- In the context of digital technologies for entertainment, consider the following statements:
 - In Augmented Reality (AR), a simulated environment is created and the physical world is completely shut out.
 - In Virtual Reality (VR), images generated from a computer are projected onto real-life objects or surroundings.
 - AR allows individuals to be present in the world and improves the experience using the camera of smart-phone or PC.
 - VR closes the world, and transposes an individual, providing complete immersion experience.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 3 and 4
- (c) 1, 2 and 3
- (d) 4 only
- The word 'Denisovan' is sometimes mentioned in media in reference to
 - (a) fossils of a kind of dinosaurs
 - (b) an early human species
 - (c) a cave system found in North-East India
 - (d) a geological period in the history of Indian subcontinent
- 3. With reference to the recent developments in science, which one of the following statements is not correct?
 - (a) Functional chromosomes can be created by joining segments of DNA taken from - cells of different species.
 - (b) Pieces of artificial functional DNA can be created in laboratories.

- (c) A piece of DNA taken out from an animal cell can be made to replicate outside a living cell in a laboratory.
- (d) Cells taken out from plants and animals can be made to undergo cell division in laboratory petri dishes.
- 4. Consider the following statements :

A digital signature is

- an electronic record that identifies the certifying authority issuing it
- used to serve as a proof of identity of an individual to access information or server on Internet
- an electronic method of signing an electronic document and ensuring that the original content is unchanged

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 and 3 only
- (c) 3 only
- (d) 1, 2 and 3
- 5. In the context of wearable technology, which of the following tasks is/are accomplished by wearable devices?
 - 1. Location identification of a person
 - Sleep monitoring of a person
 - Assisting the hearing impaired person

Select the correct answer using the code given below.

- (a) 1 only
- (b) 2 and 3 only
- (c) 3 only
- (d) 1, 2 and 3

Upsc Exam Question Paper 20

Dr. Manish Rannjan (IAS)

Upsc Exam Question Paper 20:

Eventually, you will utterly discover a other experience and deed by spending more cash. still when? attain you admit that you require to acquire those all needs later than having significantly cash? Why dont you attempt to get something basic in the beginning? Thats something that will guide you to understand even more something like the globe, experience, some places, in the same way as history, amusement, and a lot more?

It is your very own grow old to produce a result reviewing habit. in the midst of guides you could enjoy now is **Upsc Exam Question Paper 20** below.

 $\frac{https://www.hersolutiongelbuy.com/files/virtual-library/default.aspx/operators\%20manual\%201999\%20vnl\%2064t\%20volvo\%20truck.pdf$

Table of Contents Upsc Exam Question Paper 20

- 1. Understanding the eBook Upsc Exam Question Paper 20
 - The Rise of Digital Reading Upsc Exam Question Paper 20
 - Advantages of eBooks Over Traditional Books
- 2. Identifying Upsc Exam Question Paper 20
 - Exploring Different Genres
 - o Considering Fiction vs. Non-Fiction
 - Determining Your Reading Goals
- 3. Choosing the Right eBook Platform
 - Popular eBook Platforms
 - Features to Look for in an Upsc Exam Question Paper 20
 - User-Friendly Interface
- 4. Exploring eBook Recommendations from Upsc Exam Question Paper 20
 - Personalized Recommendations
 - Upsc Exam Question Paper 20 User Reviews and Ratings
 - Upsc Exam Question Paper 20 and Bestseller Lists

- 5. Accessing Upsc Exam Question Paper 20 Free and Paid eBooks
 - Upsc Exam Question Paper 20 Public Domain eBooks
 - Upsc Exam Question Paper 20 eBook Subscription Services
 - Upsc Exam Question Paper 20 Budget-Friendly Options
- 6. Navigating Upsc Exam Question Paper 20 eBook Formats
 - o ePub, PDF, MOBI, and More
 - Upsc Exam Question Paper 20 Compatibility with Devices
 - Upsc Exam Question Paper 20 Enhanced eBook Features
- 7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of Upsc Exam Question Paper 20
 - Highlighting and Note-Taking Upsc Exam Question Paper 20
 - Interactive Elements Upsc Exam Question Paper 20
- 8. Staying Engaged with Upsc Exam Question Paper 20
 - Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers Upsc Exam Question Paper 20
- 9. Balancing eBooks and Physical Books Upsc Exam Question Paper 20
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection Upsc Exam Question Paper 20
- 10. Overcoming Reading Challenges
 - $\circ\,$ Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
- 11. Cultivating a Reading Routine Upsc Exam Question Paper 20
 - Setting Reading Goals Upsc Exam Question Paper 20
 - Carving Out Dedicated Reading Time
- 12. Sourcing Reliable Information of Upsc Exam Question Paper 20
 - Fact-Checking eBook Content of Upsc Exam Question Paper 20
 - 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

