Certification Examination for Ophthalmic Registered Nurses

NCBORN

NATIONAL CERTIFYING BOARD FOR
OPHTHALMIC REGISTERED NURSES

Candidate Handbook 2024

Application Deadline*	Testing Window
February 14, 2024	March 16 – March 30, 2024
August 7, 2024	September 7 – September 21, 2024

*Applications will not be accepted after this deadline

Administered by:

PTC
PROFESSIONAL TESTING CORPORATION®

1350 Broadway, Suite 800 | New York, NY 10018
www.ptcny.com/contact

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This Handbook contains necessary information about the Certification Examination for Ophthalmic Registered Nurses. Please retain it for future reference. Candidates are responsible for reading these instructions carefully. This Handbook is subject to change.

CONTACT INFORMATION

Professional Testing Corporation (PTC) www.ptcny.com (212) 356-0660	• Apply for examination • Obtain general application information • Obtain information about testing policies • Transfer to a new testing period • Request Test Accommodations • Request Hand Score • Question about score reports • Recertification • Miscellaneous inquiries
Prometric http://www.prometric.com/NCBORN (800) 741-0934	• Schedule test appointment • Reschedule test appointment (within the same testing period) • Cancel test appointment • Find directions to test site • Questions regarding testing sites and appointments
National Certifying Board for Ophthalmic Registered Nurses (NCBORN) https://asorn.org/certification/	• General information regarding certification program • Study Guide

ATTENTION CANDIDATES

This handbook contains necessary information about the Certification Examination for Ophthalmic Registered Nurses. It is required reading for those applying for and taking the Examination. All individuals applying for the examination must comply with the policies, procedures, and deadlines in this Handbook and attest to this by signing the Candidate Attestation found on the application. Please retain this handbook for future reference. This handbook is subject to change. See www.ptcny.com for handbook updates.

ACCESSING CELL PHONES AND ELECTRONIC DEVICES AT ANY TIME WHILE YOU ARE TAKING THE EXAM IS PROHIBITED. YOU CAN ONLY REMOVE SNACKS, DRINKS, MEDICINE OR PERSONAL HEALTHCARE ITEMS FROM YOUR LOCKER- NO BACKPACKS, BAGS, POCKETBOOKS OR CLOTHING CAN BE REMOVED WHILE YOUR EXAM IS IN SESSION.

PURPOSE OF CERTIFICATION

The National Certifying Board for Ophthalmic Registered Nurses (NCBORN) endorses the concept of voluntary, periodic certification by examination for all ophthalmic registered nurses. Certification is one part of a process called credentialing. It focuses specifically on the individual and is an indication of current competence in a specialized area of practice. Board certification in ophthalmic registered nursing is highly valued and provides formal recognition of basic ophthalmic registered nursing knowledge.

The purpose of certification is to promote delivery of safe and effective care in ophthalmic registered nursing practice by:

1. Recognizing formally those individuals who meet the eligibility requirements of the National Certifying Board for Ophthalmic Registered Nurses and pass the Certification Examination for Ophthalmic Registered Nurses.

2. Encouraging continued personal and professional growth in the practice of ophthalmic registered nursing.

3. Establishing and measuring the level of knowledge required for certification in ophthalmic registered nursing.

4. Providing a standard of knowledge requisite for certification, thereby assisting the employer, public, and members of the health professions in the assessment of ophthalmic registered nurses.

ELIGIBILITY REQUIREMENTS

1. Currently licensed as a Registered Nurse in the United States or the equivalent in another country.

2. At least two years of full time or the equivalent (4,000 hours) experience in ophthalmic registered nursing practice[1].

3. Completion and filing of an Application for the Certification Examination for Ophthalmic Registered Nurses.

4. Payment of required fee.

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[1] Two years of ophthalmic nursing experience does not guarantee that one is ready to take the exam without preparation. The average nurse spends three or more months preparing for the exam. Please use this handbook to guide you through the Course Outline and References. NCBORN offers a study guide and online practice test to help you identify key areas to focus your learning.

THE CERTIFICATION PROCESS

REVIEW
- Review the Handbook in its entirety

APPLY
- Apply and pay the application fee online at www.ptcny.com

SCHEDULE
- Receive the Scheduling Authorization email
- Make an appointment with Prometric

PREPARE
- Review Content Outline
- Review References

TEST
- Take the Examination
- PTC sends Score Reports to Candidates

Pass the Examination to Become Certified!

