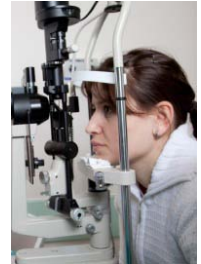


American Board of Optometry Board Certification Examination

OUTLINE of GENERAL PRACTICE and AREAS OF EMPHASIS SECTIONS



GENERAL PRACTICE SECTION (160 exam questions)

The core of the examination is based on the following ten areas of general practice:

1. **Ametropia, Ophthalmic Optics (16%)**

- a. Dispensing techniques
- b. Lens designs (e.g., advantages and disadvantages of)
- c. Materials (e.g., advantages and disadvantages of)
- d. Assessment and differential diagnosis for refractive error
- e. Treatment and management options for refractive error
- f. Assessment and differential diagnosis for anisometropia
- g. Treatment and management options for anisometropia
- h. Assessment and differential diagnosis for refractive amblyopia
- i. Treatment and management options for refractive amblyopia

2. **Pediatrics, Binocular Vision, Vision Therapy (8%)**

- a. Assessment and differential diagnosis for visual perception disorders
- b. Treatment and management options for visual perception disorders
- c. Assessment and differential diagnosis for accommodative disorders
- d. Treatment and management options for accommodative disorders
- e. Assessment and differential diagnosis for binocular vision disorders
- f. Treatment and management options for binocular vision disorders
- g. Assessment and differential diagnosis for oculo-motor anomalies (e.g., saccades, pursuits, nystagmus)
- h. Treatment and management options for oculo-motor anomalies (e.g., saccades, pursuits, nystagmus)
- i. Assessment and differential diagnosis for non-refractive amblyopia
- j. Treatment and management options for non-refractive amblyopia

3. **Contact Lenses (13%)**

- a. Contact lens materials/design
- b. Soft/gas permeable fitting techniques
- c. Optics of contact lenses (e.g., power calculations and base curves)
- d. Assessment and differential diagnosis for contact lens related complications
- e. Treatment and management options for contact lens related complications
- f. Indications and contraindications of corneal topography

4. Anterior Segment (15%)

- a. Types of foreign bodies (e.g., superficial, penetrating)
- b. Injurious chemical agents (e.g., alkali, acid, glue)
- c. Assessment and differential diagnosis for episclera, sclera, uvea
- d. Treatment and management options for episclera, sclera, uvea
- e. Assessment and differential diagnosis for lacrimal system
- f. Treatment and management options for lacrimal system
- g. Assessment and differential diagnosis for diseases and disorders of lids and/or lashes
- h. Treatment and management options for diseases and disorders of lids and/or lashes
- i. Assessment and differential diagnosis for diseases and disorders of ocular adnexa
- j. Treatment and management options for diseases and disorders of ocular adnexa
- k. Assessment and differential diagnosis for diseases and disorders of orbit
- l. Treatment and management options for diseases and disorders of orbit
- m. Assessment and differential diagnosis for corneal diseases and disorders
- n. Treatment and management options for corneal diseases and disorders
- o. Assessment and differential diagnosis for conjunctival diseases and disorders
- p. Treatment and management options for conjunctival diseases and disorders
- q. Assessment and differential diagnosis for corneal ulcer
- r. Treatment and management options for corneal ulcer
- s. Assessment and differential diagnosis for chemical burns
- t. Treatment and management options for chemical burns
- u. Assessment and differential diagnosis for foreign body removal
- v. Treatment and management options for foreign body removal
- w. Assessment and differential diagnosis for ocular trauma (e.g., blowout fracture, blunt trauma, corneal assault)
- x. Treatment and management options for ocular trauma (e.g., blowout fracture, blunt trauma, corneal assault)
- y. Indications for anterior segment photos
- z. Interpretation of anterior segment photos
- aa. Indications for punctal plugs
- ab. Interpretation of punctal plugs
- ac. Indications and contraindications of oral medications
- ad. Management of complications of oral medications
- ae. Indications and contraindications of anti-allergy medications
- af. Management of complications of anti-allergy medications
- ag. Indications and contraindications of anti-inflammatory medications
- ah. Management of complications of anti-inflammatory medications
- ai. Indications and contraindications of antifungal medications
- aj. Management of complications of antifungal medications
- ak. Indications and contraindications of antiviral medications
- al. Management of complications of antiviral medications
- am. Indications and contraindications of antibiotic medications
- an. Management of complications of antibiotic medications



