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# Guide to the OCANZ Competency in Optometry Examination

The following document provides information for candidates for the OCANZ Competency in Optometry Examination. For information regarding the eligibility criteria for the examination and application procedures, see the OCANZ publication Assessment of Optometrists with Overseas Qualifications.

The components of the Competency in Optometry Examinations assess the competence of the candidate in the entry-level competencies listed in Optometrists Association Australia Universal (Entry-level) and Therapeutic Competency Standards for Optometry 2008, a copy of which is at <u>Appendix A</u>. This document covers the skills, knowledge and attributes of an entry-level optometrist in Australia and New Zealand as well as the therapeutic competencies that are required for ocular therapeutic endorsement. **Only those competencies listed as entry-level are assessed in the OCANZ Competency in Optometry Examination, therefore, the therapeutic competencies printed in blue are not assessed.** 

The Competency in Optometry examination is divided into two sections (both of which must be passed):

## Written examination (2 parts)

- Clinical Science examination (one 3-hour multiple-choice question paper)
- Diagnosis and Management examination (one 3-hour paper requiring written answers)

## Clinical examination (2 parts)

- Skills Station examination
- Patient examination

#### **Important:**

- (1) Written examination Candidates must pass both parts of the written examination (Clinical Science examination and the Diagnosis and Management examination) before being able to proceed to the clinical examination. The two written papers are administered on consecutive days, twice each year. There is no limit to the number of times a candidate can sit the written examination papers. At their first attempt candidates must sit both the Clinical Science examination and the Diagnosis and Management examination at the one sitting. If one of these two papers is failed at this initial sitting, the candidate will have one (1) further opportunity to repeat only the failed paper at a later sitting. If at the second sitting they fail the paper again, they will need to resit both papers at their next and any subsequent attempts. If both of the papers are failed at any sitting, the candidate must repeat them both.
- (2) Skills Station examination A pass in the Skills Station examination is required before a candidate may proceed to the Patient examination.
- (3) Clinical examination There is no limit to the number of times a candidate may sit the clinical examination. Candidates who fail either the Skills Station examination or the Patient examination are encouraged to undertake remedial work targeted at updating their knowledge, clinical judgment and/or technical skills in preparation for their next attempt. However, the clinical examination must be passed within three (3) years of successfully completing the written examination. After this three year period, the candidate is required to undertake the written examination again to be eligible for the clinical examination.

## WRITTEN EXAMINATION

## (a) CLINICAL SCIENCE EXAMINATION (1 paper)

The Clinical Science Examination consists of one 3-hour paper, containing 132 multiple choice questions (MCQs). The examination assess the background knowledge of the candidate in basic biomedical, vision, optical and clinical science and the ability of the candidate to apply this knowledge in the clinical situation.

Of the 132 multiple choice questions, 120 are scored for the purposes of determining the overall result. The remaining 12 non-scored questions will be used to calibrate new questions, which may be used in future examinations, but will not be counted towards the overall score of the candidate. Candidates will not be advised which are the non-scored questions.

Candidates will need to bring black lead (2B) pencils, an eraser, a pencil sharpener and a calculator (see section (c) Examination Conduct for restrictions on calculators that may be used). Candidates will enter answers on a separate marking sheet.

In each MCQ, there are four options, labeled a, b, c and d. The candidate is required to determine which **ONE** response is the **BEST** correct answer. Marks will only be awarded for correct answers. Marks will not be deducted for incorrect answers.

The following lists the competencies that will be assessed in this examination and the approximate number of questions for each of these competencies. These are suggested numbers only and may not be strictly adhered to. The other numbers (eg. 1.6.1, 1.6.2, 6.2 etc) refer to the particular competencies from the document Optometrists Association Australia Universal (Entry-level) and Therapeutic Competency Standards for Optometry 2008 (see <u>Appendix A</u>).

**Information:** Provides advice and information to patients and others, (1.4), interpretation of patient information eg. from other professionals and from previous histories (2.4) (approximately 7 questions)

# Principles of planning, establishment, development and maintenance of an optometric practice:

Roles of staff, effective organisation of patient contacts and other tasks, scheduling of appointments and follow-up visits, staff training and supervision, equipment maintenance (1.6.1, 1.6.2, 1.6.4, 1.6.5) (approximately 3 questions)

**Legal obligations involved in optometric practice:** safe practice environment, negligence, understanding of statutory and common law obligations, insurance, employment agreements, relevant Acts including Health Insurance Act, Registration Acts, Poisons Acts, informed consent, patient referral, issuing of sick leave certificates (1.7.2) Storage and security of patient records (6.2) (approximately 3 questions)

Factors affecting the community's need for optometric services: Epidemiology of ocular disorders, provision of health and other services, demographics of patient population (1.11.1, 1.11.2) (approximately 2 questions)

**Implements examination plan and procedures:** Alternative and/or extra test procedures to maximise confidence in findings (3.2) (approximately 7 questions)

Assessment of the ocular adnexae and the eye: Anatomy of the ocular adnexae, the eye, the visual and pupillary pathways; anatomy and actions of the extraocular and intraocular muscles; equipment and pharmaceuticals used in the examination of the eye: macro-observation, eversion, slit-lamp biomicroscopy, direct and indirect ophthalmoscopy, use of diagnostic pharmaceuticals including for pupil dilation, retinoscopy, keratometry, gonioscopy, tonometry, tear dynamics, pupil reactions, nystagmus, eye movements, amblyopia; ocular pathology, pharmacology and microbiology; effects of pathological and physiological changes on visual function (visual acuity, fields, colour vision etc.), interpretation of information from optical coherence tomography etc (3.3) (approximately 18 questions)

