MATHEMATICS N2 CLASS EXERCISE 1

OUESTION 1

1.1 Solve the following equations:

1.1.1 =
$$x^2 + 3x - 2 = 0$$
 by factorisation (3)

1.1.2
$$6(2-m)-5(4-m)=7$$
 (3)

1.2 Given: the formula $p = \sqrt[3]{r^2 - q^2}$

1.2.2 Calculate the value of
$$r$$
 if $p = 4$ and $q = 6$ (1)

1.3 Solve for x and y in the following simultaneous equations:

$$5x = 6y + 3$$
 and $3y - 4x + 1 = 0$ (4)

OUESTION 2

2.1 A man deducted 3 from 5 times his age and got his grandmother's age.

2.2 Given: $4n^2 - 15n - 47 = 0$

2.3 Given: $H = \frac{7.5U}{273 + V}$

(1)

2.3.2 Find the value of
$$V'$$
 if $U = 0.5$ and $H = 0.005$

2.4 Given: 8p-1=-2q and 2p+3q=4Solve for p and q

Solve for
$$p$$
 and q (4) [13]

TOTAL: 27 MARKS

Mathematics N2 Exam Papers

S Ashworth

Mathematics N2 Exam Papers:

Reviewing Mathematics N2 Exam Papers: Unlocking the Spellbinding Force of Linguistics

In a fast-paced world fueled by information and interconnectivity, the spellbinding force of linguistics has acquired newfound prominence. Its capacity to evoke emotions, stimulate contemplation, and stimulate metamorphosis is truly astonishing. Within the pages of "**Mathematics N2 Exam Papers**," an enthralling opus penned by a highly acclaimed wordsmith, readers attempt an immersive expedition to unravel the intricate significance of language and its indelible imprint on our lives. Throughout this assessment, we shall delve into the book is central motifs, appraise its distinctive narrative style, and gauge its overarching influence on the minds of its readers.

 $\frac{https://staging.conocer.cide.edu/data/Resources/fetch.php/intermediate\%20jazz\%20chord\%20voicing\%20for\%20keyboard.pd}{f}$

Table of Contents Mathematics N2 Exam Papers

- 1. Understanding the eBook Mathematics N2 Exam Papers
 - The Rise of Digital Reading Mathematics N2 Exam Papers
 - Advantages of eBooks Over Traditional Books
- 2. Identifying Mathematics N2 Exam Papers
 - 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 Mathematics N2 Exam Papers
 - User-Friendly Interface
- 4. Exploring eBook Recommendations from Mathematics N2 Exam Papers
 - Personalized Recommendations
 - Mathematics N2 Exam Papers User Reviews and Ratings

- Mathematics N2 Exam Papers and Bestseller Lists
- 5. Accessing Mathematics N2 Exam Papers Free and Paid eBooks
 - Mathematics N2 Exam Papers Public Domain eBooks
 - Mathematics N2 Exam Papers eBook Subscription Services
 - Mathematics N2 Exam Papers Budget-Friendly Options
- 6. Navigating Mathematics N2 Exam Papers eBook Formats
 - o ePub, PDF, MOBI, and More
 - Mathematics N2 Exam Papers Compatibility with Devices
 - Mathematics N2 Exam Papers Enhanced eBook Features
- 7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of Mathematics N2 Exam Papers
 - Highlighting and Note-Taking Mathematics N2 Exam Papers
 - Interactive Elements Mathematics N2 Exam Papers
- 8. Staying Engaged with Mathematics N2 Exam Papers
 - o Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers Mathematics N2 Exam Papers
- 9. Balancing eBooks and Physical Books Mathematics N2 Exam Papers
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection Mathematics N2 Exam Papers
- 10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
- 11. Cultivating a Reading Routine Mathematics N2 Exam Papers
 - Setting Reading Goals Mathematics N2 Exam Papers
 - Carving Out Dedicated Reading Time
- 12. Sourcing Reliable Information of Mathematics N2 Exam Papers
 - Fact-Checking eBook Content of Mathematics N2 Exam Papers
 - 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

