



**Certified Eye Bank Technician Exam**  
Exam Resource Document & Study Guide

**CEBT Exam Overview and Test-Taking Information**

**Exam Overview**

EBAA offers the opportunity to attain Certified Eye Bank Technician (CEBT) status through a certification exam administered by Professional Testing Corporation (PTC) at Prometric Test Centers. The exam is given twice a year, once in the Spring and once in the Fall.

**Exam Details**

**Exam Format:** Electronic exam facilitated by Prometric. The exam can be taken at a Prometric Test Center or at a private location of choice with a remote Prometric proctor.

**Question Format:** 250 multiple-choice questions

**5 Areas of Testing:**

- Anatomy and Physiology (12%)
- Quality Assurance and Control (24%)
- Donor-Related Issues (20%)
- Technical Procedures (24%)
- Tissue-Related Procedure (20%)

**Passing Score:** A candidate must receive a score of 187 (75%) to pass the exam.

Time Limit: 4 hours

**Application Process**

The application process for the CEBT Exam includes:

- Complete the application on the EBAA website (<https://restoresight.org/members/certification/cebt-exam/>)
  - Including a completed [Practical Performance Competency Verification](#)
    - Applicants must demonstrate proficiency in the recovery of corneoscleral discs by performing an in situ or laboratory excision witnessed by a Technician Trainer and an eye bank Medical Director. A Practical Performance Competency Verification signed by the Technician Trainer and Medical Director must be completed before the application can be submitted. Please schedule the evaluations early, as the form must be uploaded with the application.
- Submit the application with payment
  - EBAA staff will contact you if there are any questions or missing components from your application.
- EBAA staff will process the application and the candidate will receive a confirmation email with additional steps that must be completed immediately.
- Following the directions in the confirmation email, candidates will register for the exam on the PTC website.
- PTC will send directions for scheduling the exam.
  - If a candidate does not receive notification from PTC within four weeks after registering on their site, they should contact the EBAA Office to inquire as to the status of their application.

**Scheduling the Exam**

Candidates will receive instructions from the PTC on how to schedule the exam. Candidates are encouraged to schedule the exam at their first opportunity and to not cancel the exam once it is scheduled.

## Test-Taking Rules and Guidelines

### **If taking the exam at a physical Prometric Test Center**

- Bring your current driver's license, passport, or state-issued ID with you to the test center. Expired or temporary documents will NOT be accepted. The name on the ID must match the name provided on your application.
- No food, beverages, watches, phones or electronic devices are allowed in the examination room. Lockers are provided for your personal items.
- Bulky clothing or jewelry are not allowed in the examination room.
- There are no breaks within the 4-hour period allotted for the exam.
- You will be scanned with a metal detector wand prior to every entry into the test room.
- You will be required to raise your pants legs above your ankles, empty and turn all pockets inside-out and raise shirt sleeves above your wrists prior to every entry into the test room.
- If you are wearing eyeglasses, you will be required to remove them for visual inspection to ensure they don't contain a recording device.
- Large jewelry items must be stored in your locker due to concerns over concealed recording devices.
- The Testing Center Administrator will inform you what is permitted during exam breaks. All candidates must inform the TCA before accessing a stored item during a break, including medicine.
- Candidates may use the restroom, but the timer on the exam continues while they are in the restroom. Candidates can leave the test room only for brief restroom breaks, but otherwise cannot leave the immediate test room area while their examination is in session. If you leave the test room, you will have to sign out and must go through security again when you return.
- Repeated or lengthy departures from the test room will be reported to the test sponsor.
- Candidates cannot bring paper and pencil or any materials to the test center.
- Light clothing items removed for comfort such as sweaters, suit jackets, scarves, etc., must be hung on the examinee's chair, not placed in laps or on the workstation desktop. Outerwear such as heavy coats, parkas, rain coats, etc., is not permitted in the test room.
- Talking to other candidates in the test room, referring to their screens, testing materials or written notes is strictly prohibited

