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OPRA[™] Exam Guide

Overseas Pharmacist Readiness Assessment

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OPRA™ Exam Guide

1. Document purpose

This document has been developed to help you understand the exam content and how you will be assessed in the Overseas Pharmacist Readiness Assessment, *OPRA™* exam.

For further information about exam eligibility, registration, payment, and exam day procedures, please refer to [our website](#).

You can also scan the QR code to find more information on [exam day preparation](#) with our delivery provider Pearson VUE.



2. Exam purpose

Pharmacists seeking registration in Australia or Aotearoa New Zealand (NZ) and trained in countries other than Australia or NZ are required to complete a verification process before applying to the Pharmacy Board of Australia or the Pharmacy Council of New Zealand (PCNZ) for registration in their intended country of practice.

The *OPRA™* exam assesses whether you have the necessary knowledge and understanding of the biomedical, pharmaceutical, and clinical sciences underlying the practice of pharmacy in Australia and NZ. It is designed to ensure that overseas trained pharmacists who wish to practice as registered pharmacists in Australia or NZ meet our standards.

To be successful in the *OPRA™* exam, you must demonstrate:

1. A sound knowledge of the pharmaceutical sciences (medicinal chemistry, pharmaceuticals/biopharmaceuticals, pharmacokinetics, pharmacodynamics, pharmacology, and toxicology).
2. An understanding of how knowledge of the pharmaceutical sciences applies to the selection of pharmacological and non-pharmacological treatment options with consideration of the patient's overall well-being, clinical needs and social-economic factors.
3. An understanding of how knowledge of the pharmaceutical sciences applies in monitoring patient outcomes, identifying and managing adverse effects including minimising misuse of medicines.
4. An understanding of the general principles regarding confidentiality and professionalism when providing information on medicines and handling patient records.

The *OPRA™* exam does not examine pharmacy practice issues specific to the Australian or NZ context, such as legislation or practice standards. These are examined in later assessments included in the internship period as you move towards general registration.

3. Exam structure

The *OPRA*[™] exam is a closed-book, computer-based exam delivered at approved test centres.

It contains 120 multiple-choice questions, each with a single correct answer. The correct answer is the best or most correct option.

You have 150 minutes (2 hours and 30 minutes) to complete the exam.

Before the exam, you will be given 5 minutes to read and agree to a non-disclosure agreement and 10 minutes to complete a tutorial designed to familiarise yourself with the exam software. After the exam, you will have 5 minutes to complete an exam feedback survey. These pre- and post-exam activities do not count towards the exam time. The 150-minute timer will begin with the first question of the exam.

Each exam session has multiple live versions of the exam, which are randomly allocated. The order of questions is also presented randomly.

4. Exam content

The *OPRA*[™] exam encompasses five content areas. Table 1 shows the content and the approximate percentage of questions allocated for each area. Details on each of the five content areas are described in [Appendix 1](#).

Table 1 *OPRA*[™] content areas

Content Area	Percentage of questions allocated
Biomedical sciences	20%
Medicinal chemistry and biopharmaceutics	10%
Pharmacokinetics and pharmacodynamics	10%
Pharmacology and toxicology	15%
Therapeutics and patient care	45%

4.1. Question construction

Questions in the *OPRA*[™] exam meet the following standards for consistency:

- Drug and ingredient names are presented as per the [TGA list of approved names](#).
- Units for quantities of drugs and directions for medications follow the approved abbreviations from the Australian Commission on Safety and Quality in Health Care's [Recommendations for terminology, abbreviations and symbols used in medicine documentation](#).
- Values are presented in SI (metric) units.
- Determiners are bold and capitalised to draw attention to the kind of response expected. e.g. **CORRECT**, **MOST**, **LEAST**, **NOT**.

OPRA™ exam questions are crafted to assess cognitive processes related to remembering/recall, comprehension/understanding, and application, derived from Bloom¹ and Anderson's² classification of learning and ability levels.

Table 2 Cognitive/ability levels for OPRA™ exam questions

Cognitive/ Ability Level	Definition	Approximate percentage distribution of questions in the exam
Remembering /Recall	Recalling or recognising specific information. Ability to remember a concept, fact, or principle in somewhat the same form in which it was learned. Health professionals must have command of vast amounts of knowledge such as interactions, protocols, and medical terminology committed to memory.	55%
Comprehension /Understanding	Understanding of information given. Communicating concept/principle in a new or different form. Health practitioners should be able to explain a principle or concept to others, and classify/compare or categorise items with similar or dissimilar characteristics.	30%
Application	Using methods, concepts, principles, and theories in various situations. Using what one has learned from various areas to find a solution to a problem.	15%

4.2. Exam scoring

The OPRA™ exam uses a scaled scoring system to ensure fairness and consistency across multiple versions of exam forms. The passing score is determined through evidence-based psychometric standard-setting processes involving subject matter experts. This passing score reflects the minimum standard that must be met to apply for provisional registration as an intern pharmacist and begin supervised work and training.

