# New Zealand Pharmacology for Midwifery Students Practice Test (Sample)

## Study Guide


**Everything you need from our exam experts!**

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# Introduction

**Preparing for a certification exam can feel overwhelming, but with the right tools, it becomes an opportunity to build confidence, sharpen your skills, and move one step closer to your goals. At Examzify, we believe that effective exam preparation isn't just about memorization, it's about understanding the material, identifying knowledge gaps, and building the test-taking strategies that lead to success.**

**This guide was designed to help you do exactly that.**

**Whether you're preparing for a licensing exam, professional certification, or entry-level qualification, this book offers structured practice to reinforce key concepts. You'll find a wide range of multiple-choice questions, each followed by clear explanations to help you understand not just the right answer, but why it's correct.**

**The content in this guide is based on real-world exam objectives and aligned with the types of questions and topics commonly found on official tests. It's ideal for learners who want to:**

- **Practice answering questions under realistic conditions,**
- **Improve accuracy and speed,**
- **Review explanations to strengthen weak areas, and**
- **Approach the exam with greater confidence.**

**We recommend using this book not as a stand-alone study tool, but alongside other resources like flashcards, textbooks, or hands-on training. For best results, we recommend working through each question, reflecting on the explanation provided, and revisiting the topics that challenge you most.**

**Remember: successful test preparation isn't about getting every question right the first time, it's about learning from your mistakes and improving over time. Stay focused, trust the process, and know that every page you turn brings you closer to success.**

**Let's begin.**

# How to Use This Guide

**This guide is designed to help you study more effectively and approach your exam with confidence. Whether you're reviewing for the first time or doing a final refresh, here's how to get the most out of your Examzify study guide:**

### 1. Start with a Diagnostic Review

**Skim through the questions to get a sense of what you know and what you need to focus on. Don't worry about getting everything right, your goal is to identify knowledge gaps early.**

### 2. Study in Short, Focused Sessions

**Break your study time into manageable blocks (e.g. 30 – 45 minutes). Review a handful of questions, reflect on the explanations, and take breaks to retain information better.**

### 3. Learn from the Explanations

**After answering a question, always read the explanation, even if you got it right. It reinforces key points, corrects misunderstandings, and teaches subtle distinctions between similar answers.**

### 4. Track Your Progress

**Use bookmarks or notes (if reading digitally) to mark difficult questions. Revisit these regularly and track improvements over time.**

### 5. Simulate the Real Exam

**Once you're comfortable, try taking a full set of questions without pausing. Set a timer and simulate test-day conditions to build confidence and time management skills.**

### 6. Repeat and Review

**Don't just study once, repetition builds retention. Re-attempt questions after a few days and revisit explanations to reinforce learning.**

### 7. Use Other Tools

**Pair this guide with other Examzify tools like flashcards, and digital practice tests to strengthen your preparation across formats.**

**There’s no single right way to study, but consistent, thoughtful effort always wins. Use this guide flexibly — adapt the tips above to fit your pace and learning style. You've got this!**