COMPLETION OF APPLICATION

Step 1 – Fill Out the Application
- Go to http://www.ptcny.com/test-sponsors/NCBORN
    - View testing periods and application deadlines
    - Fill out online application completely and upload supporting documentation.
        - Use your first and last name exactly as it appears on your current driver's license, passport, state issued non-driver ID or military ID.
        - Applications are not complete until all information, documentation, and payment has been provided.
        - When you start a new application, you will be asked to create a PIN number. This PIN will be used if you need to come back to the application to finish it later. Keep the link to the application and your PIN number for later use.

Step 2 – Submit Exam Fee and Application for Review
PTC will send you an email that says that your payment and application have been received and are being reviewed. Please allow up to 10 business days for review.

Step 3 – Receive Application Status Update
- After your application is reviewed PTC will update you with another email.
    - **REOPENED FOR MORE DOCUMENTS**
        - This means we are missing the required documentation. Follow the directions in the email.
        - Applications that are incomplete as of 14 days before the start of the testing window will be refunded minus the administration fee (see fees page 8).
    - **REJECTED**
        - This means you are not eligible to take the exam. The reason will be explained in the email.
        - Rejected applications will be refunded minus the administration fee (see fees page 8).
    - **APPROVED**
        - This means your application is approved. You will move on to Step 4.

Step 4 – Receive Scheduling Authorization and Schedule Testing Appointment
- Approved candidates will receive an email with their Scheduling Authorization, within 11 weeks before the start of the testing window. Scheduling Authorization emails come from notices@ptcny.com. Do not lose this email.
- If you don't receive your Scheduling Authorization email 3 weeks before the start of your testing window, contact PTC.
- The Scheduling Authorization includes important information including:
    - Your PTC Candidate ID number
   - Instructions on how to make your Exam appointment with Prometric.

Applicants who are not approved to sit for the examination or whose applications are incomplete 21 days prior to the first day of the testing window will receive a refund of their application fee minus the $75 administrative fee. Refunds will be processed approximately 30 days after the end of the testing period

EXAMINATION ADMINISTRATION AND SCHEDULING

The Certification Examination for Ophthalmic Registered Nurses is administered during an established two-week testing window daily, excluding holidays, at computer-based testing facilities managed by Prometric.

Scheduling Examination Appointments

Follow the steps on your Scheduling Authorization to schedule your examination appointment with Prometric.
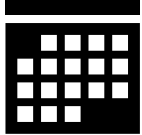
o Appointment times are first-come, first-served, so schedule your appointment as soon as you receive your Scheduling Authorization.

o **Candidates who wait until the last minute run the risk of missing out on their preferred date, time, and/or testing center. Candidates unable to schedule an appointment will forfeit their fees.**

After you make your test appointment, Prometric will send you a confirmation email with the date, time, and location of your exam. Check this confirmation carefully and contact Prometric at (800) 741-0934 if you do not receive this email confirmation or if there is a mistake with your appointment.

Note: International candidates may also schedule, reschedule, or cancel an appointment online at http://www.prometric.com/NCBORN.

IMPORTANT!

You **MUST** present your current driver's license, passport, or U.S. military ID at the test center. Expired, temporary, or paper driver's licenses will **NOT** be accepted. The first and last name on your Scheduling Authorization **MUST** exactly match the first and last name on your photo ID.

Fees will not be refunded for exams missed because of invalid ID.

Transferring to a New Testing Period

Candidates unable to take the examination during their scheduled testing period may request a **ONE-TIME** transfer to a future testing period. **There is a transfer fee of $182.00.** After you have transferred once by paying the $182.00 fee, you will need to pay the full examination fee in order to transfer a second time; so, *please plan carefully*.

Please note: requests to transfer to a new testing period must be received within 30 days of your originally scheduled testing period.

Candidates wishing to transfer to a new testing period need to follow the steps below.

1. Go to http://secure.ptcny.com/apply.

2. Click "Start New Application."

3. Choose NCBORN in the first drop-down menu; then choose the new examination period in the second drop down menu and fill out the rest of the information on the page.

4. Fill out the application making sure you answer yes to the question asking if you are transferring.

5. When you have finished the application, click "Submit Transfer Request."

6. PTC Support will send you an email letting you know your transfer application was approved and that you can log back into your application and pay the one-time $182.00 transfer fee.

