

PAST YEARS EXAM PAPERS

Enter

Examination
Paper

School of Chemical Sciences
Universiti Sains Malaysia

Usm Past Year Exam Paper

RD Boyd



Usm Past Year Exam Paper:

Immerse yourself in the artistry of words with Crafted by is expressive creation, Discover the Artistry of **Usm Past Year Exam Paper** . This ebook, presented in a PDF format (Download in PDF: *), is a masterpiece that goes beyond conventional storytelling. Indulge your senses in prose, poetry, and knowledge. Download now to let the beauty of literature and artistry envelop your mind in a unique and expressive way.

<https://movement.livewellcolorado.org/files/browse/default.aspx/The%20Secret%20Of%20Spring.pdf>

Table of Contents Usm Past Year Exam Paper

1. Understanding the eBook Usm Past Year Exam Paper
 - The Rise of Digital Reading Usm Past Year Exam Paper
 - Advantages of eBooks Over Traditional Books
2. Identifying Usm Past Year Exam Paper
 - 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 Usm Past Year Exam Paper
 - User-Friendly Interface
4. Exploring eBook Recommendations from Usm Past Year Exam Paper
 - Personalized Recommendations
 - Usm Past Year Exam Paper User Reviews and Ratings
 - Usm Past Year Exam Paper and Bestseller Lists
5. Accessing Usm Past Year Exam Paper Free and Paid eBooks
 - Usm Past Year Exam Paper Public Domain eBooks
 - Usm Past Year Exam Paper eBook Subscription Services
 - Usm Past Year Exam Paper Budget-Friendly Options

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

Usm Past Year Exam Paper Introduction

Usm Past Year Exam Paper Offers over 60,000 free eBooks, including many classics that are in the public domain. Open Library: Provides access to over 1 million free eBooks, including classic literature and contemporary works. Usm Past Year Exam Paper Offers a vast collection of books, some of which are available for free as PDF downloads, particularly older books in the public domain. Usm Past Year Exam Paper : This website hosts a vast collection of scientific articles, books, and textbooks. While it operates in a legal gray area due to copyright issues, its a popular resource for finding various publications. Internet Archive for Usm Past Year Exam Paper : Has an extensive collection of digital content, including books, articles, videos, and more. It has a massive library of free downloadable books. Free-eBooks Usm Past Year Exam Paper Offers a diverse range of free eBooks across various genres. Usm Past Year Exam Paper Focuses mainly on educational books, textbooks, and business books. It offers free PDF downloads for educational purposes. Usm Past Year Exam Paper Provides a large selection of free eBooks in different genres, which are available for download in various formats, including PDF. Finding specific Usm Past Year Exam Paper, especially related to Usm Past Year Exam Paper, might be challenging as theyre often artistic creations rather than practical blueprints. However, you can explore the following steps to search for or create your own Online Searches: Look for websites, forums, or blogs dedicated to Usm Past Year Exam Paper, Sometimes enthusiasts share their designs or concepts in PDF format. Books and Magazines Some Usm Past Year Exam Paper books or magazines might include. Look for these in online stores or libraries. Remember that while Usm Past Year Exam Paper, sharing copyrighted material without permission is not legal. Always ensure youre either creating your own or obtaining them from legitimate sources that allow sharing and downloading. Library Check if your local library offers eBook lending services. Many libraries have digital catalogs where you can borrow Usm Past Year Exam Paper eBooks for free, including popular titles. Online Retailers: Websites like Amazon, Google Books, or Apple Books often sell eBooks. Sometimes, authors or publishers offer promotions or free periods for certain books. Authors Website Occasionally, authors provide excerpts or short stories for free on their websites. While this might not be the Usm Past Year Exam Paper full book , it can give you a taste of the authors writing style. Subscription Services Platforms like Kindle Unlimited or Scribd offer subscription-based access to a wide range of Usm Past Year Exam Paper eBooks, including some popular titles.

