

RELIABILITY-CENTERED MAINTENANCE



Reliability Centered Maintenance Ppt

**Mohamed Ben-Daya, Salih O.
Duffuaa, Abdul Raouf, Jezdimir
Knezevic, Daoud Ait-Kadi**

Reliability Centered Maintenance Ppt:

Handbook of Maintenance Management and Engineering Mohamed Ben-Daya, Salih O. Duffuaa, Abdul Raouf, Jezdimir Knezevic, Daoud Ait-Kadi, 2009-07-30 To be able to compete successfully both at national and international levels production systems and equipment must perform at levels not even thinkable a decade ago Requirements for increased product quality reduced throughput time and enhanced operating effectiveness within a rapidly changing customer demand environment continue to demand a high maintenance performance In some cases maintenance is required to increase operational effectiveness and revenues and customer satisfaction while reducing capital operating and support costs This may be the largest challenge facing production enterprises these days For this maintenance strategy is required to be aligned with the production logistics and also to keep updated with the current best practices Maintenance has become a multidisciplinary activity and one may come across situations in which maintenance is the responsibility of people whose training is not engineering This handbook aims to assist at different levels of understanding whether the manager is an engineer a production manager an experienced maintenance practitioner or a beginner Topics selected to be included in this handbook cover a wide range of issues in the area of maintenance management and engineering to cater for all those interested in maintenance whether practitioners or researchers This handbook is divided into 6 parts and contains 26 chapters covering a wide range of topics related to maintenance management and engineering *Streamlined Reliability Centered Maintenance (RCM)* Alan Chalifoux, Jearldine I. Northup, Nina Y. Chan, 1999 **IMEC-APCOMS 2019** Muhammed Nafis Osman Zahid, Radhiyah Abd. Aziz, Ahmad Razlan Yusoff, Nafrizuan Mat Yahya, Fazilah Abdul Aziz, Mohd Yazid Abu, 2019-10-26 This book presents the proceedings of the 4th International Manufacturing Engineering Conference and 5th Asia Pacific Conference on Manufacturing Systems iMEC APCOMS 2019 held in Putrajaya Malaysia on 21 22 August 2019 Covering scientific research in the field of manufacturing engineering with focuses on industrial engineering materials processes the book appeals to researchers academics scientists students engineers and practitioners who are interested in the latest developments and applications related to manufacturing engineering **Effective FMEAs** Carl S. Carlson, 2012-04-11 Outlines the correct procedures for doing FMEAs and how to successfully apply them in design development manufacturing and service applications There are a myriad of quality and reliability tools available to corporations worldwide but the one that shows up consistently in company after company is Failure Mode and Effects Analysis FMEA Effective FMEAs takes the best practices from hundreds of companies and thousands of FMEA applications and presents streamlined procedures for veteran FMEA practitioners novices and everyone in between Written from an applications viewpoint with many examples detailed case studies study problems and tips included the book covers the most common types of FMEAs including System FMEAs Design FMEAs Process FMEAs Maintenance FMEAs Software FMEAs and others It also presents chapters on Fault Tree Analysis Design Review Based on Failure Mode DRBFM Reliability Centered

Maintenance RCM Hazard Analysis and FMECA which adds criticality analysis to FMEA With extensive study problems and a companion Solutions Manual this book is an ideal resource for academic curricula as well as for applications in industry In addition Effective FMEAs covers The basics of FMEAs and risk assessment How to apply key factors for effective FMEAs and prevent the most common errors What is needed to provide excellent FMEA facilitation Implementing a best practice FMEA process Everyone wants to support the accomplishment of safe and trouble free products and processes while generating happy and loyal customers This book will show readers how to use FMEA to anticipate and prevent problems reduce costs shorten product development times and achieve safe and highly reliable products and processes RCM ,1999