Call 212-356-0660 if you have any questions regarding the transfer process.

If candidates are unable to attend the examination on the date for which they registered and elect not to transfer to another testing period, the application will be closed and all fees will be forfeited. There will be no refund of fees.

The transfer fee is based on costs and is not punitive in nature. The transfer fee must be paid at the time the request is approved.

Note: Transferring your Examination only refers to instances when a candidate is unable to take their exam during a testing period for which they have already applied. Candidates who did not pass their examination and are retaking the examination need to pay the full Examination Fee.

Rescheduling Examination Appointments within a Testing Period

Candidates are able to reschedule their examination appointments within the same testing period as long as the request is submitted within the timeframe described below. Reschedule within the permitted time frame by calling or going to the Prometric website: http://www.prometric.com/NCBORN.

Time Frame	Reschedule Permitted?	Stipulations
Requests submitted 30 days or more before the original appointment	Yes	None
Requests submitted 29 to 5 days before the original appointment	Yes	Candidate must pay Prometric a rescheduling fee of $50.
Requests submitted less than 5 days before the original appointment	No	Candidates who do not arrive to test for their appointment will be considered a no-show and all their examinations fees will be forfeited. Candidates will need to reapply and pay full examination fees for a future testing period.

Failing to Report for an Examination

If you fail to report for an examination, you will forfeit all fees paid to take the examination. A completed application form and examination fee are required to reapply for the examination.

EXAMINATION FEES

Fee Type	Amount	Details
Application Fee: ASORN Members	US $350.00	• Non-refundable • Non-transferable • Includes testing center fees • Includes non-refundable $75 administrative fee
Application Fee: Non-Members	US $450.00	
Rescheduling Fee (29-5 days prior to scheduled appointment; see page 7)	US $50.00	• **Applies to candidates who need to move their appointment within their current testing period** • Payable directly to Prometric • Reschedule with Prometric online or over the phone
Transfer Fee (Moving to a new testing window; see page 7)	US $182.00	• **Applies to candidates who need to move to a new testing period** • Must submit new application & fee to PTC
Retesting Fee: ASORN Members	US 250.00	• Only valid if retesting within two years of the previous examination
Retesting Fee: Non Members	US 350.00	

Attention NOVA members: Active members of the Nurses Organization of Veterans Affairs (NOVA) may sit for the Certification Examination for Ophthalmic Registered Nurses at a rate that is $50 less than the non-member rate. Active NOVA members who are also ASORN members may note combine discounts.

- **There will be no refund of fees unless applicants are ineligible for the examination.**

- **Ineligible candidates will be refunded their fees minus an administrative fee.**

- **No refunds will be issued for applying for the incorrect examination or testing period, for failing to make an examination appointment, or for failing to appear at your scheduled appointment.**

Be advised: Prometric does not have the authority to grant transfers to another testing period or refunds.

TEST ACCOMMODATIONS

NCBORN and PTC support the intent of and comply with the Americans with Disabilities Act (ADA) and will take steps reasonably necessary to make certification accessible to persons with disabilities covered under the ADA. According to the ADA, an individual with a disability is a person who has a physical or mental impairment that substantially limits a major life activity (such as seeing, hearing, learning, reading, concentrating, walking) or a major bodily function (such as neurological, endocrine, or digestive system).

The information you provide and any documentation regarding your disability and test accommodations is confidential and is not included in scoring or reporting.

All approved testing accommodations must maintain the psychometric nature and security of the examination. Accommodations that fundamentally alter the nature or security of the exam will not be granted.

To request test accommodations, follow these 4 steps:

1. Download the Request for Test Accommodations Form, available from www.ptcny.com or by calling PTC at (212) 356-0660.

2. Complete Test Accommodations Form with your doctor/healthcare professional.

3. Upload the completed and signed Test Accommodations Form with the online exam application.

4. Submit fully both the Test Accommodations Form and the application at least 8 weeks prior to the start of your chosen testing period.

NOTES:

- Only those requests made and received on the official Request for Test Accommodations Form will be reviewed.

- All requests must be made at the time of application. Accommodations cannot be added to an existing exam appointment.

- If you miss the 8-week deadline, you may not be able to test during your chosen testing period and you will be subject to rescheduling or transfer fees.