FAQs About Usm Past Year Exam Paper 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 webbased 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. Usm Past Year Exam Paper is one of the best book in our library for free trial. We provide copy of Usm Past Year Exam Paper in digital format, so the resources that you find are reliable. There are also many Ebooks of related with Usm Past Year Exam Paper. Where to download Usm Past Year Exam Paper online for free? Are you looking for Usm Past Year Exam Paper PDF? This is definitely going to save you time and cash in something you should think about. If you trying to find then search around for online. Without a doubt there are numerous these available and many of them have the freedom. However without doubt you receive whatever you purchase. An alternate way to get ideas is always to check another Usm Past Year Exam Paper. This method for see exactly what may be included and adopt these ideas to your book. This site will almost certainly help you save time and effort, money and stress. If you are looking for free books then you really should consider finding to assist you try this. Several of Usm Past Year Exam Paper are for sale to free while some are payable. If you arent sure if the books you would like to download works with for usage along with your computer, it is possible to download free trials. The free guides make it easy for someone to free access online library for download books to your device. You can get free download on free trial for lots of books categories. Our library is the biggest of these that have literally hundreds of thousands of different products categories represented. You will also see that there are specific sites catered to different product types or categories, brands or niches related with Usm Past Year Exam Paper. So depending on what exactly you are searching, you will be able to choose e books to suit your own need. Need to access completely for Campbell Biology Seventh Edition book? Access Ebook without any digging. And by having access to our ebook online or by storing it on your computer, you have convenient answers with Usm Past Year Exam Paper To get started finding Usm Past Year Exam Paper, you are right to find our website which has a comprehensive collection of books online. Our library is the biggest of these that have literally hundreds of thousands of different products represented. You will also see that there are specific sites catered to different categories or niches related with Usm Past Year Exam Paper So depending on what exactly you are searching, you will be able tochoose ebook to suit your own need. Thank you for reading Usm Past Year Exam Paper. Maybe you have knowledge that, people have search numerous times for their favorite readings like this Usm Past Year Exam Paper, but end up in harmful downloads. Rather

than reading a good book with a cup of coffee in the afternoon, instead they juggled with some harmful bugs inside their laptop. Usm Past Year Exam Paper is available in our book collection an online access to it is set as public so you can download it instantly. Our digital library spans in multiple locations, allowing you to get the most less latency time to download any of our books like this one. Merely said, Usm Past Year Exam Paper is universally compatible with any devices to read.

Find Usm Past Year Exam Paper :

~~the secret of spring~~

~~the strange case of the disappearing dragon an ennin mystery 32~~

~~the sharman caselli tarot deck~~

~~the sport of pigeon racing~~

~~the soft voice stories memorandum~~

~~the spycraft manual rapidshare~~

~~the single chick s guide to buying a house~~

the sissy girly game chapter 1

~~the story of sushi~~

~~the stargazing year charles laird calia~~

~~the summer wind~~

the school on hearts content road

~~the sinners bargain contracts deceptions book english edition~~

~~the slaves of solitude english edition~~

the sheiks virgin lover the sisterhood book english edition

Usm Past Year Exam Paper :

rccg order of service manual pdf churchgists com - May 13 2023

web jul 28 2022 the rccg order of service is a type gospel service schedule used in the redeemed christian church of god the rccg order of service includes details on how the order of service would look like in all rccg

rccg ordser of service pdf scribd - Mar 11 2023

web marriage rehearsals the purpose of the marriage rehearsal is to be familiar with the order of service for marriage in rccg

this should be done at least one week before the wedding day carrying and kissing the bridegroom and bride are not allowed to carry or kiss each other during solemnization

the redeemed christian church of god north - Aug 16 2023

web order of service for marriage 4 order of service for naming ceremony 9 home going service 12 order of service for wake keeping program 14

rccg naming ceremony order of service kingdomgist - May 01 2022

web dec 3 2022 how a person speaks during this short sermon can affect the results of the ceremony and there are many ways to go wrong this is a sample naming ceremony order of service for your ceremony the order in which you follow the service can be changed as much as you want

baby naming ceremony form rccg anointed chapel - Jan 09 2023

web form step 1 of 2 50 name of mother required first last name of father required first last date of birth of baby ies requested date for naming

sermon on naming ceremony in rccg archives deedee s blog - Sep 05 2022

web privacy cookies this site uses cookies by continuing to use this website you agree to their use to find out more including how to control cookies see here

program of events for pastors during programs rccg - Apr 12 2023

web naming ceremony child dedication wake keeping burial ceremony laying the foundation of a church building dedicating a church building laying the foundation stone of a private house dedicating musical instruments for use in the house of god water baptism

rccg order of service for naming ceremony - Jul 15 2023

web jul 26 2022 we will explore the rccg order of service for naming ceremony how naming ceremony is performed in christianity and the order of service for naming in rccg in naming ceremonies the first sermon after the baptism is called a dedication sermon a dedication sermon for a newborn baby is specially prepared by her parents or

rccg order of service for naming ceremony pdf uniport edu - Mar 31 2022

web aug 13 2023 rccg order of service for naming ceremony 1 8 downloaded from uniport edu ng on august 13 2023 by guest rccg order of service for naming ceremony as recognized adventure as skillfully as experience nearly lesson amusement as capably as accord can be gotten by just checking out a book rccg order of service

the redeemed christian church of god north - Feb 10 2023

web jul 13 2015 page 9 and 10 order of service for naming ceremon page 11 and 12 vii the announcements should be use page 13 and 14 interment at grave sideopening pray page 15 and 16 order of service for holy communion page 17 and 18

order of service for laying foundat page 19 and 20

[rccg baby naming ceremony by pastor femi olawale 20150618103416](#) - Nov 07 2022

web about press copyright contact us creators advertise developers terms privacy policy safety how youtube works test new features nfl sunday ticket press copyright

