



Examination Guidelines

Candidate's Guide for the Pharmacist Registration Examination

Bahamas Pharmacy Council

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EXAMINATION GUIDELINES

PHARMACIST REGISTRATION EXAMINATION (PRE)

This Examination Guideline/Candidate Handbook provides information about the Pharmacist Registration Examination (PRE), including the exam application process and administration procedures. The most current version of the Examination Guideline supersedes version 1.

**** PLEASE READ THESE EXAMINATION GUIDELINES CAREFULLY ****

A candidate who breaches any of the Examination Guidelines or Rules may be liable to disciplinary action.

1. INTRODUCTION

As regulated health care professionals, pharmacists are responsible and accountable to patients through the Pharmacy Act, 2009 [Chapter 227], subsidiary legislation, and the standards established by the Bahamas Pharmacy Council (BPC). These legislation and standards set out the requirements for licensure to practice.

One of the requirements for initial registration and licensure is certification of an applicant's knowledge, skills and abilities at entry to practice. This certification is granted by the BPC to those who successfully complete the Pharmacist Registration Examination. This examination assesses both knowledge and skills. **The Pharmacist Registration Examination (PRE) is the mandatory examination for initial licensure and admission into the Register of Pharmacists.**

2. BAHAMAS PHARMACY COUNCIL

The Bahamas Pharmacy Council is responsible for ensuring that entry-level pharmacists and those who may have practiced in other jurisdictions have the necessary professional knowledge, skills and abilities to practice pharmacy within their scope of practice, in a safe and effective manner.

2020 BAHAMAS PHARMACY COUNCIL

Gina Archer-Carey, BPharm, MHA, RPh, **Council Chairperson**

Vivienne Lockhart, BPharm

Gail Cartwright, RPh

G. Ashaini Knowles, MD, FRCS

Kevia Major

Pearl McMillan, MD, **Ex Officio Member**

Anne Vanria Rolle, Pharm D, MHA, Rph, **Council Registrar**

3. STATEMENT OF NONDISCRIMINATION

The Bahamas Pharmacy Council does not discriminate among candidates on the basis of age, gender, race, colour, religion, national origin, disability, or marital status.

4. EXAMINATION COMMITTEE

The Examination Committee of the Bahamas Pharmacy Council serves to assist in the development, administration, scoring, score reporting and analysis of the Pharmacist Registration Examination.

2020 BAHAMAS PHARMACY COUNCIL EXAMINATION COMMITTEE

Gina Archer-Carey MHA, BPharm, RPh. **Committee Chairperson**

Shannon Davis, MPharm, RPh,

G. Ashaini Knowles, MD, FRCS

Charmaine Robinson-Theberge, PharmD, RPh

Valencia Johnson-Thompson, PharmD, RPh

Ivis Turner, PharmD. RPh.

Anastasia Brown, BEd, MEd

5. ELIGIBILITY REQUIREMENTS

Candidates meeting the eligibility requirements fully and passing the Pharmacist Registration Examination will be admitted into the register of Pharmacists. The BPC reserves the right to verify the accuracy of eligibility information supplied by or on behalf of a candidate.

To be eligible for entry into the Register of Pharmacists, a candidate must fulfill the following requirements: —

- (a) Be able to read, write and understand the English Language;
- (b) Be eighteen years of age or over;
- (c) Be capable of operating or being employed in a pharmacy;
- (d) Be fit and proper, that is to say —
 - 1) He/she has not been convicted of any offence under the Pharmacy Act;
 - 2) He/she has not been convicted of any offence under the Dangerous Drugs Act;
 - 3) He/she has not been convicted of any offence within the last five years of which, dishonesty or drug abuse is an element; and
 - 4) The BPC is satisfied as to the character and competence of the applicant; and
- (e) Be qualified to be so registered.

6. QUALIFICATIONS FOR THE PHARMACIST REGISTRATION EXAMINATION

To be considered as a candidate for the Pharmacist Registration Examination, the applicant must have graduated from an accredited school of pharmacy that has issued a first professional degree to the applicant. Specifically, the school of pharmacy must be accredited by a competent organization that accredits or certifies professional degree programs in pharmacy or the school must be regionally recognized, meaning nations in the geographical region of the school must recognize the professional degree program of the school as meeting regionally adopted standards.

Accreditation: Evaluation and approval of an institution, provider, or programme that has met the established standards of quality relative to its mission, educational objectives, resources, programmes and services.

The Bahamas Pharmacy Council may require the evaluation of documents by the National Accreditation & Equivalency Council of the Bahamas (NAECOB), which is a quality assurance body that evaluates institutions and training programmes to ensure that they are accredited and meet standard requirements.

First Professional Degree (Professional Degree): A degree that prepares someone to work in a particular profession, often meeting the academic requirements for licensure or accreditation; an academic degree that prepares the holder for a particular profession by emphasizing competency skills along with theory and analysis. For the profession of pharmacy, the First Professional Degree is the Bachelor of Pharmacy degree (BPharm) or the Doctor of pharmacy degree (PharmD).

7. EVIDENTIARY DOCUMENTS

An applicant must submit the following documents, if applicable, along with the Pharmacist Registration Examination Application form, as proof of meeting the eligibility requirements: —

1. Certified copies of any relevant certificates of qualification or a letter of completion from an accredited pharmacy school or institution. (Proof of a degree in pharmacy must indicate the title of the degree and the date of issuance);
2. A certified copy of applicant's previous certificate(s) of registration and license, if applicable. Applicants must provide documentation that they are licensed and/or registered for the unrestricted practice of pharmacy in the country or jurisdiction where the pharmacy degree was earned or in the country where the individual has practiced as a pharmacist;

3. A Letter of Good Standing from the Pharmacy Council/Board in the jurisdiction where previous certificate of registration and license was or is held, if applicable;
4. Proof of required hours of practice in the jurisdiction where pharmacy training took place, i.e., documentary evidence of the number of hours of practical experience in a registered pharmacy under supervision of a registered and currently licensed pharmacist (Minimum of two thousand (2,000) hours);
5. Official pharmacy school transcript from the accredited institution awarding the degree or qualification;
6. Test of English as a Foreign Language (TOEFL) scores, if applicable;
7. A current 2" x 2" photograph of the applicant taken within sixty (60) days of the filing of the application [x Two];
8. A copy of the relevant pages of the applicant's passport;
9. National Accreditation & Equivalency Council of the Bahamas (NAECOB) document evaluation, if applicable.

Note: All Documents **must** be submitted in English.

8. TEST OF ENGLISH AS A FOREIGN LANGUAGE (TOEFL)

Test of English as a Foreign Language is a standardized test to measure the English language ability of non-native speakers of English. The TOEFL is the sole English language proficiency examination accepted for applicants seeking to sit the Pharmacist Registration Examination. The TOEFL must be completed by all foreign pharmacy graduates, whose first language is not English.

The minimum score requirements for the TOEFL are as follows:

- Reading – 22
- Listening – 21
- Speaking – 26
- Writing – 24

BPC TOEFL Code: B 742

Applicants must complete all four (4) sections in one testing session and scores for the four (4) sections must be reported on one official score report. If an applicant scores less than the minimum score in any section, he/she will not be considered to sit the PRE.

Applicants must ensure that documents are sent to the BPC securely and in such a way that posting dates can be verified and documents can be tracked. Documents that do not arrive by the specified date and cannot be tracked will be deemed to have not been sent. It is the responsibility of candidates to check that documents have been delivered to the BPC by the specified time and date of the application deadline.

9. EXAMINATION APPLICATION

Each applicant must complete and submit the Pharmacist Registration Examination application and remit the appropriate fee.

It is the candidate's responsibility to submit an application that is completely and accurately filled out by the application deadline, as set by the Bahamas Pharmacy Council (BPC). All supplementary documents must be submitted along with the application form by the application deadline. **Incomplete applications will not be processed.**

All questions pertaining to the examination or the application process should be directed in writing to the Registrar of the BPC.

2020 BAHAMAS PHARMACY COUNCIL REGISTRAR

Anne T. Vanria Rolle, PharmD, MHA, RPh

Candidates who submit an incomplete application, late application or no application will not be permitted to sit the Examination. Unscheduled candidates (walk-ins) are not allowed to take the Pharmacist Registration Examination.

It is the responsibility of each candidate to keep the BPC office informed of their current mailing address, email address and telephone contact information (Business/Home/Mobile phone numbers).

10. APPLICATION DEADLINES

Each cycle of the Pharmacist Registration Examination has a deadline beyond which applications will not be considered. Applicants are advised to apply as early as possible. Applicants should not wait until the day of the deadline to submit an application or supporting documents, as the application will not be processed if it is not complete by the deadline — this includes providing all supporting documents and references.

The deadline for the submission of the application shall be 5:00pm Eastern Standard Time (EST) on the date determined by the BPC, usually six (6) weeks prior to the examination date.

Applicants must provide **all supporting documents at the same time** as the rest of the application. Information pertaining to the application deadline shall be available at the BPC Office and shall also be posted on the Councils website.

11. EXAMINATION FEE

To apply for the Pharmacist Registration Examination, an eligible candidate must submit the appropriate fee with a fully completed application.

All fees are subject to change at the discretion of the BPC. Please contact the BPC office regarding current fee schedule.

- ❖ Payment may be made by Cashier's Check/Certified Bank Check/Money Order made payable to the Bahamas Pharmacy Council, or by Direct Deposit (cash and/or personal checks). Please contact the BPC Office for account details.
- ❖ Examination related fees are **non-refundable** and **non-transferable**.
- ❖ An application may be transferred to a future Pharmacist Registration Examination date under special circumstances as detailed in Section 23.
- ❖ Candidates who fail a Pharmacist Registration Examination and apply to retake the examination must pay the full examination fee at the current fee schedule.

12. FORFEITURE OF EXAMINATION FEES

Candidates who fail to arrive at the test site on the date and time they are scheduled for examination and who have failed to get an approved withdrawal will forfeit their examination fees and must resubmit an application with the full fee if they wish to re-register for a future testing cycle.

Exceptions include special circumstances as detailed in Section 23.

Candidates who arrive at the testing site thirty (30) minutes after his or her scheduled examination has begun will be denied admission and will forfeit all examination fees. **Refunds will not be issued for forfeited examinations.** The candidate will be required to re-apply and submit current documents and the full application fee.

13. EXAMINATION WITHDRAWAL

Candidates may withdraw from the application process prior to the close of the application deadline.

**** THE REQUEST MUST BE SUBMITTED IN WRITING TO THE BPC REGISTRAR ON OR BEFORE THE APPLICATION DEADLINE. ****

Withdrawal requests, with appropriate documentation will be considered under the following circumstances:

1. Serious health condition/illness (either the candidate or an immediate family member), supported by a physician's letter or sick note.
2. Death of an immediate family member, supported by a death certificate.
3. Disabling accident, supported by police report or hospital admission note.
4. Court appearance, supported by court documentation.
5. Jury duty, supported by jury letter or notification.

Immediate family member: Spouse, child, mother, father, sister, brother, or guardian.

CATEGORIES OF SERIOUS HEALTH CONDITIONS

A serious health condition means an illness, injury, impairment, or physical or mental condition that involves one of the following:

Category 1: HOSPITAL CARE

Inpatient Care (i.e., an overnight stay) in a hospital, or residential medical care facility, including any period of incapacity¹ or subsequent treatment in connection with or consequent to such inpatient care.

Category 2: ABSENCE PLUS TREATMENT

A period of incapacity of **more than three consecutive calendar days** (including any subsequent treatment or period of incapacity relating to the same condition), that also involves:

1. **Treatment² two or more times** by a medical practitioner, or by a provider of health care services (e.g. physical therapist) under orders of, or on referral by, a medical practitioner; or
2. Treatment by a medical practitioner on **at least one occasion** which results in a **regimen of continuing treatment³** under the supervision of the medical practitioner.