### **If taking the exam using live remote proctoring:**

- Be sure to read the ProProctor user guide and PTC FAQs **BEFORE** your appointment.
  - [https://www.prometric.com/sites/default/files/2020-04/PrometricProUserGuide\\_3.1\\_1.pdf](https://www.prometric.com/sites/default/files/2020-04/PrometricProUserGuide_3.1_1.pdf)
  - <https://ptcny.com/remote-proctor-faqs/>
- Proctors will do a visual scan of your workspace. Use a laptop with a camera you can pick-up and move around your space.
- Remove everything from your desk, including phones, food, and beverages.
- You must have a working camera, working microphone, and a stable internet connection. **Your equipment and internet connection are your responsibility.** Take the readiness check prior to the appointment. Technical issues, such as power outages, internet connection, or equipment issues, can still occur and impact your examination even after passing the readiness check. If you have technical issues with your equipment or internet connection and cannot test or complete your examination, please refer to the transfer policy in the Handbook for Candidates.
- We recommend you do not use a work computer due to firewall settings.
- Ensure you have a quiet environment for testing with no one else in the room, including pets.
- If you do have an issue while testing, you must reach out to PTC no later than three days after your exam appointment. Please submit a support ticket on our website: [www.ptcny.com/contact](http://www.ptcny.com/contact)
- You **MUST** tell the proctor when you are getting up and leaving your working **space** - either for a scheduled break or to exit the exam. This must be done before clicking on the End Section button on the test software.

### **Confidentiality of Exam Content/Systems**

- The computer-based test delivery system, tutorial, exam content, and survey are the unpublished, confidential, and proprietary materials of Prometric and/or EBAA.
- Communicating, publishing, reproducing, or transmitting any part of an exam, in any form or by any means (e.g. verbal, electronic, written, etc.) for any purpose is strictly prohibited.
- ANY reproduction or disclosure will result in the immediate filing of civil and/or criminal charges against you and anyone directing or conspiring with you.

### **Exam Score Notification**

Candidates will receive scores 4-6 weeks after the exam cycle has closed. EBAA will receive the scores and will send out an email to each candidate immediately to notify them of their score and their passing status. A separate email will be sent to Executive Directors to inform them that their candidates have been notified, but information about the score and passing status will not be included. Candidates will receive their exam score breakdown from the Professional Testing Corporation in the weeks that follow. If a candidate passes the exam, EBAA will send them their certificate and pin.

### **Practice Exam**

The Professional Testing Corporation offers a practice exam. Individuals who take the exam will receive a score and a breakdown of the number of questions answered correctly in each of the 5 testing areas. Individuals will not receive information about which specific questions they answered incorrectly. The practice exam costs \$35 and can be taken multiple times.

#### Details:

- Administered by the Professional Testing Corporation
- 75 multiple-choice questions
- 2 hours to complete test
- Questions taken from the CEBT exam question bank
- 5 Areas of Testing
  - Anatomy and Physiology (12%)
  - Quality Assurance and Control (24%)
  - Donor-Related Issues (20%)
  - Technical Procedures (24%)
  - Tissue-Related Procedure (20%)
- Website: <https://ptcny.com/test-sponsors/ebaa/>

#### Tips for taking the Practice Exam:

- Create an environment like that of the testing center.
  - Eat the same type of breakfast that you will have the day of the test
  - No food and drink during the test
  - Don't take breaks
  - Don't use references during the test
- Note how long it took you to take the exam
- Review areas where you missed the most questions.

## Study Guide

This document has been prepared and approved by members of the EBAA Exam Committee. It is intended to be used as a guide for candidates taking the **Certified Eye Bank Technician Exam**. The information contained in this document follows the format of the current exam content outline and is designed to highlight resources that may be used to study for the exam.

### Study Resources

General study resources include the following:

- **EBAA Medical Standards**
  - Including appendices and glossary of terms
  - The current edition is available at [www.restoresight.org](http://www.restoresight.org), located in the Members Section under Member Publications.
- **EBAA Technical Procedures Manual**
  - Including glossary of terms
  - The current edition is available at [www.restoresight.org](http://www.restoresight.org), located in the Members Section under Member Publications.
- **Food and Drug Administration CFR 1271**
  - [FDA Final Guidance for Industry: Current Good Tissue Practice \(cGTP\)](#)
  - [FDA Final Guidance for Industry: Eligibility Determination for Donors of HCT/Ps](#)
- **eyeLEARN: EBAA's Learning Portal** ([eyelearn.restoresight.org](http://eyelearn.restoresight.org))
- **Introduction to Eye Banking, A Handbook and Atlas**, Rosenwasser and Nicholson (<https://cybersight.org/library/introduction-to-eye-banking-a-handbook-and-atlas/>)
- **Current and New Technologies in Corneal Donor Tissue Evaluations: Comparative Image Atlas**, Cornea 2018 (<https://journals.lww.com/corneajrnl/toc/2018/06001>)
- **Corneal Surgery and Technique**, Brightbill, McDonnell, McGhee, Farjo, Serdarevic
- **Berry and Kohn's Operating Room Technique**, Phillips
- **Tabers Medical Dictionary**

### Tips for Using the Document

- When an EBAA Medical Standard (MS) and/or Technical Procedure Manual (PM) section is referenced as '1.000', the entire section should be reviewed, as opposed to a specific sub-section.
- The MS and PM includes additional references for each section, which are good study resources.
- Use [Tabers Medical Dictionary](#) or an online resource to look up any unfamiliar words.
- Don't study from your eye bank's SOPs. Use original sources for practice such as FDA CFRs, EBAA Medical Standards, or any source that is referenced, i.e. [Berry and Kohn's OR Technique](#).