5. Pre- and Post-Operative Care (7%)

- a. Pre-operative evaluation for cataract or refractive surgery
- b. Post-operative care for cataract or refractive surgery
- c. Post-surgical complications of cataract or refractive surgery
- d. Assessment and differential diagnosis for cataracts
- e. Treatment and management options for cataracts



6. Posterior Segment (12%)

- a. Assessment and differential diagnosis for macular diseases
- b. Treatment and management options for macular diseases
- c. Assessment and differential diagnosis for retinal vascular diseases (excluding CRAO)
- d. Treatment and management options for retinal vascular diseases (excluding CRAO)
- e. Assessment and differential diagnosis for diseases of the retina and/or choroid (e.g., histoplasmosis, nevus)
- f. Treatment and management options for diseases of the retina and/or choroid (e.g., histoplasmosis, nevus)
- g. Assessment and differential diagnosis for peripheral retinal diseases (e.g., break, detachment, RP, degenerations)
- h. Treatment and management options for peripheral retinal diseases (e.g., break, detachment, RP, degenerations)
- i. Assessment and differential diagnosis for central retinal artery occlusion
- j. Treatment and management options for central retinal artery occlusion
- k. Sudden vision loss
- l. Indications for fundoscopy using auxiliary lenses (e.g., 90D, 3-mirror, Hruby)
- m. Interpretation of fundoscopy using auxiliary lenses (e.g., 90D, 3-mirror, Hruby)
- n. Indications for fundoscopy with binocular indirect ophthalmoscopy
- o. Interpretation of fundoscopy with binocular indirect ophthalmoscopy
- p. Indications for scleral depression
- q. Indications for retinal imaging (e.g., OPTOS, OCT, retinal photography)
- r. Interpretation of retinal imaging (e.g., OPTOS, OCT, retinal photography)

7. Optic Nerve, Glaucoma (12%)

- a. Assessment and differential diagnosis for diseases of the optic nerve (excluding glaucoma and AION)
- b. Treatment and management options for diseases of the optic nerve (excluding glaucoma and AION)
- c. Assessment and differential diagnosis for glaucoma, glaucoma suspects, and ocular hypertension
- d. Treatment and management options for glaucoma, glaucoma suspects, and ocular hypertension
- e. Assessment and differential diagnosis for acute angle closure glaucoma attack
- f. Treatment and management options for acute angle closure glaucoma attack
- g. Assessment and differential diagnosis for arteritic anterior ischemic optic neuropathy
- h. Treatment and management options for arteritic anterior ischemic optic neuropathy

- i. Indications for pachymetry
- j. Interpretation of pachymetry
- k. Indications for gonioscopy (e.g., 3 mirror lens, 4 mirror lens)
- l. Interpretation of gonioscopy (e.g., 3 mirror lens, 4 mirror lens)
- m. Indications for visual field testing for glaucoma (e.g., SAP, SWAP, FDT)
- n. Interpretation of visual field testing for glaucoma (e.g., SAP, SWAP, FDT)
- o. Indications for imaging techniques for glaucoma and optic nerve disease (e.g., GDx, HRT, OCT)
- p. Interpretation of imaging techniques for glaucoma and optic nerve disease (e.g., GDx, HRT, OCT)
- q. Indications and contraindications of glaucoma medications
- r. Management of complications of glaucoma medications

8. Neuro-Ophthalmic Disorders (5%)

- a. Onset of diplopia
- b. Assessment and differential diagnosis for visual pathway disorders (e.g., brain tumor, ocular tumor, infarction)
- c. Treatment and management options for visual pathway disorders (e.g., brain tumor, ocular tumor, infarction)
- d. Assessment and differential diagnosis for acquired brain injuries (e.g., diplopia, ocular pursuits, saccades, accommodative inability, binocular vision, glare sensitivity, inability to maintain visual contact)
- e. Treatment and management options for acquired brain injuries (e.g., diplopia, ocular pursuits, saccades, accommodative inability, binocular vision, glare sensitivity, inability to maintain visual contact)
- f. Assessment and differential diagnosis for neuro-ophthalmic and/or pupillary disorders (e.g., Bell's palsy, tonic pupil, EOM palsies)
- g. Treatment and management options for neuro-ophthalmic and/or pupillary disorders (e.g., Bell's palsy, tonic pupil, EOM palsies)
- h. Assessment and differential diagnosis for headaches including migraines
- i. Treatment and management options for headaches including migraines

9. Vision Rehabilitation (5%)

- a. General principles of low vision and vision rehabilitation
- b. Patient education

10. Systemic Health (7%)

- a. Common public health concerns (e.g., obesity, smoking)
- b. Roles and responsibilities for other health care providers and specialists
- c. Indications for blood pressure measurement
- d. Interpretation of blood pressure measurement
- e. Indications and contraindications of periorbital dermatological lesions
- f. Management of complications of periorbital dermatological lesions

AREAS OF EMPHASIS SECTION (80 exam questions)

In addition to the core examination, each candidate selects two of the following Areas of Emphasis. Each Area of Emphasis consists of 40 items.