Category 3: PREGNANCY

Any period of incapacity due to pregnancy, or for prenatal care, e.g., severe morning sickness or pregnancy-related migraines, medical orders to spend part of the pregnancy on bed rest, or pregnancy-related complications or disability such as preeclampsia.

Category 4: CHRONIC CONDITIONS REQUIRING TREATMENTS

A **chronic condition** which:

1. Requires **periodic visits** for treatment by a medical practitioner;
2. Continues over **an extended period of time** (including recurring episodes of a single underlying condition); and
3. May cause episodic rather than a continuing period of incapacity. (e.g. asthma, epilepsy, etc.)

Category 5: PERMANENT/LONG-TERM CONDITIONS REQUIRING SUPERVISION

A period of incapacity, which is permanent or long-term due to a condition for which treatment may not be effective. The applicant or immediate family member must be **under the continuing supervision of, but need not be receiving active treatment** by, a medical practitioner. Examples include a severe stroke, or the terminal stages of a disease.

Category 6: MULTIPLE TREATMENTS (NON-CHRONIC CONDITIONS)

Any period of absence to receive **multiple treatments** (including any period of recovery therefrom) by a medical practitioner or by a provider of health care services under orders of, or on referral by, a medical practitioner, either for **restorative surgery** after an accident or other injury, or for a condition that **would likely result in a period of incapacity of more than three consecutive calendar days in the absence of medical intervention or treatment**, such as cancer, (chemotherapy, radiation, etc.), severe arthritis (physical therapy), kidney disease (dialysis).

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- 1 Incapacity is the inability to work, attend school or perform other regular daily activities due to the serious health condition, treatment thereof, or recovery therefrom.
 - 2 Treatment includes examinations to determine if a serious health condition exists and evaluations of the condition. It does not include routine physical examinations, eye examinations or dental examinations.
 - 3 A regimen of continuing treatment includes, for example, a course of prescription medication (e.g. an antibiotic) or therapy requiring special equipment to resolve or alleviate the health condition. It does not include the taking of over-the-counter medications such as aspirin, antihistamines or salves, or bed rest, drinking fluids, exercise and other similar activities that can be initiated without a visit to a health care provider.

Examples of Illnesses which Generally DO NOT Qualify as —Serious Health Conditions

- The Common Cold • Earaches • Routine headaches • Flue • Upset stomach •
- Routine medical or dental visits • Plastic surgery for cosmetic purposes • Sore throat •

Candidates who receive a denial of their withdrawal request will forfeit the examination fee.

If the withdrawal request is approved, examination fees will be deferred and applied to the next examination cycle, removing the need for payment of a fee for that attempt. If an extension is required, the applicant must make the request in writing with supporting documents.

If a candidate withdraws from a sitting, that sitting is not counted as one of their sitting attempts.

14. APPLICATION PROCESSING

The application is vetted to confirm the applicant's eligibility. Approximately fourteen (14) business days after the application deadline, the applicant will be notified regarding the status of the application. If the application is ineligible, a letter will be sent to the applicant outlining the deficiency(s). If the application is eligible, the applicant will receive an admission letter to the test facility. The notice will include the date, location, and time of the Pharmacist Registration Examination and the unique identification number of the candidate.

15. EXAMINATION PREPARATION

The method of preparation and amount of time spent preparing for the Pharmacist Registration Examination may be driven by the candidate's preferred study style, level of professional experience or academic background.

Some methods of preparation may include but are not limited to the following:

1. Review of Examination Competencies and Content

Candidates are advised to review the Examination Competency Categories contained in Section 16 along with the Examination Content outlined in Section 18.

2. Study Resources

Candidates are advised to review references that cover the information contained in the Examination Competency Categories and Examination Content of this guide. These references may include textbooks, journals, websites etc. that the candidate deems appropriate.

3. Review of Sample Questions

Questions contained in the Pharmacist Registration Examination are designed to test theory as well as job related/practical experience. Sample questions have been provided in Section 18 to prepare the candidate for the type of questions that will appear on the Examination and the level of knowledge that will be examined.

16. COMPETENCY CATEGORIES

(Adapted from Professional Competencies for Canadian Pharmacists at Entry to Practice 2007)

Competency #1: Patient Care

Pharmacists, in partnership with patients and other health care professionals, use their unique knowledge and skills to meet patients' drug and health related needs and to achieve optimal patient outcomes and patient safety.

Competency Elements:

- 1.1 Develop a trusting professional relationship with the patient where both parties are interacting in a way where the obligations, expected benefits, and consequences are clearly defined.
 - i. Establish and maintain rapport by using effective communication skills.
 - ii. Demonstrate a caring, empathetic, and professional attitude.
 - iii. Elicit the patient's needs, values and desired level of care and desired outcomes regarding drug therapy.
 - iv. Assess the impact of factors that facilitate or impede the health of individual patients.
 - v. Define mutual obligations, expected benefits, and consequences.
- 1.2 Gather patient information.
 - i. Identify and use appropriate sources of information (e.g., patient, laboratory data, chart, electronic health record, profile, other health care professionals, etc.).
 - ii. Actively listen and interpret the information provided (e.g., medical and social history, adverse drug reactions, allergies, medication use, etc.).
 - iii. Assess the relevance of the information.
- 1.3 Assess the health status and concerns of the patient.
 - i. Use appropriate data, techniques and procedures to assess the patient's health.
 - ii. Use knowledge base to comprehend the scope and breadth of the patient's health problem.
 - iii. Identify factors (e.g., risk factors, financial, lifestyle, and nutrition) that impact on the therapeutic outcome.

- 1.4 Identify the patient's desired therapeutic outcomes.
 - i. Integrate knowledge of the patient's health status with knowledge of drug and non-drug treatment options.
 - ii. Outline the benefits and/or consequences of the treatment options.
 - iii. Enable the patient to make choices.

- 1.5 Identify and prioritize actual and potential drug therapy problems to determine if:
 - i. The patient requires drug therapy but is not receiving it,
 - ii. The patient is taking or receiving the wrong drug,
 - iii. The patient is taking or receiving too little of the right drug,
 - iv. The patient is taking or receiving too much of the right drug,
 - v. The patient is not taking or receiving the drug or is taking or receiving the drug inappropriately,
 - vi. The patient is experiencing an adverse reaction to the drug,
 - vii. The patient is experiencing a drug interaction (including drug-drug, drug-food, drug-laboratory test, drug-disease, or drug-blood product),
 - viii. The patient is taking or receiving a drug for no medically valid indication or potential substance abuse.

- 1.6 Develop a therapeutic plan.
 - i. Identify and assess treatment strategies, including drug and non-drug measures using an evidence-informed approach.
 - ii. Select therapeutic options.
 - iii. Recognize, solve and prevent actual and potential drug therapy problems.
 - iv. Consult with the patient and, if necessary, health care professionals.

- 1.7 Support the implementation of the therapeutic plan.
 - i. Explain the rationale for the proposed treatment.
 - ii. Provide patient education (e.g., counselling information and education on adherence issues, either verbal or written).
 - iii. Assess patient's understanding of the therapeutic plan.

- 1.8 Monitor the patient's progress and assess therapeutic outcomes.
 - i. Recognize the important clinical indicators (e.g., signs and symptoms,

- laboratory tests, adverse effects).
- ii. Identify and apply monitoring/intervention techniques and timelines.
 - iii. Specify outcomes with measurable therapeutic end points.
 - iv. Discuss with the patient the ongoing responsibilities of the pharmacist, patient and other health care professionals.
 - v. Assess tolerance and safety of therapy.
 - vi. Assess adherence to therapy.
 - vii. Conduct follow-up consultation(s) to evaluate the therapeutic effectiveness.
- 1.9 Document and share within the circle of care appropriate findings of patient information assessment, recommendations made and actions taken.
- i. Identify the purpose of the documentation.
 - ii. Maintain the patient's medication record.
 - iii. Document identified drug therapy problems.
 - iv. Prioritize and document the intervention, patient's outcome, recommendations, and follow-up.
 - v. Document communication with patient and health care professionals.

Competency #2: Professional Collaboration and Team Work

Pharmacists work in collaboration with other health care professionals to optimize patient safety and improve health outcomes.

Competency Elements:

- 2.1 Develop collaborative relationships with health care professionals such that the obligations and expected benefits are clearly defined.
- 2.2 Cooperate with and show respect for all members of the inter-professional team.
 - i. Make expertise available to others.
 - ii. Share relevant information.
 - iii. Contribute to defining objectives shared by all professions concerned.
 - iv. Support other professionals and accept their support to optimize health outcomes.
- 2.3 Refer patients to other health care providers when required.
 - i. Determine if a referral is necessary.
 - ii. Identify the most appropriate health care provider or agency for the referral (e.g., medical or social).
 - iii. Work with other health care providers to determine the desired therapeutic outcome.
- 2.4 Work with other health care professionals to promote health and wellness in the community.
- 2.5 Contribute to the discovery of new knowledge and skills (e.g., participating in collaborative health related research).
- 2.6 Understand, participate in and promote safety initiatives (e.g., medication safety, continuity of care).

Competency #3: Ethical, Legal and Professional Responsibilities

Pharmacists practise within legal requirements, demonstrate professional integrity and act to uphold professional standards of practice and codes of ethics

Competency Elements:

- 3.1 Apply legal and ethical requirements and standards.
- 3.2 Uphold and act on the ethical principle that a pharmacist's primary accountability is to the patient.
 - i. Ensure patient confidentiality.
 - ii. Advocate on behalf of the patient.
 - iii. Involve the patient in decision-making.
 - iv. Respect the rights of patients to make their own choices.
 - v. Consider patient-specific circumstances.
- 3.3 Demonstrate personal and professional integrity.
 - i. Accept responsibility for actions and decisions.
 - ii. Show respect for the dignity of the patient.
 - iii. Maintain appropriate professional boundaries.
 - iv. Practice within personal limits of knowledge, skills and abilities.
- 3.4 Demonstrate an understanding of the Bahamian health care system and the role of the pharmacist and other health care professionals within it.
- 3.5 Demonstrate an understanding of the importance of and the process of continuing professional development.
 - i. Assess own learning needs.
 - ii. Develop a plan to meet learning needs.
 - iii. Seek and evaluate learning opportunities to enhance practice.
 - iv. Incorporate learning into practice.

Competency #4: Drug, Therapeutic and Practice Information

Pharmacists assume responsibility for accessing, retrieving, evaluating and exchanging relevant information to ensure safe and effective patient care.

- 4.1 Clearly define the question(s) to be researched.
 - i. Clarify requests for information.
 - ii. Identify key targets (audiences).
- 4.2 Identify appropriate sources of relevant information, using evidence-informed approaches where possible.
 - i. Name major sources of information.
 - ii. Determine the appropriateness of these sources.
 - iii. Assess the value of the sources.
- 4.3 Retrieve information from relevant sources.
 - i. Use a variety of retrieval techniques to access relevant information.
 - ii. Assess the suitability and reliability of these techniques.
- 4.4 Evaluate scientific information.
 - i. Assess the adequacy of research design (e.g., ethics, methodology, etc.).
 - ii. Assess the relevance, applicability, accuracy, reliability, validity and generalizability of information.
- 4.5 Organize information and develop a knowledge exchange strategy.
 - i. Determine key messages.
 - ii. Identify barriers to uptake.
 - iii. Identify target audience.
 - iv. Determine and apply methods for knowledge exchange.
 - v. Assess outcomes of the knowledge exchange.
- 4.6 Identify issues in pharmacy practice and drug utilization.
 - i. Interpret information in order to address issues in individual pharmacy practice.
 - ii. Use findings to improve practice.
 - iii. Communicate results to appropriate audiences.

Competency #5: Communication and Education

Pharmacists communicate with and provide education to groups and individuals in order to promote and support optimal patient care and wellbeing.