**Assessment of visual processing:** normal developmental milestones, brain injury or neurological disease, recognition of when it is necessary to assess visual information processing skills (3.7) (approximately 2 questions)

Assessment of significance of signs and symptoms found during ocular examination: ocular, visual and non-ocular signs and symptoms: social, emotional, neurological etc (3.8) (approximately 4 questions)

**Spectacles:** Determination of the patient's prescription based on: case history, refraction findings, magnification requirements, dispensing requirements and limitations, vertex distances, aniseikonia, vergence accommodation status; sports, vocational and occupational visual and safety requirements; lens design and materials (prism, tints, base curves, thickness, special lenses and treatments, interpupillary distance, coatings, additions); care regime, standards, the written prescription (5.2) (approximately 13 questions)

**Contact lenses:** Suitability of lenses for the patient's needs, lifestyle, vocation, risk factors, vision, comfort and duration of wear, contra-indications, ocular integrity, physiology and environment, slit lamp, topography/ keratometry observations, staining, working distances, anisometropia, aniseikonia, vergence accommodation status, special lenses and treatments, sports requirements, incidental optical effects, lens design, materials, tints, trial lens fitting techniques, care and maintenance regimen, determination of the prescription, performance of the contact lens, monitoring of contact lens wear, recognition and management of contact-lens related conditions, frequency and content of after-care visits, monitoring of patient adherence to the wearing and maintenance regimen, the written prescription (5.3.1, 5.3.2, 5.3.6, 5.3.7) (approximately 13 questions)

**Low vision aids:** Types of low vision aids available, prescription, evaluation, monitoring, working distances, magnification requirements, incidental optical effects, low vision aid design, special materials, tints, selection and prescription of most appropriate low vision aid, clear instructions, description of the use of the device (5.4) (approximately 4 questions)

Prescribing pharmacological agents, treatment of adnexal and anterior eye disorders, provision of adequate eyecare and progressive review and modification of treatment or management:

Appropriate drugs are selected and prescribed; outcomes of treatment regimen monitored; patient instructions including use, administration, storage, disposal of medications, precautionary procedures and how to avoid cross infection, appropriate medications; instructions to the patient; the use, administration, storage and disposal of pharmaceutical agents, shelf-life of the medication, side effects, review, monitoring; decisions based on the results obtained, appropriate timing of reviews, modification of the management plan depending on the results obtained, timing of recall (5.5) (approximately 18 questions)

**Dispensing of optical prescriptions:** Interpretation of prescription, Australian and New Zealand Standards, resolution of ambiguity in specification and usage, frame selection, parameters of the prescription to be measured, processes and limitations involved in the fabrication of optical appliances understood, patient instructions, fitting of spectacles to patient, inspection of lenses and spectacles (5.6) (approximately 6 questions)

**Visual therapy program:** Diagnoses and treats or refers patients diagnosed with accommodative vergence, strabismus and amblyopic condition (5.7) (approximately 3 questions)

**Referral:** Need for referral recognised, urgency, documentation, scope and limitations of services provided by optometrists and other health and allied health professionals; choice of practitioner for referral; recognition of the need for co-management with another optometrist or a member of another profession, post-operative referral (5.9, 5.10.4) (approximately 10 questions)

**Provision of pre-and post-operative co-management:** Pre-operative assessment and advice, post-operative assessment and monitoring, treatment/referral alternatives, provision of emergency care (5.10.1, 5.10.2, 5.10.3) (approximately 3 questions)

**Advice on vision in the workplace:** Safety lenses, radiation protection, eye protection, visual standards, sunglasses, tints, industrial and environmental analysis, Australian and New Zealand standards, lighting, ergonomic design, industry and other occupational requirements for colour vision, visual acuity, spectacle powers, certification of fitness for designated occupations or tasks, counselling on occupational needs and suitability; implications for family members (5.11) (approximately 3 questions)

**Legislative requirement regarding record retention/destruction**: children's versus adult's records, methods of destruction (6.3) (approximately 1 question)

Sample multiple choice questions are available at: www.ocanz.org.

## (b) DIAGNOSIS AND MANAGEMENT EXAMINATION (1 paper)

The Diagnosis and Management paper is a 3-hour paper comprising 18 questions (most of which have multiple parts) addressing case histories. These case histories may be accompanied by photographs of clinical conditions. Candidates will observe and identify in the photographs pathological and other conditions (including normal variations) of the eye and adnexae, binocular vision anomalies, results of Hess screen assessment, vergence accommodation disorders, visual perceptual findings, refraction findings, contact lens fittings, colour vision assessment results, visual field results etc.

Candidates can be required to do tasks such as:

- describe abnormal or normal features
- discuss observations in anatomical, biochemical, microbiological and/or pathological terms
- offer a diagnosis or diagnoses to account for observations
- suggest appropriate treatment or management including criteria for referral or monitoring
- list systemic, ocular and visual signs and symptoms associated with the condition
- · list extra tests needed for a differential diagnosis
- discuss the likely prognosis of the condition

Sample examination questions are available at www.ocanz.org.

Candidates will need to bring writing implements (pen or pencils) and a calculator (see section (c) Examination Conduct for restrictions on calculators that may be used). Candidates will enter answers on paper provided.

The following lists the competencies which may be assessed in this examination. The numbers refer to the competencies from the document Optometrists Association Australia Universal (Entry-level) and Therapeutic Competency Standards for Optometry 2008 (see <u>Appendix A</u>). The number in brackets is a guide to the number of questions on a particular area; however, the suggested numbers of questions may not be strictly adhered to.