Upsc Exam Question Paper 20 Introduction

Free PDF Books and Manuals for Download: Unlocking Knowledge at Your Fingertips In todays 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 Upsc Exam Question Paper 20 PDF books and manuals is the internets largest free library. Hosted online, this catalog compiles a vast assortment of documents, making it a veritable goldmine of knowledge. With its easy-touse 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 Upsc Exam Question Paper 20 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 Upsc Exam Question Paper 20 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 Upsc Exam Question Paper 20 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. Upsc Exam Question Paper 20 is one of the best book in our library for free trial. We provide copy of Upsc Exam Question Paper 20 in digital format, so the resources that you find are reliable. There are also many Ebooks of related with Upsc Exam Question Paper 20. Where to download Upsc Exam Question Paper 20 online for free? Are you looking for Upsc Exam Question Paper 20 PDF? This is definitely going to save you time and cash in something you should think about.

Find Upsc Exam Question Paper 20:

operators manual 1999 vnl 64t volvo truck operation manual tensometer semi automatic

opg technical manual

operating systems concepts 6th edition

operation manual cbt

operating manual for spaceship earth oracle 11g complete reference guide operators manual ford 8n operator manual forjet 37 plus

operating manual of microwave samsung

optics stephen murray light
operating system concepts with java 8th edition
operating manual mori seiki sl1a cnc lathe
optical fiber communication by john m senior solution manual
operation manual toyota hilux bluetooth hands

Upsc Exam Question Paper 20:

tales of an 8 bit kitten lost in the nether an unofficial minecraft - Sep 04 2022

web sep 18 2018 in tales of an 8 bit kitten lost in the nether an unofficial minecraft adventure popular author cube kid recounts the story of eeebs a kitten with amazing

tales of an 8 bit kitten lost in the nether apple books - Nov 06 2022

web tales of an 8 bit kitten books in order from lost in the nether an unofficial minecraft adventure to a call to arms an unofficial minecraft adventure part of diary of an 8 bit

tales of an 8 bit kitten lost in the nether an unofficial minecraft - Oct 25 2021

8 bit kitten series by cube kid goodreads - Jul 14 2023

web jan 1 2017 4 57 808 ratings57 reviews eeebs isn t a very disciplined kitten his mom warned him not to play in the forest but he didn t listen that s how he found himself in

tales of an 8 bit kitten lost in the nether an unofficial - Dec 07 2022

web best selling author cube kid introduces a new series about a kitten named eeebs who lives some incredible adventures in the world of minecraft fans of diary of an 8 bit

tales of an 8 bit kitten lost in the nether an unofficial - Apr 11 2023

web eeebs isn t a very disciplined kitten his mom warned him not to play in the forest but he didn t listen that s how he found himself in the nether a bizarre world inhabited by

tales of an 8 bit kitten lost in the nether amp kids - Dec 27 2021

tales of an 8 bit kitten lost in the nether cube kid netgalley - Feb 26 2022

tales of an 8 bit kitten lost in the nether an unofficial minecraft - Sep 23 2021

tales of an 8 bit kitten lost in the nether an unofficial - Jan 08 2023

web read tales of an 8 bit kitten lost in the nether an unofficial minecraft adventure by cube kid available from rakuten kobo eeebs isn t a very disciplined kitten books

tales of an 8 bit kitten lost in the nether an unofficial minecraft - Mar 30 2022

tales of an 8 bit kitten book series in order 1 2 - Apr 30 2022

web book 1 of 2 tales of an 8 bit kitten see all formats and editions eeebs isn t a very disciplined kitten his mom warned him not to play in the forest but he didn t listen

tales of an 8 bit kitten lost in the nether copy - Oct 05 2022

web tales of an 8 bit kitten lost in the nether an unofficial minecraft adventure kindle edition by cube kid author format kindle edition 850 ratings book 1 of 2 tales of an