- 5.1 Demonstrate effective communication skills.
 - i. Demonstrate comprehension and proficiency in written and verbal English.
 - ii. Demonstrate appropriate verbal, non-verbal and listening skills.
 - iii. Demonstrate effective interview techniques.
 - iv. Display clear, concise and effective writing skills.
 - v. Select appropriate communication techniques for use with patients and other health care professionals.

- 5.2 Demonstrate sensitivity, respect and empathy when communicating with diverse groups or individuals.
 - i. Demonstrate an understanding of the impact that individual differences have on communication.

- 5.3 Optimize individual and group health and wellness through education and health promotion.
 - i. Use knowledge base to discuss health care issues and public health priorities.
 - ii. Identify factors that are barriers to, or facilitators of, health and wellness in individuals and groups.
 - iii. Collaborate with patients and other health care professionals in the development and implementation of health promotion strategies and public health initiatives.

- 5.4 Design, implement and evaluate an education plan for individuals and groups.
 - i. Identify the learning needs of participants.
 - ii. Assess personal abilities to carry out a particular educational plan.
 - iii. Select educational methods that are appropriate for the learner(s).
 - iv. Implement an educational plan for individual or groups.
 - v. Assess outcomes.

Competency #6: Drug Distribution

Pharmacists manage the drug distribution system to ensure the safety, accuracy and quality of supplied products

- 6.1 Apply relevant knowledge in the performance of tasks related to:
 - i. Interpretation of drug orders and/or prescriptions,
 - ii. Identification of bioequivalency and interchangeability of multi-source drugs,
 - iii. Performance of pharmaceutical calculations,
 - iv. Selection of quality products and ingredients,
 - v. Demonstration of compounding and dispensing, including labelling,
 - vi. Preparation of sterile products,
 - vii. Identification of storage and handling conditions to ensure stability,
 - viii. Acquiring and disposing of drugs,
 - ix. Administration of drugs,
 - x. Documentation.

- 6.2 Demonstrate ability to supervise drug distribution.
 - i. Maintain safe and effective systems of drug supply and distribution.
 - ii. Adhere to distribution policies and procedures.
 - iii. Supervise support staff.

- 6.3 Participate in continuous quality assurance.
 - i. Respond to actual or potential problems within the drug distribution system.
 - ii. Acknowledge the problem.
 - iii. Take steps to assess and resolve issues arising from the problem.
 - iv. Implement measures to prevent occurrences or reoccurrences.
 - v. Document and report the problem and resolution.

- 6.4 Monitor drug distribution patterns.
 - i. Recognize and respond to patterns of unusual drug distribution (e.g., diversion, drug misuse, fluctuations in utilization, etc.).

Competency #7: Understanding Management Principles

Pharmacists apply knowledge, principles and skills of management with the goal of optimizing patient care and inter-professional relationships.

Competency Elements:

- 7.1 Supervise personnel such that delegated functions are carried out to meet accepted standards.
 - i. Apply management principles and skills relevant to human and physical resources.
 - ii. Define accepted standards, policies and procedures.
 - iii. Demonstrate the principles of effective inter-professional and intra-professional working relationships.
- 7.2 Effectively manage workflow.
 - i. Demonstrate organizational skills.
 - ii. Prioritize and organize workflow.
 - iii. Demonstrate time management skills.
- 7.3 Understand management principles pertaining to pharmacy practice including:
 - i. Financial resources,
 - ii. Inventory,
 - iii. Information resources (e.g., reference library, information technology, legal documents, etc.),
 - iv. Human resources,
 - v. Quality assurance.
- 7.4 Interpret and apply the drug utilization, reimbursement and pharmacoeconomic policies of health care facilities, agencies and third party payment plans (e.g., generic substitution, therapeutic interchange, use of formularies, co-payments, deductibles, prescription quantity limits, etc.).

17. EXAMINATION FORMAT

The Pharmacist Registration Examination (PRE) consists of three (3) PARTS: PART I, PART II and PART III as follows:

PART I — FOUNDATIONS IN PHARMACY PRACTICE

PART I of the PRE consists of two (2) Papers that contain fifty (50) Multiple Choice Questions (MCQs) each.

Each question is weighted at one (1) Point for a total of fifty (50) Points per Paper.

PAPER 1 — PHARMACY CALCULATIONS AND PRACTICE EXAMINATION PAPER 2
— PHARMACOLOGY AND THERAPEUTICS EXAMINATION

PART II — PHARMACY LAW AND ETHICS

PART II of the PRE consists of one (1) Paper that contains fifty (50) Multiple Choice Questions (MCQs).

Each question is weighted at one (1) Point for a total of fifty (50) Points.

PAPER 1 — PHARMACY LAW AND ETHICS EXAMINATION

PART III — OBJECTIVE STRUCTURED CLINICAL EXAMINATION (OSCE)

PART III of the PRE is a performance assessment that will consist of to five (5) clinical practical stations. Each station will contain a clinical scenario with short answer questions. The candidate will be given ten (10) minutes per station to answer the short answer questions.

Each station is weighted at ten (10) Points.

18. EXAMINATION CONTENT

PART I — FOUNDATIONS IN PHARMACY PRACTICE

PAPER 1 — PHARMACY CALCULATIONS AND PRACTICE EXAMINATION

PAPER 1 shall contain questions that assess safe and accurate preparation, compounding, dispensing, and administration of medications and provision of health care products, inclusive of the following:

- (a) Pharmacy Math
- (b) Dosage Forms and Delivery Systems
- (c) Pharmacokinetics
- (d) Compounding
- (e) Biostatistics
- (f) Sterile Products
- (g) Drug Information
- (h) Clinical Trials
- (i) Non-prescription medicines (OTC)

SAMPLE QUESTIONS (Correct Answers Are Indicated In Red)

1. Dr Johnson has prescribed the following prescription for MJ:

Prednisone 10mg tabs
40 mg QD x 2/7
30 mg QD X 3/7
20 mg QD X 4/7
10 mg QD X 5/7

How many tablets should be dispensed?

- A. 20
- B. 30**
- C. 55
- D. 60
- E. 75

2. The recommended pediatric dosage for azithromycin therapy is 12 mg/kg po once daily on Days 1 through 5. For a child weighing 8.3 kg, calculate the total volume needed for the total course of treatment, if a product supplying 200 mg/5 mL is supplied for this order.

A. 12.5 mL

- B. 15 mL
- C. 25 mL
- D. 37.5 mL
- E. 50 mL

3. Which of the following is the volume of Water for Injection, BP to be added to a vial containing 500 mg amoxicillin to produce a solution with a volume of 5 mL. The displacement volume of amoxicillin is 0.1 mL for 125 mg.

A. 4.6 mL

- B. 3.0 mL
- C. 3.6 mL
- D. 5.0 mL
- E. 4.5 mL

4. A physician wants to switch a terminally-ill patient from slow release morphine sulfate tablets, 15 mg twice daily, to a liquid morphine sulfate dosage form because the patient has difficulty in swallowing tablets. If a morphine sulfate solution containing 5 mg per mL is prescribed q4h, what volume should be dispensed for a 20 day supply to provide the same pain relief as the tablet regimen?

- A. 20 mL
- B. 60 mL
- C. 80 mL
- D. 100 mL
- E. 120 mL**

5. A junior house officer (JHO) asks for your advice about setting up an intravenous infusion of dopexamine hydrochloride for a male patient, weighing 80 kg, on the cardiac ward. The JHO wishes to administer the drug at a dose of 500ng/kg/minute. The drug is formulated as a strong 10 mg/mL sterile solution, but needs to be diluted to a concentration of 400 micrograms/mL with 5% glucose before intravenous administration can occur. Which of the following is an appropriate administration flow rate for you to advise the JHO?

- A. 0.1 mL/min**
- B. 1.25 mL/min
- C. 4 mL/min
- D. 8 mL/min
- E. 0.1 L/min

Dose: 500 ng/kg/min for an 80 kg patient

$$\Rightarrow \frac{500 \text{ ng}}{\text{kg}} \times \frac{1}{\text{min}} \times 80 \text{ kg} = 40\,000 \text{ ng/min}$$

Convert ng to mcg 1 ng = 0.001

$$\text{mcg } 40\,000 \text{ ng/min} = 40 \text{ mcg/min}$$

Administered at concentration of 400 mcg/mL \Rightarrow

$$400 \frac{\text{mcg}}{\text{mL}} = 40 \frac{\text{mcg}}{\text{X mL}}$$

$$\text{Solve for X } \Rightarrow \text{X mL} = \frac{40 \text{ mcg}}{400 \text{ mcg}} = 0.1$$

Therefore, the IV rate should be **0.1 mL/min**

6. Vancomycin hydrochloride is to be administered to a 2-year-old patient weighing 30 lb for the management of antibiotic-associated colitis. The suggested dose to be prescribed is 5 mg/kg four times daily for 7 days. Over the total 7 days how much vancomycin hydrochloride will the patient have been given?
- A. 189 000 micrograms
 - B. 18 900 mg
 - C. 189 mg
 - D. 1.89 g**
 - E. 0.0189 kg

Remember! Must convert lb to kg

7. The Michaelis-Menten equation will appear first order when:
- A. The substrate concentration is much smaller than K_m**
 - B. K_m is much smaller than the substrate concentration
 - C. V_{max} is much smaller than K_m
 - D. V_{max} is much larger than K_m
 - E. K_m approaches V_{max}
8. If a drug exhibits saturation (zero order) kinetics, then
- A. The rate of drug elimination is constant**
 - B. Drug half-life is constant
 - C. Drug clearance is constant
 - D. Plasma drug concentration is constant
 - E. Plasma drug concentration falls exponentially

9. Diazepam Injection U.S.P

Diazepam 5 mg/mL
Ethanol 10%
Propylene glycol 40%
Benzyl alcohol 1.5%
Water for Injection qs 100%

In the formulation given above, propylene glycol functions as what?

- A. Emulsifier
- B. Antioxidant
- C. Cosolvent**
- D. Buffer
- E. Preservative

10. The process of preparing a prescribed medication for an individual patient from bulk ingredients created by a pharmacist in order to treat a specified medical condition according to prescription by a licensed prescriber

- A. Compounding**
- B. Pulverization
- C. Trituration
- D. Levigation
- E. Manufacturing

11. The stages of a malignant disease (cancer) is recorded using the symbols 0, I, II, III, IV. We say that the scale used is:

- A. Alphanumeric
- B. Numerical
- C. Ordinal**
- D. Nominal
- E. Statistical

12. The median of a series of numerical values is:

- A. Equal to the average
- B. A graph or hart
- C. A number**
- D. A frequency table
- E. A scale

13. Area designed for the preparation of sterile products

- A. Clean room**
- B. Formulary
- C. In-patient pharmacy
- D. Out-patient pharmacy
- E. Dispensary

14. Protein, carbohydrates and essential nutrients given to the patient through an IV line

- A. PRN order
- B. Total parenteral Nutrition (TPN)**
- C. Medication order
- D. Extemporaneous compound
- E. Enteral Nutrition

15. Identify the route of administration for ear drops

- A. Oral administration
- B. Parenteral administration
- C. Topical administration**
- D. Enteral administration
- E. Optic administration

16. Identify the term used to describe an injection that is given just under the skin

- A. Subcutaneous**
- B. Intramuscular
- C. Intravenous
- D. Epidural
- E. Sublingual

17. Total number of phases in clinical trials

- A. 1
- B. 2
- C. 3
- D. 4**
- E. 5

18. What is the purpose of pre-clinical testing?

- A. To verify that a drug is sufficiently safe and effective to be tested in humans.**
- B. To undergo preliminary testing in healthy humans to monitor the effects of the drug.
- C. To create a basic outline for the larger scale future tests on a widespread population.
- D. A and B
- E. B and C

19. Which of the following medications can cause a potentially life-threatening condition known as Reye Syndrome if given to a child with a viral illness?

