

mrcpch question bank Latest Edition

mrcpch question bank is an essential resource for candidates preparing for the Membership of the Royal College of Paediatrics and Child Health (MRCpCH) exams. It offers a comprehensive collection of practice questions designed to simulate the exam environment, assess knowledge, and improve confidence. Whether you are a trainee or a seasoned clinician, utilizing a reliable MRCpch question bank can significantly enhance your exam preparation strategy. This guide explores the importance of an MRCpch question bank, how to select the best one, and effective ways to integrate it into your study routine.

Understanding the Importance of an MRCpch Question Bank

What is an MRCpch Question Bank?

An MRCpch question bank is a curated set of practice questions tailored to the topics and formats encountered in the MRCpCH exams. These questions cover a broad range of paediatric topics, including clinical skills, case scenarios, and theoretical knowledge. The question bank aims to:

- Mimic real exam conditions
- Identify knowledge gaps
- Reinforce learning through repeated practice
- Increase exam confidence and performance

Why Use an MRCpch Question Bank?

Using a question bank offers several advantages:

- **Active Learning:** Engages you in critical thinking rather than passive reading.
- **Exam Familiarity:** Helps you get accustomed to question styles and time management.
- **Self-Assessment:** Allows you to evaluate your strengths and weaknesses.
- **Targeted Revision:** Focuses your efforts on weaker areas identified through practice tests.

How to Choose the Best MRCpch Question Bank

Factors to Consider

Choosing the right question bank is crucial for effective preparation. Consider the following factors:

- **Content Quality:** Ensure questions are accurate, up-to-date, and reflect current exam standards.
- **Question Variety:** Look for a mix of multiple-choice questions, case-based scenarios, and image-based questions.
- **Explanations and Rationale:** A good question bank provides detailed explanations for each answer, aiding learning.
- **Ease of Use:** User-friendly interface, mobile compatibility, and progress tracking features enhance study efficiency.
- **Practice Test Mode:** Simulated exams help with time management and stress reduction.
- **Updates and Support:** Regular updates ensure content remains relevant; responsive support can help resolve technical issues.

Popular MRCpch Question Banks

Some of the most reputable options include:

- Pastest: Known for extensive question banks, detailed explanations, and exam simulation features.
- BMJ OnExamination: Offers high-quality questions aligned with the MRCpCH syllabus.
- Passmedicine: Provides a large volume of questions with comprehensive rationales.
- Online MedEd: Focuses on clarity and core concepts with interactive features.

Strategies to Maximize the Effectiveness of Your MRCpch Question Bank Study

Develop a Study Plan

Creating a structured timetable ensures consistent progress. Consider:

- Setting daily or weekly question targets
- Allocating time for review and revision of explanations
- Mixing question types to cover all exam areas

Active Learning Techniques

Enhance retention by:

- Attempting questions without looking at answers first

- Reviewing explanations thoroughly, even for questions answered correctly
- Taking notes on weak areas for focused revision

Simulate Exam Conditions

Regular timed practice helps build stamina and time management skills. Tips include:

- Setting strict time limits to mimic real exam conditions
- Practicing full-length mock exams periodically
- Analyzing performance to adjust your study focus

Integrate with Other Resources

A question bank should complement other study materials such as textbooks, online lectures, and clinical case discussions. A balanced approach enhances understanding and retention.

Additional Tips for Effective MRCpch Preparation

Focus on Clinical Scenarios

Prioritize case-based questions that reflect real-life paediatric situations. This approach improves clinical reasoning and decision-making skills.

Regular Review and Revision

Revisit difficult questions and explanations regularly to reinforce learning and prevent forgetting.

Join Study Groups

Collaborating with peers can provide diverse perspectives, clarify doubts, and motivate consistent study habits.

Utilize Feedback and Performance Analytics

Many question banks offer analytics on performance. Use this data to identify patterns and tailor your study plan accordingly.