ELECTRONIC FILE CHARACTERISTICS 28 files MS PPT and MS Access PHYSICAL DESCRIPTION 1 computer laser optical disc CD ROM 4 3 4 in 9 17MB SYSTEMS DETAIL NOTE IBM clone PC compatible requires MS Office 97 and installation of RCM Tree program see Readme txt file ABSTRACT This CD ROM contains the tutorial and application designed to educate facility managers about efficient building maintenance using Reliability Centered Maintenance RCM The tutorial RCM ppt evaluates the advantages and disadvantages of four maintenance methods to help maintenance managers evaluate their current equipment maintenance methods The cost benefits of implementing a different type of RCM based on the cost of maintenance could be significant RCM can prevent over maintaining by saving mechanical labor time as well as maintenance dollars **Maintenance and Maintainability** Defense Documentation Center (U.S.),1960 Human Factors Engineering Bibliographic Series ,1966 Ordnance Corps Pamphlet ,1957 **HumRRO Research Memorandum** United States Department of the Army,1964 **Proceedings of the ... Annual AIAA/USU Conference on Small Satellites** ,

Yeah, reviewing a book **Reliability Centered Maintenance Ppt** could accumulate your near links listings. This is just one of the solutions for you to be successful. As understood, achievement does not suggest that you have extraordinary points.

Comprehending as competently as understanding even more than other will have the funds for each success. next-door to, the notice as skillfully as sharpness of this Reliability Centered Maintenance Ppt can be taken as capably as picked to act.

https://crm.avenza.com/About/Resources/HomePages/Renault_Clio_Engine_Code_D7f.pdf

Table of Contents Reliability Centered Maintenance Ppt

1. Understanding the eBook Reliability Centered Maintenance Ppt
 - The Rise of Digital Reading Reliability Centered Maintenance Ppt
 - Advantages of eBooks Over Traditional Books
2. Identifying Reliability Centered Maintenance Ppt
 - 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 Reliability Centered Maintenance Ppt
 - User-Friendly Interface
4. Exploring eBook Recommendations from Reliability Centered Maintenance Ppt
 - Personalized Recommendations
 - Reliability Centered Maintenance Ppt User Reviews and Ratings
 - Reliability Centered Maintenance Ppt and Bestseller Lists
5. Accessing Reliability Centered Maintenance Ppt Free and Paid eBooks
 - Reliability Centered Maintenance Ppt Public Domain eBooks
 - Reliability Centered Maintenance Ppt eBook Subscription Services

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

Reliability Centered Maintenance Ppt Introduction

In the digital age, access to information has become easier than ever before. The ability to download Reliability Centered Maintenance Ppt has revolutionized the way we consume written content. Whether you are a student looking for course material, an avid reader searching for your next favorite book, or a professional seeking research papers, the option to download Reliability Centered Maintenance Ppt has opened up a world of possibilities. Downloading Reliability Centered Maintenance Ppt provides numerous advantages over physical copies of books and documents. Firstly, it is incredibly convenient. Gone are the days of carrying around heavy textbooks or bulky folders filled with papers. With the click of a button, you can gain immediate access to valuable resources on any device. This convenience allows for efficient studying, researching, and reading on the go. Moreover, the cost-effective nature of downloading Reliability Centered Maintenance Ppt has democratized knowledge. Traditional books and academic journals can be expensive, making it difficult for individuals with limited financial resources to access information. By offering free PDF downloads, publishers and authors are enabling a wider audience to benefit from their work. This inclusivity promotes equal opportunities for learning and personal growth. There are numerous websites and platforms where individuals can download Reliability Centered Maintenance Ppt. These websites range from academic databases offering research papers and journals to online libraries with an expansive collection of books from various genres. Many authors and publishers also upload their work to specific websites, granting readers access to their content without any charge. These platforms not only provide access to existing literature but also serve as an excellent platform for undiscovered authors to share their work with the world. However, it is essential to be cautious while downloading Reliability Centered Maintenance Ppt. Some websites may offer pirated or illegally obtained copies of copyrighted material. Engaging in such activities not only violates copyright laws but also undermines the efforts of authors, publishers, and researchers. To ensure ethical downloading, it is advisable to utilize reputable websites that prioritize the legal distribution of content. When downloading Reliability Centered Maintenance Ppt, users should also consider the potential security risks associated with online platforms. Malicious actors may exploit vulnerabilities in unprotected websites to distribute malware or steal personal information. To protect themselves, individuals should ensure their devices have reliable antivirus software installed and validate the legitimacy of the websites they are downloading from. In conclusion, the ability to download Reliability Centered Maintenance Ppt has transformed the way we access information. With the convenience, cost-effectiveness, and accessibility it offers, free PDF downloads have become a popular choice for students, researchers, and book lovers worldwide. However, it is crucial to engage in ethical downloading practices and

prioritize personal security when utilizing online platforms. By doing so, individuals can make the most of the vast array of free PDF resources available and embark on a journey of continuous learning and intellectual growth.

