



**NHA Certified Pharmacy Technician (CPhT)  
Test Plan for the ExCPT Exam**

*100 Scored Items/20 Pretest Items  
Exam Time: 2 hours + 10 minutes*

*\*Based on The Results of a Job Analysis Completed in 2023*

*This document provides both a summary and detailed outline of the topics that may be covered on the ExCPT Certification Exam. The summary examination outline specifies domains that are covered on the examination and the number of test items per domain.*

*The detailed outline adds to the summary outline by including task and knowledge statements associated with each domain on the test plan. Task statements reflect the duties that a candidate will need to know how to properly perform. Knowledge statements reflect information that a candidate will need to know and are in support of task statements. Items on the examination might require recall and critical thinking pertaining to a knowledge statement, a task statement, or both.*

**ExCPT Summary Examination Outline**

<b>DOMAINS/SUBDOMAINS</b>	<b># of Items on Examination</b>
<b>1. Role, Responsibilities, and General Duties of the Pharmacy Technician</b>	<b><u>15</u></b>
<b>2. Laws</b>	<b><u>15</u></b>
A. Laws and Regulations	9
B. Controlled Substances	6
<b>3. Drugs and Drug Therapy</b>	<b><u>13</u></b>
A. Drug Classification	8
B. Frequently Prescribed Medications	5
<b>4. Dispensing Process</b>	<b><u>43</u></b>
A. Prescription and Medication Order Intake and Entry	13
B. Preparing and Dispensing Prescriptions	13
C. Calculations	7
D. Sterile and Non-Sterile Products, Compounding, Unit Dose, and Repackaging	10
<b>5. Medication and Patient Safety and Quality Assurance</b>	<b><u>14</u></b>
<b>Total</b>	<b>100</b>

**Domain 1: Role, Responsibilities, and General Duties of the Pharmacy Technician (15 items)**

Tasks	Knowledge of:
<p>1A. Differentiate between tasks that may be performed by a pharmacy technician and those that must be performed by a pharmacist</p> <p>1B. Maintain pharmacy security (for example, secure medications, protect patient information, prevent unauthorized pharmacy access, maintain emergency protocol and phone number lists).</p> <p>1C. Assist pharmacist in medication reconciliation.</p> <p>1D. Assist pharmacist in medication therapy management (MTM) (for example, follow-up with patients, discuss compliance, therapy changes).</p> <p>1E. Assist patient with identification and selection of compliance aids and devices (for example, lock boxes, timers, glucose and blood pressure monitors).</p> <p>1F. Interpret basic medical terminology commonly used in the pharmacy setting.</p> <p>1G. Adapt professional communications to different audiences, including staff, third-party providers, and healthcare professionals.</p> <p>1H. Interact with patients and caregivers in a professional manner while displaying clinical empathy and cultural sensitivity.</p> <p>1I. Ensure final prescription verification has been completed by pharmacist prior to releasing to patient.</p> <p>1J. Assist in managing inventory by ordering, receiving, verifying, stocking, and rotating medications.</p> <p>1K. Store medications following manufacturers' instructions (for example, light, temperature, humidity).</p> <p>1L. Identify and remove expired products from inventory.</p> <p>1M. Identify and remove recalled products from inventory.</p> <p>1N. Dispose of medications based on product-specific requirements.</p> <p>1O. Access and use references and resources as needed to perform job duties.</p>	<p>K.1. Role and responsibilities of the pharmacy technician</p> <p>K.2. Role of the pharmacist (for example, provide oversight, verify prescriptions, provide counseling)</p> <p>K.3. Pharmacy operations and process workflow</p> <p>K.4. Pharmacy practice settings (for example, retail, in-patient, long-term care, compounding, online/mail order)</p> <p>K.5. Pharmacy security measures (for example, physical barriers, security and alarm systems, authorized access)</p> <p>K.6. Purpose and benefits of medication reconciliation and pharmacy technician's role therein</p> <p>K.7. Purpose and benefits of medication therapy management (MTM) and pharmacy technician's role therein</p> <p>K.8. Benefits of compliance aids and devices</p> <p>K.9. Medical terminology (for example, pharmacy abbreviations, prefixes, suffixes, root words)</p> <p>K.10. Communication methods and strategies (for example, interviewing techniques, non-verbal cues, communication styles)</p> <p>K.11. Classes of recalls and required actions</p> <p>K.12. Basic components of drug pricing for ordering and inventory facilitation</p> <p>K.13. Ordering and inventory management methods (for example, periodic automatic replenishment (PAR) levels, just in time ordering, rotating inventory, fast and slow movers)</p> <p>K.14. Storage requirements for medications</p> <p>K.15. Disposal methods for hazardous and non-hazardous materials and medications</p> <p>K.16. Material Safety Data Sheets (MSDS)/Safety Data Sheets (SDS)</p> <p>K.17. United States Pharmacopeia (USP) Standards</p> <p>K.18. Approved Drug Products with Therapeutic Equivalence Evaluations ("Orange Book")</p> <p>K.19. American Academy of Pediatric Report of the Committee on Infectious Diseases ("Red Book")</p>