Success is determined by the level of ability or performance compared to this standard, not by comparing performance to other candidates or by an arbitrary score. Passing the OPRA™ exam depends on your overall performance across the entire exam. You must meet the passing standard set for your randomly allocated exam form to pass the OPRA™ exam.

We collaborate with psychometricians to undertake robust analyses of scoring and exam standards to maintain the reliability and validity of OPRA™ exam results. Of the 120 questions in the OPRA™ exam 90% are 'scored' questions, which count towards your result. The remaining 10% of questions are 'unscored' questions. This means they are included in the exam for calibration and testing, but do not count towards your result.

Unscored questions may relate to any content area of the exam, but they will not count towards the target percentage of questions for any of the content areas. Unscored questions

¹ Bloom, BS 1956, Taxonomy of Educational Objectives, New York, McKay

² Anderson LW, Krathwohl DR 2001, A taxonomy for learning, teaching, and assessing: a revision of Bloom's taxonomy of educational objectives, New York, Longmans

are evenly distributed across all five content areas. You will not be made aware which of your questions are scored, and which are unscored.

4.3. Exam results

To protect the security and integrity of our assessments, we do not share the questions and answers from your exam attempt(s). Additionally, we do not disclose raw scores or percentages of your exam results, as they do not accurately reflect the difficulty of the questions or whether the exam standard was met.

We will provide you with a result report that indicates whether you met the overall standard or were unsuccessful.

Feedback on your performance in each content area is also provided to offer general guidance for continual professional development. Please note that the content area scores on your result report are not used to determine your result. Passing the *OPRA*[™] exam is based on your overall performance across the entire exam, not within each content area.

OPRA[™] exam results are available within approximately 4 weeks of the exam. The result release date for each session is available on our website. You will receive an email notification once your exam result is available and information on how to access it.

Exam results are not subject to review. If you feel your exam performance was negatively affected by an incident or administrative procedure, you can find more information on the options available to you in our [Appeals policy](#).

If you do not pass the exam you may apply to sit another exam session. You will be required to register and pay the exam fee for each exam attempt, and to re-sit the full exam.

4.4. Resources

A sample *OPRA*[™] exam paper is available [on our website to help you prepare](#).

The content of our exams is based on the latest information, which you can find in relevant:

- Peer-reviewed journals
- Clinical practice guidelines
- Textbooks.

Ensure you are utilising up-to-date and evidence-based resources to guide your preparation.

Please note that APC does not endorse any *OPRA*[™] exam preparation programs or offerings.

We encourage you to explore official professional organisations for Australian or New Zealand pharmacists to support your professional development and enhance your readiness to practice. These organisations include:

- [Australasian College of Pharmacy](#)
- [Pharmaceutical Society of Australia](#)
- [The Society of Hospital Pharmacists of Australia](#)
- [Pharmaceutical Society of New Zealand](#).

5. If you need to contact our team

We wish you all the best with your exam preparations.

You will receive emails from us as you progress in your journey. We do ask that you check and read our emails carefully.

Please contact us if you have any further questions; we're here to help.

Email us at info@pharmacycouncil.org.au

Appendix 1

Table 3 OPRA™ exam content areas (descriptive)

Content area	General description	Content assessed	Examples of topics (non-exhaustive)	
1. Biomedical sciences	Normal and abnormal body functions including at cellular level, and the manner in which diseases and disorders affect normal body functions. It includes the causes (aetiology) of disease and disorders and the recognition of normal and abnormal body functions	1.1	Physiological processes and normal bodily function for all systems	Central nervous, digestive, cardiovascular, lymphatic, nervous, respiratory, urinary, endocrine, and reproductive systems, and their integration; blood and other body fluids.
		1.2	Pathophysiology	Alteration of normal physiological processes and genesis of disease states by genetic factors, environmental, chemical/drug causes, physical injury or infectious agents or other causes.
		1.3	Medical microbiology	Pathogenesis of infections (bacteria, viruses, fungi, and other parasites).
		1.4	Immunology	Immune responses and defence mechanisms against infectious agents. Vaccines and vaccine preventable disease.
		1.5	Disorders affecting bodily fluids	Fluid and electrolyte disorders, metabolic acid-base disorders, and blood disorders.
		1.6	Symptoms and physiological values of disease states and disorders	Signs, symptoms, of disease, diagnostic tests and laboratory investigations associated with normal and abnormal body functions, disease states, and disorders.

Content area	General description	Content assessed	Examples of topics (non-exhaustive)
2. Medicinal chemistry and biopharmaceutics	Principles of drug design and development and the factors that influence and/or determine the materials and methods used in the formulation of medicines	2.1 Physicochemical properties of drugs	Physicochemical properties of drugs of relevance to drug absorption, distribution, metabolism, and excretion (ADME).
		2.2 Formulations for the delivery of drugs	Properties of solids, solid dosage forms, solvents, solutes, aqueous and non-aqueous solutions, liquid-liquid solutions, solid-liquid solutions, gas-liquid solutions, suspensions, and emulsions.
		2.3 Drug and chemical stability	Mechanisms of degradation (hydrolysis, oxidation), zero and first-order degradation, effect of temperature and pH.
		2.4 Solubility	Factors affecting solubility, dissolution, partition, and thermodynamics of pharmaceutical solutions.
		2.5 Drug formulation	Materials and methods used in the formulation of drug delivery systems for common routes of administration, including oral, pulmonary, transdermal, parenteral, ophthalmic, nasal, rectal, and vaginal.
		2.6 Pharmaceutical microbiology	Preservation, antimicrobial agents, and sterilisation processes.