# Questions

**1. What does the term "selective toxicity" refer to in pharmacology?**

**A. Harms human cells while targeting bacteria**

**B. Targets specific bacterial cells but not human cells**

**C. Is toxic in large doses only**

**D. Induces hypersensitivity reactions**

**2. What is the definition of GORD?**

**A. Excessive gastric acid secretion**

**B. Passage of gastric contents into the oesophagus causing troublesome symptoms**

**C. Increased heartburn due to food intake**

**D. Chronic esophageal spasm**

**3. What is one of the primary goals of prenatal pharmaceutical care?**

**A. Ensuring the safe and effective use of medications during pregnancy**

**B. Reducing the number of medications prescribed**

**C. Promoting the use of herbal remedies exclusively**

**D. Maximizing the dosage of all medications**

**4. What type of anticoagulant is heparin classified as?**

**A. Oral anticoagulant**

**B. Parental anticoagulant**

**C. Natural anticoagulant**

**D. Topical anticoagulant**

**5. How do benzodiazepines produce their effects?**

**A. By inhibiting dopamine receptors**

**B. By acting as GABA agonists**

**C. By increasing serotonin levels**

**D. By blocking sodium channels**

**6. What is the primary concern when prescribing medication shortly before delivery?**

**A. Maternal comfort**

**B. Neonatal exposure to drugs**

**C. Timing of labor onset**

**D. Potential allergic reactions**

**7. What does the acronym GORD stand for?**

**A. Gastro-intestinal obstruction and reflux disease**

**B. Gastro-oesophageal reflux disease**

**C. Generalized organic reflux disorder**

**D. Gastric outlet reflux disease**

**8. What is the mechanism of action for Flucloxacillin?**

**A. Inhibits DNA synthesis**

**B. Prevents bacterial cell wall synthesis**

**C. Disrupts protein synthesis**

**D. Increases cell membrane permeability**

**9. What can occur due to prolonged use of Syntocinon with IV fluids?**

**A. Dehydration**

**B. Water toxicity**

**C. Hypernatremia**

**D. Hyperkalemia**

**10. What is the main reason for prescribing Nitrofurantoin?**

**A. Respiratory infection**

**B. Urinary tract infection**

**C. Skin infection**

**D. Gastrointestinal infection**

# Answers

**1. B**
**2. B**
**3. A**
**4. B**
**5. B**
**6. B**
**7. B**
**8. B**
**9. B**
**10. B**

# Explanations

## 1. What does the term "selective toxicity" refer to in pharmacology?

**A. Harms human cells while targeting bacteria**

**B. Targets specific bacterial cells but not human cells**

**C. Is toxic in large doses only**

**D. Induces hypersensitivity reactions**

**Selective toxicity in pharmacology refers to the ability of a drug to specifically target and harm certain pathogens, such as bacteria, while sparing human cells. This concept is crucial for the effectiveness of antimicrobial agents, as it allows the treatment of infections without damaging the host's own tissues. Choosing options that reflect this understanding highlights that selective toxicity is fundamental in developing antibiotics and chemotherapeutics. For example, many antibiotics function by exploiting differences between bacterial and human cells, such as differences in cell wall structure, metabolic pathways, or ribosomal function. This means that while the drug can effectively kill or inhibit bacterial growth, it does not harm the human cells, which is essential for minimizing side effects and maximizing therapeutic outcomes. The other options do not accurately capture the essence of selective toxicity. Some may imply broader implications that do not align with the targeted approach that is central to the concept, while others might confuse the definitions related to drug dosage or adverse reactions, which are not part of the principle of selective toxicity.**

## 2. What is the definition of GORD?

**A. Excessive gastric acid secretion**

**B. Passage of gastric contents into the oesophagus causing troublesome symptoms**

**C. Increased heartburn due to food intake**

**D. Chronic esophageal spasm**

**The definition of GORD (Gastro-oesophageal Reflux Disease) is characterized by the passage of gastric contents into the oesophagus, leading to troublesome symptoms. This reflux of stomach contents can result in symptoms such as heartburn, regurgitation, and nausea. It signifies a failure of the lower oesophageal sphincter to prevent the backflow of acids and other contents from the stomach, which can cause inflammation and damage to the oesophageal lining if not managed effectively. Understanding GORD in this way highlights its broader implications on a patient's health beyond just a symptom, as it can lead to complications such as oesophagitis or Barrett's oesophagus if not treated or managed. The choice that emphasizes troublesome symptoms captures the essence of what characterizes GORD as a clinical condition.**

## 3. What is one of the primary goals of prenatal pharmaceutical care?

**A. Ensuring the safe and effective use of medications during pregnancy**

**B. Reducing the number of medications prescribed**

**C. Promoting the use of herbal remedies exclusively**

**D. Maximizing the dosage of all medications**

**One of the primary goals of prenatal pharmaceutical care is to ensure the safe and effective use of medications during pregnancy. This focus is crucial because pregnancy presents unique physiological changes that can affect the pharmacokinetics and pharmacodynamics of medications. It is essential for healthcare providers to carefully consider which medications are appropriate for pregnant individuals to minimize risks to both the mother and the developing fetus. Safe medication management involves assessing the therapeutic benefits against any potential risks associated with drug exposure during pregnancy. In addition, this goal aligns with the broader principles of prenatal care, which emphasize the health and well-being of both the mother and the fetus. By focusing on safety and efficacy, healthcare providers can help prevent adverse drug reactions and ensure that any necessary pharmacological interventions effectively support the health needs of pregnant patients.**