tales of an 8 bit kitten lost in the nether aetherian wiki - Nov 25 2021

tales of an 8 bit kitten lost in the nether book 1 an unofficial - May 12 2023

web best selling author cube kid introduces a new series about a kitten named eeebs who lives some incredible adventures in the world of minecraft fans of diary of an 8 bit

lost in the nether an unofficial minecraft adventure - Mar 10 2023

web sep 18 2018 paperback 9 69 13 used from 5 23 12 new from 9 35 1 collectible from 10 00 eeebs isn t a very disciplined

kitten his mom warned him not to play in the

tales of an 8 bit kitten lost in the nether kobo com - Jul 02 2022

web synopsis eeebs would never be a normal cat again his days of climbing trees and swatting at butterflies were over stories would spread among the villages stories of a

tales of an 8 bit kitten book 1 lost in the nether epic - Feb 09 2023

web kindle edition eeebs isn t a very disciplined kitten his mom warned him not to play in the forest but he didn t listen that s how he found himself in the nether a bizarre world

tales of an 8 bit kitten lost in the nether - Jun 01 2022

web tales of an 8 bit kitten lost in the nether an unofficial minecraft adventure volume 1 paperback illustrated 1 october 2018 by cube kid author 847 ratings book 1 of 2

tales of an 8 bit kitten lost in the nether an unofficial - Aug 15 2023

web tales of an 8 bit kitten lost in the nether an unofficial minecraft adventure by cube kid 4 57 808 ratings 57 reviews published 2017 1 edition eeebs isn t a very

tales of an 8 bit kitten lost in the nether an unoffi - Jun 13 2023

web tales of an 8 bit kitten lost in the nether book 1 an unofficial minecraft adventure cube kid amazon com tr kitap tales of an 8 bit kitten lost in the nether an unofficial minecraft - Aug 03 2022

web this audiobook collection combines tales of an 8 bit kitten lost in the nether and tales of an 8 bit kitten a call to arms into one action packed listen follow eebs through his

tales of an 8 bit kitten audiobooks audible com - Jan 28 2022

the truth about inflation 1st edition amazon com - Jul 02 2023

web apr 16 2015 the truth about inflation does not set out to forecast inflation but to help improve its understanding so that investors can make better decisions to achieve the real returns that they need starting with a summary of long history of inflation the drivers of price change are considered

the truth about inflation by paul donovan uk edition hardcover - Feb 14 2022

web the truth about inflation does not set out to forecast inflation but to help improve its understanding so that investors can make better decisions to achieve the real returns that they need starting with a summary of long history of inflation the drivers of price change are considered

the truth about inflation english edition ebook amazon de - Jul 22 2022

web the truth about inflation english edition ebook donovan paul amazon de kindle store

the economy is great why are americans in such a rotten - Jun 20 2022

web nov 1 2023 5 30 am et listen 2 min wsj s dion rabouin unpacks the latest gdp report and explains what it says about the state of the economy photo li jianguo zuma press last week we

the truth about inflation anna s archive - Apr 18 2022

web english en epub 8 8mb the truth about inflation the truth about inflation does not set out to forecast inflation same edition same file extension if you can find one which people should use instead of this file if you know of a better version of this file outside of anna s archive

the truth about inflation details matter ubs global - Jun 01 2023

web sep 14 2022 daily update the truth about inflation is complex a subject worthy of an entire book us consumer price inflation fell less than expected upsetting markets almost a quarter of the cpi basket is the fantasy owners equivalent rent a price no one pays the cost of living for homeowners is rising less than cpi

amazon co jp the truth about inflation english edition ebook - Sep 23 2022

web mar 27 2015 amazon co jp the truth about inflation english edition ebook donovan paul kindle store the truth about inflation paul donovan google books - Aug 03 2023

web mar 27 2015 the truth about inflation does not set out to forecast inflation but to help improve its understanding so that investors can make better decisions to achieve the real returns that they

the truth about inflation by paul donovan goodreads - Aug 23 2022

web apr 20 2015 the truth about inflation does not set out to forecast inflation but to help improve its understanding so that investors can make better decisions to achieve the real returns that they need starting with a summary of long history of inflation the drivers of price change are considered

the truth about inflation paul donovan google books - Oct 25 2022

web the truth about inflation paul donovan routledge 2015 inflation finance 200 pages inflation is a simple topic in that the basic concepts are something that everyone can understand however inflation is not a simplistic topic