- A. Aspirin**
- B. Ibuprofen
- C. Acetaminophen
- D. Naproxen
- E. Paracetamol

20. People allergic to aspirin may also be allergic to which other OTC(s)?

- I. Naproxen
 - II. Ketoprofen
 - III. Ibuprofen
 - IV. Paracetamol
-
- A. I and II
 - B. I and III
 - C. I and IV
 - D. I, II, and III**
 - E. I, III and IV

PAPER 2 — PHARMACOLOGY AND THERAPEUTICS EXAMINATION

PAPER 2 shall contain questions that assess pharmacology, safe and effective pharmacotherapy, and health outcomes. The following disease states shall be assessed:

Hypertension Diabetes Heart Failure Arrhythmia Ischemic Heart Disease Thromboembolic Disease Thyroid, Adrenal, Endocrine Women's/Men's Health Kidney Disease Fluids and Electrolytes Nutrition Oncology	Gastrointestinal Disease Arthritis, Gout, Lupus Pain Management and Migraine Seizure Disorders Psychiatric Conditions Dermatology Asthma and COPD Infectious Disease Anti-Infective Agents HIV and AIDS Anaemia
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SAMPLE QUESTIONS (Correct Answers Are Indicated In Red)

- Prednisone may produce all of the following effects **EXCEPT**:
 - Skeletal muscle weakness
 - Hypoglycemia**
 - Sodium retention
 - Peptic ulceration
 - Lowered resistance to infection
- Which of the following medications requires monitoring for the adverse effect of dyslipidemia?
 - Ciprofloxacin
 - Allopurinol
 - Isotretinoin**
 - Ramipril
 - Raloxifene

QUESTION 3 REFERS TO THE FOLLOWING SCENARIO:

SM is a 34 year old female who, while vacationing in Mexico, began prophylactic treatment for travelers' diarrhea. Shortly thereafter she complained of a feeling of fullness in her ears, black stools and a black tongue. SM's previous history includes an allergy to sulfonamides.

3. Which of the following drugs could be the cause of SM's complaints?
- A. Bismuth subsalicylate**
 - B. Cotrimoxazole
 - C. Doxycycline
 - D. Amoxicillin
 - E. Loperamide

QUESTIONS 4 AND 5 INCLUSIVE REFERS TO THE FOLLOWING SCENARIO:

TK is a 63 year old male with chronic kidney disease ($\text{CrCl} = 29 \text{ mL/min/1.73m}^2$) and gout. He experienced his last gout attack about 2 months ago. Today his toe is extremely painful, hot, red and swollen. At a walk-in clinic, he receives a prescription for naproxen 500 mg po bid for 5 days. TK's other current medication is pravastatin 20 mg po hs.

4. What drug therapy problem should the pharmacist identify for TK?
- A. Naproxen is inferior to indomethacin for the treatment of acute gout
 - B. The duration of naproxen treatment is too short
 - C. Naproxen should be avoided in patients taking pravastatin
 - D. Naproxen should be avoided in patients with renal dysfunction**
 - E. The frequency of naproxen dosing is too low
5. Following successful resolution of the acute episode, TK's physician decides that he should initiate allopurinol. TK should be advised to:
- A. Limit fluid intake
 - B. Take medication on an empty stomach
 - C. Use precautions to avoid photosensitivity
 - D. Report any skin rash or itching to the physician**
 - E. Avoid dairy products or multivitamins within 2 hours of dose

6. The adverse effects of beta-adrenoceptor antagonists (e.g. propranolol) include
- A. Hyperglycemia
 - B. Cardiac arrhythmias
 - C. Myocardial ischemia
 - D. Anxiety
 - E. Bronchoconstriction**
7. The two most important sites for drug elimination are:
- A. Pulmonary and liver
 - B. Liver and gastrointestinal tract
 - C. Kidney and liver**
 - D. Skin and liver
 - E. Pulmonary and kidney
8. Which of the following drugs when used for prolonged period in the maintenance treatment of tonic-clonic seizures can lead to increased metabolism of warfarin like drugs?
- A. Phenobarbital**
 - B. Meprobamate
 - C. Chlordiazepoxide
 - D. Triazolam
 - E. Zolpidem
9. Cephalosporins show their antimicrobial action by:
- A. Binding to cytoplasmic receptor proteins
 - B. Inhibition of beta-lactamases
 - C. Inhibition of transpeptidation reactions**
 - D. Interference with the synthesis of ergosterol
 - E. Inhibition of the synthesis of precursors of peptidoglycans
10. Which of the following is useful topically for genital herpes infection?
- A. Acyclovir**
 - B. Amantadine
 - C. Ritonavir
 - D. Trifluridine
 - E. Foscarnet

PART II — PHARMACY LAW AND ETHICS

PAPER 1 — PHARMACY LAW AND ETHICS EXAMINATION

PAPER 1 shall contain questions that assess the candidate's knowledge of the laws that govern the practice of pharmacy within the Commonwealth of The Bahamas, as well as professional and research ethics.

LEGISLATION AND REGULATORY INSTRUMENTS

1. Pharmacy Profession and Practice

- The Pharmacy Act, 1913 (Chapter 22)
- The Pharmacy Act, Revised Edition 1987 (Chapter 212)
- The Pharmacy Act, Revised Edition 2000 (Chapter 227)
- The Pharmacy Act, 2009 (Chapter 227)
- Pharmacy (Prescription) Regulations, 2010
- Pharmacy (Import and Export) Regulations, 2010
- Pharmacy (Registration and Licensing) Regulations, 2010
- Pharmacy (Amendment) Act, 2013

2. Dangerous Drugs

- Dangerous Drugs Act, 1939 (Chapter 228)
- Dangerous Drugs (Application) Order, 1994
- Dangerous Drugs (Dispensing of Narcotics) Rules, 1952
- Dangerous Drugs (Methaqualone) Order
- Dangerous Drugs (Prescription of Minimum Amounts) Rules
- Single Convention on Narcotic Drugs, 1961
- Convention on Psychotropic Substances, 1971
- United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, 1988
- Mandate and Functions of the International Narcotics Control Board
- List of Narcotic Drugs Under International Control — International Narcotics Control Board Yellow List
- List of Psychotropic Substances Under International Control — International Narcotics Control Board Green List

3. Precursor Chemicals

- Precursors Chemicals Act, 2007 (Chapter 228A)
- Precursors and Chemicals Frequently Used in the Illicit Manufacture of Narcotic Drugs and Psychotropic Substances — International Narcotics Control Board
- List of Precursors and Chemicals Frequently Used in the Illicit Manufacture of Narcotic Drugs and Psychotropic Substances Under International Control — International Narcotics Control Board Red List

4. Antibiotics

- Penicillin Act, 1948 (Chapter 229)

5. Prescription Writing

- Medical Act, 2014
- Medical Regulations, 2014
- The Public Hospitals Authority (Medical Staff) Byelaws, 2003
- Dental Act, 1990 (Chapter 226)
- Health Professions (General) Regulations, 2000
- Nurses and Midwives Regulations, 1971
- Veterinary Surgeons Act, 1967

6. National Health Services

- National Insurance (Chronic Diseases Prescription Drug Fund) Act, 2009
- National Insurance (Chronic Diseases Prescription Drug Fund) Act, 2009 (Amendment) Regulations, 2012
- National Insurance (Chronic Diseases Prescription Drug Fund) Act, 2009 (Amendment to Schedule) Order, 2012
- National Insurance (Chronic Diseases Prescription Drug Fund) Act, 2009 (Amendment) Regulations, 2015
- National Insurance (Chronic Diseases Prescription Drug Fund) Act, 2009 (Amendment to Schedule) Order, 2015
- National Health Insurance Act, 2016

7. Miscellaneous Legislation Affecting Pharmacy Practice

- Environmental Health Services Act, 1987 (Chapter 232)
- Environmental Health Services (Collection and Disposal of Waste) Regulations, 2004 (Chapter 232)
- Sale of Goods Act
- Consumer Protection Act
- Customs Management Act, 2011
- Stem Cell Research and Therapy Act, 2013
- Anti-Doping in Sports Act, 2009
- Hospitals and Health Care Facilities Act, 1998 (Chapter 235)

Note: List subject to change based on addition of new laws/regulations and (or) repeal of same.

Copies of the above named legislation may be located online at:



For official printed copies visit the Bahamas Government Printing Department (Government Publications) at Lighthouse Parking Lot, Bay Street.

Telephone: 242-322-2410

CONTENT OF THE PHARMACY LAW & ETHICS EXAMINATION

1 Structure of the Council and General Terms

- 1.1. The Bahamas Pharmacy Council
 - 1.1.1. History, structure, function and responsibilities
 - 1.1.2. Role of The Registrar
 - 1.1.3. Publication of Registers
 - 1.1.4. Terms

- 1.2. The Bahamas National Drug Agency (BNDA)
 - 1.2.1. Functions

- 1.3. The National Insurance Act (Chronic Diseases Prescription Drug Fund)
 - 1.3.1. National Prescription Drug Plan

2 Licensure, Registration, and Operational Requirements

- 2.1. Pharmacy Facilities
 - 2.1.1. Registration requirements
 - 2.1.2. Operations requirements

- 2.2. Pharmacists, Pharmacy Technicians, and Pharmacy Interns
 - 2.2.1 Fees
 - 2.2.2 Registration Requirements
 - 2.2.3 Qualifications
 - 2.2.4 Continuing Education Requirements

- 2.3. Types of Licenses

- 2.4. Professional Misconduct
 - 2.4.1 Suspension Licenses

- 2.5. Manufacturers and Wholesalers

3 Pharmacy Practice

3.1. Legal responsibilities of Pharmacists, Pharmacy Technicians, and Pharmacy Interns

- 3.1.1. Scope of duties
- 3.1.2. Operational requirements
- 3.1.3. National Health Services and Miscellaneous Legislation Affecting Pharmacy Practice

3.2. Pharmacy (Prescription) Regulations, 2010

- 3.2.1. Requirements Contents of a Prescription
- 3.2.2. Dispensing
- 3.2.3. Labelling
- 3.2.4. Refilling
- 3.2.5. Transfer
- 3.2.6. Electronically Transmitted
- 3.2.7. Emergency Supply

3.3. Dangerous Drugs Act Ch. 228

- 3.3.1. Prescription requirements
- 3.3.2. Record Keeping
- 3.3.3. Schedules
 - 3.3.3.1. Narcotic
 - 3.3.3.2. Psychotropic

3.4. Pharmacy (Import and Export) Regulations, 2010

- 3.4.1. Import and Export of Drugs
- 3.4.2. Record keeping

3.5. Poisons

3.6. Penicillin Act Ch. 226

3.7. Precursor Chemicals Act Ch. 228A

4 Pharmacy Ethics

4.1. Pharmacist Code of Ethics (American Pharmacists Association (APhA))

4.2. Ethical Principles

- 4.2.1. Autonomy
- 4.2.2. Beneficence
- 4.2.3. Malfeasance
- 4.2.4. Justice

4.3. Research Ethics

SAMPLE QUESTIONS (Correct Answers Are Indicated In Red)

1. The Pharmacy Act (Chapter 227) serves **ALL** of the following purposes **EXCEPT**:
 - A. The regulation and control of the practice of pharmacy
 - B. The registration and licensing of pharmacy technicians
 - C. The regulation and control of dangerous drugs**
 - D. The establishment of The Bahamas Pharmacy Council

2. Which of the following is **NOT** a function of the Bahamas Pharmacy Council?
 - A. To govern and regulate the standard of practice for professionals involved in the practice of pharmacy
 - B. To establish, develop and maintain standards of knowledge, skill and professional ethics for persons involved in the profession and practice of pharmacy
 - C. To govern and regulate the standards and practice of all facilities utilized in the practice of pharmacy
 - D. To train and educate pharmacy technicians and pharmacists**

