

PHLEBOTOMY TECHNICIAN, PBT(ASCP) INTERNATIONAL PHLEBOTOMY TECHNICIAN, PBT(ASCPⁱ) EXAMINATION CONTENT GUIDELINE

EXAMINATION MODEL

The PBT(ASCP) and PBT(ASCPⁱ) certification examination is composed of 80 questions given in a 2 hour time frame. All exam questions are multiple-choice with one best answer. The certification exam is administered using the format of computer adaptive testing (CAT).

With CAT, when a person answers a question correctly, the next test question has a slightly higher level of difficulty. The difficulty level of the questions presented to the examinee continues to increase until a question is answered incorrectly. Then a slightly easier question is presented. In this way, the test is tailored to the individual's ability level.

Each question in the test bank is calibrated for level of difficulty and is assigned a content area that matches with the subtest area of the content outline for a particular examination. The weight (value) given to each question is determined by the level of difficulty. Therefore, the examinee must answer enough difficult questions to achieve a score above the pass point in order to successfully pass the certification examination.

EXAMINATION CONTENT AREAS

The PBT certification exam questions encompass the following content areas within Phlebotomy: Circulatory System; Specimen Collection; Specimen Handling, Transport and Processing; Waived and Point-of-Care Testing (POCT); Non-Blood Specimens; and Laboratory Operations. Each of these content areas comprises a specific percentage of the overall 80-question exam. The percentages and content areas are described below:

| CONTENT AREA | DESCRIPTION | EXAM PERCENTAGE |
|---|--|-----------------|
| CIRCULATORY SYSTEM | Structure and function of the circulatory system; composition/function of blood | 5 – 10% |
| SPECIMEN COLLECTION | Review, clarification, and verification of orders; patient communication; patient identification; patient assessment and preparation; site selection; techniques; common tests; order of draw; complications and considerations; equipment | 45 – 50% |
| SPECIMEN HANDLING, TRANSPORT, AND PROCESSING | Specimen acceptability for testing (e.g., specimen type/quality, add-on testing); specimen accessioning/labeling; specimen centrifugation and aliquoting; specimen transport and storage | 15 – 20% |
| WAIVED AND POINT-OF-CARE TESTING (POCT) | Performance of rapid tests (e.g., urinalysis, hemoglobin and hematocrit, coagulation, glucose, kit tests); instrument operation, troubleshooting, maintenance, and quality control | 5 – 10% |
| NON-BLOOD SPECIMENS | Physiology; patient preparation and instruction; specimen collection; specimen processing and handling | 5 – 10% |
| LABORATORY OPERATIONS | Quality assurance; quality improvement; proficiency testing; competency assessment; interpersonal relations; professional ethics; laboratory regulations; safety regulations | 15 – 20% |

For a more specific overview of the PBT exam, please refer to the **CONTENT OUTLINE** starting on page 2.

PHLEBOTOMY TECHNICIAN, PBT(ASCP) INTERNATIONAL PHLEBOTOMY TECHNICIAN, PBT(ASCPⁱ) EXAMINATION CONTENT OUTLINE

Examination questions, which are related to the subtest areas outlined below, may be both theoretical and/or procedural. Theoretical questions measure skills necessary to apply knowledge. Procedural questions measure skills necessary to perform phlebotomy techniques and follow quality assurance protocols. Additionally, regulatory questions are based on U.S. sources (e.g., AABB, FDA, CLIA, CLSI, etc.).

I. CIRCULATORY SYSTEM (5 – 10%)

- A. Structure and Function of the Circulatory System
 - 1. Heart
 - 2. Arteries
 - 3. Veins
 - 4. Capillaries
- B. Composition/Function of Blood
 - 1. Types of blood (venous, capillary, arterial)
 - 2. Plasma
 - 3. Serum
 - 4. Cellular elements (RBC, WBC, platelets)
- C. Terminology