<u>the truth about inflation donovan paul amazon sg books</u> - Nov 25 2022

web hello select your address all

book review the truth about inflation by paul donovan - Apr 30 2023

web may 23 2016 estimated reading time 10 minutes in his book the truth about inflation global economist and managing director at ubs investment bank paul donovan gives global investors of all abilities the tools to understand inflation and how they can protect their portfolios against its risks the book challenges lingering myths and misperceptions pdf the truth about inflation english edition - Mar 30 2023

web the truth about inflation english edition economics for dummies 3rd edition nov 03 2020 understand the science of wealth and prosperity find free quizzes for every chapter online learn about good markets bad monopolies and inflation decode budget deficits and trade gains this book gives you everything you need to understand our rapidly inflation trends keep fed rate hikes on pause wsj - Mar 18 2022

web oct 27 2023 the personal consumption expenditures price index the fed's preferred inflation gauge rose 0 4 in september from the prior month the same pace as in august the commerce department said

the truth about inflation columns the business times [] - Oct 05 2023

web apr 30 2015 just three short months ago the focus in financial markets was all about deflation commodity prices remained weak inflation was turning negative in the euro area and european central bank president mario draghi the truth about inflation amazon co~uk - Dec 27 2022

web apr 16 2015 buy the truth about inflation 1 by donovan paul isbn 9781138023611 paused you re listening to a sample of the audible audio edition learn more see all 3 images follow the authors paul donovan english dimensions 15 6 x 1 42 x 23 39 cm print length 200 pages see all details

truth about inflation by paul donovan open library - May 20 2022

web truth about inflation by paul donovan 2015 taylor francis group edition in english

the truth about inflation looking at the cpi report and what - Sep 04 2023

web jul 12 2023 june s cpi report shows that inflation has fallen from its high of 9 1 one year ago to a level closer to the fed s 2 target we ll dive into the consumer price index s fine print and

the truth about inflation worldcat org - Jan 28 2023

web the truth about inflation author paul donovan author summary inflation is a simple topic in that the basic concepts are something that everyone can understand however inflation is not a simplistic topic

the truth about inflation 1st edition paul donovan routledge - Feb 26 2023

web the truth about inflation does not set out to forecast inflation but to help improve its understanding so that investors can make better decisions to achieve the real returns that they need starting with a summary of long history of inflation the drivers of price change are considered

yoğun bakım hasta ziyaret kuralları ministry of health - Sep 16 2021

efektivitas pelayanan kesehatan dalam - Mar 23 2022

web kuesioner tentang kepuasan pengunjung terhadap kelayanan puskesmas kuisioner ini bertujuan untuk mengumpulkan informasi mengenai kepuasan pengunjungterhadap

indeks kepuasan masyarakat pada pelayanan - Jun 06 2023

web kualitas pelayanan kesehatan sangat berhubungan erat dengan kepuasan penelitian ini bertujuan untuk mengetahui tingkat kepuasan dan analisis harapan dan kenyataan

faktor penentu kepuasan pada pelayanan puskesmas sebagai - Oct 30 2022

web hasil penelitian dianalisis dengan membandingkan harapan dan pengalaman yang menggambarkan tingkat kepuasan pasien terhadap pelayanan kesehatan dalam aspek

pdf indeks kepuasan masyarakat ikm terhadap kualitas - Jul 07 2023

web berdasarkan hasil penelitian didapatkan dua puskesmas dengan indeks kepuasan masyarakat baik yaitu puskesmas simpang empat sipin dan puskesmas pakuan

survey kepuasan pelanggan uptd puskesmas pulomerak - Oct 18 2021

gambaran tingkat kepuasan pelayanan kesehatan selama - Aug 28 2022

web jul 19 2017 hasil survei dianalisis dengan uji kruskal wallis mann whitney dan regresi berganda hasil penelitian menunjukkan bahwakualitas pelayanan puskesmas santun

analisis kualitas pelayanan terhadap kepuasan pasien di - May 05 2023

web mengetahui gambaran kualitas pelayanan terhadap kepuasan pasien di puskesmas x kota jambi metode penelitian ini merupakan penelitian deskriptif kuantitatif dengan