## 4. What type of anticoagulant is heparin classified as?

**A. Oral anticoagulant**

**B. Parental anticoagulant**

**C. Natural anticoagulant**

**D. Topical anticoagulant**

**Heparin is classified as a parental anticoagulant because it is administered via injection, either subcutaneously or intravenously. This method of administration allows for immediate systemic effects, which is essential for managing conditions requiring rapid anticoagulation, such as deep vein thrombosis or pulmonary embolism. Parental anticoagulants, including heparin, are utilized when gastrointestinal absorption is not feasible or when a more controlled response is needed. Oral anticoagulants, in contrast, are taken by mouth and undergo first-pass metabolism in the liver before entering the systemic circulation, which affects their onset of action. Natural anticoagulants are substances that are produced by the body, while topical anticoagulants are applied directly to skin or mucous membranes and are not suitable for systemic anticoagulation. Understanding these classifications is crucial for midwifery students, as it directly relates to how and when to use these medications during patient care.**

## 5. How do benzodiazepines produce their effects?

**A. By inhibiting dopamine receptors**

**B. By acting as GABA agonists**

**C. By increasing serotonin levels**

**D. By blocking sodium channels**

**Benzodiazepines produce their effects primarily by acting as GABA agonists, specifically enhancing the action of the neurotransmitter gamma-aminobutyric acid (GABA) at the GABA-A receptor. GABA is the main inhibitory neurotransmitter in the central nervous system, and when benzodiazepines bind to their specific site on the GABA-A receptor, they facilitate the opening of the chloride channels associated with this receptor. This leads to an increased influx of chloride ions into the neuron, resulting in hyperpolarization and making the neuron less likely to fire. This action helps to produce a calming effect on the brain, which can alleviate anxiety, promote sleep, and provide muscle relaxation. The mechanism by which benzodiazepines enhance GABAergic activity is what distinguishes them from other classes of drugs. For instance, while some drugs may inhibit dopamine receptors, increase serotonin levels, or block sodium channels, these actions do not describe the pharmacological effects of benzodiazepines. Instead, it is their ability to modulate GABA activity that underpins their therapeutic use in conditions such as anxiety disorders, insomnia, and certain seizure disorders.**

## 6. What is the primary concern when prescribing medication shortly before delivery?

**A. Maternal comfort**

**B. Neonatal exposure to drugs**

**C. Timing of labor onset**

**D. Potential allergic reactions**

**The primary concern when prescribing medication shortly before delivery is neonatal exposure to drugs. This consideration is crucial because medications administered to the mother can cross the placental barrier and affect the fetus. The timing and type of medication given can have significant implications for the newborn, influencing their respiratory status, feeding patterns, and overall neurological outcomes immediately after birth. Understanding the pharmacokinetics and pharmacodynamics of medications in the context of late-stage pregnancy is essential, as some drugs may have sedative effects or could cause withdrawal symptoms in the neonate after birth. Careful assessment of risks versus benefits is necessary to ensure the safety and well-being of the infant, making this the priority when considering medication administration shortly before delivery.**

## 7. What does the acronym GORD stand for?

**A. Gastro-intestinal obstruction and reflux disease**

**B. Gastro-oesophageal reflux disease**

**C. Generalized organic reflux disorder**

**D. Gastric outlet reflux disease**

**The acronym GORD stands for Gastro-oesophageal reflux disease, which is a condition characterized by the backflow of stomach contents into the esophagus, leading to symptoms such as heartburn, regurgitation, and discomfort. This condition occurs when the lower esophageal sphincter fails to close properly, allowing gastric acid to flow back into the esophagus. Understanding this condition is vital for midwifery practice, as it can affect pregnant individuals due to physiological changes in the body, including hormonal changes and pressure from the growing uterus. Midwives must be able to identify and manage symptoms related to GORD, as well as provide education on lifestyle modifications to alleviate discomfort. The other options do not accurately describe the condition associated with the acronym GORD. For instance, gastrointestinal obstruction, generalized organic reflux disorder, and gastric outlet reflux disease refer to different gastrointestinal issues that are not specifically related to the classic understanding of reflux disease as presented in option B. Thus, this context reinforces why Gastro-oesophageal reflux disease is the correct expansion of the acronym GORD.**