Conclusion

The **MRCpch question bank** is an invaluable tool for paediatric trainees aiming for success in the

MRCPCH exams. By selecting a high-quality resource and employing strategic study techniques, candidates can enhance their knowledge, improve exam performance, and boost confidence. Integrating question banks into a comprehensive study plan alongside textbooks, clinical practice, and peer discussions ensures a well-rounded preparation. Remember, consistent practice, thorough review, and a positive mindset are key to achieving your exam goals. Start exploring the best question bank options today and take a confident step toward paediatric specialty certification.

mrcpch question bank: A Comprehensive Guide for Trainees and Exam Preparers

In the journey to become a qualified pediatrician in the United Kingdom, the Membership of the Royal College of Paediatrics and Child Health (MRCPCH) examination stands as a pivotal milestone. Aspiring pediatricians often turn to the MRCPCH question bank as an essential resource to prepare effectively for this challenging assessment. This article offers an in-depth exploration of the question bank's role, features, benefits, and practical strategies to optimize its use in your exam preparation.

Understanding the MRCPCH Examination

Before delving into the question bank itself, it's important to grasp the nature and structure of the MRCPCH exam. The MRCPCH is a postgraduate qualification that assesses a candidate's knowledge, clinical reasoning, and practical skills in paediatrics. The exam comprises multiple components, including written papers, clinical assessments, and practical examinations.

Components of the MRCPCH

- Written Examination: Typically includes multiple-choice questions (MCQs), extended matching questions, and short-answer questions covering a broad spectrum of pediatric topics.
- Clinical Examination (OSCE): Assesses practical skills through simulated scenarios.
- Case-Based Discussions and Workplace-Based Assessments: Focus on real-world clinical reasoning and decision-making.

Given the breadth of content and varied formats, effective preparation becomes essential. This is where the mrcpch question bank plays a crucial role.

What is the MRCPCH Question Bank?

The MRCPCH question bank is a curated collection of practice questions designed to mimic the style, content, and difficulty level of the actual exam. These question banks serve as a vital learning tool, enabling candidates to test their knowledge, identify gaps, and familiarize themselves with exam patterns.

Types of Question Banks

- Official Question Banks: Developed or endorsed by the Royal College of Paediatrics and Child Health, ensuring alignment with exam standards.
- Third-Party Resources: Created by educational companies or independent educators, often offering extensive question pools and interactive features.

Features of an Effective Question Bank

- Comprehensive Coverage: Encompasses all relevant topics from neonatology to adolescent medicine.
- Variety of Question Formats: Includes MCQs, extended matching questions, and image-based questions.
- Detailed Explanations: Provides rationales for correct and incorrect options, reinforcing learning.
- Performance Tracking: Offers analytics to monitor progress and identify weak areas.
- Regular Updates: Keeps questions current with evolving clinical guidelines and exam trends.

Why Use a Question Bank in MRCPCH Preparation?

Incorporating a question bank into your study plan offers multiple benefits:

Active Learning Reinforcement

Answering questions engages active recall, a proven method to enhance memory retention and understanding. It transforms passive reading into an interactive process, making learning more effective.

Exam Familiarization

Practicing with questions that mirror the exam style reduces anxiety and boosts confidence. It helps candidates become comfortable with question pacing, wording, and the types of clinical scenarios encountered.

Self-Assessment and Progress Tracking

A well-designed question bank provides insights into strengths and weaknesses, enabling targeted revision. This tailored approach improves efficiency and outcomes.

Exposure to a Wide Range of Topics

Question banks often cover the entire spectrum of pediatric topics, ensuring comprehensive preparation and reducing the risk of surprises during the exam.

Choosing the Right MRCPCH Question Bank

With numerous resources available, selecting an appropriate question bank can seem daunting. Here are key factors to consider:

Content Quality and Relevance

- Ensure questions are aligned with current exam standards and guidelines.
- Look for detailed explanations that clarify reasoning and reinforce learning.

User Interface and Usability

- An intuitive, user-friendly platform enhances engagement.
- Features such as bookmarking, notes, and progress tracking facilitate efficient studying.

Question Diversity

- A wide variety of question formats and clinical scenarios prepares you for the real exam.

Accessibility and Cost

- Consider whether the resource is accessible across devices (desktop, tablet, mobile).
- Evaluate the cost relative to features offered; some free resources are valuable, while others require subscriptions.

Updates and Support

- Regularly updated question banks keep pace with curriculum changes.
- Good customer support can assist with technical issues and user queries.

Strategies for Maximizing the Utility of the MRCPCH Question Bank

Using the question bank effectively requires strategic planning. Here are best practices:

Incorporate Regular Practice Sessions

- Schedule consistent practice times, such as daily or weekly sessions.
- Mix question difficulty levels to build confidence gradually.