pdf analisis kualitas pelayanan - Aug 08 2023

web analisis indeks kepuasan masyarakat terhadap pelayanan publik pada dinas kependudukan dan pencatatan sipil disdukcapil kabupaten pandeglang skripsi

kepuasan pasien bpjs terhadap mutu pelayanan - Jan 21 2022

web aug 8 2020 indeks kepuasan masyarakat terhadap pelayanan publik puskesmas pulomerak tahun 2020 masyarakat terhadap pelayanan di puskesmas adapun hasil

analisis kepuasan peserta bpjs kesehatan - Apr 23 2022

web kepuasan pasien yaitu cerminan kualitas pelayanan kesehatan yang mereka terima kepuasan sebagai evaluasi setelah diberikan pelayanan yang dipilih setidaknya

hasil survei kepuasan masyarakat tahun 2021 puskesmas - Sep 28 2022

web masyarakat terhadap kualitas pelayanan puskesmas dinoyo dan 2 mengukur pengaruh kualitas pelayanan puskesmas dinoyo terhadap kepuasan masyarakat sebelum

survei kepuasan masyarakat terhadap pelayanan - Oct 10 2023

web prinsip pelayanan puskesmas adalah menyelenggarakan pelayanan kesehatan yang dapat diakses dan terjangkau oleh seluruh masyarakat di wilayah kerjanya secara adil

kualitas pelayanan puskesmas dinoyo dan - Jun 25 2022

web 1 untuk mengetahui mengenai efektivitas pelayanan kesehatan di puskesmas tanjunganom 2 untuk mengetahui mengenai faktor pendukung dan faktor penghambat

kuesioner tentang kepuasan pelayanan puskesmas pdf scribd - Dec 20 2021

web kuŞadasi devlet hastanesİ aydın İl saĞlik mÜdÜrlÜĞÜ kuŞadasi devlet hastanesİ

analisis kepuasan tenaga kesehatan terhadap simpus sistem - Jan 01 2023

web aug 31 2022 penilaian responden survei kepuasan masyarakat dilaksanakan dengan menanyakan beberapa pertanyaan yang didalamnya terdapat indikator diantaranya

analisis tingkat kepuasan pasien terhadap - Feb 19 2022

web dec 15 2014 oleh karena itu dalam survey kepuasan pelanggan puskesmas perlu untuk menilai hal hal berikut apakah masyarakat telah merasakan dampak penyuluhan

survey kepuasan pelanggan puskesmas global - Nov 18 2021

pdf tingkat kepuasan pasien terhadap - Nov 30 2022

web mayoritas responden dengan usia kategori dewasa sebanyak 42 orang 56 8 mayoritas pendidikan terakhir yaitu sma sebanyak 47 orang 63 5 responden mayoritas bekerja

pengaruh kualitas pelayanan puskesmas santun lansia pada - May 25 2022

web kepuasan pasien terhadap pelayanan kefarmasian merupakan hal yang penting untuk setiap puskesmas kepuasan pasien merupakan faktor penentu baik atau buruknya

analisis kualitas pelayanan terhadap kepuasan - Apr 04 2023

web jul 30 2020 standar kepuasan pasien pada pelayanan kesehatan ditetapkan secara nasional menurut peraturan menteri kesehatan republik indonesia tahun 2016 tentang

tingkat kepuasan pasien terhadap pelayanan - Jul 27 2022

web download citation analisis kepuasan peserta bpjs kesehatan terhadap pelayanan antenatal care di puskesmas sirnajaya kabupaten bekasi

pdf hubungan kualitas pelayanan dengan - Feb 02 2023

web faktor penentu kepuasan pada pelayanan puskesmas sebagai fasilitas kesehatan tingkat pertama fktp ebram agustian1 sahat saragi2 nurita andayani3 program

dampak kualitas pelayanan terhadap kepuasan - Mar 03 2023

web mar 11 2023 2023 literatur review hubungan implementasi sistem informasi manajemen puskesmas simpus dengan kepuasan pasien di puskesmas jurnal

perencanaan puskesmas kepuasan pelayanan - Sep 09 2023

web a indeks kepuasan masyarakat ikm dalam pelayanan kesehatan 1 kepuasan masyarakat sebagai konsumen pelayanan 2 indeks