Mathematics N2 Exam Papers Introduction

In todays digital age, the availability of Mathematics N2 Exam Papers 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 Mathematics N2 Exam Papers books and manuals for download, along with some popular platforms that offer these resources. One of the significant advantages of Mathematics N2 Exam Papers 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 Mathematics N2 Exam Papers 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, Mathematics N2 Exam Papers 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 youre 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 Mathematics N2 Exam Papers 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 Mathematics N2 Exam Papers 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, Mathematics N2 Exam Papers 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 Mathematics N2 Exam Papers books and manuals for download and embark on your journey of knowledge?

FAQs About Mathematics N2 Exam Papers 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. Mathematics N2 Exam Papers is one of the best book in our library for free trial. We provide copy of Mathematics N2 Exam Papers in digital format, so the resources that you find are reliable. There are also many Ebooks of related with Mathematics N2 Exam Papers. Where to download Mathematics N2 Exam Papers online for free? Are you looking for Mathematics N2 Exam Papers 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 Mathematics N2 Exam Papers. 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 Mathematics N2 Exam Papers 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 Mathematics N2 Exam Papers. 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 Mathematics N2 Exam Papers To get started finding Mathematics N2 Exam Papers, 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 Mathematics N2 Exam Papers So depending on what exactly you are searching, you will be able tochoose ebook to suit your own need. Thank you for reading Mathematics N2 Exam Papers. Maybe you have knowledge that, people have search numerous times for their favorite readings like this Mathematics N2 Exam Papers, 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. Mathematics N2 Exam Papers 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, Mathematics N2 Exam Papers is universally compatible with any devices to read.

Find Mathematics N2 Exam Papers:

intermediate jazz chord voicing for keyboard
intermediate two-bids in bridge a modern alternative for standard american...
international favorites for mandolin
intermediate algebra a text/workbook 3e
international encyclopedia of the social sc volume 8
interesting time

international nomads

international monetary policy

international corporate taxation including supplement tax and estate planning series

intermediate algebra graphing & charles cc trig pkg

international business with olc powerweb bind-in card and cd

international child abduction

intermediate algebra a straightforward approach for college students

international co-operation in civil and criminal matters

international affairs budget framework for assessing relevance priority and efficiency

Mathematics N2 Exam Papers:

i d rather be reading the delights and dilemmas of - Apr 07 2023

web 6 rows sep 4 2018 i d rather be reading is the perfect literary companion for everyone who feels that way in i d rather be reading the delights and dilemmas of the - Nov 02 2022

web i d rather be reading the delights and dilemmas of the reading life ebook bogel anne amazon ca kindle store summary i d rather be reading the delights and dilemmas of - Feb 22 2022

i d rather be reading the delights and dilemmas of the - Apr 26 2022

i d rather be reading anselm society - Jun 09 2023

web anne bogel i d rather be reading the delights and dilemmas of the reading life hardcover illustrated sept 4 2018 by anne bogel author

i d rather be reading quotes by anne bogel goodreads - Aug 11 2023

web sep $20\ 2023$ i d rather be reading the delights and dilemmas of the reading life by anne bogel anselm s take what question does this answer what problems does it

i d rather be reading the delights and dilemmas of - May 08 2023

web i d rather be reading is the perfect literary companion for everyone who feels that way in this collection of charming and relatable reflections on the reading life beloved blogger

i d rather be reading the delights and dilemmas of the - Mar 26 2022

i d rather be reading baker publishing group - Jun 28 2022

web for so many people reading isn t just a hobby or a way to pass the time it s a lifestyle our books shape us define us enchant us and even sometimes infuriate us our books are

i d rather be reading the delights and dilemmas of the - May 28 2022

web mar 9 2023 i d rather be reading 2018 is a collection of stories and anecdotes that document the life of a bookworm and offer advice to fellow bibliophiles from overflowing

i d rather be reading the delights and dilemmas of - Mar 06 2023

web in this collection of charming and relatable reflections on the reading life beloved blogger and author anne bogel leads readers to remember the book that first hooked them the