1. Additional General Practice

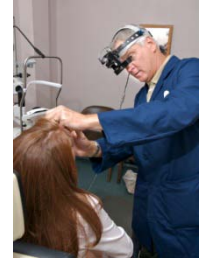
(As above)

2. Contact Lenses

- a. Contact lens materials/design
- b. Soft and gas permeable fitting techniques
- c. Optics of contact lenses (e.g., power calculations and base curves)
- d. Assessment and differential diagnosis for anisometropia
- e. Treatment and management options for anisometropia
- f. Assessment and differential diagnosis for contact lens related complications
- g. Treatment and management options for contact lens related complications
- h. Assessment and differential diagnosis for episclera, sclera, uvea
- i. Treatment and management options for episclera, sclera, uvea
- j. Assessment and differential diagnosis for lacrimal system
- k. Treatment and management options for lacrimal system
- l. Assessment and differential diagnosis for corneal diseases and disorders
- m. Treatment and management options for corneal diseases and disorders
- n. Assessment and differential diagnosis for corneal ulcer
- o. Treatment and management options for corneal ulcer
- p. Indications for pachymetry
- q. Interpretation of pachymetry
- r. Indications and contraindications of corneal topography

3. Pediatrics, Binocular Vision, Vision Therapy

- a. Interviewing techniques
- b. Patient education
- c. Neuro-optometric rehabilitation methods (e.g., vision therapy for patients who have suffered stroke, brain tumor, trauma)
- d. Assessment and differential diagnosis for anisometropia
- e. Treatment and management options for anisometropia
- f. Assessment and differential diagnosis for refractive amblyopia
- g. Treatment and management options for non-refractive amblyopia
- h. Assessment and differential diagnosis for visual perception disorders
- i. Treatment and management options for visual perception disorders
- j. Assessment and differential diagnosis for accommodative disorders
- k. Treatment and management options for accommodative disorders
- l. Assessment and differential diagnosis for binocular vision disorders
- m. Treatment and management options for binocular vision disorders
- n. Assessment and differential diagnosis for oculo-motor anomalies (e.g., saccades, pursuits, nystagmus)



- o. Treatment and management options for oculo-motor anomalies (e.g., saccades, pursuits, nystagmus)
- p. Assessment and differential diagnosis for non-refractive amblyopia
- q. Treatment and management options non-refractive amblyopia
- r. Assessment and differential diagnosis for acquired brain injuries (e.g., diplopia, ocular pursuits, saccades, accommodative inability, binocular vision, glare sensitivity, inability to maintain visual contact)
- s. Treatment and management options for acquired brain injuries (e.g., diplopia, ocular pursuits, saccades, accommodative inability, binocular vision, glare sensitivity, inability to maintain visual contact)

4. Ocular Disease Anterior

- a. Pre-operative evaluation for cataract or refractive surgery
- b. Post-operative evaluation for cataract or refractive surgery
- c. Post-surgical complications of cataract or refractive surgery
- d. Types of foreign bodies (e.g., superficial, penetrating)
- e. Injurious chemical agents (e.g., alkali, acid, glue)
- f. Assessment and differential diagnosis for contact lens related complications
- g. Treatment and management options for contact lens related complications
- h. Assessment and differential diagnosis for episclera, sclera, uvea
- i. Treatment and management options for episclera, sclera, uvea
- j. Assessment and differential diagnosis for lacrimal system
- k. Treatment and management options for lacrimal system
- l. Assessment and differential diagnosis for diseases and disorders of lids and/or lashes
- m. Treatment and management options for diseases and disorders of lids and/or lashes
- n. Assessment and differential diagnosis for diseases and disorders of ocular adnexa
- o. Treatment and management options for diseases and disorders of ocular adnexa
- p. Assessment and differential diagnosis for diseases and disorders of orbit
- q. Treatment and management options for diseases and disorders of orbit
- r. Assessment and differential diagnosis for corneal diseases and disorders
- s. Treatment and management options for corneal diseases and disorders
- t. Assessment and differential diagnosis for conjunctival diseases and disorders
- u. Treatment and management options for conjunctival diseases and disorders
- v. Assessment and differential diagnosis for cataracts
- w. Treatment and management options for cataracts
- x. Assessment and differential diagnosis for corneal ulcer
- y. Treatment and management options for corneal ulcer
- z. Assessment and differential diagnosis for chemical burns
- aa. Treatment and management options for chemical burns
- ab. Assessment and differential diagnosis for foreign body removal
- ac. Treatment and management options for foreign body removal