- Do not go to www.prometric.com or contact Prometric to request test accommodations as they are not authorized to approve accommodations. All requests for test accommodations must be submitted on the PTC Request Form.

- If you need to use your cell phone or another electronic device to monitor a medical condition, such as diabetes, please be sure to include this on Part 1 of the Request for Test Accommodations Form so that we can notify Prometric in advance.

- Only pre-approved test accommodations will be permitted on the day of the examination. Test center personnel are not authorized to make any changes to the test accommodations on the day of the testing session and any such change may result in your examination score being canceled.

PREPARING FOR THE EXAMINATION

- Check your driver's license, passport, non-driver state issued ID or U.S. Military ID.

    o Is it expired?

    o Does the first and last name on your ID match the first and last name on your Scheduling Authorization email?

    o Proctors at the Prometric testing center will refuse admission to candidates with expired ID, IDs with names that do not match their records, and temporary paper IDs. Candidates will be marked as no-shows and will forfeit their exam fees.

- Check your PTC Scheduling Authorization email and Prometric Appointment Confirmation email to make sure everything is accurate (i.e., your first and last name, exam name, appointment date, time and location).

- Make yourself familiar with the location of your test center and parking options and check the weather and traffic conditions before you leave for the test center. Allow plenty of time as late arrival may prevent you from testing.

- In the event of inclement weather, check the Prometric website for site closures: https://www.prometric.com/closures

- Prometric's website provides information on what you can expect on your test day, including a walkthrough of check in and security procedures: https://www.prometric.com/test-center-security.

- This Handbook provides the Content Outline for the Examination (see appendix). Use this to help you start studying for the examination.

- Review What to Expect at the Test Center and Rules for the Examination on the next pages before your appointment.

WHAT TO EXPECT AT THE TESTING CENTER

- Candidate Check-In
    - o Candidates will be asked to:
        - ▪ present their IDs.
        - ▪ empty and turn out their pockets.
        - ▪ walk through a metal detector or get "wanded".
    - o Eyeglasses, jewelry, and other accessories will be inspected.
        - ▪ Jewelry other than wedding and engagement rings is prohibited.
        - ▪ Leave these at home or place them in your locker.
    - o Religious headwear may be worn into the testing room; however, it is subject to inspection by test center staff.
    - o Prometric provides lockers to store purses, backpacks, mobile phones, jackets, food, drinks and medical supplies.
    - o Water in a clear plastic containers (no labels) may be brought into the testing room.

- During the Exam
    - o No breaks are scheduled during the exam.
    - o Candidates are only permitted to leave the testing room to use the restroom or access food, drink, or medicine from their assigned locker. The exam timer will NOT be paused.
    - o Smoking is prohibited at the testing center.
    - o All examinations are monitored and may be recorded in both audio and video format.

- Keep in mind:
    - o Other exams will be administered at the same time as your examination.
    - o You may hear ambient noises such as typing, coughing, or people entering and exiting the testing room that cannot be avoided.
    - o Prometric is unable to provide a completely noise-free environment.
    - o Headphones may be requested to minimize the impact of ambient noise.
    - o Proctors will periodically walk through the testing room as part of their monitoring process.
    - o See Prometric's website for more information about what to expect on testing day.

RULES FOR THE EXAMINATION

Read the information below carefully. You are responsible for adhering to the examination rules while at the testing center.

- o DO NOT BRING
  These items are strictly prohibited at the testing center. Leave these items in your car or your assigned locker.
    - o Cell phones and all other electronic devices
    - o Watches
    - o Jackets/coats/bulky clothing such as sweatshirts
    - o Hats (except hats worn for religious reasons)
    - o Jewelry, including watches and wearable technology.

- ⇨ You may NOT access the following at any time during your exam or breaks: papers, books, any reference materials; electronic devices including your cell phone. Candidates may access the following items from their locker: snacks, drinks, medicine, or other personal healthcare items.

- ⇨ No questions concerning content of the examination may be asked during the examination session. Read carefully the directions that are provided on screen at the beginning of the examination session.

- ⇨ You are prohibited from leaving the testing room while your examination is in session, except for going to the restroom. Candidates who do go to their lockers or the restroom will need to repeat the security screening before being permitted to reenter the testing room. **Candidates who leave the center will have their examinations terminated.**

- ⇨ See Prometric's statement on Test Center Security for more information.