## Formulation and implementation of examination plan, assessment of the ocular adnexae and the eye, diagnosis:

Tests and procedures needed for information to obtain a diagnosis; interpretation of results of optometric techniques, assessment of the state of health of the ocular adnexae and eye; differential diagnosis, differentiation of congenital, developmental, hereditary and active and resolved pathological changes; selection of tests suitable to the condition being investigated and the abilities of the patient, further tests, referral for indicated assessment, alternate test procedures, possible progressive modification of examination plan and procedures, patient informed consent (3.1,3.2, 3.3, 4.1) (approximately 4 questions)

Assessment of pupil function, establishment of diagnoses, interpretation and analysis of findings to establish a diagnosis, including formulation and implementation of examination plan: assessment of pupils and pupil reactions for symmetry, response rate and cycle times: varied lighting conditions, swinging flashlight tests, pharmacological testing, differential diagnosis, differentiation of congenital, developmental, hereditary, active and resolved pathological changes; further tests (3.4.4, 4.1, 3.1, 3.2) (approximately 1 question)

**Treatment/management program:** Presentation of diagnosis, management options, costs and relative merits of each option, need for ongoing care, review, referral or discharge, reassurance, advice on driving or operation of machinery, repercussions of management options, optical correction: spectacles, contact lenses, low vision aids, vision therapy, pharmacological therapy, task modification, environmental adaptations, other interventions, prioritisation of patient problems and management, likely course of condition and prognosis; degree of threat to ocular function, health, performance, development of a management plan, urgency of action recommended, sequence of procedures, treatment duration, criteria for discharge, awareness of validity and reliability of treatment options, referral, co-management, follow-up of referral, informed consent (5.1) (approximately 2 question)

# Prescription of contact lenses, including formulation and implementation of an examination plan:

Keratometry/topography, fluorescein and slit-lamp findings, assessment of suitability of lenses based on photographic documentation of fluorescein patterns for rigid lenses and photographs of the fit of soft contact lenses, after-care presentations, selection of tests suitable to the condition being investigated and necessary to obtain a diagnosis, further tests, referral, alternate test procedures to maximise confidence in findings, possible progressive modification of examination plan and procedures; aniridia; cosmetic management; occlusion; management of recurrent erosion syndrome, basement membrane dystrophy (3.1.1, 3.2, 5.3.1, 5.3.2, 5.3.4) (approximately 1½ question)

Assessment of visual fields and colour vision including examination plan and interpretation and analysis of findings to establish a diagnosis: Interpretation of results from eg. Amsler grid, colour vision and discrimination, confrontation, kinetic, static threshold, automated threshold fields, possible diagnoses for the patient's condition, specification of most likely diagnosis, differential diagnosis, differentiation of congenital, developmental, hereditary, teratogenic and active and resolved pathological changes; formulation of examination plan to include the tests necessary to obtain a diagnosis and any other tests which need to be done for a particular patient (3.1.1, 3.4.2, 3.4.3, 4.1) (approximately 2 questions)

Assessment of oculomotor and binocular function including examination plan, including interpretation and analysis of findings to establish a diagnosis: Deviation of visual axis (manifest and latent), associated and dissociated phoria/tropia, laterality, amount of deviation, cover test, comitancy, nine positions of gaze, Hirschberg test, limitations of gaze, qualitative assessment of pursuit movements and saccades, fusional vergence ranges, vergence facility, fixation disparity (curve analysis), near point of convergence, accommodation, possible diagnoses, most likely diagnosis, differential diagnosis, differentiation of congenital, developmental, hereditary, teratogenic and active and resolved pathological changes, formulation of examination plan to include the tests necessary to obtain a diagnosis and any other tests which need to be done for a particular patient (3.1.1, 3.6.1, 3.6.2, 3.6.4, 3.6.5, 4.1) (approximately 1½ questions)

Significance of incidental findings/investigation of ocular signs and symptoms: Non-ocular, ocular and visual signs and symptoms; medical, acquired neurological disorders, pharmacological factors, signs of impending stroke (transient ischaemic attacks); developmental testing, tests of higher cortical function etc; need for specific tests eg. sphygmomanometry, carotid auscultation, extended history, blood sugar levels, (3.8) (approximately 1½ questions)

**Contact lens aftercare including examination plan:** Appropriate lens replacement recommended, contact-lens related conditions recognised and management recommended, appropriate tests at after-care visits, frequency of after-care visits, formulation of examination plan to include tests necessary to obtain a diagnosis and tests needed for a particular patient (3.1.1, 5.3.6) (approximately 1 question)

**Treatment of adnexal and anterior eye disorders:** Ocular pharmacology, treatment procedures, actions, interactions, contra-indications and side effects of drugs, dosage, ocular lubricants, pharmaceutical diagnostic agents, review to monitor treatment (5.5.1, 5.5.2, 5.5.3, 5.5.4, 5.5.5, 5.5.6) (approximately 1 question)

Referral of the patient/choice of practitioner for referral: Recognition of when referral is necessary, written referral including all appropriate information, urgency, timing of referral, specified tests and procedures arranged, relevant signs and symptoms and reasons for referral, clarity, understanding of role and scope of services provided by other professionals including health, welfare and education services: general and specialist medicines, ophthalmology subspecialties, psychology, occupational therapy, audiology, speech pathology, community nursing, education, dietetics, social work, physiotherapy, chiropractic, low vision services, rehabilitation services etc. (5.9.1, 5.9.2, 5.10.4) (approximately 1½ questions)

**Provision of pre- and post-operative management:** Understanding of indications and contraindications for surgery, recovery, intervention, referral, use of pharmacological agents (5.10.1, 5.10.2, 5.10.3) (approximately ½ question)

Advice on vision, eye health and safety in the workplace/recreational settings: Industry and other occupational requirements are known for colour vision, visual acuity, spectacle powers, occupational counselling, certification of fitness for occupations and tasks; conditions that have implications for other family members (5.11.3, 5.11.4, 5.11.5) (approximately ½ question)

## (c) EXAMINATION CONDUCT

Late comers will not be permitted to enter the examination room after the first 30 minutes of the examination. A candidate, who arrives late, but before the 30 minute mark, will be allowed to sit the examination but will not receive additional time.