### General Study and Preparation Tips

- Familiarize yourself with the EBAA Medical Standards, the EBAA Technical Procedures Manual and the relevant FDA Regulations.
- Know the difference between EBAA Medical Standards and FDA Regulations. Do not study your eye bank's SOPs.
- Be ready to apply your knowledge to scenario-based questions.
- Questions are written for individuals who have 6 months of experience working as an eye bank technician.
- Questions are designed to be straightforward and are not meant to trick candidates.
- Study Ocular Anatomy, this section seems to be the most difficult for candidates.
- If taking the test in person, visit the testing center to make sure you know how to get there and how long it takes to get there.
- Eat before the exam, you will not be able to take a break.

Exam Outline	Study References
<b>I. Anatomy and Physiology (12%)</b>	<ol style="list-style-type: none"> <li>1. <u>General Ophthalmology</u>, Vaughn and Asbury, Lange Medical Publications, Los Altos, CA. Parts of the Eye, and Optics and Refraction</li> <li>2. <u>Ophthalmic Assistant: A Guide to Ophthalmic Medical Personnel</u>, Stein, Stein and Slatt, Anatomy</li> <li>3. <u>Smolin and Thoft's The Cornea</u>, Smolin, Gilbert and Thoft, Richard</li> <li>4. <u>Clinical Slit Lamp Biomicroscopy and Photo Slit Lamp Biomicrography</u>, Martonyi, Bahn and Meyer, Time One Ink</li> <li>5. <u>Cornea Atlas</u>, Krachmer and Palay. Elserver Mosby: Normal Anatomy</li> <li>6. <u>Ocular Surface Disease: Medical and Surgical Management</u>, Holland and Mannis. Springer Verlag, New York. Anatomy and Physiology of the Ocular Surface.</li> <li>7. Internet searches, including images.</li> </ol>
<b>A. Ocular</b> i. General Characteristics <ol style="list-style-type: none"> <li>1. Anatomy of the Eye</li> <li>2. Function</li> <li>3. Conditions of the Eye</li> </ol> ii. Refractive Power of the Eye <ol style="list-style-type: none"> <li>1. Refractive Properties</li> </ol>	<p>Study the anatomy, structures and functions of the entire eye, not just the cornea.</p> <p>Know contraindications and pre-operative diagnosis</p> <p>Know the definition, understand how refraction works, and be able to identify the structures involved</p>
<ol style="list-style-type: none"> <li>2. Refractive Errors</li> </ol>	Myopia, Hyperopia, Presbyopia, Astigmatism
iii. Accommodation	Know the definition, structures involved and how it is affected by age.
iv. Other	
<b>B. Cornea</b> i. General Characteristics ii. Corneal Layers	Resource: Introduction to Eye Banking: An Atlas and Handbook Understand the overall structure and function of the cornea, including knowledge of each layer and how they can be impacted during recovery and what can be observed during evaluation Study function, relative location, thickness, etc.
<ol style="list-style-type: none"> <li>1. Epithelium</li> <li>2. Bowmans Membrane</li> <li>3. Stroma</li> <li>4. Descemet Membrane</li> <li>5. Endothelium</li> </ol> iii. Metabolic Functions iv. State of Hydration v. Factors Affecting Transparency <ol style="list-style-type: none"> <li>1. Rejection</li> <li>2. Edema</li> <li>3. Other</li> </ol>	<p>Examples include but are not limited to: Infiltrates, exposure, hydration, scars, arcus, edema</p>