3. The Bahamas Pharmacy Council must act in the public interest when considering what decisions to make in relation to pharmacists appearing before it. Which of the following is **NOT** an example of acting in the public interest?
 - A. Protecting the reputation of an individual pharmacist**
 - B. Protecting members of the public
 - C. Maintaining public confidence in the profession
 - D. Declaring and upholding proper standards of conduct

4. Where a pharmacist supplies an emergency drug, he/she may supply which of the following in accordance with the Pharmacy (Prescription) Regulations, 2010?
 - A. A 72 hour supply of an Oral Contraceptive Pill
 - B. A 48 hour supply of a Dangerous Drug
 - C. A metered dose inhaler of Salbutamol**
 - D. A 30 day supply of Lisinopril 10mg tablets

5. How long is a pharmacy required to keep prescription records?
- A. One (1) year
 - B. Two (2) years
 - C. Five (5) Years
 - D. Six (6) Years**
6. The National Insurance (Chronic Diseases Prescription Drug Fund) Act, 2009 provides for a contractual arrangement with the owner of any registered pharmacy for the provision by that pharmacy of which of the following?
- I. Specific types of prescription drugs
 - II. Medical supplies
 - III. Antibiotics
 - IV. OTC products
- A. I only
 - B. I and II**
 - C. I and III
 - D. I and IV
7. Which of the following appears in the Second Schedule of the Pharmacy Act, 2009 [Chapter 227]?
- I. Cocaine
 - II. Digitalis
 - III. Morphine and its salts
 - IV. Preparations of opium
- A. I only
 - B. I and II
 - C. I, II and III
 - D. I, II, III and IV**
8. Which of the following narcotic drugs appear in both Narcotic Schedule I and Narcotic Schedule IV of the Dangerous Drugs Act (Application) Order, 1994?
- A. Morphine
 - B. Thiofentanyl**
 - C. Codeine
 - D. Amphetamine

9. The Dangerous Drugs (Dispensing of Narcotics) Rules defines a narcotic as which of the following?
- A. Morphine, opium, codeine, heroin, cocaine and their salts**
 - B. Marijuana, opium, codeine, heroin, cocaine and their salts
 - C. Morphine, codeine, heroin, cocaine marijuana and their salts
 - D. Morphine, opium, codeine, heroin, cocaine and marijuana
10. The Dangerous Drugs Act (Application) Order year of commencement is which of the following?
- A. 1979
 - B. 1980
 - C. 1990
 - D. 1994**
11. Which of the following pharmaceuticals is regulated under the Precursor Chemicals Act, as a precursor chemical for illicit drug use?
- A. Dextromethorphan
 - B. Dimenhydrinate
 - C. Diazepam
 - D. Pseudoephedrine**
12. The Penicillin Act [Chapter 229] defines penicillin as which of the following?
- A. The meaning assigned to it by regulations in force under the Therapeutic Substances Act 1925 of the Parliament of the United Kingdom**
 - B. The meaning assigned to it by regulations in force under the Therapeutic and Medicines Act 1925 of the Parliament of the United Kingdom
 - C. The meaning assigned to it by regulations in force under the Therapeutic Substances Act 1952 of the Parliament of the United Kingdom
 - D. The meaning assigned to it by regulations in force under the Therapeutic and Medicines Act 1952 of the Parliament of the United Kingdom
13. The ethical principle of veracity requires that pharmacists do which of the following?
- A. Respect the rights of patients to make choices
 - B. Do good to patients
 - C. Act with honesty**
 - D. Act with fairness

14. Identify the correct listing of the six basic bioethical principles:

A. Individuality, autonomy, beneficence, nonmaleficence, justice, and fidelity

B. Autonomy, beneficence, nonmaleficence, justice, fidelity, and veracity

C. Generativity, justice, individuality, liberty, veracity, and beneficence

D. Justice, veracity, fidelity, consensuality, autonomy, and practicality

15. Which research method is most commonly associated with a lack of informed consent?

A. Qualitative content analysis

B. In-depth interviewing

C. Covert observation

D. Structured interviewing

PART III — OBJECTIVE STRUCTURED CLINICAL EXAMINATION (OSCE)

The OSCE will contain questions that seek to assess the clinical problem-solving skills of the candidate. These questions will be derived from the content of PART I and PART II.

The Objective Structured Clinical Examination (OSCE) is an evaluation tool that has become a standard method of assessment for health care professionals. It is designed to assess competency based on objective testing and/or direct observation.

It is intended to be:

- (a) Objective — all candidates are assessed using exactly the same stations with the same marking scheme. Candidates will be marked for each step on the mark scheme that they perform correctly, which makes the assessment of clinical skills more objective, rather than subjective.
- (b) Structured — each station in the examination will have a very specific task. Where simulated patients are used, detailed scripts will be provided to ensure that the information given is the same for all candidates, including the emotions that the patient may exhibit during the consultation.
- (c) Clinical Examination — the OSCE is designed to apply clinical and theoretical knowledge.

OSCE FORMAT

The OSCE is a **timed examination** that consists of a series of five (5) “stations” that may simulate common and/or practical situations that may occur in retail and/or hospital pharmacy.

Each station will refer to a patient scenario that will be affixed to the station. A series of questions related to the scenario must be answered.

Each candidate will be allowed **ten (10) minutes per station** to answer the required questions and/or perform the required task.

Candidates will rotate through the stations (moving from Station 1 to Station 2 to Station 3 etc.), until they complete all the required stations. Rest stations will be

included in the rotation course and candidates may use this as an opportunity to gather their thoughts and/or complete any unanswered questions.

Calculator use is allowed for the OSCE (please refer to the Calculator Policy).

References will be provided, as applicable.

Note: A reference source may not be positioned at every station.

STATION FORMAT

OSCE Stations may be of two (2) types:

1. Written (Non-interactive)

This type of station will contain a scenario/instruction with written structured questions. The points assigned for each question will be clearly marked.

2. Interactive

This type of station may contain a demonstration requirement or face to face interactive simulations that may involve interactions with a —Standardized PatientII or —Standardized ClientII (e.g., parent or caregiver) or —Standardized Health ProfessionalII (e.g., registered nurse or physician).

**** AT ALL INTERACTIVE STATIONS A TRAINED EXAMINER, USING STANDARDIZED ASSESSMENT CRITERIA, WILL OBSERVE, RECORD AND ASSESS CANDIDATES' INTERACTIONS AND/OR COMPLETION OF THE TASK. ****

Each OSCE Station will require that the candidate complete one or more short tasks. Examples include, but are not limited to the following:

- ❖ Counselling or responding to questions from a —Standardized PatientII or Standardized Client;
- ❖ Taking a medical history from a — “Standardized Patient” or Standardized Client;

- ❖ Interacting with a —Standardized PatientII or —Standardized ClientII or —Standardized Health ProfessionalII to resolve a drug therapy problem or ethical dilemma;
- ❖ Gathering and interpreting information needed to identify and/or solve a patient’s drug therapy problem;
- ❖ Identifying and solving a practice problem which may involve the same patient (e.g., sharing of clinical information);
- ❖ Collaborating with other health professionals and/or caregivers in solving a drug related problem;
- ❖ Communicating effectively;
- ❖ Responding to a request for information/advice;
- ❖ Screening/evaluating new prescriptions or medication orders to identify and describe any errors, omissions or concerns; and
- ❖ Checking dispensed prescriptions/labels for accuracy.

The candidate may be required to select and justify the best therapeutic option available. For example, in a situation involving a patient’s request for assistance in selecting an appropriate non-prescription remedy for symptomatic relief, limited products will be displayed and there will be one or more appropriate and inappropriate options. Even if the candidate believes that there is a better option than those provided, the candidate must choose the most appropriate option(s) from those given.

In any situation (interactive/non-interactive), the candidate is expected to use his/her professional and/or ethical judgement and/or legal responsibility, and act in the best interest of the patient, in order to provide good patient care. In most instances, the candidate will be required to assist the client in some way, not simply refer the client to another health professional nor indicate that he/she will call the client back later with a response.

Note: The candidate may either refer or offer to call the client back **in addition** to providing appropriate assistance.

SAMPLE QUESTIONS (Correct Answers Are Indicated In Red)

Sample Station #1 – Written (Non-Interactive)

Scenario:

As a hospital pharmacist you are making your daily visit to a medical ward. You are given a prescription to prepare for Mr S to go home. Mr S was taking co-amilozide before coming in to hospital, for water retention. He has since been started on lisinopril to treat heart failure. His serum potassium level is 5.4 mmol/L, which has increased from 4.3 mmol/L on admission to hospital.

(Normal potassium range 3.5–5.0 mmol/L.)

His prescription for taking home is:

- Co-amilozide 5/50mg i mane

Resources provided: Drug Information Handbook and BNF

1. Is this prescription clinically appropriate? Explain your answer. (5 Points)

This prescription is not clinically appropriate because there is an interaction between co-amilozide and lisinopril. Co-amilozide is a combination of a thiazide diuretic (hydrochlorothiazide) and a potassium-sparing diuretic (amiloride) which leads to potassium retention. ACE inhibitors also cause potassium retention; therefore there is a risk of hyperkalaemia. From the laboratory results it is clear that there is evidence of the interaction, with the potassium level already exceeding the upper limit of normal.

2. What action(s) would you recommend? Explain your answer. (5 Points)

What are the guidelines for the treatment of heart failure? When an interaction is identified you need to decide which medicine, if any, to adjust or change. Here, both drugs are recommended for heart failure. In addition the patient is retaining fluid. You know that ACE inhibitors may cause hyperkalaemia, so the most sensible option is not to use a potassium-sparing diuretic. The best solution here is to choose a loop diuretic only, such as furosemide in place of co-amilofide. It is important that you mention how to monitor whether your suggestions have solved the clinical problem. Here you would recommend that serum potassium levels are monitored. You may lose marks by failing to follow-up recommendations suggested.

Sample Station #2 - Interactive

At this Station, take a complete history from this patient and explain to the patient any implications of the history as it relates to his oral health and any proposed dental treatments. (Accept that you cannot examine the patient) Make recommendations to the physician, as appropriate. (10 Points)

Patient Details:

Name	Mr
Age	65 (DoB
Gender	Male
Occupation	Retired librarian

Examiner’s Checklist

- ✓ Identifies medical condition (atrial fibrillation) associated with anticoagulation
- ✓ Ascertains relevant medical (including prescription drugs, OTC medications, herbal products and allergies) history
- ✓ Elicits list of medication from patient
- ✓ Identifies drug related problems e.g. Warfarin as an issue for dental extraction as posing post extraction hemorrhage risk
- ✓ Enquires about INR level
- ✓ Makes recommendations, as appropriate, to physician regarding drug related problems, follow up requirements etc.

19. EXAMINATION ADMINISTRATION

The Pharmacist Registration Examination is administered in paper-and-pencil format at a Test Centre determined by the BPC.

The Pharmacist Registration Examination is **not** offered on public holidays.

Computer administration and international testing is **not** available. All international candidates must present at the time of the examination at the local Test Centre determined by the BPC.

A candidate with a disability that prevents taking the examination under standard conditions may request special accommodations at the time of application.

20. SITTING ATTEMPTS

The Pharmacist Registration Examination can be sat a maximum of three (3) times.

Sitting the Examination for a Second Time

Candidates may sit the assessment for a second (2nd) time within three (3) to six (6) months of the first attempt.

Sitting the Examination for a Third Time

Candidates must sit the assessment for the third (3rd) time no longer than twelve (12) months after the first attempt.

21. EXAMINATION CALENDAR

The Pharmacist Registration Examination shall be conducted two (2) times per calendar year, in the months of MARCH and SEPTEMBER on dates so determined by the BPC.

In the event of inclement weather or other unforeseen circumstance, the examination may be subject to cancellation and rescheduled in accordance with Section 26.

If circumstance requires, an extraordinary sitting of the Pharmacist Registration Examination may occur as deemed necessary by the BPC.