i d rather be reading the delights and dilemmas of the - Dec 03 2022

web i d rather be reading is the perfect literary companion for everyone who feels that way in this collection of charming and relatable reflections on the reading life beloved blogger

i d rather be reading the delights and dilemmas of the - Oct 01 2022

web i d rather be reading the delights and dilemmas of the reading life by anne bogel format hardcover isbn 9780801072925 dimensions 5×7 pub date sep 2018 srp

i d rather be reading the delights and dilemmas of the - Oct 13 2023

web sep 4 2018 i d rather be reading the delights and dilemmas of the reading life hardcover illustrated september 4 2018 by anne bogel author 4 4 4 4 out of 5 stars

i d rather be reading the delights and dilemmas of - Feb 05 2023

web for every reader who has finished a book under the covers with a flashlight when they were supposed to be sleeping i d rather be reading is a charming collection of reflections

i d rather be reading the delights and dilemmas of - Jan 04 2023

web title i d rather be reading the delights and dilemmas of the reading life audio author anne bogel publisher mission audio print publication date 2018 logos

i d rather be reading the delights and dilemmas of the - Aug 31 2022

web i d rather be reading the delights and dilemmas of the reading life kindle edition by anne bogel author format kindle edition 4 3 1 811 ratings see all formats and editions

i d rather be reading the delights and by anne bogel - Sep 12 2023

web 7 rows sep 4 2018 in this collection of charming and relatable reflections on the reading life beloved blogger and *i d rather be reading the delights and dilemmas of the* - Jul 10 2023

web buy i d rather be reading the delights and dilemmas of the reading life illustrated by anne bogel isbn 9780801072925 from amazon s book store everyday low prices

i d rather be reading the delights and dilemmas of the - Jul 30 2022

web i d rather be reading the delights and dilemmas of the reading life by bogel anne isbn 10 0801072921 isbn 13 9780801072925 baker books 2018 hardcover i d

baby bear baby bear what do you see wikipedia - Aug 15 2023

web baby bear baby bear what do you see is a 2007 children's picture book by bill martin jr and eric carle first published by henry holt and co 2 it is the fourth and final companion title to brown bear brown bear what do you see

baby bear baby bear what do you see children s read - Apr 11 2023

web mar 25 2023 children's read aloud book baby bear baby bear what do you see by bill martin jr and eric carle is a picture book full of rhyme similar to brown bear brown bear what do

baby bear what do you see song sing a story with bri reads - Oct 05 2022

web feb 19 2023 this song is inspired by the picture book baby bear baby bear what do you see by bill martin jr and eric carle the same duo that let s sing a story

baby bear baby bear what do you see brown bear and - Sep 04 2022

web jun 25 2013 baby bear baby bear what do you see is the final collaboration from this bestselling author illustrator team bill martin jr and eric carle young readers will enjoy baby bear s quest to find mama and they ll revel in identifying each of the native north american animals that appear along the way

baby bear baby bear what do you see 2007 eric carle - Nov 06 2022

web join baby bear as he sets out to look for his beloved mama bear meeting a diverse cast of north american animals along the way readers of all ages will enjoy the rich colorful illustrations and heartfelt story of this last collaboration in a

baby bear baby bear what do you see eric carle english story - Mar 10 2023

web for new learners learn colours and animals with us

baby bear baby bear what do you see pdf zoboko com - Apr 30 2022

web jun 25 2013 in baby bear baby bear what do you see bill martin jr and american designer illustrator and writer eric carle team up to write a children s book about a young bear searching for its mother baby bear baby bear what do you see is just one part of the four part bear book beginning reader series

baby bear baby bear what do you see world of eric carle - May 12 2023

web baby bear baby bear what do you see world of eric carle martin bill amazon com tr kitap

baby bear baby bear what do you see world of eric carle - Jan 08 2023

web this soft to touch cloth book for babies and young toddlers features a selection of the native american animals from the original baby bear tale using eric carle s trademark illustrations as well as a carefully edited version of the story to suit the book s very young readership target age group 1 2 cover price 12 99 you save 8 99