Exam Outline	Study References
<b>II. Quality Assurance and Control (24%)</b> <b>A. Professional Standards</b>  i. Accreditation	EBAA MS: B1.000 EBAA PM: B1.000 Constitution and Bylaws - Accreditation P&P
ii. Certification	EBAA MS: C2.000 EBAA PM: C2.000
iii. Personnel	EBAA MS: C1.000 EBAA PM: C2.000
iv. Reporting Requirements	EBAA MS: C1.400 EBAA PM: B1.000
<b>B. Legislation and Regulatory Requirements</b> i. FDA Registration ii. FDA Donor Eligibility Rule iii. FDA Current Good Tissue Practices iv. FDA Guidance for Industry v. CMS Conditions of Participation (CoP)	Study source documents, as applicable
<b>C. Facilities</b>  i. Instrument Inspection, Cleaning and Handling	EBAA MS: C3.000 EBAA PM: C3.000  EBAA MS: C3.300 EBAA PM: C3.300 FDA 21 CFR 1271.210
ii. Refrigeration and Temperature Recording	EBAA MS: C3.200 EBAA PM: C3.100; C3.200 FDA 21 CFR 1271.200, 1271.260
iii. Sterilization Methods	EBAA MS: C3.300 EBAA PM: C3.300
iv. Other	
<b>D. Infection Control and Personnel Safety</b>  i. Aseptic Technique ii. Standard Precautions iii. Communicable Disease iv. Environmental Monitoring	EBAA MS: C3.600 Relevant OSHA  Aseptic Technique - AAORN, Berry & Kohn's OR Technique EBAA MS: C3.600 EBAA MS: D1.000

Exam Outline	Study References
<b>E. Quality Assurance</b>	EBAA MS: G1.000 EBAA PM: G1.000 FDA 21 CFR: 1271.150, 1271.160, 1271.180, 1271.320
i. Auditing	EBAA PM Guidance Document: Implementation Guidance Document, Donor Risk Assessment Interview Forms EBAA PM Guidance Document: Effective Quality Assurance of the Donor Risk Assessment Interview
ii. Microbiology	
1. Organisms	Gram positive/negative bacteria - Wikipedia search Common post-operative pathology, e.g. candida Preservation media coverage
2. Cultures a. Requirements b. Reporting c. Environmental control	EBAA PM: C3.200, G1.210 EBAA MS G1.200
iii. Record Keeping and Documentation	EBAA MS: C3.200, D1.300, L1.000, M1.000 EBAA PM: M1.050 FDA 21 CFR: 1271.55, 1271.90, 1271.270
iv. Adverse Reaction Reports	EBAA MS: G1.000, M1.400, M1.500 EBAA PM: M1.550 EBAA PM Guidance Document - Guidance Document for Investigating and Reporting Adverse Reactions to the EBAA FDA 21 CFR 1271.350
v. Recalls and Withdrawals  vi. Other <b>F. Other</b>	EBAA MS: E1.300, G1.300 EBAA PM: G1.300 FDA 21 CFR 1271.440  Post-operative requirements, etc.

Exam Outline	Study References
<b>III. Donor-Related Issues (20%)</b> <b>A. Authorization</b> i. Required Request Law (42 U.S.C.A. § 1320b–8) ii. Uniform Anatomical Gift Act	<a href="http://www.uniformlaws.org">www.uniformlaws.org</a>
iii. Authorization Procedures and Documentation	EBAA MS: D1.400 EBAA PM: D1.300
<b>B. Donor History, Screening, and Evaluation</b>  i. Donor Risk Assessment Interview (DRAI)	EBAA MS: Appendix III EBAA PM Guidance Document: Implementation Guidance Document, Donor Risk Assessment Interview Forms EBAA PM Guidance Document: Effective Quality Assurance of the Donor Risk Assessment Interview FDA 21 CFR 1271.3, 1271.47, 1271.75
ii. Serology Testing	
1. Blood Sample Qualification	EBAA MS: D1.200, Appendix IV FDA 21 CFR 1271.3, 1271.80, 1271.85
2. EBAA Required Tests	EBAA MS: D1.200, Appendix I, IV EBAA PM: G1.200
3. FDA Required Tests	EBAA MS: D1.220 FDA 21 CFR 1271.3, 1271.80, 1271.85
iii. Determination of Donor Eligibility for Transplant  1. EBAA Contraindications	EBAA MS: D1.100
2. FDA Contraindications	EBAA MS: D1.000, Appendix I, II, III EBAA PM: Guidance Document: Effective Quality Assurance of the Donor Risk Assessment Interview FDA 21 CFR 1271.50, 1271.75
3. Known Transmissible Disease a. Rabies b. Infection c. Hepatitis B d. Melanoma e. Transmissible Spongiform Encephalopathies f. Other	