Simulate Exam Conditions

- Attempt questions in timed sessions to improve time management.
- Avoid distractions to replicate exam environment.

Review Explanations Thoroughly

- Don't just guess answers; understand the rationale behind each question.
- Use explanations to clarify misconceptions and reinforce learning.

Track Your Progress

- Use analytics features to identify weak areas.
- Focus revision efforts on topics with lower success rates.

Combine with Other Resources

- Supplement question bank practice with textbooks, clinical logs, and peer discussions.
- Attend workshops or study groups to deepen understanding.

Challenges and Limitations of MRCPCH Question Banks

While question banks are invaluable, they also have limitations:

- Over-reliance on Question Practice: May neglect other forms of learning like clinical exposure or reading guidelines.
- Question Bank Quality Variability: Not all resources maintain high standards; poor quality questions can mislead.
- Potential for Repetition: Repeated practice on the same questions may lead to memorization rather than understanding.

To mitigate these issues, balance question bank practice with comprehensive study strategies.

The Future of MRCPCH Question Banks

Advancements in technology continue to shape the landscape of medical exam preparation:

- Adaptive Learning Platforms: Tailor question difficulty based on performance, optimizing learning efficiency.
- Integration with E-Learning Modules: Combine questions with multimedia resources such as videos and case simulations.
- Artificial Intelligence (AI): Provide personalized feedback and identify patterns in learning behavior.

These innovations aim to enhance the effectiveness and engagement of MRCPCH preparation tools.

Conclusion

The MRCPCH question bank remains a cornerstone resource for pediatric trainees aiming to succeed in their exams. Its role in reinforcing knowledge, simulating exam conditions, and identifying learning gaps makes it an indispensable part of a well-rounded study plan. By selecting high-quality resources and employing strategic preparation techniques, candidates can navigate the complexities of the MRCPCH confidently and efficiently. As technology evolves, future question banks will likely become even more interactive and personalized, further empowering trainees on their journey to becoming competent pediatricians.

Remember: Effective exam preparation is a blend of practice, understanding, and clinical experience. The MRCPCH question bank is a powerful tool, but it's most effective when integrated into a comprehensive, disciplined study strategy.

Question What is the MRCPCH question bank used for? The MRCPCH question bank is used by medical trainees preparing for the Membership of the Royal College of Paediatrics and Child Health exam to practice exam-style questions and assess their knowledge. How can I access the latest MRCPCH question bank? The latest MRCPCH question bank can typically be accessed through authorized online platforms, official RCPCH resources, or via subscription services that offer up-to-date practice questions. Are there practice questions in the MRCPCH question bank that mirror the actual exam? Yes, the MRCPCH question bank contains practice questions designed to mimic the style, format, and difficulty of the actual exam to help candidates prepare effectively. Can I track my progress using the MRCPCH question bank? Many online MRCPCH question banks offer progress tracking features, allowing users to monitor their performance and identify areas needing

improvement. Is the MRCCHP question bank updated regularly? Yes, reputable MRCCHP question banks are updated periodically to reflect the latest exam syllabus, guidelines, and question styles. Are explanations provided for answers in the MRCCHP question bank? Most MRCCHP question banks include detailed explanations for each answer, helping candidates understand the reasoning behind correct and incorrect options. Can I use the MRCCHP question bank for group study or only individual practice? The question bank can be utilized for both individual practice and group study sessions, fostering collaborative learning and discussion. What is the best way to integrate the MRCCHP question bank into my study plan? Incorporate the question bank regularly into your study schedule, simulate exam conditions, review explanations thoroughly, and track progress to maximize exam preparation effectiveness.

Related keywords: MRCPE, pediatric questions, pediatrician exam, medical question bank, pediatric MCQs, exam preparation, clinical scenarios, pediatric assessment, medical study resources, exam question bank

BANK RECONCILIATION STATEMENT WITH QUESTION AND SOLUTION

Bank Reconciliation Statement with Question and Solution

A bank reconciliation statement is an essential financial document that helps businesses and individuals ensure that their accounting records align with the bank's records. It involves comparing the company's cash book with the bank statement to identify any discrepancies, errors, or omissions. This process is crucial for maintaining accurate financial records, detecting fraud, and ensuring the correctness of cash balances. In this article, we will explore what a bank reconciliation statement is, why it is important, and provide a comprehensive example with questions and solutions to clarify the process.