II. SPECIMEN COLLECTION (Venipuncture, Skin Puncture) (45 – 50%)

- A. Review, Clarification, and Verification of Orders
- B. Patient Communication (pre- and post-collection instructions, age-specific needs, special needs)
- C. Patient Identification
- D. Patient Assessment/Preparation
- E. Site Selection
- F. Techniques
- G. Common Tests
- H. Order of Draw
 - 1. Venous
 - 2. Capillary
- I. Complications and Considerations (e.g., fainting, edema, hematoma, IV, mastectomy)
- J. Equipment (e.g., tubes/anticoagulants, needles, tourniquet, lancets, syringes)
- K. Terminology

III. SPECIMEN HANDLING, TRANSPORT, AND PROCESSING (15 – 20%)

- A. Assess Specimen Acceptability for Testing
 - 1. Correct specimen type for test requested
 - 2. Specimen quality (e.g., hemolysis, insufficient quantity, clotted sample)
 - 3. Specimen acceptability for add-on tests
 - 4. Special sample types (e.g., chain-of-custody, alcohol, forensic, newborn screening)
- B. Specimen Accessioning and Labeling
- C. Specimen Centrifugation and Aliquoting (e.g., pour-offs, pipetting)
- D. Specimen Transport and Storage
 - 1. Temperature
 - 2. Light
 - 3. Time
 - 4. Pneumatic tube
- E. Terminology

IV. WAIVED AND POINT-OF-CARE TESTING (POCT) (5 – 10%)

- A. Test Performance
 - 1. Urinalysis (e.g., dipstick)
 - 2. Hemoglobin and Hematocrit
 - 3. Coagulation (e.g., PT/INR)
 - 4. Glucose
 - 5. Kit Tests (e.g., Strep screen, rapid flu test, pregnancy test, COVID test)
- B. Instrumentation
 - 1. Operation and troubleshooting
 - 2. Maintenance
 - 3. Quality control (i.e., internal and external controls)
- C. Terminology

V. NON-BLOOD SPECIMENS (5 – 10%)

- A. Physiology
- B. Patient Preparation and Instruction
 - 1. Urine collections (e.g., random, clean-catch midstream, 24-hour)
 - 2. Stool collections
 - 3. Sputum
- C. Specimen Collection
 - 1. Throat swabs
 - 2. Nasal/nasopharyngeal swabs
 - 3. Breath testing (e.g., H. pylori, lactose)
 - 4. Iontophoresis (sweat chloride)
 - 5. Chain-of-custody
- D. Processing and Handling
 - 1. Specimen types and correlation with tests performed (e.g., urine, CSF, breath, stool, nasopharyngeal, sweat, semen, body fluids, sputum, buccal swabs)
 - 2. Specimen acceptability for testing
 - 3. Transport and storage (e.g., temperature, time, preservatives)
- E. Terminology

- 2. Fire safety practices (e.g., response protocols, classes of fire, fire safety equipment)
- 3. Radiation safety practices (e.g., labeling)
- 4. Infection control
 - a. Routes of transmission including reservoirs and vectors
 - b. Standard Precautions
 - c. Patient isolation
 - d. Signs and labels
 - e. Disinfection and decontamination
 - f. Hand hygiene
 - g. Personal protective equipment (PPE)
 - h. Sharps safety
- H. Terminology

Examples provided (as indicated by e.g.) are not limited to those listed.

All Board of Certification examinations use conventional and SI units for results and reference ranges.

VI. LABORATORY OPERATIONS (15 – 20%)

- A. Quality Assurance
 - 1. Techniques
 - 2. Equipment
- B. Quality Improvement (e.g., incident report/investigation, specimen errors, turnaround times)
- C. Proficiency Testing and Competency Assessment
- D. Interpersonal Relations (e.g., laboratory staff, other healthcare professionals)
- E. Professional Ethics (e.g., patient confidentiality [HIPAA], types of consent, standard of care, malpractice, negligence)
- F. Laboratory Regulations (e.g., ADA, CDC, CLIA, CMS)
 - 1. Accreditation (e.g., CAP)
 - 2. Specimen collection (e.g., CLSI, TJC)
 - 3. Specimen shipping (e.g., DOT, IATA, Category A and B)
 - 4. Coding/billing (e.g., ICD coding, ABN, test complexity)
- G. Safety Regulations (e.g., OSHA, NFPA)
 - 1. Chemical safety practices (e.g., SDS, chemical labeling, health hazards)

END OF CONTENT GUIDELINE