- Candidates will not be permitted to bring into the examination any unauthorised materials or equipment. This includes any wearable technology, including all watches. A calculator may be used so long as it meets the following criteria:
  - a. Hand-held and noiseless.
  - b. Is not in a wallet-like container.
  - c. Battery-operated and does not accept plug-in memory modules or magnetic cards.
  - d. Is not capable of displaying any alphabetic characters other than calendar and time functions.
- There should be no talking once the candidates have entered the examination room and candidates who communicate with each other during the examination may be ejected.
- The examination papers remain the property of the Optometry Council of Australia and New Zealand. Candidates will not be permitted to take away any material from the examination when they leave. The examinations are protected by copyright laws. Any reproduction or distribution of examination questions is unlawful and may be subject to legal action.
- A candidate who needs to leave the examination room temporarily must be accompanied by a supervisor. A candidate should raise their hand if they require the attention of a supervisor.
- A candidate who completes the examination early will not be permitted to leave the examination room until their examination script has been collected and they have been instructed to do so.
- Cheating or collusion or other disruptive or unacceptable behaviour is prohibited. A candidate found cheating will receive a zero score for the examination in which the cheating occurred, and the candidate may be prohibited from taking further examinations administered by the Optometry Council of Australia and New Zealand.

## **CLINICAL EXAMINATION**

## (a) SKILLS STATIONS

Candidates will be required to demonstrate the ability to perform optometric techniques at a number of stations. They must provide themselves with a retinoscope, p.d. rule, occluder, pen torch and pens. No other equipment is allowed to be brought into the examination. The equipment available at each station is listed below.

- The skills to be assessed at each station are shown in the table on the following page.
- Candidates will not be permitted to commence a station unless their personal presentation and preparation of instruments conform to necessary hygiene standards. A candidate will be instructed to stop a test if the examiner considers that his/her technique is unsafe or inappropriate. In this event the candidate will be considered to have failed that particular technique.
- To pass a station each individual skill must be passed. Candidates who fail up to two of the skills in this section of the examination may be given the opportunity to re-sit the failed skills on another day. Failure of three or more skills at the first attempt or failure of any skill/s at the second attempt means failure of the entire skills station examination. If a candidate fails a technique within a skill, the whole of the relevant skill (e.g. Binocular vision analysis parts (i), (ii) and (iii)) will be retested, not just the technique that was not demonstrated successfully at the first attempt.
- A number of skills testing stations will be used with rotation of candidates from one station to the next. At each station two different skills are required to be demonstrated. Some skills may include more than one technique e.g. (i), (ii), (iii). Each of the seven stations must be completed within 30 minutes.
- If a candidate is given the opportunity to re-sit one or two failed skills, each of the skills must be completed within 20 minutes.
- Candidates will be assessed on preparation, personal hygiene, execution and conclusion of each task and communication with the subject/patient. Candidates will wash their hands before each new patient and prior to the insertion of contact lenses. Candidates will disinfect or clean equipment as necessary. The candidate will explain the purpose of each test to the patient and advise the patient of what they are expected to do for the test.
- Candidates are expected to behave in a professional manner at all times toward the subjects and the assessors. Unprofessional behavior can be used as a reason for failure of a skills examination

Station	Skills	Equipment Available
1	A. Binocular vision analysis:  (i) Cover test  (ii) Heterophoria measurement  (iii) Vergence testing  (iv) Positive and negative  accommodation  B. Vision therapy	Prism bars, loose prisms, trial frame and lenses, refractor head, Maddox rod, Prentice phoria card, fixation target, occluder, vision therapy devices (Brock string, loose prisms, anaglyphs, red-green glasses, raf rule, life-saver card)
2	C. Distance retinoscopy D. Keratometry	Refractor head, trial frames, trial set lenses and prisms, internally-illuminated visual acuity charts or projected visual acuity charts, keratometer, disinfectants
3	E. Ophthalmic materials evaluation F. Contact applanation tonometry	Vertometer, lens thickness gauge, Geneva lens measure, Australian Standards, selection of frames. Multifocal centration chart, sodium fluorescein dye, anaesthetic, disinfectants, applanation tonometers eg. Perkins, Goldmann Slit lamp biomicroscope (900 Haag-Streit Bern, Topcon DC-3 or Nikon S-1)
4	G. Visual field assessment (i) Amsler grid testing (ii) Automated visual field testing (iii) Confrontation H. Colour vision assessment (i) Pseudo-isochromatic plates (ii) Farnsworth D15 test	Amsler Grids, occluder, automated perimeters (Humphrey and Medmont), Pseudoisochromatic plates (e.g. Ishihara), Farnsworth D15 test, confrontation target
5	I. Slit-lamp biomicroscopy J. Gonioscopy	Sodium fluorescein dye, slit-lamp with observation system (900 Haag-Streit Bern, Topcon DC-3 or Nikon S-1), anaesthetic, disinfectants, stains, ocular lubricants, Zeiss four-mirror goniolens (goniolens with a flange is not available), Goldmann three-mirror goniolens, posner (4 mirror) gonioprism.
6	K. Binocular indirect ophthalmoscopy L. Fundus lens evaluation	BIO with observation system, condensing lenses, Slit lamp Biomicroscope with observation system, Goldmann lens, 20D lens, 90D lens and Volk Super Field lens.
7	M. Soft contact lens insertion and assessment     N. Hard contact lens insertion and assessment	Keratometer, radiuscope, RGP trial sets, Soft CL trial sets, Burton Lamp, Stains, Slit lamp Biomicroscope, , lens cases, mirror, bowl, towels, lens cleaning, disinfection & storage solutions

A copy of the Skills stations assessment sheets is at <u>Appendix B</u>. <u>Appendix C</u> contains a copy of the sheets that will be available for candidates to record their findings.