Understanding Bank Reconciliation Statement

What is a Bank Reconciliation Statement?

A bank reconciliation statement is a report prepared to match the company's cash book balance with the bank statement balance. It identifies differences between the two records and explains the reasons for these differences, such as outstanding checks, deposits in transit, bank charges, or errors.

Why is Bank Reconciliation Important?

The significance of preparing a bank reconciliation statement includes:

- Ensuring accuracy of cash balances
- Detecting errors or fraudulent activities
- Facilitating proper financial reporting
- Maintaining good financial control
- Complying with auditing standards

Components of a Bank Reconciliation Statement

A typical bank reconciliation statement contains:

- Bank statement balance
- Cash book balance
- Adjustments for outstanding checks
- Adjustments for deposits in transit
- Bank charges and interest
- Errors identified in either record

Steps to Prepare a Bank Reconciliation Statement

Preparing a bank reconciliation involves systematic steps:

- Obtain the latest bank statement and cash book
- Compare the bank statement with the cash book
- Identify and record outstanding checks and deposits in transit
- Adjust for bank charges, interest, or errors
- Calculate the adjusted balances
- Ensure both adjusted balances agree

Sample Question and Solution

Scenario:

XYZ Ltd. has provided the following details for their bank reconciliation as of March 31, 2024:

- Bank statement balance on March 31, 2024: Rs. 50,000

- Cash book balance on March 31, 2024: Rs. 48,500
- Outstanding checks: Rs. 4,000
- Deposits in transit: Rs. 2,500
- Bank charges for March: Rs. 200
- Interest credited by bank: Rs. 150
- Bank error: Rs. 300 (bank recorded a deposit of Rs. 1,000 instead of Rs. 1,300)

Question:

Prepare the bank reconciliation statement and determine the correct cash book balance.

Solution:

Step 1: Start with the bank statement balance

Bank statement balance: Rs. 50,000

Step 2: Adjust for deposits in transit

Deposits in transit: Rs. 2,500

These are already included in the bank statement but not reflected in the cash book.

Step 3: Adjust for outstanding checks

Outstanding checks: Rs. 4,000

These are recorded in the cash book but not yet cleared by the bank.

Step 4: Adjust for bank errors

Bank error: Rs. 300 (the bank understated a deposit by Rs. 300)

Step 5: Calculate the adjusted bank balance

Adjusted bank balance = Bank statement balance + Deposits in transit - Outstanding checks ± Bank errors

Adjusted bank balance = Rs. 50,000 + Rs. 2,500 - Rs. 4,000 + Rs. 300

= Rs. 50,000 + 2,500 - 4,000 + 300

= Rs. 48,800

Step 6: Adjust the cash book balance

Cash book balance: Rs. 48,500

Adjustments:

- Subtract bank charges: Rs. 200
- Add interest credited by bank: Rs. 150

Adjusted cash book balance = Rs. 48,500 - Rs. 200 + Rs. 150

= Rs. 48,450

Step 7: Reconciliation

Since the adjusted balances are Rs. 48,800 (bank) and Rs. 48,450 (cash book), they do not match. The difference is Rs. 350.

Step 8: Explanation of the discrepancy

The Rs. 350 difference might be due to unrecorded bank charges, errors, or timing differences. To reconcile, the company should verify:

- Whether any unrecorded bank charges or credits exist
- Any errors in recording transactions

Final step:

The company records the necessary adjustments in the cash book to match the bank statement, ensuring both balances agree.

Conclusion

A bank reconciliation statement is a vital tool for maintaining accurate financial records. It helps detect errors, prevent fraud, and ensure the correctness of cash balances. By following systematic steps and understanding common adjustments like outstanding checks, deposits in transit, bank charges, and errors, businesses can effectively reconcile their bank and cash book records. Regular

reconciliation not only enhances financial control but also builds trust with stakeholders and auditors. The example provided demonstrates how to approach a typical bank reconciliation with practical questions and solutions, equipping users with the skills to perform their own reconciliations confidently.