Contact PTC at (212) 356-0660 or www.ptcny.com/contact with any questions about the Examination Rules.

> **Irregular or improper behavior that is observed, made apparent by statistical analysis, or uncovered by other means before, during or after the examination will be considered a violation of these rules and may constitute grounds for invalidation of a candidate's examination. NCBORN will initiate an investigation and request suitable analyses and appropriate documentation.**

TESTING CONDITIONS OR EXAMINATION FEEDBACK

Any candidate who feels that the examination effort was negatively impacted by the test center conditions should notify the proctor immediately. The situation should also be reported to PTC at www.ptcny.com/contact within 15 days of the test appointment. Any comments about the test itself should also be reported to PTC at www.ptcny.com/contact within 15 days of the test appointment.

REPORT OF RESULTS

All candidates will be notified via email by PTC, of their official scores (scores on the major areas of the examination and on the total examination will be reported) within approximately four weeks of the close of the testing period. Please note that this time is necessary to allow for the psychometric review and administration time required to ensure accurate and reliable scores.

Please note that official scores will not be released at the testing center but will be sent via mail within four weeks following the close of the testing period.

Confidentiality of Examination Scores

NCBORN will release the individual examination scores in writing ONLY to the individual candidate. Any questions concerning test results should be referred to the Professional Testing Corporation, at 212-356-0660.

Requesting a Handscore

Candidates who fail the examination may request a hand scoring of their data file. Hand scoring is a manual check of the data file by the testing service to determine if there have been any errors in scoring. Although the probability of such an error is extremely remote, this service is available. Requests for hand scoring must be received by PTC no later than 90 days after the date of the examination by completing and returning the Request of Handscore form on www.ptcny.com with payment of $25. Candidates who fail the examination will not be permitted to see the examination questions. For reasons of test security, no candidate is allowed to review the examination or any of its items.

To ensure correct reporting of results, PTC automatically performs handscores of examinations of candidates who score within 3 points of passing as a quality control measure. Thus, it is extremely doubtful that any examination results will change from "fail" to "pass" through handscoring.

Reexamination

The Certification Examination for Ophthalmic Registered Nurses may be taken as often as desired, upon filing of a new Application and fee. There is no limit to the number of times the examination may be repeated; however, candidates may not retest during the same testing period.

ATTAINMENT OF CERTIFICATION & RECERTIFICATION

Eligible candidates who pass the Certification Examination for Ophthalmic Registered Nurses are eligible to use the registered designation CRNO after their names and will receive certificates from the NCBORN or complete an application for recertification and meet the recertification requirements. A registry of Certified Ophthalmic Registered Nurses will be maintained by the NCBORN and may be reported in its publications.

Ophthalmic registered nurse certification is recognized for a period of five years at which time the candidate must retake and pass the current Certification Examination for Ophthalmic Registered Nurses or complete an application for recertification by continuing education and meet the recertification requirements. For further information on Recertification by Continuing Education, please visit the ASORN website at www.asorn.org/certification.

EXAMINATION SECURITY

Candidates seeking admission to take the examination do so for the purpose of pursuing registration, and for no other purpose. Because of the confidential nature of the examination, candidates may not make or keep copies, excerpts, or notes of examination materials, and to not use or divulge information learned from the examination. The examination is the exclusive property of MSNICB and candidates may not use examination information in any way without the express prior written consent of MSNICB.

The MSCN examination is confidential. Candidates are required to sign a confidentiality agreement prior to the start of the examination.

Candidates agree to abide by the testing rules in effect at the time of their test appointment. MSNICB, PTC, and/or Prometric staff may refuse a candidate admission to the examination if they do not have the proper identification as detailed in the Candidate Handbook. Candidates who do not abide by the testing rules may have their exam terminated during the exam administration in order to maintain a secure and proper exam administration and/or exam scores invalidated.

REVOCATION OF CERTIFICATION

Certification will be revoked for any of the following reasons:

1. Falsification of an Application.

2. Revocation of current Registered Nurse license.

3. Misrepresentation of certification status.

The Appeals Committee of the NCBORN provides the appeal mechanism for challenging revocation of Board Certification. It is the responsibility of the individual to initiate this process.

CONTENT OF THE EXAMINATION

The Certification Examination for Ophthalmic Registered Nurses is a computer-based examination composed of a maximum of 250 multiple-choice, objective questions with a total testing time of four (4) hours. The content for the examination is described in the Content Outline on the next page.