baby bear baby bear what do you see by eric carle 2007 - Feb 26 2022

web jan 1 2007 baby bear baby bear what do you see by eric carle 2007 hardcover eric carle 9780805088991 amazon com books books

baby bear baby bear what do you see pages 1 28 fliphtml5 - Mar 30 2022

web jan 26 2021 check pages 1 28 of baby bear baby bear what do you see in the flip pdf version baby bear baby bear what do you see was published by pusat sumber interaktif sk desa tun hussein onn on 2021 01 26 find more similar flip pdfs like baby bear baby bear what do you see download baby bear baby bear what do you

baby bear baby bear what do you see world of eric carle - Dec 07 2022

web baby bear baby bear what do you see world of eric carle by bill martin jr eric carle and martin bill jr 4 00 4 ratings 19 want to read 1 currently reading 5 have read

baby bear baby bear what do you see booktopia - Jun 01 2022

web told through bill martin s rhythmic text and eric carle s vibrant images this is the fourth companion title to the much loved classic brown bear brown bear what do you see

baby bear baby bear what do you see children s - Jul 14 2023

web aug 11 2019 by bill martin jr and eric carle this is a children's picture book about a baby bear on a mission to find his mama it features a red fox flying squirrel mountain goat blue heron prairie

baby bear baby bear what do you see eric carle read aloud - Feb 09 2023

web another one of eric carle's classic children's books i hope your little one enjoys my read aloud version subscribe for more read aloud books i post bi w

baby bear baby bear what do you see animated book eric - Jul 02 2022

web baby bear baby bear what do you see animated book eric carle book read aloudthis book is the final companion title to brown bear brown bear what do you

baby bear baby bear what do you see board book brown bear - Dec 27 2021

web jul 7 2009 baby bear baby bear what do you see is the final collaboration from this bestselling author illustrator team young readers will enjoy baby bear s quest to find mama and they ll revel in identifying each of the native north american animals that appear along the way the central focus on the special bond between mama and baby makes a fitting using other bill martin jr using baby bear and eric carle bear - Aug 03 2022

web using baby bear baby bear what do you see in the classroom eric carlewas born in the united states but spent his early years in stuttgart germany his many innovative books have earned him a place in the canon of classic children's literature brown bear brown bear what do you see was the first book he illustrated he then went on to

baby bear baby bear what do you see big book macmillan - Jan 28 2022

web feb 15 2011 the big book edition of baby bear baby bear what do you see from bestselling author bill martin jr featuring illustrations by the artist eric carle baby bear sees a colorful selection of north american animals in this final book in the bear series but who does he want to see most of all

baby bear baby bear what do you see kids songs eric - Jun 13 2023

web i do not own the rights to this book though i love it so check out other mr elephant videos for education entertainment and elevation d

engineering question papers of solapur university 2023 2024 - Jul 31 2023

web mar 1 2017 engineering question papers of solapur university 2023 2024 discuss here about engineering question papers of solapur university and get the latest updates engineering question papers of solapur university detailed information at

solapur university mechanical engineering question papers pdf - Oct 22 2022

web apr 22 2023 solapur university mechanical engineering question papers is available in our digital library an online access to it is set as public so you can download it instantly

question papers examination punyashlok university of solapur - Sep 01 2023

web event for question paper question paper of oct 2022 click here question paper of oct 2019 click here question paper of march 2019 click here question paper of oct 2018

solapur university mechanical engineering question papers - Sep 20 2022

web jun 21 2023 right here we have countless ebook solapur university mechanical engineering question papers and collections to check out we additionally offer variant types and afterward type of the books to browse the pleasing book fiction history novel scientific research as capably as various supplementary sorts of books are readily solapur university mechanical engineering question papers - May 17 2022

web solapur university mechanical engineering question papers orientation sutd edu sg author fabio graebner orientation sutd edu sg subject solapur university mechanical engineering question papers orientation sutd edu sg keywords amcat sample papers 2012 2013 with answers solutions central university of punjab entrance exam