[rccg order of service for naming ceremony wrbb neu](#) - Jul 03 2022

web rccg order of service for naming ceremony 2019 07 05 sherlyn palmer ministerial ethics and etiquette springer nature commitment to the almighty god is the highest priority for the christian and it cannot be taken lightly because of its eternal implications there should be assurance of salvation that is bible based which lasts

rccg order of service for naming ceremony download only - Jun 02 2022

web latency era to download any of our books afterward this one merely said the rccg order of service for naming ceremony is universally compatible later than any devices to read rccg order of service for naming ceremony 2022 02 27 joyce rogers the holiness of god beyond words atria books

rccg order of service for naming ceremony uniport edu - Dec 28 2021

web aug 15 2023 rccg order of service for naming ceremony 1 13 downloaded from uniport edu ng on august 15 2023 by guest rccg order of service for naming ceremony eventually you will unquestionably discover a further experience and carrying out by spending more cash

rccg order of service for naming ceremony pdf uniport edu - Feb 27 2022

web aug 17 2023 order of service for naming ceremony but end stirring in harmful downloads rather than enjoying a fine book bearing in mind a cup of coffee in the afternoon then again they juggled in imitation of some harmful virus inside their computer rccg order of service for naming

rccg naming ceremony sermon churchgists com - Jan 29 2022

web july 26 2022 in naming ceremonies the first sermon after the baptism is called a dedication sermon a dedication sermon for a newborn baby is specially prepared by her parents or guardians how a person speaks during this short sermon can affect the results of the ceremony and there are many ways to go wrong

rccg netherlands mission - Dec 08 2022

web o o c s i o o c õ c m c o c c o o o o o o o o o o o o 00 3 o n o o x c c o o õ o o o o o o o o o o

rccg order of service manual pdf kingdomgist - Jun 14 2023

web dec 2 2022 the following is the order of service for naming as done by rccg church the choirs will sing a song while waiting for the guest of honor the pastor will give an opening prayer there would be a special message from the pastor on the importance of naming ceremony and its significance in our lives

rccg order of service for naming ceremony pdf uniport edu - Oct 06 2022

web rccg order of service for naming ceremony 2 8 downloaded from uniport edu ng on september 9 2023 by guest

foundations the five essays in this section deal with the bible theology and ecumenism the subjects of theological methods contextual hermeneutics and appropriate curriculum are given special attention

rccg order of service for naming ceremony - Aug 04 2022

web jun 10 2023 rccg order of service for naming ceremony 百度网盘 百度网盘 sep 20 2021 order of service for god s blessing on the academic year on sunday on sunday 9th march 1969 at 10 30 a m jame hall oct 10 2020 an order of service to be used at gregynog on sunday 3 february 1935 dec 04 2022

how to be danish from lego to lund a short introduction to the - Jul 13 2023

web jun 18 2023 how to be danish from lego to lund a short introduction to the state of denmark kingsley patrick free download borrow and streaming internet archive

how to be danish from lego to lund a short introd valentino - Feb 25 2022

web you to see guide how to be danish from lego to lund a short introd as you such as by searching the title publisher or authors of guide you in point of fact want you can

how to be danish from lego to lund a short introd - May 31 2022

web jul 12 2023 if you ally dependence such a referred how to be danish from lego to lund a short introd book that will give you worth acquire the utterly best seller from us currently

how to be danish from lego to lund a short introduction to - Sep 03 2022

web learn more about how to be danish from lego to lund a short introduction to the state of denmark in the national library board singapore digital collection

how to be danish from lego to lund a short introduction to - Aug 14 2023

web how to be danish from lego to lund a short introduction to the state of denmark kingsley dr patrick amazon com tr kitap

how to be danish from lego to lund a short introduction to - Mar 09 2023

web buy how to be danish from lego to lund a short introduction to the state of denmark by patrick kingsley isbn 9781780721330 from amazon s book store everyday low

how to be danish from lego to lund a short introd pdf - Dec 26 2021

web jul 21 2023 how to be danish from lego to lund a short introd 1 10 downloaded from uniport edu ng on july 21 2023 by guest how to be danish from lego to lund a

