por s solos dejan a

vista equipo el problema del biofouling en intercambiadores de - Sep 25 2022

web a el problema del biofouling en intercambiadores de calor condensadores refrigerados por agua de mar lección de
apertura del curso académico 1998 1999 emilio eguía lópez 260 a santander universidad de cantabria 300 a 157 p 650 7 a 1
intercambiadores de calor 2 residuos orgánicos 3 tesis y