**Binocular Vision Analysis:** The candidate will analyse the binocular vision status of the patient using cover test, assessment of heterophoria, assessment of accommodation and vergence testing. Candidates will use appropriate light levels, occluder and fixation targets. The candidate will perform distance and near cover tests and objectively measure any deviation. Horizontal and vertical heterophorias will be measured for distance and near using a suitable method. The accommodation status of the patient will be measured. The patient's distance and near prescription, p.d. and visual acuity will be given. Vergence testing will be performed at near. All results will be recorded clearly using the appropriate notation.

**Vision therapy:** The candidate will select, demonstrate and teach the use of two different vision therapy devices for the remediation of positive vergence deficiency, and discuss the frequency of therapy and the need to monitor treatment.

**Distance Retinoscopy:** The candidate will perform distance retinoscopy on both eyes of a patient and record results. The candidate will not be provided with any previous information about the patient.

**Ophthalmic materials evaluation:** The candidate will measure the parameters of a pair of spectacle and will measure the pupillary distance of a patient, assess the suitability of a spectacle frame having been provided with the patient's prescription, and determine the required location of optical centres within a frame and the position of a segment height and/or the details necessary for the correct positioning of progressive lenses. All measurements are to be clearly recorded using the appropriate notation. One pair of spectacles will be compared to a prescription and assessed to determine whether it meets the Australian and New Zealand standard.

**Slit-lamp biomicroscopy:** The candidate will use slit-lamp biomicroscopy to examine the lids (including eversion of the upper lid), lid margins, lashes, bulbar and palpebral conjunctiva, cornea, iris and lens, assess the tear film, screen the anterior chamber and assess the anterior chamber angle by means of the van Herick test in both eyes. The candidate will maintain an image of what is being observed for the examiner to view through an observation system and will record all observations.

**Visual field analysis:** The candidate will measure the central visual fields of one eye of the patient using automated perimetry and record a description on the record card. The candidate will interpret the results of a sample test on the record card. The candidate will instruct the patient in the performance of an Amsler grid test, perform the test and record results. The candidate will also measure fields to confrontation, and record and interpret results.

**Keratometry:** The candidate will perform keratometry on both eyes of the subject who is to be seated comfortably at the instrument and provided with an appropriate fixation target. Keratometry measurements are to be made in the two principal meridians and results recorded appropriately including radius and axis.

**Colour Vision Assessment:** The candidate will perform a colour vision analysis on a subject using pseudo-isochromatic plates, and the Farnsworth D15 test and will interpret results and record all necessary information.

**Contact Applanation Tonometry:** The candidate will be required to perform contact applanation tonometry on one eye of the patient (using topical anaesthesia). Measurements are to be within **+/- 3mm Hg**. The candidate will record results using the appropriate terminology. Candidates will be expected to assess the cornea for staining before and after tonometry.

**Gonioscopy:** The candidate will perform gonioscopy on one eye of the patient. The candidate will obtain a view of the 4 quadrants which can be observed by the examiner via an observation system. The candidate will describe what is observed during the procedure and record all findings.

**Binocular Indirect Ophthalmoscopy:** The candidate will perform binocular indirect ophthalmoscopy on one eye of the patient. The patient's pupils will have been dilated prior to the test. During the examination of the structures the candidate will maintain the image for the examiner to observe through the observation system. Observations are to be recorded clearly and accurately.

**Fundus lens evaluation:** The candidate will perform a fundus evaluation of one eye of the patient using a fundus lens. The pupils of the subject will be dilated prior to the test. The candidate will sustain an image for observation by the examiner through an observation system. Observations are to be recorded clearly and accurately.

**Soft Contact Lens Insertion and assessment:** The candidate will be provided with keratometry readings of the subject and will select, prepare and insert a soft contact lens to one eye (with the presumption that the lens has previously been disinfected) and evaluate the fit of the lens by use of a slit-lamp. On completion the candidate will remove, clean and store the lens and describe appropriate alternatives for lens disinfection. The candidate will record observations about the suitability of the fit of the lens. All necessary contact lens solutions will be provided.

**Rigid contact lens insertion and assessment:** The candidate will select, prepare and insert a rigid gas permeable lens to one eye of the subject (with the presumption that the lens has previously been disinfected) having been provided with the keratometry readings of the subject. Comments on the lens fits are to be recorded clearly and concisely. On completion the candidate will remove, clean and store the lens and describe appropriate alternatives for lens disinfection. The candidate will then assess the fit of the contact lens and remove the lens without the aid of a suction cap or any other device. The candidate will then appropriately prepare the lens for storage.