ExCPT Detailed Examination Outline

	<p>K.20. Clinical information sources (for example, Drug Facts and Comparisons, Up to Date, Clinical Pharmacology)</p> <p>K.21. Ident-a-drug</p> <p>K.22. Handbook on Injectables</p> <p>K.23. State Board of Pharmacy regulations</p> <p>K.24. Poison Control Centers</p>
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**Domain 2: Laws (15 items)**

<b>A. Laws and Regulations (9 items)</b>	
<b>Tasks</b>	<b>Knowledge of:</b>
<p>2A.1. Comply with federal laws and regulations applicable to pharmacy practice.</p> <p>2A.2. Maintain HIPAA compliance while communicating and disclosing information with patients, caregivers, healthcare professionals, and others.</p> <p>2A.3. Adhere to and follow best practices regarding confidentiality with PII in a variety of settings (for example, patient credit card information, social security number).</p> <p>2A.4. Comply with HIPAA requirements regarding collection, storage, and disposal of patient information, including protected health information (PHI).</p> <p>2A.5. Comply with applicable laws and regulations when filling, partial-filling, or refilling prescriptions for non-controlled substances.</p> <p>2A.6. Package prescription medications in appropriate and approved containers (for example, child-resistant, easy-open/easy-cap).</p> <p>2A.7. Comply with regulations for dispensing, storage, and disposal of hazardous substances (for example, biologic materials, sharps, chemotherapy drugs).</p> <p>2A.8. Comply with laws related to monitoring and reporting fraud, waste, and abuse.</p> <p>2A.9. Follow record-keeping and retention procedures per federal requirements.</p>	<p>K.25. Health Insurance Portability and Accountability Act (HIPAA)</p> <p>K.26. Combat Methamphetamine Epidemic Act of 2005 (CMEA)</p> <p>K.27. Drug Listing Act of 1972 (including elements of the NDC)</p> <p>K.28. Food and Drug Act of 1906</p> <p>K.29. Omnibus Budget Reconciliation Act of 1990 (OBRA 1990)</p> <p>K.30. Durham Humphrey amendment</p> <p>K.31. Food Drug and Cosmetic Act</p> <p>K.32. Kefauver-Harris amendment</p> <p>K.33. Drug Supply Chain Security Act (DSCSA) a.k.a. Track and Trace</p> <p>K.34. Laws related to bioequivalence</p> <p>K.35. Poison Prevention Packaging Act (PPPA)</p> <p>K.36. Medicare Modernization Act</p> <p>K.37. Centers for Medicare and Medicaid Services (CMS)</p> <p>K.38. Anabolic Steroid Act</p> <p>K.39. Safe handling and disposal practices for hazardous drugs (USP &lt;800&gt;)</p> <p>K.40. Laws related to non-controlled substances regarding initial fill, refills, and/or partial fills of prescriptions</p> <p>K.41. Organizations/regulators related to pharmacy practice (for example, OSHA, The Joint Commission, FDA, EPA, DOH)</p>