how to be danish from lego to lund a short introd eva - Mar 29 2022

web you could purchase guide how to be danish from lego to lund a short introd or acquire it as soon as feasible you could

speedily download this how to be danish

how to be danish from lego to lund a short intro pdf - Jul 01 2022

web jul 30 2023 how to be danish patrick kingsley 2012 beskrivelse from lego to lava lamps via borgen the killing and the muhammed cartoons patrick kingsley takes us

how to be danish from lego to lund a short introduction to - Jan 07 2023

web denmark is the country of the moment recently named the happiest nation in the world it s the motherland of the bridge borgen and the killing and home to noma the world s

how to be danish from lego to lund a short introd - Nov 24 2021

web how to be danish from lego to lund a short introd 2 11 downloaded from uniport edu ng on july 22 2023 by guest trait frío chilly frío cold fuerte strong grande large

how to be danish from lego to lund a short introduction to - Apr 10 2023

web how to be danish from lego to lund a short introduction to the state of denmark by patrick kingsley 0 ratings 0 want to read 0 currently reading 0 have read

how to be danish from lego to lund a short introduction to the - Dec 06 2022

web jul 4 2013 how to be danish from lego to lund a short introduction to the state of denmark paperback july 4 2013 by patrick kingsley author 4 1 out of 5 stars 133

how to be danish from lego to lund a short - Jun 12 2023

web jan 1 2012 part reportage part travelogue how to be danish is an attempt to fill in some of the gaps an introduction to contemporary danish culture that spans television food

how to be danish from lego to lund a short introduction to - Feb 08 2023

web synopsis about this title about this edition denmark is the country of the moment recently named the happiest nation in the world it s the motherland of the bridge borgen and

how to be danish from lego to lund a short intro pdf - Aug 02 2022

web apr 19 2023 danish from lego to lund a short introd but end up in harmful downloads rather than enjoying a good pdf following a cup of coffee in the afternoon instead they

pdf download book how to be danish from lego to lund a - Oct 04 2022

web download book how to be danish from lego to lund a short introduction to the state of denmark d pdf download book how to be danish from lego to lund a

quora a place to share knowledge and better understand the world - Apr 29 2022

web we would like to show you a description here but the site won t allow us

how to be danish from lego to lund a short overdrive - Nov 05 2022

web nov 1 2012 how to be danish from lego to lund a short introduction to the state of denmark ebook by dr patrick kingsley

how to be danish from lego to lund a short introd copy - Jan 27 2022

web jul 29 2023 merely said the how to be danish from lego to lund a short introd is universally compatible in the manner of any devices to read curious about lego

how to be danish from lego to lund a short introd estrid - May 11 2023

web how to be danish from lego to lund a short introd is available in our book collection an online access to it is set as public so you can download it instantly our digital library

end of year exam paper cos2614 unisa studocu - May 03 2023

web inc 76pages inc3701 study guide bachelor of education unisa rrlb81 ass 3 practical 1 crop science maths literacy grade 10 assignment 2022 and memo 1 economics 5 mcq c4 practice ios2601 ass 1 cos2614 2014 10 e 1 end of year exam

download save share this is a preview do you want full access go premium and

unisa cos2614 exam - Apr 21 2022

web 2 unisa cos2614 exam 2023 10 03 acknowledgement that strategy implementation is the greatest challenge to managers in the 21st century and the greatest reason for strategy failure we decided to focus on strategy implementation rather than promoting the unrealistic idea of strategy as a purely rational and deliberate outcome this book

cos2614 assignment 1 question 1 semester 02 2016 youtube - Oct 28 2022

web aug 22 2016 this is just a simple introduction to uml diagram and the creation of the class using the qt framework as per the requirements of unisa cos2614 2016 qt gu

cos2614 exam pack 2023 cos2614 programming - Nov 28 2022

web jan 11 2023 cos2614 exam pack 2023 course cos2614 programming contemporary concepts institution university of south africa unisa this exam pack contains exam question papers memorandums summary of the course material this exam pack contains exam question papers memorandums summary of the course

cos2614 studynotesunisa - Jun 23 2022

web cos2614 mo001 contents of learning units on myunisa cos2614 102 additional notes cos2614 201 discussion of solutions to assignment 1 cos2614 202 discussion of solutions to assignment 2 this tutorial letter test it and when you are satisfied with the results implement another class in the project

cos2614 2014 10 e 1 end of year exam cos2614 unisa - Apr 02 2023

web cos2614 2014 10 e 1 end of year exam cos2614 unisa studocu end of year exam university examinations

universiteitseksamens unisa lene universty of south africa cos 261 2014 rco2614 programming contemporary concepts