The questions for the examination are obtained from individuals with expertise in clinical Ophthalmology and are reviewed for construction, accuracy, and appropriateness by NCBORN.

NCBORN, with the advice and assistance of the Professional Testing Corporation, prepares the examination.

The Certification Examination for Ophthalmic Registered Nurses will be weighted in approximately the following manner:

I.	Ocular Conditions	15%
II.	Pharmacology	20%
III.	Nursing Assessment of the Ophthalmic Patient	20%
IV.	Clinical and Perioperative Procedures	35%
V.	Professional Issues	10%

I. **OCULAR CONDITIONS**
A. Developmental
    1. Age-related
    2. Presbyopia
    3. Myopia
    4. Astigmatism
    5. Hyperopia
    6. Normal Anatomy
B. Congenital and Hereditary
    1. Strabismus and Amblyopia
    2. Glaucoma
    3. Cataracts
    4. Retinoblastoma
    5. Retinopathy of Prematurity
    6. Marfan's Disease
    7. Retinitis Pigmentosa
    8. Other
C. Systemic
    1. Endocrine
        a. Diabetes
        b. Graves' Disease
        c. Thyroid Conditions
        d. Pituitary Tumors
    2. Hypertension
    3. Multiple Sclerosis
    4. Myasthenia Gravis
    5. Rheumatologic Disorders
        a. Lupus Erythematosus
        b. Sjogren's Syndrome
        c. Temporal Arteritis
        d. Rheumatoid Arthritis
        e. Other
    6. Acquired Immune Deficiency Syndrome (AIDS)
    7. Other
D. Acquired
    1. Lid Disorders
    2. Conjunctival Disorders
    3. Corneal Disorders
    4. Glaucoma
        a. Narrow Angle
        b. Open Angle
        c. Low Tension
        d. Ocular Hypertension

        e. Neovascular
        f. Secondary
        g. Angle Closure
    5. Cataracts
    6. Retinal Disorders
    7. Macular Dysfunctions
    8. Neurological
    9. Inflammations and Infections
    10. Nutritional Deficiencies
    11. Lacrimal Disorders
    12. Pupillary Disorders
    13. Other
E. Trauma
F. Malignancies/Tumors

II. **PHARMACOLOGY**
A. Administration Routes and Techniques
    1. Topical
        a. Drops
        b. Ointments
        c. Other
    2. Injections
        a. Intraocular
        b. Retrobulbar
        c. Intravenous
        d. Subconjunctival
        e. Other
    3. Oral
        a. Hyperosmotics/Osmotics
        b. Carbonic Anhydrase Inhibitors
        c. Other
B. Types and Effects of Drugs
    1. Mydriatics
    2. Antibiotics
    3. Miotics
    4. Cycloplegics
    5. Corticosteroids
    6. Anesthetics
    7. Nonsteroidal Anti-inflammatory
    8. Hyperosmotics/Osmotics
    9. Beta Blockers

10. Systemic
11. Antivirals
12. Lubricants
13. Carbonic Anhydrase Inhibitors
14. Diagnostics
15. Antimetabolites
16. Viscoelastics
17. Antivascular Endothelial Growth Factor
18. Prostaglandins
19. Other

III. **NURSING ASSESSMENT OF THE OPHTHALMIC PATIENT**
A. Health History
   1. Patient Interviewing
      a. Medical/Ocular History
      b. Medication History
      c. Problems and Findings
      d. Family History
      e. Allergies
   2. Laboratory Results
   3. Vital Signs
B. Basic Diagnostic Tests and Techniques
   1. Visual Acuity
      a. Snellen
      b. Jaeger Near
      c. Other Charts
      d. Pinhole
      e. Hand/Fingers
      f. Other
   2. Color
      a. Ishihara
      b. Other
   3. Macular Function
      a. Amsler Grid
      b. Other
   4. Stereopsis
   5. Visual Field
   6. Muscle Function
   7. Keratometry
   8. Pachymetry
   9. Pupils
   10. Other
C. Special Diagnostic Tests
   1. Patient Preparation
   2. Types of Procedures
      a. Angiography
      b. Tonometry
      c. Direct and Indirect Ophthalmoscopy
      d. Ophthalmic Photography
      e. Ultrasound
      f. Tear Function
      g. Slit Lamp Examination
         1) Gonioscopy
         2) Fundus
         3) Other
      h. Specular Microscopy
      i. Exophthalmometry
      j. Corneal Topography
      k. Ocular Imaging
      l. Other
   3. Complications
D. Triage