Bank Reconciliation Statement with Question and Solution: An In-Depth Analytical Review

Introduction

In the realm of financial management, accuracy, transparency, and consistency are paramount. One of the essential tools to ensure these qualities in an organization's financial records is the bank reconciliation statement. This document acts as a bridge, aligning the company's cash book with the bank statement, thereby uncovering discrepancies, preventing fraud, and maintaining reliable financial data. Despite its importance, many practitioners encounter challenges in preparing and understanding bank reconciliation statements. This article offers an investigative analysis into the concept of bank reconciliation statements, providing detailed explanations, common issues, illustrative questions, and their solutions aimed at enhancing comprehension and application.

Understanding the Bank Reconciliation Statement

What Is a Bank Reconciliation Statement?

A bank reconciliation statement is a financial document prepared periodically—monthly or quarterly—that compares the company's internal cash records (cash book) with the bank's records (bank statement). The primary purpose is to identify discrepancies caused by timing differences, errors, or fraudulent activities, and to adjust the company's books accordingly.

Why Is It Important?

- Detects Errors: Identifies errors made by the bank or the company.
- Prevents Fraud: Helps catch unauthorized transactions.
- Ensures Accurate Financial Reporting: Provides reliable cash balances.
- Maintains Control: Assists in managing cash flows effectively.

Fundamental Components of Bank Reconciliation

Before delving into the process, understanding the core components involved is crucial.

- Cash Book Balance: The company's recorded cash balance.

- Bank Statement Balance: The bank's recorded balance.
- Adjustments: Items that cause differences such as deposits in transit, outstanding checks, bank charges, or errors.

The Process of Reconciling

The general steps include:

- Comparing the cash book and bank statement balances.
- Identifying timing differences and errors.
- Making necessary adjustments to either record.
- Preparing the reconciliation statement to reflect the true cash position.

Common Discrepancies and Their Causes

Discrepancies between the cash book and bank statement can arise from various reasons:

| Discrepancy Type | Typical Causes |

|-----|-----|

| Timing Differences | Deposits in transit, outstanding checks |

| Errors in Recording | Mistakes in recording amounts, double entries |

| Bank Charges | Service charges, interest deductions |

| Unauthorized Transactions | Fraudulent withdrawals or deposits |

| Errors in Bank Records | Bank's recording mistakes |

Investigative Approach: Question and Solution

To illustrate the process, consider the following common problem encountered during bank reconciliation.

Sample Question

Question:

XYZ Ltd. has the following details for the month of March 2024:

- Cash book balance (as per company records): ₹1,20,000
- Bank statement balance (as per bank's records): ₹1,15,000
- The following reconciling items were identified:
 - Deposit of ₹5,000 made on March 30th, recorded in the cash book but not yet reflected in the bank statement.
 - Outstanding checks totaling ₹8,000 issued but not yet cleared by the bank.
 - Bank charges of ₹200 debited in the bank statement but not yet recorded in the cash book.
 - A cheque of ₹2,000 deposited directly into the bank account (not recorded in the cash book).
 - A bank error: a deposit of ₹1,000 was wrongly recorded as ₹100 by the bank.

Required:

Prepare the bank reconciliation statement for March 2024.

Step-by-Step Solution

Step 1: Start with the balances

- Cash book balance: ₹1,20,000
- Bank statement balance: ₹1,15,000

Step 2: Adjust the bank statement balance

a. Add deposits in transit:

Deposit made on March 30th of ₹5,000 not yet reflected in bank statement.

Adjusted balance: $₹1,15,000 + ₹5,000 = ₹1,20,000$

b. Deduct outstanding checks:

Outstanding checks totaling ₹8,000.

Adjusted balance: $₹1,20,000 - ₹8,000 = ₹1,12,000$

c. Correct bank error:

Bank wrongly recorded a deposit of ?1,000 as ?100.

Difference: $?1,000 - ?100 = ?900$ (bank under-recorded deposit).

Adjusted bank balance: $?1,12,000 + ?900 = ?1,12,900$

Step 3: Adjust the cash book balance

a. Record bank charges:

Bank charges of ?200 deducted by the bank but not yet recorded in cash book.

Adjusted cash book balance: $?1,20,000 - ?200 = ?1,19,800$

b. Record direct deposit:

A deposit of ?2,000 directly into the bank account (not recorded in cash book).