#### **COMPETENCIES TO BE ASSESSED**

- **1.4 Conveying of information to others**: manner in which advice is given: confident approach; clear communication of information, communication skills, clear instructions to patients
- 1.6.2 Equipment: safety, accuracy, calibration and cleaning
- **1.6.3 Appropriate standard of personal and general hygiene:** disinfection of tonometers, disinfecting of trial set lenses, cleanliness of equipment including chin and forehead rests, hand washing, maintenance of sterility of drops if used for a number of patients.
- **3.3** Assessment of the ocular adnexae and the eye: techniques such as binocular indirect ophthalmoscopy, fundus lens evaluation, gonioscopy, interpretation of findings
- **3.4.2, 3.4.3 Assessment of visual fields and colour vision:** automated visual field assessment, confrontation, Amsler chart, pseudo-isochromatic plates, D15 test etc
- 3.5 Assessment of refractive status: retinoscopy
- **3.6 Assessment of oculomotor and binocular function:** cover test, measurement of stereopsis, phorias and fusional reserves, accommodation etc.
- **5.3.1, 5.3.2, 5.3.4 Suitability, prescription and assessment of fit and performance of contact lenses:** keratometry, slit lamp biomicroscopy, lens fitting for soft and/or rigid lenses
- **5.6.1, 5.6.2, 5.6.3, 5.6.4** Dispensing of optical prescriptions and verification of optical appliances: interpretation of prescription, selection of appliances, adjustment of optical appliances, frame measurements, measurement of spectacle lens parameters, Australian and New Zealand standards
- **5.7.1, 5.7.2, 5.7.3 Patient instruction in the use and maintenance of visual training equipment:** instructions, choice of vision therapy, goals of therapy
- **6.1.1 Recording of information:** results, use of standard terminology

## (b) PATIENT EXAMINATION

- a) The candidate will pass a minimum of 3 out of 4 patients for whom a full examination, including all necessary tests and completion of all paperwork, is to be performed **within 70 minutes**. If gonioscopy is required and the patient is subsequently dilated, an additional 5 minutes will be allocated. If gonioscopy is required but the patient is not dilated, no additional time will be allocated. If a more extensive binocular vision analysis is considered essential to be performed on the day due to the presentation of the patient, an additional 5 minutes will be allocated. At the completion of the examination, there will be an additional ten minutes available for discussion of the case with the assessor.
- b) The candidate will be assessed on personal presentation and the preparation of the consulting room and equipment. Candidates must provide their own p.d. rule, pens, direct ophthalmoscope, retinoscope and occluder. In addition, candidates are encouraged to bring their own binocular indirect ophthalmoscope (BIO), fundus lenses, goniolens, trial frame or other equipment to the patient examinations. Candidates are not permitted to bring their own tonometer to the patient examinations. The candidate will have access to the equipment listed as available for the skills stations and ocular diagnostic pharmaceuticals, record cards and near point cards.
- c) The candidate will be assessed on
  - his/her ability to communicate clearly to the patient including the ability to explain the purpose of each test and what is expected of the patient in the course of each test
  - the ability to perform each individual test
  - the co-ordination of the examination
  - the ability to make an accurate diagnosis and to determine appropriate management or treatment
- d) Candidates will be given the name and the date of birth of the patient, but no other information. The examination should be conducted as if it is a first visit. The candidate will record all significant information on the record card in a format easily understood by any optometrist reading the card.
- e) In the patient examinations, information from previous record cards will not be available but reference material concerning side effects of medications may be consulted. Candidates will not have access to the patient's previous prescription for the measurement of the previous prescription. In effect, it will be as if the patient's presenting problem is "lost glasses".
- f) No communication will be permitted with other candidates or optometrists other than the assessor and examination coordinator.
- g) The candidate will perform those tests which could reasonably be expected to be performed at an initial consultation. This will **include a dilated ocular fundus examination (unless contraindicated), and all other tests** which are necessary to obtain a diagnosis, and are routine screening procedures for the age of the presenting patient. The candidate should be able to justify the inclusion of any test. The candidate will demonstrate proficiency in all tests performed, explain to the patient what is expected of them for each procedure and obtain and record accurate results. Where further tests are indicated, the candidate must advise the assessor and the patient of this need. If these further tests are unable to be performed at the initial appointment, the candidate must make an appointment for the patient to have them performed. At the completion of the examination, the candidate will make a diagnosis/diagnoses to account for the presenting signs and symptoms and record what the advice to the patient would be. Where necessary, a prescription is to be written with all information necessary for the accurate fabrication of a pair of spectacles. If referral is necessary, the candidate will note this on the record card. The assessor will write the letter.
- h) Candidates are expected to behave in a professional manner at all times towards patients and assessors. Unprofessional behaviour can be used as a reason for failure of a patient examination.

A copy of the patient examination assessment sheet is at <u>Appendix D</u>. <u>Appendix E</u> is a copy of the clinic record card.