22. EXAMINATION SCHEDULE

The Pharmacist Registration Examination will be held over a three (3) day period; Thursday, Friday, and Saturday.

Day 1 (Thursday)

PART I FOUNDATIONS IN PHARMACY PRACTICE

Paper 1 PHARMACY CALCULATIONS AND PRACTICE EXAMINATION
Time Allotted — 1 Hour

Paper 2 PHARMACOLOGY AND THERAPEUTICS EXAMINATION
Time Allotted — 1 Hour

Day 2 (Friday)

PART II PHARMACY LAW AND ETHICS

Paper 1 PHARMACY LAW AND ETHICS EXAMINATION
Time Allotted — 1 Hour

Day 3 (Saturday)

PART III OBJECTIVE STRUCTURED CLINICAL EXAMINATION (OSCE)

Time Allotted — Ten (10) minutes per station

Note: Examination continues until all candidates have cycled through the examination. When a candidate has completed all of the stations and submitted their answer sheet, they may leave the Examination Centre.

**** SCHEDULE SUBJECT TO CHANGE, AS REQUIRED. ****

**** CANDIDATES MUST BE IN PLACE THIRTY (30) MINUTES
PRIOR TO EXAM START TIME ****

This will allow adequate time for admission to the examination hall and instructions to candidates.

23. EXTENUATING CIRCUMSTANCES

Extenuating circumstances are exceptional, serious, acute and unforeseen problems or events which genuinely may affect the candidate's preparation for an Examination assessment or his/her ability to undertake the assessment and which were out of the candidate's control.

The following special circumstances, accompanied by appropriate documentation, will be considered as extenuating:

1. Serious or significant medical conditions or illness (either the candidate or an immediate family member), as defined in Section 13, including physical or mental health problems, supported by a physician's letter or sick note.
2. Complications of pregnancy/labour/delivery, as defined in Section 13, supported by a physician's letter or sick note.
3. Death of an immediate family member, supported by a death certificate.
4. Disabling accident, supported by police report or hospital admission note.
5. Being a victim of a crime that occurred within one (1) week of the scheduled examination, supported by a police report.
6. Court appearance, supported by court summons or documentation.
7. Jury duty, supported by court summons, jury letter or notification.
8. Extraordinary travel circumstances beyond the control of the candidate which prevented him/her from attending the Examination.

Immediate family member: Spouse, child, mother, father, sister, brother, or guardian.

The candidate must provide independent, verifiable, objective supporting evidence in order for the claim to be deemed as valid. Claims without such evidence will not be considered. It is the candidate's responsibility to provide such supporting evidence to the Registrar of the BPC. The Registrar will not request evidence on the candidate's behalf.

24. NON-ATTENDANCE OF THE EXAMINATION

Not appearing for an examination sitting, outside of the extenuating circumstances mentioned in Section 23, will count as the candidate's examination attempt. The candidate will be marked as a no show candidate and all examination fees will be forfeited. No-show candidates will have the option to apply for a future testing cycle at the full examination price.

25. SITTING THE EXAMINATION (FIT TO SIT)

It is the responsibility of every candidate to ensure that they are fit to sit the Examination assessment. A candidate should not sit the assessment if they consider that their performance is likely to be adversely affected by illness or other circumstance. If a candidate remains in the assessment room after the point at which question papers are handed out, they have deemed themselves to be fit to sit.

Being 'fit to sit' means that if a candidate undertakes an Examination assessment then he/she is declaring himself/herself well enough to do so and knows of no reason why his/her performance would be adversely affected during the assessment. A candidate, who is affected by illness or other adverse circumstance before or on the day of the Examination assessment but decides to sit the assessment, will be treated as being fit to sit and will count as the candidate's examination attempt.

If on or before the day of an assessment, a candidate knows of an illness or adverse circumstance that might affect their performance, they should not sit the examination. Candidates should be guided by Section 23 and submit documentation supported by a physician's letter or sick note. It is the candidate's responsibility to ensure that the Registrar is informed of any extenuating circumstances, such as illness or other valid circumstances, which might prevent him/her from undertaking an Examination assessment or is impacting on his/her ability to prepare for the assessment.

A candidate who is taken ill or experiences other adverse circumstances during the assessment such that they cannot continue with the assessment must draw this to the attention of an Examination proctor at once, in order for the proctor to assist with the indisposition and to prepare a written report to be signed by the candidate. One copy of the report will be given to the candidate and one will be forwarded to the Registrar.

26. INCLEMENT WEATHER AND CANCELLATIONS

In the event of inclement weather, as determined by the Department of Meteorology and (or) the National Emergency Management Agency (NEMA), or unforeseen circumstances on the day of the Pharmacist Registration Examination, the BPC will determine whether circumstances warrant the cancellation and subsequent rescheduling of the Examination. If testing personnel are able to conduct business, the Pharmacist Registration Examination will proceed as scheduled.

Every attempt will be made to administer the Pharmacist Registration Examination as scheduled; however, should the Examination be cancelled, the scheduled candidate will receive notification regarding a rescheduled Pharmacist Registration Examination date or reapplication procedures. In the case of cancellation, no additional fee is required to take the Examination. However, if a test site is open and the candidate does not attend the examination, the sitting will count as the candidate's examination attempt and the candidate will forfeit all fees.

Inclement Weather Conditions: Extreme weather conditions that might create hazardous driving conditions or impede the normal operations of the examination(s). These conditions include, but are not limited to, snow, ice, tornados, flooding, hurricanes and other natural perils.

27. PERSONAL EMERGENCY

In the event of a personal emergency on the day of the Pharmacist Registration Examination, a candidate may request consideration of rescheduling the Examination without additional fee by contacting the Registrar in writing within five (5) business days of the scheduled testing session. A description of the emergency and supporting documentation are required.

Rescheduling without additional fee will be considered on a case-by-case basis.

28. EXAMINATION CENTRE AND EXAMINATION ROOM

- ❖ Examination sittings shall be scheduled at a set venue, “Examination Centre”, which may vary from year to year and sitting to sitting.
- ❖ Candidates must make their own travel arrangements to and from the examination centre.
- ❖ Each examination centre will have an examination room – where candidates will write the examination.
- ❖ Only specified items shall be allowed in the examination room; pencils, blue or black ink pens, erasers, pencil sharpeners, calculators, and prescription eyeglasses.
- ❖ The examination room is a controlled environment, which is invigilated at all times by examination proctors.
- ❖ Candidates must arrive at the examination room thirty (30) minutes [one half (½) hour] before the scheduled examination.
- ❖ Candidates must enter and exit the examination room as specified by the Examination proctors.
- ❖ Candidates are not allowed to leave the examination room unless at times specified by Examination proctors.
- ❖ Testing room temperature can be unpredictable; therefore, it is suggested that candidates bring appropriate clothing with them (e.g., sweater, sweatshirt without hood) to help to adapt to a cooler or warmer climate in the examination room.

29. REPORTING FOR THE EXAMINATION

The candidate must bring the admission letter provided by the Registrar to the Examination. It contains the unique identification number required to take the test and is required for admission to the testing room. The candidate shall report to the designated testing room at the time indicated on the notice. The Pharmacist Registration Examination will begin after scheduled candidates are checked-in and seated and no more than one (1) hour after the scheduled registration process.

30. IDENTITY VERIFICATION

To gain admission to the Test Centre or a testing room, the candidate must present two (2) forms of identification. The primary form must be the admission letter that is supplied by the Registrar of the BPC which will bear the candidate's photograph. This letter will also bear a Candidate Number, which will serve as the candidate's unique identifier. The second must be a government issued photo identification that is current and includes the candidate's name, signature and photograph. Examples of secondary forms of identification are current passport, current driver's license with photograph, National Insurance (NIB) card with photograph, or voter's card with photograph. A candidate without proper identification will not be permitted to take the Examination.

Both pieces of identification will be checked by exam personnel to verify the candidate's identity. A candidate will not be admitted to the examination unless he/she provides both pieces of identification and both are a likeness of the current physical appearance of the candidate. Also, the name on the admission letter and government-issued photo identification must correspond.

The candidate will also be required to sign a roster for verification of identity. If the candidate's name on the registration list is different than it appears on the secondary form of identification, the candidate must bring proof of the name change (e.g., marriage license, divorce decree, or court order).

No form of temporary identification will be accepted.

Only documents specified by the BPC can be used to verify identity.

31. CANDIDATE REGISTRATION

Candidates must have their admission letter and identification document (such as passport, drivers licence, voter's card) out and available to be checked by the Examination proctors.

Candidates will be required to sign a Registration Log, indicating the attendance of the candidate at the scheduled Examination.

32. ADMISSION TO THE EXAMINATION ROOM

- ❖ Candidates must arrive thirty (30) minutes before the scheduled start of the examination at the specific location and time indicated in the admission letter.
- ❖ During the thirty (30) minute period between the report time and the examination start time, the Examination proctors will verify the identification of the candidates, allow entrance to the examination room, refer candidates to their assigned seats, distribute answer sheets and instruct candidates on the proper use of answer sheets. Candidates will be allowed to fill in their unique identification numbers and the Examination Title on the answer sheets at this time.
- ❖ After instructions are given and candidates are seated, the Examination Booklets will be distributed. The Examination proctors will give specific instructions and guidelines for the Examination, after which, the examination will begin.
- ❖ Candidates will be admitted to the sitting of an Examination paper at any time during the first thirty (30) minutes after its start time. **After the first thirty (30) minutes of a paper, candidates will not be admitted.** No extra time will be provided to candidates who arrive late.
- ❖ Unless otherwise authorized, only candidates for the scheduled examination who present their admission letter and government-issued photo identification will be permitted to enter the examination room. Family members or friends of candidates are not permitted to enter the examination room.

33. LATE ARRIVAL

Candidates are advised to plan ahead and allow for extra travelling time. No extension to the normal finishing time of a paper will be given for candidates who arrive late. The identity and circumstances of latecomers will be recorded by an Examination proctor.

A candidate who arrives more than **thirty (30) minutes** after the scheduled starting time is not admitted and will forfeit the application and all fees paid to take the examination. The candidate who is not admitted due to late arrival must re-apply for a subsequent sitting of the Pharmacist Registration Examination, i.e., for a new testing date and pay the full exam fee.

34. EXAMINATION RULES

All Pharmacist Registration Examination candidates must comply with the following rules during the Examination administration:

1. No personal items, valuables or weapons should be brought into the Examination Centre or testing room. All personal belongings are prohibited and must be placed at the designated area of the examination room. Any bag brought to the assessment by a candidate must be left in a place specified by the Examination proctors.
2. No liability for the loss of any item(s) will be accepted by the Examination proctors or the BPC. The BPC is not responsible for items left at the designated reception area.
3. Candidates must switch off mobile phones and other electronic devices on entering the assessment room. These devices must be placed in the designated area of the examination room.
4. Books, computers, or other reference materials are strictly prohibited. References, such as Drug Handbooks, BNFs, pictures, charts and Summaries of Product Characteristics, will be provided by the BPC on the day of the examination sitting, as appropriate.
5. If unapproved personal items, reference materials, documents or papers etc. are observed in the testing area or candidate's desk after the examination is started, the exam administration will be treated as an examination irregularity.
6. Number 2 pencils must be used to answer all Multiple Choice Questions (MCQs).
7. Where indelible ink is required, it must be blue or black ink only.
8. The Pharmacist Registration Examination is proprietary. Examination questions may not be recorded or shared with any individual in any manner. It is prohibited to copy, reproduce, record, distribute or display the Examination questions by any means, in whole or in part. No cameras, notes, tape recorders, pagers, cellular/smart phones, or other recording devices are allowed in the testing room. Possession of a cellular/smart phone/smart watch or other electronic devices is strictly prohibited.