Adjusted cash book balance: $?1,19,800 + ?2,000 = ?1,21,800$

Step 4: Final comparison

- Adjusted bank statement balance: ?1,12,900
- Adjusted cash book balance: ?1,21,800

Difference: $?1,21,800 - ?1,12,900 = ?8,900$

This discrepancy indicates some unresolved items, and further investigation is necessary.

Step 5: Analyze and reconcile remaining differences

The remaining difference of ?8,900 suggests additional unrecorded items or errors. Since we have already accounted for the known items, possible causes include:

- Unrecorded bank errors
- Outstanding checks not yet cleared
- Unpresented deposits

Given the information, the main unresolved item is the difference caused by timing and possible errors.

Final Reconciliation Statement

Particulars	Dr. (?)	Cr. (?)
Balance as per cash book	1,20,000	
Add: Direct deposit not recorded in cash book	2,000	
Less: Bank charges not recorded in cash book		200
Adjusted cash book balance	1,21,800	
Balance as per bank statement (after adjustments)		1,12,900
Add: Deposit in transit (not reflected in bank statement)		5,000
Less: Outstanding checks		8,000
Add: Bank error correction (deposit recorded wrongly)		900
Adjusted bank statement balance		1,12,900

Note: The remaining difference of ?8,900 suggests further scrutiny or unrecorded items, but based on available data, the reconciliation aligns with the known adjustments.

Critical Analysis and Implications

The above example underscores the importance of meticulous record-keeping and timely updates. It highlights how small errors or omissions can cause significant discrepancies, potentially leading to misstatements or fraud if left uncorrected.

Common Challenges in Bank Reconciliation

- Timing issues: Deposits or checks recorded in one record but not yet reflected in the other.
- Errors: Mistakes in recording amounts or in bank processing.

- Fraudulent activities: Unauthorized transactions that can be disguised within discrepancies.
- Unclear documentation: Lack of supporting evidence for transactions.

Best Practices for Effective Reconciliation

- Regular reconciliation: Monthly or even weekly to catch issues early.
- Detailed record-keeping: Maintain supporting documents for all transactions.
- Clear procedures: Establish standardized steps for reconciliation.
- Automation tools: Use accounting software to automate parts of the process.
- Audit trail: Keep records of adjustments for future audits.

Conclusion

The bank reconciliation statement is a vital component of financial oversight that ensures the accuracy and integrity of an organization's cash records. While the process may appear straightforward, it demands careful attention to detail, comprehensive understanding of potential discrepancies, and diligent investigation. The illustrative question and solution provided demonstrate not only how to prepare a reconciliation but also how to interpret and resolve common issues. Organizations that prioritize regular reconciliation and adopt best practices stand to benefit from stronger financial controls, enhanced transparency, and reduced risk of fraud.

Final Thoughts

Understanding the nuances of bank reconciliation statements equips finance professionals, auditors, and business owners with a critical tool for safeguarding assets and ensuring reliable reporting. As financial environments grow more complex, mastery over reconciling techniques becomes even more essential, emphasizing the need for ongoing education and process refinement.

Question What is a bank reconciliation statement and why is it important? A bank reconciliation statement is a document that compares the company's cash account with the bank's record to identify discrepancies. It is important because it helps ensure the accuracy of financial records, detect errors or fraud, and maintain reliable cash balances. What are common reasons for discrepancies in bank reconciliation statements? Common reasons include outstanding checks, deposits in transit, bank errors, recording errors in the company's books, and timing differences between bank and company records. How do you prepare a bank reconciliation statement? To prepare a bank reconciliation, start with the bank statement balance, add deposits in transit, deduct outstanding checks, and adjust for bank errors. Then, compare this adjusted balance with the company's ledger balance, making necessary adjustments for errors or unrecorded transactions to reconcile both records. What is an example of a common adjustment in a bank reconciliation statement? A common adjustment is recording bank charges or interest earned that the company

has not yet recorded in its books. For example, if the bank statement shows a service fee, the company needs to record this expense to reconcile the balances. How often should a business perform a bank reconciliation? It is recommended to perform a bank reconciliation at least monthly to ensure timely detection of errors, prevent fraud, and maintain accurate financial records.

Related keywords: bank reconciliation, bank statement, outstanding checks, deposits in transit, bank errors, cash book, reconciling items, bank balance, ledger account, reconciliation process

Read the full article online: [BANK RECONCILIATION STATEMENT WITH QUESTION AND SOLUTION](#)