#### **COMPETENCIES TO BE ASSESSED**

- **1.2.2** Consequences of actions etc. and provision of services: patient difficulties are managed; all care is taken to ensure that appropriate management occurs; patient understands what he/she needs to do, unnecessary follow-up visits are not provided unless initiated by the patient
- **1.3 Acts in accordance with standards of behaviour for the profession:** the optometrist behaves and practises in a professional manner
- **1.4.1 Conveying of information to others:** manner in which advice is given: confident approach; clear communication of information, communication skills, clear written or oral instructions to patients, use of an interpreter
- **1.6 2 Maintenance of equipment: equipment is maintained in appropriate order:** calibration, cleaning, new globes, repair, etc.
- **1.6.3** Personal and general safety, comfort, appropriate standard of personal and general hygiene and tidiness are maintained in the practice: dress mode, manner, attitude, disinfection of tonometers, disinfecting of trial set lenses, recognition of when it may be necessary to wear surgical gloves and masks, awareness of possible effect on patients of any systemic illnesses of the optometrist (eg. rubella and pregnant patients, Hepatitis B, AIDS etc), cleanliness of equipment including chin and forehead rests, hand washing facilities, maintenance of sterility of drops if used for a number of patients
- **1.9 Provision of emergency ocular treatment and general first aid:** can deal with emergency ocular first-aid requirements or organise for the patient to receive it; general first-aid management is available
- **1.10.2** Advice on eye protection for home and recreational pursuits: safety lenses, radiation protection, sunglasses, tints, industrial and environmental analysis, standards, occupational lens designs, lighting, ergonomic design
- **2.1.1 Suitability of modes and methods of communication:** use of interpreter, appropriate language, rephrasing of questions to enhance understanding
- **2.1.2** Establishment of appropriate relationship between the optometrist and the patient: greeting, introduction and identification, patient set at ease and made comfortable, confidence instilled, candidate listens to patient, diplomacy, appearance and presentation of the consulting room
- **2.2.1 Noting of physical and behavioural characteristics of the patient:** abnormal appearance, gait, general movements, mobility, balance, posture, behaviour, speech
- **2.3.1** Eliciting of reasons for the visit of the patient and **2.3.2** Eliciting of information for diagnosis and management: presenting symptoms and patient/carer's chief complaint; other signs/symptoms; visual demands eg. occupational, recreational, educational and other requirements, follow-up questions, observation of candidate listening to patient, noting body language, anxieties, reinforcing patient observations, clarifying understanding and ambiguities, noting and understanding referral, deflecting irrelevancies, determining patient expectations; personal and family history including educational/social/birth history; behavioural patterns (including avoidance), medications (current and past), previous assessments and treatment by other professionals, previous illness with ocular, visual or developmental significance, surgical intervention with visual/ocular relevance, trauma, accident and injury of ocular/visual significance and family eye and medical history, on-going history throughout examination, actively listens to patient, notes body language, anxieties, reinforces patient observations, clarifies understanding and ambiguities, notes and understands referral, deflects irrelevancies, determines patient expectations
- **2.4.1 Seeking, collation and interpretation of the significance of information from previous assessments:** reading previous histories, contacting other professionals for information
- **3.1.1** Design of an examination plan and **3.1.2** Selection of tests and procedures appropriate to the patient's condition and abilities and **3.1.3** Relevant investigations not necessarily associated with the patient's history are considered: tests necessary to obtain a diagnosis, other tests necessary, justification for the inclusion of any test, tests are suitable to the ability of the patient and to the condition being investigated and can be modified as necessary
- **3.2.1** Performance of tests and procedures to provide the information required for diagnosis: proficiency with equipment and techniques, explanations to the patient, accurate results, preparation of equipment and consulting room

- **3.2.2 Modification of examination plan and procedures:** further tests, referral for indicated assessment, alternate test procedures are used to maximise confidence in findings
- **3.3** Assessment of the structure, functioning and health of the ocular adnexae, the anterior segment, the ocular media, and the posterior segment: interpretation of results obtained in the examination of the ocular adnexae and the eye, using such tests as macro-observation, vital stains, slit-lamp biomicroscopy, interpupillary distance, eversion, double eversion, direct and indirect ophthalmoscopy, retinoscopy, keratometry, gonioscopy, tonometry, diagnostic pharmaceuticals, slit-lamp assisted ophthalmoscopy, tear dynamics
- **3.4.1, 3.4.4** Assessment of vision, visual acuity and pupil function: contrast sensitivity function, light perception, neutral density filter test, photo-stress test, optokinetic nystagmus, pinhole, line and single letter tests and preferential looking tests, amblyopia, vision, visual acuity, pupil reactions, anisocoria
- **3.4.2, 3.4.3** Assessment of visual fields and colour vision: Amsler grid, contrast sensitivity function, light perception, colour vision and discrimination, confrontation, kinetic, static threshold, automated threshold fields, neutral density filter test, photo-stress test, optokinetic nystagmus, pinhole, line and single letter tests and preferential looking tests, amblyopia, vision, visual acuity
- **3.5** Assessment of the refractive status: logical progression of objective and subjective tests, standardised acuity charts, retinoscopy, cross-cyl technique, fogging, binocular balance, near vision cards, refractometer, cycloplegia, records findings eg. aided/unaided visual acuity, sphere, cyl, axis, add
- **3.6** Assessment of oculomotor and binocular function: eye alignment and the state of fixation, quality and range of eye movements, sensory fusion status, vergence system adaptability, placement and adaptability of accommodation, anomalous and normal retinal correspondence, foveal and eccentric fixation, steadiness and direction of gaze, deviation of visual axis (manifest and latent), nystagmus, fixation disparity curve analysis, associated and dissociated phoria/tropia, laterality, amount of deviation, cover test, comitancy, nine positions of gaze, Hirschberg test, limitations of gaze, qualitative assessment of pursuit movements, developmental eye movement test, saccades, flat fusion, lustre, simultaneous perception, colour fusion, SILO effect, stereopsis, suppression, amblyopia, fusional reserves, vergence facility, Sheard's criterion, Percival's criterion, zone of zero associated phoria, near point of convergence, accommodative accuracy, relative accommodation, accommodation facility, monocular and binocular amplitudes of accommodation
- 3.7 Assessment of visual information processing
- **3.8.1** Consideration of signs and symptoms found during the ocular examination to the patient's eye and/or general health: general welfare of the patient, medical, acquired neurological disorders, pharmacological, social, emotional factors, familial and other assault/molestation, disorders of communication and articulation, memory of current events, history of spatial confusion, reducing cognition
- **3.8.2** Investigation of significant ocular signs and symptoms and **3.8.3** Investigation of significant non-ocular signs and symptoms are investigated.: sphygmomanometry, carotid auscultation, extended history, blood sugar levels, signs of impending stroke (transient ischaemic attacks); assessment or referral for specific tests, developmental testing, tests of higher cortical function, signs of higher cortical dysfunction (eg. Alzheimer's disease, intellectual disability)
- **4.1 Interpretation and analysis of findings to establish a diagnosis:** determination of accuracy, validity and reliability of test results and information, integration of information from sensory, refractive, binocular and perceptual tests and other sources to establish a differential diagnosis, ocular and general health, differentiation of congenital, developmental, hereditary, teratogenic and active and resolved pathological changes, psycho-emotional disorders, information prioritised
- **5.1.1 Presentation and explanation of the diagnosis and prognosis:** explanation of diagnosis to patient using appropriate language, answering of patient questions regarding the diagnosis