dismiss try ask an expert

cos2614 summary unisa inf2611 qt exam revision notes - Jul 05 2023

web 101 2016 3 b 2 summary programming contemporary concepts sap mm configuration step by step cos2614 summaries with screenshots and code examples unisa inf2611 qt exam revision notes qinputdialog there are variants of the qinputdialog getinteger int

cos2614 programming contemporary concepts gimmenotes - Aug 26 2022

web cos2614 mayjune 2017 exampaper2 cos2614 2014 10 e 1 cos2614 2014 10 e1 solution cos2614 2017 10 e 1 cos2614b102 2018 2 cos2614b201 2018 1

cos2614 assignment 1 2021 answer cos2614 unisa - Jan 31 2023

web university of south africa cos2614 tl202 cos2614 tl201 cos2614 203 1 2020 final cos2614 sem01 2020 ass1 answer cos2614 b202 2019 1 discussion of solutions to assignment 2 cos2614 b201 2018 1 inf3708 assignment 02 memo 2018 diagrams for test 1 solution 2020sem2 may june 2017 answers may june 2016 question paper

cos2614 assessment assignment 3 2023 cos2614 - Feb 17 2022

web jul 15 2023 university of south africa unisa cos2614 assessment assignment 3 2023 with link to the functioning applications there are 3 applications implemented bank robot application and stock control application last document update 2 months ago

diagrams for test 1 cos2614 unisa studocu - Dec 30 2022

web cos2614 b201 2018 1 cos2614 b202 2019 1 discussion of solutions to assignment 2 cos2614 assignment 2 2021 mne2601 assignment 12021 mne2601 assignment 2 2021 cos2614 assessment 1 2022 inheritance contemporary concepts in programming this should include assignment answers may june 2016 question paper may june 2017

en 14126 koruyucu tulum testleri labaratuar com - Mar 21 2022

web en 14126 koruyucu tulum testleri tehlikeli çevre koşullarında ve zararlı maddelerle çalışırken uygun koruyucu giysi vazgeçilmezdir en 14126 koruyucu giysi enfektif ajanlara karşı koruyucu giysi için performans gereksinimleri ve test yöntemleri ürün standardı bir giysinin bulaşıcı hastalıklara karşı gerekli korumayı sağlayıp sağlamadığını

cos2614 unisa programming contemporary concepts - Oct 08 2023

web cos2614 unisa programming contemporary concepts studocu programming contemporary concepts cos2614 university of south africa programming contemporary concepts follow this course documents 113 questions 0 students 229 lecture notes date rating year ratings show 8 more documents show all 16

cos2614 exam pack 2021 cos2614 programming - Sep 07 2023

web aug 27 2021 cos2614 exam pack 2021 course cos2614 programming contemporary concepts cos2614 institution

university of south africa unisa book contemporary high performance computing cos2614 exam pack 2021 this exam pack contains exam question papers memorandums summary of the course material

programming contemporary concepts cos2614 unisa ac za - Aug 06 2023

web under graduate degree year module nqf level 6 credits 12 module presented in english module presented online pre requisite cos1511 and cos1512 purpose to enable students to understand and apply the principles of object orientated programming inheritance encapsulation abstraction and polymorphism

osprey forums cos2614 - Sep 26 2022

web cos2614 programming contemporary concepts announcements last post soc curricula 09 30 2017 01 08pm demarcation or scoping of examinations and assessment 02 13 2017 07 59am school of computing short learning programmes

cos2614 made easy university of south africa - May 23 2022

web demarcation or scoping of examinations and assessment 02 13 2017 07 59am school of computing short learning programmes 11 24 2014 08 37am unisa contact information 07 28 2011 01 28pm forums messages new zakesman cos2614 made easy cos2614 made easy february 17 2014 09 43pm admin registered 11 years ago

cos2614 2021 course guidelines and assignments studocu - Mar 01 2023

web cos2614 mo001 3 tutorial letter mo001 3 programming contemporary concepts cos 2614 semesters 1 and 2 school of computing important information this tutorial letter contains important information about your module please activate your my unisa account and your my life email address and ensure that you have regular access to the

study notes cos2614 programming contemporary concepts - Jun 04 2023

web cos2614 programming contemporary concepts cos2614 here are the best resources to pass cos2614 at university of south africa unisa find cos2614 study guides notes assignments and much more

cos2614 gimmenotes - Jul 25 2022

web additional resources of cos2614 on myunisa a separate folder is created for each question test them note the following about the code the copy constructor of gpscoord is implemented to provide deep copies of the coordinate objects pointed to by latitude and longitude the destructor of gpscoord deletes the coordinate objects