- ad. Assessment and differential diagnosis for ocular trauma (e.g., blowout fracture, blunt trauma, corneal assault)
- ae. Treatment and management options for ocular trauma (e.g., blowout fracture, blunt trauma, corneal assault)
- af. Assessment and differential diagnosis for acute angle closure glaucoma attack
- ag. Treatment and management options for acute angle closure glaucoma attack
- ah. Indications for pachymetry
- ai. Interpretation of pachymetry
- aj. Indications for gonioscopy (e.g., 3 mirror lens, 4 mirror lens)
- ak. Interpretation of gonioscopy (e.g., 3 mirror lens, 4 mirror lens)
- al. Indications for anterior segment photos
- am. Interpretation of anterior segment photos
- an. Indications for punctal plugs
- ao. Indications for blood chemistry (e.g., CBC, ESR, A1c) for a differential diagnosis
- ap. Interpretation of blood chemistry (e.g., CBC, ESR, A1c) for a differential diagnosis
- aq. Indications and contraindications of corneal topography
- ar. Indications and contraindications of corneal debridement
- as. Management of complications of corneal debridement
- at. Indications and contraindications of culture results
- au. Indications and contraindications of periorbital dermatological lesions
- av. Management of complications of periorbital dermatological lesions
- aw. Indications and contraindications of oral medications
- ax. Management of complications of oral medications
- ay. Indications and contraindications of anti-allergy medications
- az. Management of complications of anti-allergy medications
- ba. Indications and contraindications of anti-inflammatory medications
- bb. Management of complications of anti-inflammatory medications
- bc. Indications and contraindications of antifungal medications
- bd. Management of complications of antifungal medications
- be. Indications and contraindications of antiviral medications
- bf. Management of complications of antiviral medications
- bg. Indications and contraindications of antibiotic medications
- bh. Management of complications of antibiotic medications

5. Ocular Disease Posterior

- a. Post-surgical complications of cataract surgery
- b. Sudden vision loss
- c. Onset of diplopia
- d. Assessment and differential diagnosis for diseases and disorders of orbit
- e. Treatment and management options for diseases and disorders of orbit
- f. Assessment and differential diagnosis for macular diseases
- g. Treatment and management options for macular diseases
- h. Assessment and differential diagnosis for retinal vascular diseases (excluding CRAO)
- i. Treatment and management options for retinal vascular diseases (excluding CRAO)

- j. Assessment and differential diagnosis for diseases of the retina and/or choroid (e.g., histoplasmosis, nevus)
- k. Treatment and management options for diseases of the retina and/or choroid (e.g., histoplasmosis, nevus)
- l. Assessment and differential diagnosis for peripheral retinal diseases (e.g., break, detachment, RP, degenerations)
- m. Treatment and management options for peripheral retinal diseases (e.g., break, detachment, RP, degenerations)
- n. Assessment and differential diagnosis for diseases of the optic nerve (excluding glaucoma and AION)
- o. Treatment and management options for diseases of the optic nerve (excluding glaucoma and AION)
- p. Assessment and differential diagnosis for glaucoma, glaucoma suspects, and ocular hypertension
- q. Treatment and management options for glaucoma, glaucoma suspects, and ocular hypertension
- r. Assessment and differential diagnosis for ocular trauma (e.g., blowout fracture, blunt trauma, corneal assault)
- s. Treatment and management options for ocular trauma (e.g., blowout fracture, blunt trauma, corneal assault)
- t. Assessment and differential diagnosis for acute angle closure glaucoma attack
- u. Treatment and management options for acute angle closure glaucoma attack
- v. Assessment and differential diagnosis for central retinal artery occlusion
- w. Treatment and management options for central retinal artery occlusion
- x. Assessment and differential diagnosis for arteritic anterior ischemic optic neuropathy
- y. Treatment and management options for arteritic anterior ischemic optic neuropathy
- z. Indications for pachymetry
- aa. Interpretation of pachymetry
- ab. Indications for gonioscopy (e.g., 3 mirror lens, 4 mirror lens)
- ac. Interpretation of gonioscopy (e.g., 3 mirror lens, 4 mirror lens)
- ad. Indications for funduscopy using auxiliary lenses (e.g., 90D, 3-mirror, Hruby)
- ae. Interpretation of funduscopy using auxiliary lenses (e.g., 90D, 3-mirror, Hruby)
- af. Indications for funduscopy with binocular indirect ophthalmoscopy
- ag. Interpretation of funduscopy with binocular indirect ophthalmoscopy
- ah. Indications for scleral depression
- ai. Interpretation of scleral depression
- aj. Indications for visual field testing for glaucoma (e.g., SAP, SWAP, FDT)
- ak. Interpretation of visual field testing for glaucoma (e.g., SAP, SWAP, FDT)
- al. Indications for imaging techniques for glaucoma and optic nerve disease (e.g., GDx, HRT, OCT)
- am. Interpretation of imaging techniques for glaucoma and optic nerve disease (e.g., GDx, HRT, OCT)
- an. Indications for retinal imaging (e.g., OPTOS, OCT, retinal photography)
- ao. Interpretation of retinal imaging (e.g., OPTOS, OCT, retinal photography)