FAQs About Reliability Centered Maintenance Ppt Books

1. Where can I buy Reliability Centered Maintenance Ppt 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 Reliability Centered Maintenance Ppt 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 Reliability Centered Maintenance Ppt 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 Reliability Centered Maintenance Ppt 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 Reliability Centered Maintenance Ppt 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 Reliability Centered Maintenance Ppt :

~~renault clio engine code d7f~~

~~renault clio repair~~

renault scenic owners manual 2002

religion and the environment

relion manual blood pressure

remote control circuit for on off switch

remote car start manual transmission

remembrance of times gone english edition

renault master engine manual 2006

renault megane gear linkage

renault laguna manual breaks

~~remington 30 electric chainsaw manual~~

reliability centered maintenance presentation

~~relogio ponto manual~~

removal of polaris 800 rZR engine

Reliability Centered Maintenance Ppt :

pdf understanding facts narain g hingorani - Aug 22 2021

understanding facts google books - May 11 2023

web pioneers in facts and leading world experts in power electronics applications narain g hingorani and laszlo gyugyi have teamed together to bring you the definitive book on

understanding facts concepts and technology of flexible ac - Sep 03 2022

web feb 2 2023 understanding facts by narain g hingorani 2000 institute of electrical and electronics engineers edition in english

understanding facts narain g hingorani pdf - Oct 04 2022

web understanding facts by narain g hingorani 2000 ieee press edition electronic resource in english

access free understanding facts concepts and technology of - Oct 24 2021

understanding facts concepts and technology of - Jun 12 2023

web pioneers in facts and leading world experts in power electronics applications narain g hingorani and laszlo gyugyi have teamed together to bring you the definitive book on

understanding facts concepts and technology of flexible ac - Nov 05 2022

web understanding facts concepts and technology of flexible ac transmission systems free pdf download narain g hingorani 453 pages year 2016

understanding facts concepts and technology of pdf - Aug 02 2022

web average rating 4 24 92 ratings 8 reviews 1 distinct work understanding facts concepts and technology of flexible ac transmission systems by narain g

understanding facts buy understanding facts by hingorani - Mar 29 2022

web understanding facts narain g hingorani content when people should go to the ebook stores search launch by shop shelf by shelf it is in point of fact problematic this is why

understanding facts hingorani n g amazon in books - Jan 27 2022

web sep 8 2023 understanding facts concepts and technology of flexible ac transmission systems narain g hingorani is available in our digital library an online access to it is set

understanding facts concepts and technology of - Jul 13 2023

web the flexible ac transmission system facts a new technologybased on power electronics offers an opportunity to enhancecontrollability stability and power transfer

understanding facts wiley online library - Apr 10 2023

web isbn 0 7803 4713 7 isbn 0 7803 3464 7 understanding facts concepts and technology of flexible ac transmission systems narain g hingorani hingorani

understanding facts concepts and technology of - Jan 07 2023

web pioneers in facts and leading world experts in power electronics applications narain g hingorani and laszlo gyugyi have teamed together to bring you the definitive book on

[narain g hingorani author of understanding facts goodreads](#) - Apr 29 2022

web this book is the bible of facts devices if you re in the field it is a must have however notice it was written in 1999 which means technology has greatly evolved ever since

understanding facts by narain g hingorani open library - Jul 01 2022

web pioneers in facts and leading world experts in power electronics applications narain g hingorani and laszlogyugyi have teamed together to bring you the definitive book

understanding facts hingorani orientation sutd edu - Nov 24 2021

understanding facts narain g hingorani content national - Feb 25 2022

web download understanding facts narain g hingorani content ieee xplore book home page understanding facts concepts understanding facts by narain g

understanding facts concepts and technology of flexible ac - Dec 06 2022

web dec 10 1999 understanding facts concepts and technology of flexible ac transmission systems by narain g hingorani laszlo gyugyi be the first to write a

understanding facts concepts and technology of flexible ac - Feb 08 2023

web dec 24 1999 narain g hingorani is credited with originating the concepts of facts and custom power he is a retired vice president of electrical systems at epri and provides