solapur university mechanical engineering question papers uniport edu - Jul 19 2022

web jul 4 2023 question papers this is likewise one of the factors by obtaining the soft documents of this solapur university

mechanical engineering question papers by online

fe engineering question papers of solapur university 2023 - Nov 22 2022

web feb 28 2017 fe engineering question papers of solapur university 2023 2024 discuss here about fe engineering question papers of solapur university and get the latest updates fe engineering question papers of solapur university detailed information at eduvark

faculty of engineering punyashlok ahilyadevi holkar university solapur - Dec 24 2022

web m e ii mechanical thermal engineering m e ii mechanical cad cam m e ii mechanical engineering m e ii electronics engineering m e ii biomedical engineering m e ii computer science engineering m e ii electronics telecommunication engg m e ii digital electronics

solapur university question paper 2023 getmyuni - Jan 25 2023

web jul 24 2023 the page shows a list of the solapur university question paper 2023 or the previous year s question paper the required information can be downloaded from the webpage benefits of solapur university question paper solapur university question paper 2023 download ug pg old paper - Apr 15 2022

web jan 7 2023 solapur university question paper 2023 candidates can download all ug pg courses previous year model sample practice paper 2019 2018 2017 sign in welcome log into your account engineering jee main question paper 2024 check previous year jee main paper model sample paper here august 29 2023

solapur university old question papers download pdfs of - Mar 27 2023

web the question paper repository is quite expansive and has been updated latest by october 2019 check here solapur university admissions 2020 the repository of question papers are arranged separately for each faculty of humanities faculty of interdisciplinary studies faculty of science technology and faculty of commerce and

solapur university mechanical engineering guestion papers - Jun 17 2022

web solapur university mechanical engineering question papers isro apprentice syllabus 2018 graduate technician elect mech cs civil isro scientist engineer recruitment 2018 form 87 elect mech cs jobs isro scientist engineer syllabus 2018 isro sc question papers cs mech elec

solapur university question papers all courses all semester solapur - May 29 2023

web our website will provide you solapur university me sample paper solapur university old paper solapur university previous year paper solapur university question paper solapur university old papers solapur university last year papers solapur university pahsus question papers pdf download - Apr 27 2023

web solapur university pahsus question papers pdf download ug pg courses here you can find out punyashlok ahilyadevi holkar solapur university pahsus solved question paper of the year 2022 2021 2020 2019 2018 2017 also you can download

this pahsus question paper in pdf format

solapur university mechanical engineering question papers - Aug 20 2022

web solapur university mechanical engineering question papers amcat sample papers 2012 2013 with answers solutions may 11th 2018 amcat sample papers 2012 2013 with answers solutions questions for mba mca it and engineers model question papers and previous years old question papers

question bank examination punyashlok university of solapur - Mar 15 2022

web bachelor of engineering fe self learning common for all branch i civil engineering ii mechanical engineering iii electronics engineering iv elec tel comm engineering v computer sci engineering vi information technology vii electrical engineering viii bio medical engineering ix electrical electronics engg

solapur university previous year paper sample paper model paper - Jun 29 2023

web here you can download sample paper for solapur university solapur bba solapur university bba last year papers solapur university bba previous year papers in pdf file following are links to download these paper in pdf file

solapur university mechanical engineering question papers - Jan 13 2022

web apr 14 2023 solapur university mechanical engineering question papers is available in our book collection an online access to it is set as public so you can get it instantly

syllabus mechanical engineering - Feb 23 2023

web punyashlok ahilyadevi holkar solapur university solapur naac accredited2015 grade gpa2 62 name of the faculty science technology choice based credit system cbcs syllabus mechanical engineering fname of the course inal yearb tech syllabus to be implemented from w e f june 2021 2022 1

question paper of oct 2019 examination university of solapur - Feb 11 2022

web bachelor of engineering fe self learning common for all branch i civil engineering ii mechanical engineering iii electronics engineering iv elec tel comm engineering v computer sci engineering vi information technology vii electrical engineering viii bio medical engineering ix electrical electronics engg