Exam Outline	Study References
<b>IV. Technical Procedures (24%)</b>	
<b>A. Preparatory Procedures</b>	
i. Donor	
1. Blood Drawing Procedures	EBAA PM: E1.140
2. Physical Inspection	EBAA MS: E1.100 EBAA PM: E1.110
3. Ocular Area Prep	EBAA MS: E1.100 EBAA PM: E1.110
4. Sterile Field Setup	EBAA PM: E1.110
ii. Open-Container Processing	
1. Laminar Flow Hood vs. 'Clean' Room	EBAA MS: E1.200 EBAA PM: E1.000, E1.200
2. Sterile Field Setup	EBAA PM: E1.200, E1.224
<b>B. Whole Eye Enucleation</b>	
i. Equipment, Supplies, and Reagents	EBAA MS: E1.100, E1.210 EBAA PM: E1.120
ii. Procedure	EBAA MS: E1.210 EBAA PM: E1.120
<b>C. Corneal Excisions</b>	
i. Equipment, Supplies, and Reagents	EBAA MS: E1.100, E1.300, EBAA PM: E1.110, E1.130
1. Flow Hood Excision	EBAA MS: E1.200 EBAA PM: E1.221
2. In-situ Excision	EBAA MS: E1.100 EBAA PM: E1.130
ii. Procedure	EBAA MS: E1.220, E1.221 EBAA PM: E1.130, E1.221
1. Flow Hood Excision	
2. In-situ Excision	
<b>D. Scleral preservation</b>	
i. Equipment, Supplies, and Reagents	EBAA MS: E1.230 EBAA PM: E1.230
ii. Procedure	EBAA MS: E1.230 EBAA PM: E1.231
<b>E. Tissue processing</b>	
i. Equipment, Supplies, and Reagents	EBAA MS: E1.200, E1.222, E1.400 EBAA PM: E1.222
ii. Procedure	EBAA MS: E1.222, E1.223 EBAA PM: E1.000

Exam Outline	Study References
<b>V. Tissue-related Procedures (20%)</b>	
<b>A. Tissue Evaluation and Determination of Suitability</b>	1. <u>Introduction to Eye Banking, A Handbook and Atlas</u> , Rosenwasser and Nicholson 2. <u>Current and New Technologies in Corneal Donor Tissue Evaluations: Comparative Image Atlas</u> , Cornea 2018; S1- S36, 37 <a href="https://journals.lww.com/corneajrnl/toc/2018/06001">https://journals.lww.com/corneajrnl/toc/2018/06001</a>
i. Slit Lamp Biomicroscopy	EBAA MS: F1.100, F1.300 EBAA PM: F1.100, F1.200
1. Procedure	
2. Surgical Suitability	
ii. Specular Microscopy	EBAA MS: F1.200 EBAA PM: F1.300
1. Procedure	
2. Suitability	
iii. Other	
<b>B. Surgical procedures</b>	
i. Penetrating Keratoplasty	1. YouTube is a great resource for surgical videos. Search for the surgical procedure preceded by 'cornea'
ii. Lamellar Keratoplasty	2. Understand the relationship between tissue surgical suitability and pre-operative diagnoses
1. Anterior	3. Frederick Brightbill's <u>Corneal Surgery and Technique</u>
2. Posterior	
iii. Patch Graft	
iv. Refractive Keratoplasty	
v. Trabeculectomy	
vi. Sclera Use	
vii. Keratolimbal Allograft	
viii. Other	
<b>C. Storage and Distribution of Tissue</b>	
i. Storage	EBAA MS: I1.000 EBAA PM: I1.000 FDA CFR 1271.260
ii. Labeling	EBAA MS: J1.000 EBAA PM: J1.000 EBAA PM Guidance Document: Implementation Guide, Use of ISBT128 in North American Eye Banks ISBT 128 ICCBBA ST-002 FDA 21 CFR 1271.250, 1271.370
1. ISBT 128	EBAA PM Guidance Document: Implementation Guide, Use of ISBT 128 in North American Eye Banks ISBT 128 ICCBBA ST-002
iii. Packaging	EBAA MS: L2.000 EBAA PM: L2.000 FDA 21 CFR 1271.265

<b>Exam Outline</b>	<b>Study References</b>
iv. Accompanying Documentation Requirements	EBAA MS: L1.000 EBAA PM: L1.000 FDA 21 CFR 1271.55, 1271.370
v. Distribution of Tissue	EBAA MS: K1.000 EBAA PM: K1.000 FDA CFR 1271.265
vi. Other	
<b>D. Use of Tissue in Research and Education</b>	EBAA MS: H1.000 EBAA PM: H1.000 FDA CFR 1271.65