IV. **CLINICAL AND PERIOPERATIVE PROCEDURES**
A. Operative Procedures
   1. Laser
      a. YAG
      b. Argon/Green
      c. Excimer
      d. Diode
      e. Other
   2. Intraocular
      a. Cataract Extractions
      b. Glaucoma
      c. Keratoplasties
      d. Retinal-Vitreal Procedures
      e. Foreign Body Removal

      f.   Evisceration

   3.   Extraocular
      a.   Pterygium Excision
      b.   Chalazion Incision
      c.   Lesion Excision
      d.   Enucleation
      e.   Muscle Procedures
      f.   Lacrimal Procedures
      g.   Oculoplastics
      h.   Lids
      i.   Trauma
      j.   Cornea
      k.   Retinal Procedures

   4.   Refractive

B.   Perioperative Procedures and Care
   1.   Supplies and Instrumentation
   2.   Aseptic Technique
   3.   Physiological Monitoring
   4.   Emotional Support
   5.   Other

C.   Discharge Planning
   1.   Patient and Family Teaching
      a.   Activities of Daily Living (ADL) and Self-Care
      b.   Medications
      c.   Psychological Aspects
      d.   Other
   2.   Ocular Dressings
   3   Wound Care
   4.   Emergencies

D.   Complications
   1.   Hemorrhage
   2.   Corneal Abrasion
   3.   Vasovagal Response
   4.   Cardiac/Respiratory Arrest
   5.   Retinal/Vitreal
   6.   Intraocular Pressure
   7.   Toxic Anterior Segment Syndrome

   8.   Other

E.   Visual Impairment and Blindness
   1.   Activities of Daily Living (ADL)
   2.   Low Vision
   3.   Community and National Resources
   4.   Counseling

F.   Trauma

V.   PROFESSIONAL ISSUES

A.   Ethics

B.   Legal Aspects
   1.   Professional Practice
   2.   Confidentiality
   3.   Patient Rights and Informed Consent
   4.   Release of Documentation
   5.   Documentation

C.   Management and Supervision
   1.   Staff
   2.   Patient and Family
   3   Professional
   4.   Materials and Equipment

D.   Patient and Staff Education
   1.   Ocular Hygiene and Preventive Care
   2.   Safety and Prevention
      a.   Ocular Trauma
      b.   Infection Control
      c.   Environmental Hazards
      d.   National Patient Safety Goals

E.   Patient Teaching
   1.   Principles and Methods
   2.   Disease Process

SAMPLE EXAMINATION QUESTIONS

The following are samples of the types of questions that may appear on the Certficiation Examination for Ophthalmic Registered Nurses. These sample questions are intended for candidates to view how test questions are structured. Please note these are samples and these specific questions will not appear on the examination.

1. The patient with keratoconus is typically
   1. female.
   2. under 35.
   3. over 55.
   4. arthritic.

2. Epinephrine eyedrops may cause
   1. diplopia.
   2. corneal edema.
   3. retinal detachment.
   4. an attack of acute glaucoma.

3. Which of the following is the most common reason for patients to seek ophthalmic medical attention?
   1. Painful eyes
   2. A change in vision
   3. Red and itching eyes
   4. A discharge from the eyes

4. What is the best method for a nurse to assist a blind patient to ambulate?
   1. Walk next to the patient with the nurse's arm around the patient's waist
   2. Walk slightly behind the patient gently holding the patient's elbow
   3. Hold both of the patient's hands and guide gently towards the nurse
   4. Walk slightly ahead of the patient allowing the patient to hold the nurse's elbow

5. Patient phone calls regarding complaints and concerns should be
   1. kept in a log near the phone.
   2. documented on the patient record.
   3. discussed at staff meetings for follow up.
   4. documented only when the physician must be consulted.

ANSWER KEY	
Q	A
1	2
2	4
3	2
4	4
5	2

PRACTICE TEST

A practice test consisting of 75 questions with a testing time of 2 hours is available online in order to assist candidates in preparing for the Certification Examination.