<b>B. Controlled Substances (6 items)</b>	
<b>Tasks</b>	<b>Knowledge of:</b>
<p>2B.1. Differentiate among the controlled substances schedules and the drugs within them.</p> <p>2B.2. Identify elements needed to verify the validity of DEA number.</p> <p>2B.3. Verify, upon intake, that required information is present on prescription for controlled substance.</p> <p>2B.4. Comply with laws and regulations when filling, partial filling, and refilling prescriptions for controlled substances.</p> <p>2B.5. File all classes of hardcopy prescriptions appropriately.</p> <p>2B.6. Comply with federal laws pertaining to the handling of Schedule V (exempt narcotics) and regulated non-prescription (BTC) products.</p> <p>2B.7. Order, store, and maintain inventory of controlled substances in accordance with the Controlled Substances ACT (CSA).</p>	<p>K.42. Controlled Substances Act (CSA)</p> <p>K.43. Drug Enforcement Administration (DEA) for controlled substances</p> <p>K.44. Schedules of controlled substances and drugs within them</p> <p>K.45. Exempt narcotics that do not need a prescription (Schedule V)</p> <p>K.46. Prescription requirements for controlled substances</p> <p>K.47. Elements of and formula for DEA number</p> <p>K.48. DEA forms (for example, 41, 106, 222)</p> <p>K.49. Expiration dates and refills for controlled substances</p> <p>K.50. Emergency filling procedures</p> <p>K.51. Filing requirements</p> <p>K.52. Laws, regulations, and processes to transfer inventory of controlled substances between pharmacies</p> <p>K.53. Laws, regulations, and processes to transfer patient prescriptions for controlled substances between pharmacies, where applicable</p> <p>K.54. Procedures for ordering, receiving, storing, and disposing of controlled substances</p> <p>K.55. Tracking requirements for perpetual inventory of controlled substances</p> <p>K.56. Diversion and prescription monitoring programs (for example, Prescription Drug Monitoring Program (PDMP), Controlled Substance Monitoring Program (CSMP), Opioid Rapid Response Program (ORRP))</p>

**Domain 3: Drug and Drug Therapy (13 items)**

<b>A. Drug Classification (8 items)</b>	
<b>Tasks</b>	<b>Knowledge of:</b>
3A.1. Differentiate among therapeutic classes of drugs. 3A.2. Differentiate among various dosage forms. 3A.3. Differentiate among various routes of administration. 3A.4. Match common prescription medications with their indications. 3A.5. Match common over-the-counter (OTC) medications with their indications. 3A.6. Match common behind-the-counter (OTC) medications with their indications.	K.57. Drug classes (for example, analgesics, dermatologics, alpha blockers) K.58. Drug class abbreviations (for example, NSAID, SSRI, ARB, ACE) K.59. Dosage forms (for example, tablets, topicals, liquids, injectables, inhalers) K.60. Routes of administration (for example, oral, topical, parenteral, enteral, intramuscular) K.61. Indications for frequently prescribed medications K.62. Basic body systems and disease states K.63. Basic pharmacotherapy for common acute and chronic disease states (for example, infection, hypertension, diabetes, hyperlipidemia) K.64. Prescription medications and their indications K.65. Over-the-counter (OTC) medications and their indications K.66. Behind-the-counter (BTC) medications and their indications
<b>B. Frequently Prescribed Medications (5 items)</b>	
<b>Tasks</b>	<b>Knowledge of:</b>
3B.1. Match brand and generic names of commonly used prescription, OTC, and BTC medications. 3B.2. Differentiate between side effects and adverse drug reactions. 3B.3. Differentiate between contraindications and drug interactions. 3B.4. Recognize physical interactions and incompatibilities in the preparation of compounded medications. 3B.5. Recognize common vaccines and immunization schedules.	K.67. Drug Topics Top 200 medications (by prescription volume per year) K.68. Brand and generic medication names K.69. Therapeutic equivalence K.70. Effects and side-effects of pharmacotherapy K.71. Basic drug interactions (for example, drug-drug, drug-food, drug-OTC, drug-supplement) K.72. Physical interactions and incompatibilities K.73. Vaccine and immunization schedules