- **5.1.2, 5.1.3, 5.1.4 Treatment/management program:** action (importance, urgency, etc), formulation of a treatment or management plan to address the patient's needs: degree of threat to ocular function, health, performance, appropriate emphasis on urgency of any action recommended, sequence of procedures, treatment duration, criteria for discharge, awareness of validity and reliability of treatment options, referral, co-management, eye protection, modification of visual tasks, lifestyle requirements, the different options, their costs and their relative merits are presented to the appropriate parties to assist them to make an informed decision, counselling, likely course of condition, case management and prognosis, awareness of management options, patient assisted to make a decision regarding the management option, advice regarding ongoing care, review, referral or discharge, reassurance, advice on driving or operation of machinery, repercussions of management options, optical correction: spectacles, contact lenses, low vision aids, vision therapy, pharmacological therapy, task modification, environmental adaptations, other interventions
- **5.1.5 Informed consent:** explanation of presenting complaints, alternatives discussed, additional findings, diagnosis, management options, expected duration, course, costs, outcomes and limitations of treatment, possible complications and risks, patient queries answered, ambiguities and misinterpretations clarified, record advice given
- **5.1.6 Recall of patients:** advice to patient of time of next attendance
- **5.2 Prescription of spectacles:** working distances, magnification requirements, prism, dispensing requirements and limitations (vertex distances), anisometropia, aniseikonia, vergence accommodation status, safety spectacles, special lenses and treatments, sports requirements, incidental optical effects, lens design, materials, tints, etc. spherical component, cylindrical component, axis, lens form and specifications, coatings, additions, care regime, use, interpupillary distance, prism, Fresnel lenses, hardening process, date, optometrist's signature, patient's name, expiry date
- **5.6.2 Appliance to suit the needs of the patient:** advice on features, benefits, suitability, fashion/cosmesis, contemporary lens forms, lens treatments, materials, safety factors, anatomical, physiological and proposed use factors, costs
- **5.6.3 Lens selection:** requirements, processes and limitations involved in the fabrication of optical appliances
- **5.5** Treatment of adnexal and anterior eye disorders and injuries: performance of treatment or intervention procedures (adnexa and anterior eye): epilation, lid scrubs, lacrimal lavage, irrigation, foreign body removal, pharmacological or therapeutic management of adnexal and ocular conditions: actions, interactions, contraindications and side effects of drugs, dosage, frequency, prophylactic management, ptosis crutches, ocular lubricants; patient instruction in the use, administration, storage and disposal of pharmaceutical agents, shelf-life of the medication
- **5.9.1, 5.9.2** Referral for assessment or treatment, timing of referral and documentation, selection of a suitable **professional:** patient referred if necessary to the appropriate health professional or other professional, organisation of the referral attending to urgency, arrangement of the referral, referral letters etc, role and scope of services provided by other professionals including health, welfare and education services is understood: general and specialist medicines, ophthalmology subspecialties, psychology, occupational therapy, audiology, speech pathology, community nursing, education, dietetics, social workers, physiotherapy, chiropractic, low vision services, rehabilitation services etc, experience, locations
- **5.11.2** Advice on eye protection, visual standards and visual ergonomics: safety lenses, radiation protection, sunglasses, tints, industrial and environmental analysis, standards, occupational lens designs, lighting, ergonomic design
- **5.11.3 Counselling on visual suitability of vision for occupations:** industry and other occupational requirements are known for colour vision, visual acuity, spectacle powers, etc.
- 5.11.4 Certification of visual suitability for occupations or tasks: report written including all relevant information)
- **5.11.5** Advice to patient/parent/guardian re the presence of conditions with implications for other family members: conditions warranting further assessment
- **6.1.1 Recording of information:** date, patient's name and address, examining practitioner, history, procedures performed, diagnoses, results and management strategies, use of standard terminology, inclusion of photographic, video, written and computer records, records of consultations and other contacts

## (c) FAMILIARISATION SESSION FOR CANDIDATES

Candidates are welcome and strongly encouraged to attend familiarisation sessions which are held on the day of both the skills testing and patient examinations. The patient examination familiarization session is only available to candidates who have passed the skills examination and have been advised they are able to proceed to the patient examination.

The familiarisation sessions are held at the same venue as the skills testing and patient examinations and run for approximately one hour only.

These sessions will provide candidates with an overview description of how each of the examinations will be organised and conducted and are an opportunity for candidates to ask questions. Candidates will be able to walk through the clinical facility and see the areas where the examinations will be conducted.

Please note that candidates attending familiarisation sessions are not able to practice clinical skills or techniques in the facility.

The Optometry Council of Australia and New Zealand reserves the right to alter this document without notice.

Version	1.1
Effective date	30 <sup>th</sup> October 2015
Minor revisions	27 <sup>th</sup> May 2016
Approved by	Examination Committee