9. Removing papers or questions from an assessment hall constitutes serious misconduct and will be treated as an examination irregularity. Questions may not be distributed by candidates in any way, including by email or text message, or posted on social networking sites. This list is not exhaustive.
10. Eating, drinking, and smoking are not permitted in the testing room.
11. Candidates must follow all instructions given to them by the Examination proctors. In particular, candidates must write only on papers provided to them by Examination proctors.
12. Assessment question papers, answer sheets, resource materials, and any other papers provided by the Examination proctors must be returned by candidates to the Examination proctors at the end of each Examination. No documents or notes of any kind may be removed from the testing room. Each candidate will be provided one or more sheet(s) of scratch paper that must be returned to the Examination proctor at the completion of testing.
13. Talking or participating in conversation with other Examination candidates is strictly prohibited.
14. Permission from the Examination proctor is required to leave the testing room during the exam. Candidates will be escorted by an Examination proctor when taking toilet breaks during the examination. No additional time is granted to compensate for time lost.
15. Candidates will not be permitted to leave the assessment room during the first thirty (30) minutes or last fifteen (15) minutes of a paper, except in an emergency.
16. No guests, visitors, or family members are allowed in the testing room or reception areas.

35. PROHIBITED MATERIALS

Candidates are expressly prohibited from bringing the following items into the examination room:

- ❖ Cameras, cell phones, or other electronic devices that include the ability to photograph, photocopy or otherwise copy test materials
- ❖ Notes, books, dictionaries or language dictionaries, documents, envelopes, pictures or reference materials of any kind
- ❖ Book bags or luggage
- ❖ Purses or handbags, briefcases
- ❖ iPods, mp3 players, tablets, headphones, or pagers
- ❖ Programmable calculators (see CALCULATOR POLICY)
- ❖ Computers, PDAs, or other electronic devices with one or more memories
- ❖ Audio/video/gaming devices
- ❖ Rulers, pencil cases, and highlighters
- ❖ Google and smart glasses (any glasses with any electronics)
- ❖ Smart watches
- ❖ Weapons
- ❖ Food and (or) beverages
- ❖ Paper items of any kind, whether blank, printed or written upon, including similar items such as wrappers on food or beverages
- ❖ Coats and jackets
- ❖ Hats, hoods, or other headwear are not permitted in the examination room unless required for religious purposes.

All items are subject to inspection by the Examination proctors.

The Examination proctors are not liable for lost or damaged items brought into the examination room.

All personal belongings are prohibited and must be placed at the designated area of the examination room. **Please bring only the essential materials required for the examination.**

Cellular devices brought into the examination room must be switched off at ALL times. If your cellular device is found to be switched on in the examination room, it will be confiscated and retained for investigation of possible violation of Examination Rules.

Photography is **NOT** allowed in the examination room at **ANY** time.

Note: The Examination proctor has the authority to inspect any materials brought into the examination **and/or to request that the candidate remove outerwear, roll up their sleeves and empty all pockets to permit inspection for smart watches and other prohibited items.**

36. EXAMINATION MATERIALS

PART I — FOUNDATIONS IN PHARMACY PRACTICE

PAPER 1: PHARMACY CALCULATIONS AND PRACTICE EXAMINATION

- ❖ Closed-book examination. Formula sheets will be provided, as appropriate.
- ❖ Use of a standardized basic scientific calculator is permitted. (Please refer to the Calculator Policy).
- ❖ No. 2 Pencils, erasers and blue or black ink pens are permitted.

PAPER 2: PHARMACOLOGY AND THERAPEUTICS EXAMINATION

- ❖ Closed-book examination.
- ❖ No. 2 Pencils, erasers and blue or black ink pens are permitted.

PART II — PHARMACY LAW AND ETHICS EXAMINATION

- ❖ Closed-book examination.
- ❖ No. 2 Pencils, erasers and blue or black ink pens are permitted.

PART III — OBJECTIVE STRUCTURED CLINICAL EXAMINATION (OSCE)

- ❖ Reference books or materials will be provided, as appropriate.
- ❖ Use of a standardized basic scientific calculator is permitted (Please refer to the Calculator Policy).
- ❖ No. 2 Pencils, erasers and blue or black ink pens are permitted.

37. CALCULATOR POLICY

Some Examination questions may require calculations. Use of a silent, nonprogrammable, hand-held calculator without paper tape-printing capability or alpha keypad is permitted during the Pharmacist Registration Examination. Use of a computer or a cell phone is not permitted. Calculators will be checked for conformance with this regulation before candidates are allowed admission to the Test Centre or testing room. Calculators that do not comply with these specifications are not permitted in the Test Centre or testing room.

Hand-held calculators that contain addition, subtraction, multiplication, division, and log functions are appropriate for the examination. Candidates may **NOT** use calculators or any other devices that have either word processing or word storage capabilities (complete A-Z keypad). Mobile phones and other transmitting devices cannot be used as calculators.

38. TAKING THE EXAMINATION

After identity of the candidate has been verified and his/her calculator has been approved, the candidate is directed to an assigned seat for administration of the Examination. For examinations that require calculations, each candidate will be provided with one or more sheet(s) of scratch paper that must be returned to the Examination proctor at the completion of testing. The candidate will be provided with oral and written instructions about the Examination administration process.

The Examination is set in English, because this is the principal language used in practice in the Commonwealth of The Bahamas. Candidates are required to be able to read, write, and understand the English language. For this reason, the assessment will not be set in any other language.

39. EXAMINATION INSTRUCTIONS

Multiple Choice Questions (MCOs)

On entrance to the examination room, candidates will be directed to sit at the desk that corresponds with their unique identification number.

All examinations are anonymous. Therefore, candidates must not write their name on the answer sheet, examination booklet or scratch paper. Candidates should write only the unique identification number, correctly and legibly, in the space provided on the **answer sheet and scratch paper ONLY**. Providing incorrect or illegible information onto the answer sheet creates the potential risk of the answer sheet becoming void.

Candidates must **NOT** make any marking(s) on the examination booklet or the candidate admission letter.

Examination proctors will administer exam booklets and answer sheets to all candidates at the start of the examination period. Test instructions will be provided to candidates on the use of the answer sheet. Only answers properly marked on the answer sheet will be scored. **Answers written in the test booklet will not be scored.**

The test booklet and the answer sheet are the property of the BPC. **BOTH** must be returned to the Examination proctors at the end of each session of the examination.

Objective Structured Clinical Examination (OSCE)

Candidates must wear a white lab coat over professional clothing.

Examination proctors will administer the answer booklet to the candidate at the start of the examination period. Test instructions will be provided to candidates on the use of the answer booklet.

All examinations are anonymous. Therefore, candidates must not write their name on the answer booklet or scratch paper. Candidates should write only the unique identification number, correctly and legibly, in the space provided.

Answers must be written clearly and legibly.

OSCE Process

1. Before entering the station:

- ❖ The candidate will be given the Answer Booklet by the Examination proctor.
- ❖ The Examination proctor will instruct the candidate to place their unique identification number onto each page of the Answer Booklet in the space indicated.
- ❖ The candidate may take a No. 2 pencil, blue or black ink pen and calculator into the examination room.

2. When the start buzzer sounds:

- ❖ Enter the station and begin immediately.
- ❖ Find the Station instructions or patient scenario or written prescription or medication product/device, and reference materials, if applicable, on the desk/table.

3. Do the exercise:

- ❖ Each candidate will have ten (10) minutes to answer the questions posed at the Station.
- ❖ The OSCE is an —open book Examination, but candidates may only use the references which are provided at the applicable stations.
- ❖ At the end of ten minutes a buzzer will sound, indicating that the candidate must move to the next station.

4. When the buzzer sounds:

- ❖ Proceed to the next station, taking your Answer Booklet with you.

****DO NOT REMOVE ANY ITEM(S) FROM THE STATION****
****DO NOT LEAVE ANYTHING AT THE STATION****

5. At the last Station:

- ❖ When the final buzzer sounds, stop writing immediately.
- ❖ Turn your completed Candidate Answer Booklet in to the Examination proctor.
- ❖ Sign the Registration Log.
- ❖ Leave the Examination room.

40. DURING THE EXAMINATION

Candidates **MUST NOT** converse or communicate with one another in any manner whatsoever, or speak or read out loud while the examination is underway or during the time when answer sheets and examination papers are being distributed or collected. Violation of this rule will be treated as an examination irregularity.

Candidates may converse with the Examination proctors if required, in a discrete and confidential manner.

If a candidate wishes to use the washroom or when a candidate is ready to hand in the examination materials, he/she must raise his/her hand to indicate this to Examination proctor.

Candidates should behave in a professional and courteous manner when interacting with Examination proctors.

Unless granted permission by an Examination proctor, a candidate is not allowed to leave their assigned seat.

Once the candidate has entered the examination room, he/she will not be allowed to leave the room until **one (1) hour** after the examination has commenced.

If, for any reason, he/she is given permission to leave the room temporarily, he/she must be accompanied by an Examination proctor throughout his/her absence from the examination room.

Candidates must **NOT** write on, mark, highlight or deface the examination booklet or the candidate admission letter.

The candidates will be given information relating to the time allotted for each examination. Examination proctors will make regular announcements about the time remaining throughout the examination.

During the examination period, candidates will **NOT** be permitted to have anything on the desk, **EXCEPT**:

- the Candidate Admission Letter
- the Examination Booklet
- the answer sheet
- blue or black ink pen, No.2 pencil, pencil sharpener and eraser
- a standardized scientific calculator, when permissible

**** SURFACES OF DESKS AND ALL CANDIDATE MATERIALS AND BELONGINGS ARE SUBJECT TO INSPECTION BY EXAMINATION PROCTORS, AT ANY TIME. ****

Any devices or other materials that may compromise the administration or security of the examination will be confiscated.

Confiscated items will be sent to the BPC for inspection, together with a report of the incident, and will be retained until any investigation is completed.

41. EXAMINATION IRREGULARITIES

Types of examination irregularity include, but are not limited to the following:

1. Having unauthorized material in/on the examination area/desk.
2. Removal of examination booklet or examination stationery from the examination room.
3. Attempting to confer with another candidate.
4. Attempting to see or read another candidate's answer sheet.
5. Unsupervised absence from the examination room.
6. Impersonation of a candidate.
7. Gaining unauthorized admission to the Examination.
8. Creating a disturbance, being abusive or otherwise uncooperative.
9. Displaying and/or using electronic communications equipment including but not limited to pagers, cellular/smart phones, etc.
10. Talking or participating in conversation with other Examination candidates.
11. Giving or receiving help or being suspected of doing so.
12. Attempting to record Examination questions in any manner or making notes.
13. Attempting to take the Examination paper out of the examination room.
14. Using notes, books, or other aids without authorization.
15. Allowing oneself to be misrepresented during a sitting of the Examination, for example having someone sit the assessment on one's behalf.
16. Sharing answers with other candidates during a sitting.
17. Concealing reference texts/revision material, including handwritten reference sources/revision material, in the environs of the assessment centre.
18. Concealing reference texts, including handwritten reference sources/revision material, about one's person.
19. Writing revision material on one's person.

Note: This list is not exhaustive.

If during the Examination, an exam irregularity occurs, the Examination proctor will submit a written report of the incident to the Registrar of the BPC. This report will detail the allegations, and may include relevant evidence from the Examination. The Registrar will then forward the information to the BPC for further investigation and (or) disciplinary action.

Evidence of misconduct is reviewed by the Disciplinary Committee of the BPC to

determine whether the candidate will be allowed to reapply for Examination. If re-examination is granted, a complete Pharmacist Registration Examination application and full Examination fee are required.