- ap. Indications for fluorescein angiography
- aq. Interpretation of fluorescein angiography
- ar. Indications for radiologic imaging (e.g., MRI, CT) for a differential diagnosis
- as. Indications for blood chemistry (e.g., CBC, ESR, A1c) for a differential diagnosis
- at. Interpretation of blood chemistry (e.g., CBC, ESR, A1c) for a differential diagnosis
- au. Indications and contraindications of oral medications
- av. Management of complications of oral medications
- aw. Indications and contraindications of anti-inflammatory medications
- ax. Management of complications of anti-inflammatory medications
- ay. Indications and contraindications of antiviral medications
- az. Management of complications of antiviral medications
- ba. Indications and contraindications of antibiotic medications
- bb. Management of complications of antibiotic medications
- bc. Indications and contraindications of glaucoma medications
- bd. Management of complications of glaucoma medications

6. Vision Rehabilitation, Low Vision, Neuro-Ophthalmic Rehabilitation

- a. Vision rehabilitation
- b. Interviewing techniques
- c. Patient education
- d. Low vision testing techniques (e.g., Feinbloom, Bailey-Lovie)
- e. Community support services (e.g., Commission for the Blind, Vocational Rehab)
- f. Low vision devices (e.g., magnification, telescopes)
- g. Principles of magnification
- h. Neuro-optometric rehabilitation methods (e.g., vision therapy for patients who have suffered stroke, brain tumor, trauma)
- i. Sudden vision loss
- j. Onset of diplopia
- k. Assessment and differential diagnosis for visual perception disorders
- l. Treatment and management options for visual perception disorders
- m. Assessment and differential diagnosis for oculo-motor anomalies (e.g., saccades, pursuits, nystagmus)
- n. Treatment and management options for oculo-motor anomalies (e.g., saccades, pursuits, nystagmus)
- o. Assessment and differential diagnosis for diseases and disorders of orbit
- p. Treatment and management options for diseases and disorders of orbit
- q. Assessment and differential diagnosis for diseases of the optic nerve (excluding glaucoma and AION)
- r. Treatment and management options for diseases of the optic nerve (excluding glaucoma and AION)
- s. Assessment and differential diagnosis for visual pathway disorders (e.g., brain tumor, ocular tumor, infarction)
- t. Treatment and management options for visual pathway disorders (e.g., brain tumor, ocular tumor, infarction)



- u. Assessment and differential diagnosis for acquired brain injuries (e.g., diplopia, ocular pursuits, saccades, accommodative inability, binocular vision, glare sensitivity, inability to maintain visual contact)
- v. Treatment and management options for acquired brain injuries (e.g., diplopia, ocular pursuits, saccades, accommodative inability, binocular vision, glare sensitivity, inability to maintain visual contact)
- w. Assessment and differential diagnosis for neuro-ophthalmic and/or pupillary disorders (e.g., Bell's palsy, tonic pupil, EOM palsies)
- x. Treatment and management options for neuro-ophthalmic and/or pupillary disorders (e.g., Bell's palsy, tonic pupil, EOM palsies)
- y. Indications for retinal imaging (e.g., OPTOS, OCT, retinal photography)
- z. Interpretation of retinal imaging (e.g., OPTOS, OCT, retinal photography)
 - aa. Indications for radiologic imaging (e.g., MRI, CT) for a differential diagnosis
 - ab. Interpretation of radiologic imaging (e.g., MRI, CT) for a differential diagnosis

The computer-based examination is administered at **Prometric Testing Centers** worldwide.