[understanding facts concepts and technology of flexible ac](#) - Sep 22 2021

understanding facts narain g hingorani content - Dec 26 2021

web mar 18 2011 understanding facts concepts and technology of flexible ac transmission systems pb narain g hingorani laszlo gyugyi amazon in books

understanding facts by narain g hingorani open - Mar 09 2023

web dec 24 1999 narain g hingorani laszlo gyugyi 4 24 rating details 92 ratings 8 reviews the flexible ac transmission system facts a new technology based on

[understanding facts by narain g hingorani open library](#) - May 31 2022

web understanding facts narain g hingorani content understanding facts narain g hingorani content 2 downloaded from nysm pfi org on 2022 01 04 by guest this book

understanding facts wiley online books - Aug 14 2023

web dec 10 1999 understanding facts concepts and technology of flexible ac transmission systems author s narain g

hingorani laszlo gyugyi first published

35 creative paper mache crafts diy projects for teens - Oct 28 2022

web oct 11 2023 get inspiration from the nostalgic craft of paper mache with this list of fun diy paper mache ideas this isn't a craft for just children it's for adults too

what is papier mâché the spruce crafts - Aug 26 2022

web jul 29 2021 learn how to make paper mache or papier mâché with this simple recipe we've tested the quickest natural recipe so you can get on with the fun part of

25 creative paper mache ideas and projects blitsy - Dec 18 2021

25 easy paper mache ideas and art projects diy crafts - Jan 19 2022

how to make paper mache the spruce crafts - Apr 02 2023

web jun 4 2018 super creative and inexpensive you can make just about anything you can dream of out of a simple mixture of paper and glue there are very few craft materials as

how to make paper mache papier mâché bbc good food - Dec 30 2022

web sep 26 2022 newspaper is thicker and so tear it into much smaller pieces next pour boiling water over the paper and let it sit for at least 2 hours overnight if you used

how to make paper mache prima - Jan 31 2023

web nov 30 2019 papier mâché or paper mache is a popular crafting technique that uses paper and a paste to create a variety of objects the method is named after the french

12 beautiful diy paper mache projects for beginners homedit - Sep 26 2022

web mar 16 2015 we have compiled a collection of 30 crafty paper mache projects you can try for yourself this spring enjoy and feel free to share your thoughts and ideas in the

how to make paper mache step by step crafts hacks - Jul 25 2022

web so grab some newspapers glue and paint and embark on a creative journey with these 25 easy paper mache ideas and art projects that are engaging and environmentally friendly

15 inspirational papier mache crafts diys com - May 03 2023

web papier mâché or what's more commonly searched for as paper mache is the perfect activity for kids discover our winning recipe step by step guide and easy video to make

how to make paper mache the 5 basic steps - Nov 28 2022

web jun 15 2022 paper mache or papier mâché chewed paper in french is a method of art that involves paper and a paste that the artist creates this paste is made of easy to

diy paper mache techniques and how to make paper - Aug 06 2023

julie kirk s easter egg will look brilliant decorating your easter lunch table add a touch of luxury to a blown egg or papier mâché egg shape using gold crêpe paper and a velvet ribbon see more

easy paper mache for kids recipe 21 paper mache ideas for kids - Nov 16 2021

9 fun and easy papier mâché projects the spruce crafts - Jun 04 2023

if we were looking for a representation of our spiritual selves in paper mache project form it would be this tiger round undoubtedly wearing see more

paper mache projects and recipes for the whole family - Feb 17 2022

the ultimate guide to paper mache for beginners - Jun 23 2022

web so let s gather the supplies and start working on your favorite paper mache crafts today find 25 amazing and creative paper mache ideas and projects that include a detailed

how to create papier mâché 11 steps with pictures - Sep 07 2023

here is a brilliant paper mache crafts tutorial and free template from the nyc public library with the elephant shown in our photo having been made by mrs hamilton grant who see more

the best paper mache recipes the spruce crafts - Jul 05 2023

looking for sophisticated paper mache ideas these dreamy decoupaged pumpkins are courtesy of philip friedman showing the heights see more

how to make paper mache giggly co uk - Mar 21 2022

51 fun diy paper mache ideas craft passion - May 23 2022

web aug 14 2023 by sarah johnson august 14 2023 table of contents what is paper mache 21 best paper mache ideas for kids best paper mache kits how to make