**Domain 4: Dispensing Process (43 items)**

<b>A. Prescription and Medication Order Intake and Entry (13 items)</b>	
<b>Tasks</b>	<b>Knowledge of:</b>
4A.1. Analyze a prescription for completeness and obtain missing information.	K.74. Required components of a prescription
4A.2. Obtain, input, and maintain information for the patient profile.	K.75. Types of prescriptions (for example, written, telephone/verbal, facsimile, electronic)
4A.3. Input and process incoming prescriptions from different origins (for example, written, telephone/verbal, facsimile, and electronic).	K.76. Providers and their prescriptive authority (for example, dentist can prescribe medication related to dental treatment, dermatologist can prescribe medication limited to patient’s skin conditions)
4A.4. Send and process refill authorization requests to prescribers.	K.77. Refills allowed based on prescription, drug type, and drug class (for example, controlled versus non-controlled)
4A.5. Identify and input third-party payer identifier numbers.	K.78. Elements of a patient profile (for example, demographics, medication history including OTCs, health conditions, allergies, and third-party payers)
4A.6. Process third-party prescriptions (for example, coordination of benefits, rejections, prior authorizations).	K.79. National Provider Identifier (NPI)
4A.7. Translate prescriber’s directions for use into accurate and complete directions for the patient.	K.80. Purpose and use of SIG codes / pharmacy abbreviations
4A.8. Interpret pharmacy abbreviations and SIG codes used on prescriptions or medication orders.	K.81. Institute for Safe Medication Practices (ISMP) error-prone abbreviations list
4A.9. Use correct Dispense as Written (DAW) codes when entering prescription data into the computer.	K.82. DAW codes and their uses
4A.10. Communicate with patients, providers, and/or third-party payers about prescription coverage (for example, copays, deductibles)	K.83. Types of electronic alerts (for example, refill denials, recalls, canceled/expired prescription)
4A.11. Respond to electronic alerts (for example, compliance, interactions, third-party payers) while processing a prescription.	K.84. Drug utilization reviews/drug utilization evaluations
4A.12. Process Durable Medical Equipment (DME) prescriptions, including coordination of benefits.	K.85. Components required to process a third-party claim (for example, BIN, PCN, member ID)
	K.86. Coordination of benefits
	K.87. Types of formularies
	K.88. Types of third-party rejections (for example, therapy duplication, high dose, prior authorization, missing diagnosis code)
	K.89. Tiered co-pay structures
	K.90. Types of coverage (for example, Medicare Parts B and D, Medicaid, Workers’ Compensation, HMO, patient assistance programs)
	K.91. Durable medical equipment (DME), including Medicare benefits and coverage rules

<b>B. Preparing and Dispensing Prescriptions (13 items)</b>	
<b>Tasks</b>	<b>Knowledge of:</b>
4B.1. Identify validity of prescriptions (for example, forged, copied, or altered).	K.92. Role and benefits of automated dispensing systems in the pharmacy
4B.2. Select appropriate medication product based on prescription; name and strength; NDC number; expiration date; and lot number.	K.93. When to keep medication in original packaging
4B.3. Identify medications that require special handling procedures.	K.94. Components of a patient prescription label
4B.4. Stock, maintain, and operate pill counter and automated dispensing machines.	K.95. Purpose of Risk Evaluation Mitigation Strategies (REMS) program
4B.5. Select appropriate prescription vials, caps, bottles, and other supplies.	K.96. Prescriptions that require Medication Guides
4B.6. Count/measure, reconstitute, or pour medication as indicated.	K.97. Purpose or use of Medication Guides, product package inserts (PPI), and instructions for use (IFU)
4B.7. Label prescriptions and medications in approved containers or stock packaging.	K.98. Components of an NDC number
4B.8. Select and apply appropriate auxiliary labels.	K.99. Considerations for handling hazardous drugs (USP <800>)
4B.9. Provide printed patient information leaflets and required Medication Guides.	K.100. Distinction between prescription, OTC, and BTC medications
4B.10. Package and ship medications according to manufacturers' recommendations.	K.101. Prescription label placement
4B.11. Select appropriate OTC product, including supplements, based on pharmacist recommendation.	K.102. Purpose and placement of auxiliary labels (for example, usage warnings, storage requirements)
4B.12. Offer pharmacist consultation to patients.	K.103. Labels appropriate to different types and classes of drugs
	K.104. Components of OTC packaging
	K.105. Federal regulations on shipping of specific medications and supplies (for example, diabetic testing supplies, controlled substances)
	K.106. Vitamins, minerals, and herbal supplements
	K.107. Security features of prescriptions (for example, identification requirements, watermarks)