**** CANDIDATES OBSERVED ENGAGING IN ANY OF THE ABOVEMENTIONED CONDUCT DURING THE EXAMINATION MAY BE DISMISSED FROM THE EXAMINATION SESSION, THEIR SCORE ON THE EXAMINATION VOIDED AND THE EXAMINATION FEES FORFEITED. ****

42. ANSWERING QUESTIONS

Multiple Choice Questions (MCQs)

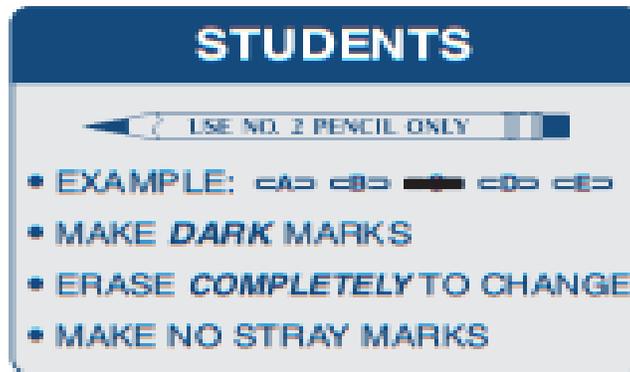
Answer sheets for Multiple Choice Questions (MCQs) are pre-printed with space for every question to be answered by selecting one letter from a list. The answer sheets are machine-readable and will be scored automatically by a computer system. This type of answer sheet will have a set of blank ovals or boxes that correspond to each question. Bar codes may mark the sheet for automatic processing, and each series of ovals filled will return a certain value when read. In this way candidate answers can be digitally recorded. (See Figure 1)

It is recommended that candidates use a No. 2 pencil. It is very important that candidates fill in the entire space darkly and completely. If a candidate changes a response, erase as completely as possible. Incomplete marks or erasures may affect the final score. (See Figure 2)

Figure 1



Figure 2



Objective Structured Clinical Examination (OSCE)

Answer sheets for the OSCE are pre-printed with spaces for answering short answer questions and adding numerical answers to calculations questions by hand. These answers will be scored by a Tribunal of Examiners. Candidate answers must be clearly written and legible.

Example:

- 1) _____

- 2) _____

- 3) _____

43. SUBMISSION OF EXAMINATION ANSWERS

On completion of the Examination, candidates must return the answer booklet, answer sheet and all scratch paper to the Examination proctor.

On submission of the answer booklet, answer sheet and all scratch paper to the Examination proctor, the candidate must sign the Registration Log to indicate that they have completed the Examination and have submitted an Examination answer sheet for grading.

44. AT THE END OF THE EXAMINATION

Candidates are **NOT** allowed to leave the examination room during the last **fifteen (15) minutes** of the examination and during the collection of the answer sheets and examination papers. All candidates must remain seated throughout this period in order to allow for Examination proctors to properly account for all answer sheets and examination booklets.

When the Examination proctor announces the end of the examination, all candidates must stop filling in their answer sheets immediately.

**** ANY CANDIDATE WHO CONTINUES TO FILL IN THEIR ANSWER SHEET AFTER THE END OF THE EXAMINATION WILL FORFEIT THE EXAMINATION (i.e., THEY WILL NOT RECEIVE A RESULT AND IT WILL COUNT AS AN ATTEMPT). ****

Candidates are to stay in the examination room until the Examination proctor has given the permission to leave. **DO NOT** talk or communicate with other candidates until outside of the examination room.

Once dismissed, candidates should leave the examination room in an orderly manner. Remember to remove all personal belongings from the designated area.

45. EXAMINATION SCORE REPORTS

Scores are reported, generally about three (3) to six (6) weeks after the Examination, in written form only, and must be collected in person. Scores are not reported over the telephone, by electronic mail or by facsimile.

The score report indicates a —Pass or —Fail for each PART (PARTS I, II and III) of the Pharmacist Registration Examination, which is determined by the raw score on each of the individual Examinations. A raw score is the number of questions answered correctly.

Responses to individual Examination questions will not be disclosed to the candidate.

Candidates shall not contact any member of the BPC or the BCP Examination Committee regarding test results. All enquiries shall be submitted in writing to the Registrar of the BPC.

**** FOR REASONS OF CONFIDENTIALITY, RESULTS WILL NOT BE RELEASED BY TELEPHONE, FAX OR EMAIL. ****

46. DETERMINATION OF EXAMINATION SCORES

Scores are computed based on the number of correct responses recorded by candidates. It is to the candidate's advantage to answer every question on the examination paper. There is no penalty in the scoring formula for guessing or selecting an incorrect response.

The individual score report will indicate whether the candidate passed or failed the examination. A minimum passing score of seventy percentage points (70%) is required in each of Parts I, II, and III as follows:

- Part I The scores obtained on Paper 1 and Paper 2 will be combined and averaged. The mean score must total 70% or higher.
- Part II A minimum score of 70% is required.
- Part III A minimum score of 70% is required.

The passing standard is applied consistently across all candidates who take the same form of the Pharmacist Registration Examination.

47. PASSING THE EXAMINATION

To pass the Pharmacist Registration Examination, a candidate must pass PART I, PART II AND PART III with a score of 70 percentage points (70%) or higher in each PART.

An eligible candidate who passes all three (3) PARTS (PARTS I, II and III) of the Pharmacist Registration Examination is awarded a license to practice pharmacy. Generally about three (3) to six (6) weeks after the candidate passes the Pharmacist Registration Examination, the Registrar will have the License to Practice completed and ready for collection by the candidate. The license will be in written form only, and must be collected by the candidate in person. Licenses are not distributed by electronic mail or by facsimile or provided to anyone other than the candidate, in any circumstances. It is the candidate's responsibility to keep the license current through fulfilment of the required continuing education credits.

48. FAILING THE EXAMINATION

If a candidate does not pass any PART (PARTS I, II, and III) of the Pharmacist Registration Examination, he/she will be required to retake that PART(s) of the Examination within the ninety (90) day period following the failed Examination. If the candidate fails to re-take the failed PART(s) of the Examination within ninety (90) days of the failed Examination then he/she will be required to retake the entire Pharmacist Registration Examination.

To schedule a retake of the Examination, a candidate may apply by submitting an application for re-examination. The completed application and full Examination fee must be submitted and a Pharmacist Registration Examination scheduled within the ninety (90) day period following the failed Examination.

A candidate who wishes to retake the Examination after ninety (90) days following the failed examination date must retake the entire Examination.

Every retake of the Examination requires submitting an Examination application and the full Examination fee.

The number of allowed Examination retakes of any PART (PARTS I, II, and III) of the Pharmacist Registration Examination is two (2).

49. SCORE VERIFICATION REQUEST

A candidate who does not pass any PART of the Pharmacist Registration Examination that consists of Multiple Choice Questions (MCQs) may request a manual verification of the computer scoring. Requests for manual scoring must be submitted to the Registrar in writing within one (1) year following the Examination date. A hand scoring fee will be applicable. The request must include the candidate's name, unique identification number, mailing address, Examination date, and a copy of the Examination Score Report. Please allow a minimum of fourteen (14) business days for processing of the request.

The Objective Structured Clinical Examination (OSCE) is a written examination, and therefore, this Paper is not eligible for computer scoring. The OSCE is automatically hand scored by three (3) Examiners before results are released to the candidate as a quality control measure. Therefore, it is unlikely that any OSCE result will change from — "Fail" to — "Pass" after a requested hand score. A candidate may make a request for a manual verification of the OSCE by an External Examiner Tribunal. Requests for an External Examiner's manual scoring must be submitted to the Registrar in writing within one (1) year following the Examination date. An External Examiner's hand scoring fee will be applicable. The request must include the candidate's name, unique identification number, mailing address, Examination date, and a copy of the Examination Score Report. Please allow a minimum of twenty eight (28) business days for processing of the request.

EXAMINATION CHECKLIST

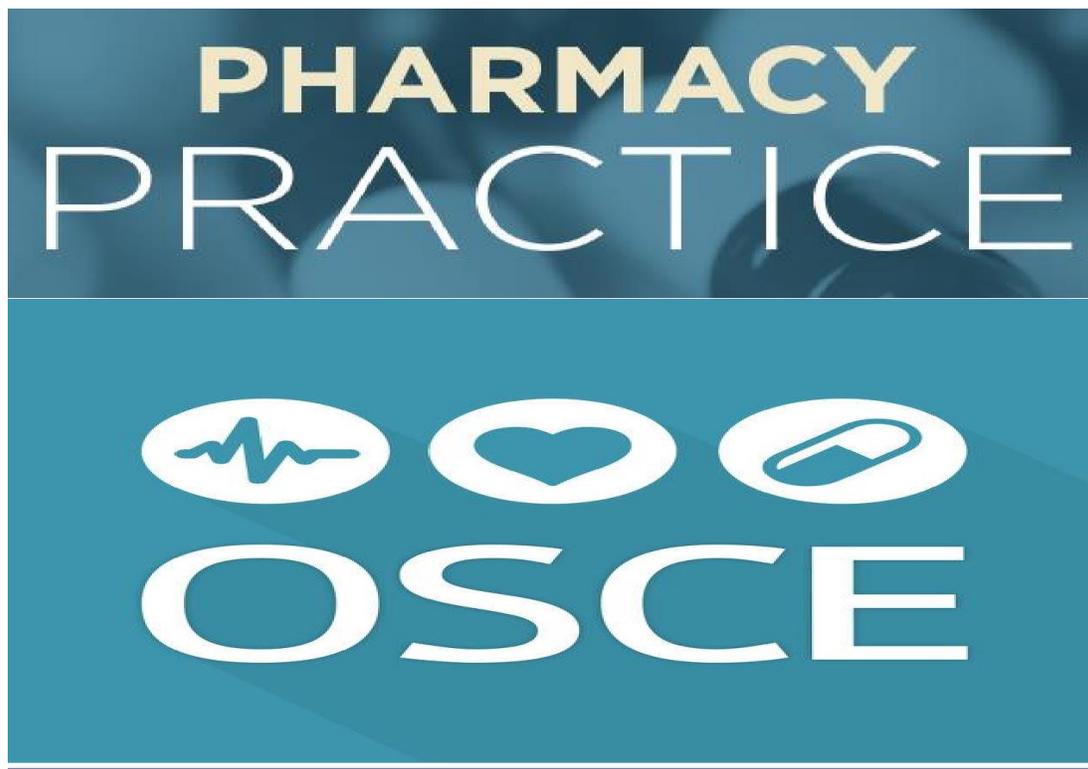
- ✓ Meet the Pharmacist Registration Examination Eligibility Requirements.
- ✓ Prepare for the Examination.
- ✓ Read the Candidate Examination Guidelines fully.
- ✓ Use the Examination Competencies and Content Outline to focus study efforts.
- ✓ Use the Sample Questions provided to aid in preparation for the Examination.
- ✓ Appear on time for the Examination on the date and at the time and location selected.
- ✓ Bring the admission letter provided by the Registrar and secondary identification as described in the Examination Guidelines.
- ✓ Bring a No. 2 pencil for MCQ Papers.
- ✓ Bring a basic scientific calculator for PART 1 (Paper 1) and OSCE.

REFERENCES

1. Code of Federal Regulations, 29 C.F.R. § 825.114.
2. Federal Register (Form WH-380) Rules/Regulations, Vol. 60, No.4.
3. The Board of Pharmacy Specialties (BPS), Candidates Guide.
4. The National Association of Pharmacy Regulatory Authorities (NAPRA), Professional Competencies for Canadian Pharmacists at Entry to Practice, 2007.
5. The Pharmacy Examining Board of Canada (PEBC).

The Bahamas Pharmacy Council (BPC) Pharmacist Registration Examination (PRE)

The Bahamas Pharmacy Council wishes to advise all prospective applicants for registration as pharmacists under the provisions of the Pharmacy Act that with effect from the 30th June, 2018 the Council shall require all applicants to take the Pharmacist Registration Examination (PRE). The examination shall include testing of the core competencies for pharmacy practice in the following areas: Foundations in Pharmacy Practice, Pharmacy Law and Ethics and an Objective Structured Clinical Examination (OSCE).



Professional Ethics & Pharmacy Regulations