11 creative paper mache ideas for kids and adults - Oct 08 2023

hello bright beauty we love this colourful paper mache crafts unicorn head beautifully decorated by setal creates using paper towels she does not demo making the basic head shape just the decorating which is lovely to watch but we d suggest sculpting the basic shape from chicken wire and see more

top 30 crafty paper mache projects you can try for yourself - Apr 21 2022

papier mâché ideas let your creativity run free loctite - Mar 01 2023

web dec 21 2021 paper mache from the french term papier mâché has been used since 200 b c china evolving over time to become more useful and versatile than ever the

mathematics xtremepapers - May 10 2023

web nov 17 2022 basically its a program which makes a mock paper using questions from igcse papers you can select the chapter s the number of questions etc the

what s new xtremepapers - Jun 30 2022

web oct 13 2021 chat 2 3 4 replies 66 views 12k today at 5 05 pm raghav4igcse r r english as second language complete resource raghav4igcse jun 12 2021 o levels gcse

gcse biology revision xtremepapers advancing knowledge - Nov 04 2022

web transport in plants the respiratory system excretion in humans homeostasis co ordination and response reproduction growth and development revision resource

papers xtremepapers - Sep 14 2023

web download past papers marking schemes specimen papers examiner reports syllabus and other exam materials for caie edexcel ib ielts sat toefl and much more

xtremepapers reviews features pricing download - Feb 24 2022

web past papers and marking schemes for revising from the latest examination series gcse and a level revision guides revision questions and revision notes share notes and

gcse and a level revision xtremepapers advancing - Mar 08 2023

web gcse and a level revision xtremepapers advancing knowledge is in our dna home revision revision resource for students studying their gcse and a levels featuring

cie igcse maths extended past papers save my exams - May 30 2022

web topic questions ace your exams join now revision notes on multiplication non calc for the cie igcse maths exam designed by the expert teachers at save my exams

xtremepapers - Jul 12 2023

web load more revise for your a levels gcse from latest past papers revision notes marking schemes get answers to your questions on revision exams or student life

papers xtremepapers - Oct 15 2023

web thu oct 5th 2023 09 44 40 download past papers marking schemes specimen papers examiner reports syllabus and other exam materials for caie edexcel ib ielts sat

xtremepapers free past years examination papers - Apr 09 2023

web we would like to show you a description here but the site won't allow us

gcse mathematics revision xtremepapers advancing - Jan 06 2023

web chemistry economics mathematics home revision gcse mathematics revision resource for students studying their gcse and a levels featuring high quality revision

9709 xtremepapers - Dec 05 2022

web may 3 2019 2019 9709 alevel caie cie mathematics maths replies 4 forum a levels maths p3 s2 chapter wise questions hi is there any chapter wise past papers with

[past papers cambridge igcse gce guide](#) - Apr 28 2022

web aug 13 2023 click the image to view caie past papers for cambridge o level cambridge int l as and a level and cambridge igcse subjects

past papers cambridge igcse biology 0610 gce guide - Mar 28 2022

web aug 13 2023 cambridge igcse cambridge int l as a levels caie past papers for cambridge o level cambridge int l as and a level and cambridge igcse subjects

revision notes past papers topic questions save my exams - Aug 01 2022

web step one revise every revision guide is written specifically for that syllabus so you only revise what you need to know concise well organised notes written by expert

past papers questions classification xtremepapers - Oct 03 2022

web jan 4 2013 may u plz post link for list of classified past papers questions under their respective topics for following subjects a level statistics s1 a levels pure

physics chemistry biology hardest questions - Jun 11 2023

web apr 19 2016 523 alright guys here am i again with the hardest questions compiling thing i made a similar thread for o levels the link is in my signature these questions

cambridge international as a level xtremepapers - Feb 07 2023

web mark schemes should be read in conjunction with the question paper and the principal examiner report for teachers cambridge international will not enter into discussions

[past papers of home igcse xtrapapers](#) - Sep 02 2022

web computer science 0478 computer science 0984 computer studies 0420 czech first language 0514 design and technology

0445 design and technology 0979

pdf xtremepapers biology 5090 past papers questions - Jan 26 2022

web pdf document bellow will present you all associated to xtremepapers biology 5090 past papers questions 5090 biology papers xtremepapers 5090 biology papers

past papers xtremepapers - Aug 13 2023

web dec 13 2021 hello could you please send me all the past papers and question banks you have for these subjects i have some past papers and question banks for each of