The online practice test is an optional tool candidates may use as they prepare for the certification examination. While the practice test may help candidates identify areas of strengths and weakness, it should not be used as the only means to determine candidate preparedness or readiness to test. Since the practice test is NOT intended to be a study guide nor the sole source of preparation for the actual certification examination, candidates are NOT provided with the answer key, rationales for each question, nor notification of which specific items were answered correctly or incorrectly.

Though the specific questions that are on the practice test will not appear on the actual certification examination, it allows candidates to become familiar with the style of questions that may be asked. The instant score report received after practice test submission shows overall test performance as well as performance in each of the content areas. Candidates may find this information useful in determining future study needs. Once the practice test is scored, candidates cannot return to the test to review the questions. Performance on the practice test does not guarantee similar performance on the actual certification examination.

The PTC Online Testing System does not demonstrate the testing software used during the certification examinations. Those who purchase the online practice test should be aware that they will use a different testing platform when they take certification examinations at designated proctored testing centers.

The practice test is not a requirement for certification eligibility nor does it contribute in any way to success on the certification examination. There are many ways candidates should prepare for the certification examination. Candidates should use a variety of resources and consider their own education and experiences. Review the content outline and reference materials listed in the handbook for additional exam-related information.

The practice test can be found at the PTC website at: www.ptcny.com/test-sponsors/NCBORN.

STUDY GUIDE

A Study Guide is available for purchase on the ASORN website, www.asorn.org/publications. The Study guide contains three practice exams of 250 questions each weighted similar to the CRNO exam, supplemental questions in each of the exam content areas, and question answers, with location, in ASORN publications.

REFERENCES

The National Certifying Board of Ophthalmic Registered Nurses has prepared a suggested reference list to assist in preparing for the Certification Examination for Ophthalmic Registered Nurses. These references contain books, journals and textbooks, which include information of significance to ophthalmic nursing practice. Inclusion of certain textbooks on this list may not constitute an endorsement by the NCBORN of specific professional literature which, if used, would guarantee candidates successful passing of the certification examination.

Essentials of Ophthalmic Nursing Book 1 - Ocular Anatomy and Physiology, Embryology, Nursing Assessment, Visual Impairment, Nutritional Disorders, Systemic Disorders with Ocular Manifestations, and Professional Issues. The American Society of Ophthalmic Registered Nurses: San Francisco, 2014.

Essentials of Ophthalmic Nursing Book 2- Conjunctival Disorders, Corneal Disorders, Lacrimal System Disorders, Lens Disorders, Muscle Disorders, Neoplastics Disorders. The American Society of Ophthalmic Registered Nurses: San Francisco, 2016.

Essentials of Ophthalmic Nursing Book 3 - Neuro-Ophthalmic Disorders, Retinal and Vitreal Disorders, Scleral Disorders, Traumatic Disorders, Uveal Disorders. The American Society of Ophthalmic Registered Nurses: San Francisco, 2016.

Essentials of Ophthalmic Nursing Book 4 – Pharmacology. The American Society of Ophthalmic Registered Nurses, ASORN: San Francisco, 2015.

Care and Handling of Ophthalmic Microsurgical Instruments. current edition. The American Society of Ophthalmic Registered Nurses, ASORN: San Francisco, 2016.

Ophthalmic Procedures in the Office and Clinic, current edition, The American Society of Ophthalmic Registered Nurses: San Francisco, ASORN, San Francisco, 2016

Ophthalmic Procedures in the Operating Room and Ambulatory Surgery Center, current edition The American Society of Ophthalmic Registered Nurses: San Francisco, 2016.

Scope and Standards of Ophthalmic Clinical Nursing Practice, current edition The American Society of Ophthalmic Registered Nurses, ASORN: San Francisco, 2014.

CRNO Examination Study Guide, current edition. The American Society of Ophthalmic Registered Nurses: San Francisco, 2017.

Ophthalmic Medical Assisting: An Independent Study Course current edition, (American Academy of Ophthalmology AAO), San Francisco, Available at https://store.aao.org/

Insight, The Journal of ASORN, published quarterly, available online in 2018. The American Society of Ophthalmic Registered Nurses: San Francisco.

American Society of PeriAnesthesia Nurses (ASPAN), 2017-2018 Perianesthesia nursing standards, practice recommendations and interpretive statements, please visit https://www.aspan.org to order ASPAN publications.

PTC22043