<b>C. Calculations (7 items)</b>	
<b>Tasks</b>	<b>Knowledge of:</b>
<p>4C.1. Convert within and between systems of measurement.</p> <p>4C.2. Calculate individual and total daily dosages.</p> <p>4C.3. Calculate the days' supply for prescriptions.</p> <p>4C.4. Calculate the medication quantities for prescriptions based on dosage.</p> <p>4C.5. Perform sterile and non-sterile compounding calculations.</p> <p>4C.6. Perform temperature conversions.</p> <p>4C.7. Calculate percentages.</p> <p>4C.8. Perform basic pharmacy business calculations (for example, pricing and inventory control).</p>	<p>K.108. Measurement systems (for example, metric, household, military time)</p> <p>K.109. Basic algebra</p> <p>K.110. Milliequivalent (mEq) calculations</p> <p>K.111. Dosage units and days' supply</p> <p>K.112. Body surface area (BSA)</p> <p>K.113. Pediatric dosage calculations (for example, Young's rule, Clark's rule, Fried's rule)</p> <p>K.114. Weight-based dosage concentration (for example, mg/kg/day)</p> <p>K.115. Package size calculations (for example, drops/ml, injectable medications mg/package)</p> <p>K.116. Ratio strength (for example, 1:3, 1 part medication to 3 parts base)</p> <p>K.117. Percent concentration calculations (for example, w/w%, w/v%, v/v%)</p> <p>K.118. Dilution/concentration</p> <p>K.119. Intravenous flow rate (for example, mL/hr)</p> <p>K.120. Alligation</p> <p>K.121. Temperature scales</p> <p>K.122. Types of business calculations (for example, percentage markup, gross and net profit, cost)</p>



<b>D. Sterile and Non-Sterile Products, Compounding, Unit Dose, and Repackaging (10 items)</b>	
<b>Tasks</b>	<b>Knowledge of:</b>
<p>4D.1. Use Universal Precautions.</p> <p>4D.2. Employ infection control [for example handwashing, personal protective equipment (PPE)].</p> <p>4D.3. Follow correct procedures for maintaining the environment for the sterile product compounding area.</p> <p>4D.4. Maintain sterile and non-sterile compounding and repackaging equipment (for example cleaning, calibration).</p> <p>4D.5. Select appropriate equipment and supplies.</p> <p>4D.6. Select appropriate diluent or base product based on manufacturer’s recommendation.</p> <p>4D.7. Perform compounding process for sterile products following aseptic technique.</p> <p>4D.8. Perform compounding process for non-sterile products.</p> <p>4D.9. Determine beyond-use dates based on published data or regulatory agency requirements for both compounded and repackaged products</p> <p>4D.10. Label compounded products.</p> <p>4D.11. Repackage and label unit dose products.</p> <p>4D.12. Inspect final product for errors (for example physical incompatibilities, accuracy, sterility).</p> <p>4D.13. Complete required documentation for sterile, non-sterile, and repackaged products.</p>	<p>K.123. Characteristics of sterile and non-sterile compounds</p> <p>K.124. CDC/OSHA Universal Precautions Guidelines</p> <p>K.125. Infection control (USP &lt;795&gt; and &lt;797&gt;)</p> <p>K.126. Maintaining sterile environment (USP &lt;797&gt; and &lt;800&gt;)</p> <p>K.127. Needle gauges and types (for example, regular, filter, vented)</p> <p>K.128. Types of syringes (for example, slip-tip, luer-lok, luer-slip, catheter tip)</p> <p>K.129. Diluents and base products</p> <p>K.130. Guidelines and methods for compounding sterile products (USP &lt;797&gt;) (for example, aseptic technique)</p> <p>K.131. Guidelines and methods for compounding non-sterile products (USP &lt;795&gt;)</p> <p>K.132. Resources related to compounding (for example, product package insert, electronic resources, Trissel’s Stability of Compounded Formulations)</p> <p>K.133. Forms of incompatibility (for example, physical, chemical, osmolarity)</p> <p>K.134. Labeling guidelines (USP &lt;795&gt;, &lt;797&gt; and &lt;800&gt;)</p> <p>K.135. Components of a unit dose label</p> <p>K.136. Equipment maintenance (USP &lt;795&gt; and &lt;797&gt;)</p> <p>K.137. Manufacturers guidelines for maintaining repackaging equipment</p> <p>K.138. Primary engineering controls (for example, laminar versus vertical flow hood, compounding aseptic isolators versus compounding aseptic containment isolators) (USP &lt;797&gt;)</p> <p>K.139. Sources and guidelines to determine beyond-use date</p> <p>K.140. Documentation requirements (USP &lt;795&gt; and &lt;797&gt;)</p>