Content area	General description	Content assessed	Examples of topics (non-exhaustive)
3. Pharmacokinetics and pharmacodynamics	Factors that influence how medicines are absorbed, distributed, metabolised, and eliminated (ADME) from the body, and how pathophysiological changes impact ADME and the selection of treatment options	3.1 Drug metabolism	Chemical and biochemical basis for drug action and pathways for drug metabolism, drug absorption, disposition, biotransformation, elimination, receptor theory, signal transduction mechanisms, and molecular pharmacology.
		3.2 Principles of pharmacokinetics	Bioavailability and bioequivalence, biological half-life, elimination and clearance concepts, distribution, protein binding, steady state considerations.
		3.3 Factors affecting drug impacts	Determinants of drug onset, drug duration, and effect of factors such as disease/conditions and diet on absorption, distribution, metabolism, and excretion.
		3.4 Evaluation of pharmacokinetic data	Kinetics of drug interactions, drug concentration vs time curves and interpretation of pharmacokinetics of low-therapeutic-index drugs.
		3.5 Using pharmacokinetic data in treating patients	Use of pharmacokinetics to calculate, evaluate, and individualise drug therapy, including monitoring and adjustment of doses in renal and hepatic dysfunction, loading doses and time to reach a steady state.
		3.1 Drug metabolism	Chemical and biochemical basis for drug action and pathways for drug metabolism, drug absorption, disposition, biotransformation, elimination, receptor theory, signal transduction mechanisms, and molecular pharmacology.

Content area	General description	Content assessed	Examples of topics (non-exhaustive)	
4. Pharmacology and toxicology	How medicines work in the body, how common chemicals and poisons exert their effect, recognition of toxic and adverse effects and their management	4.1	Impact of drugs on the body	Effects of drugs on organs and body systems, dose-response relationships, agonists, partial agonists, antagonists, enzyme inducers/substrates/inhibitors, genetic polymorphism, and clinical relevance.
		4.2	Receptor theory	Drug receptor interactions, agonists/antagonists, dose-response curves, desensitisation, and super sensitivity.
		4.3	Mechanisms of action of drugs	Mechanisms of action of various drug categories as they relate to organs and disease states. Including but not limited to central nervous system, cardiovascular, haemostasis and thrombosis, and cancer chemotherapy
		4.4	Adverse drug reactions	Adverse drug reactions, side effects of medicines and management, and mechanisms of drug-drug interactions.
		4.5	Drug interactions	Drug-drug interactions, drug-receptor interactions, drug-receptor binding, enzyme-substrate relationships, hydrophilic and hydrophobic interactions.
		4.6	Drug toxicity and treatment	Drug and chemical overdose and antidotes. Signs and symptoms of toxicity and mechanism of toxicity and its management.
		4.7	Factors causing changes in the pharmacology and toxicity of drugs	Modulators of drug pharmacology and toxicity such as pharmacologic factors (disposition, biotransformation, renal elimination), physiological factors (age, sex, genetics, pregnancy, etc), and pathophysiological factors (liver disease, renal dysfunction).

Content area	General description	Content assessed	Examples of topics (non-exhaustive)	
5. Therapeutics and patient care	Clinical application of content areas 1-4 in patient care. It includes understanding the principles of health promotion, disease prevention, quality use of medicine, selection of medicines for special populations and provision of medicines information	5.1	Screening	Calculate common patient assessment parameters such as body mass index (BMI) and creatinine clearance.
		5.2	Dose calculations	Amount of drug, number of doses, dosing based on body weight/ body surface area/ age/or other pharmacokinetic parameters, ratio and proportion, percentage, stock solutions, dilution, and concentration, alligation, electrolyte solutions (milliequivalents/milliosmoles), reconstitution, infusion flow rates, isotonicity.
		5.3	Primary health care	Select appropriate management options for treating illness and maintaining health and identify circumstances where non-pharmacological treatment is more appropriate.
		5.4	Safe and effective use of medicines in populations requiring extended consideration	Consideration for medicine use, precautions, and contraindications in special populations: the elderly, children less than 12 years of age, during pregnancy or while breastfeeding.
		5.5	Safe and effective use of medicines	Monitoring and review of management options, including medicines use and promoting adherence to medicines.
		5.6	Harm minimisation	Knowledge about strategies for minimising misuse and abuse of medicines at the patient and community level.
		5.7	Health promotion and disease prevention	Knowledge about general approaches for health promotion and disease prevention. Measures for promoting wellness, and proper use of non-pharmacological treatment options.
		5.8	Confidentiality	Understanding general principles about maintaining confidentiality and professionalism when providing medicines information and handling patient records.



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