## 8. What is the mechanism of action for Flucloxacillin?

**A. Inhibits DNA synthesis**

**B. Prevents bacterial cell wall synthesis**

**C. Disrupts protein synthesis**

**D. Increases cell membrane permeability**

**Flucloxacillin functions by preventing bacterial cell wall synthesis. This antibiotic belongs to the penicillin group of beta-lactam antibiotics, which exert their effect by binding to penicillin-binding proteins located within the bacterial cell wall. This interaction inhibits the cross-linking of peptidoglycan layers, an essential process for maintaining cell wall integrity. As a result, the bacterial cell cannot withstand osmotic pressure and ultimately undergoes lysis and death. The importance of targeting cell wall synthesis is underscored by the fact that many bacteria lack cell walls in human cells, making this mechanism a safe and effective way to selectively eliminate bacterial pathogens while preserving human cell integrity. This focus on the cell wall is particularly effective against gram-positive bacteria, which have a thick peptidoglycan layer that is essential for their survival. By understanding this mechanism, it becomes clear why Flucloxacillin is specifically useful in treating infections caused by penicillin-sensitive staphylococci and other related infections. The effectiveness of Flucloxacillin stems from its targeted action against the bacterial cell wall, leading to its role as a critical component in the treatment of various bacterial infections.**

## 9. What can occur due to prolonged use of Syntocinon with IV fluids?

**A. Dehydration**

**B. Water toxicity**

**C. Hypernatremia**

**D. Hyperkalemia**

**Prolonged use of Syntocinon, particularly when administered with IV fluids, can lead to water toxicity, also known as hyponatremia. Syntocinon contains oxytocin, which can promote water retention in the body. When combined with intravenous fluids, especially hypotonic solutions, this effect may be exacerbated, potentially leading to an excess amount of water in the bloodstream. As the sodium levels in the body dilute, this can result in a condition called dilutional hyponatremia, where the sodium concentration in the blood becomes critically low. Symptoms of water toxicity may include headache, nausea, and in severe cases, seizures or coma if the sodium imbalance becomes significant. Understanding this connection between Syntocinon use, fluid management, and potential for water toxicity is crucial in midwifery practice, ensuring that both the mother and the fetus are monitored effectively to avoid complications arising from electrolyte imbalances.**

## 10. What is the main reason for prescribing Nitrofurantoin?

**A. Respiratory infection**

**B. Urinary tract infection**

**C. Skin infection**

**D. Gastrointestinal infection**

**Nitrofurantoin is primarily prescribed for the treatment of urinary tract infections (UTIs). This antibacterial medication works by targeting bacteria in the urinary tract, making it particularly effective for cystitis and other infections located in the bladder and urinary system. It is not generally used for respiratory, skin, or gastrointestinal infections because its action is most effective in acidic urine, where it can concentrate and exert its antibacterial properties against common UTI pathogens. By understanding the specific application of Nitrofurantoin, it becomes clear why the treatment of urinary tract infections is the primary indication for this medication.**

# Next Steps

**Congratulations on reaching the final section of this guide. You've taken a meaningful step toward passing your certification exam and advancing your career.**

**As you continue preparing, remember that consistent practice, review, and self-reflection are key to success. Make time to revisit difficult topics, simulate exam conditions, and track your progress along the way.**

**If you need help, have suggestions, or want to share feedback, we'd love to hear from you. Reach out to our team at hello@examzify.com.**

**Or visit your dedicated course page for more study tools and resources:**

**https://nzpharmformidwiferystudents.examzify.com**

**We wish you the very best on your exam journey. You've got this!**