**Domain 5: Medication and Patient Safety and Quality Assurance (14 items)**

Tasks	Knowledge of:
<p>5A. Follow best practices for quality assurance and medication safety.</p> <p>5B. Follow requirements published by the National Institute for Occupational Safety and Health (NIOSH) (for example, quarantine and handling, proximity to other medications).</p> <p>5C. Assist pharmacist in identifying patient medication adherence issues.</p> <p>5D. Utilize safety strategies to prevent mix ups between look-alike, sound-alike medications, errors with high alert/high risk medications, and medications with different routes of administration.</p> <p>5E. Match patient information to prescription or medication order (for example, checking against name, date of birth, medical record number).</p> <p>5F. Follow procedures to assure the correct prescription(s) is/are dispensed and released to correct patient.</p> <p>5G. Take corrective action after detecting potential medication errors or near misses.</p> <p>5H. Document and report medication errors or near misses, as appropriate.</p> <p>5I. Maintain a clean work environment in the drug dispensing and patient care areas.</p> <p>5J. Perform quality assurance checks of inventory (for example, returns, unsecured medications, expired or outdated medications, emergency medications).</p>	<p>K.141. Best practices for quality assurance during entire filling process</p> <p>K.142. Institute for Safe Medication Practices (ISMP) Guidelines, including considerations for error-prone drugs</p> <p>K.143. National Institute for Occupational Safety and Health (NIOSH) guidelines and regulations</p> <p>K.144. Safe dosage ranges</p> <p>K.145. Pregnancy and lactation warnings</p> <p>K.146. Medication adherence</p> <p>K.147. Health literacy (patients' knowledge of their medications and usage)</p> <p>K.148. Look-alike/sound-alike drugs</p> <p>K.149. Black box warnings</p> <p>K.150. Tall Man lettering</p> <p>K.151. High-alert/high-risk medications</p> <p>K.152. Error-prone medications</p> <p>K.153. Error-prone abbreviations</p> <p>K.154. Adverse drug events, including adverse drug reactions (ADEs and ADRs)</p> <p>K.155. MedWatch</p> <p>K.156. FDA Adverse Event Reporting System (FAERS)</p> <p>K.157. Vaccine Adverse Event Reporting System (VAERS)</p> <p>K.158. Record keeping requirements related to medication errors and near misses</p> <p>K.159. Risk Evaluation Mitigation Strategies (REMS)</p> <p>K.160. Types of errors (for example, medication, human, near misses, software)</p> <p>K.161. Error investigation and risk management (for example, root cause analysis (RCA), workflow analysis)</p> <p>K.162. Procedures to avoid cross-contamination</p> <p>K.163. Sanitization processes</p> <p>K.164. Continuous quality improvement</p>