Examination Format

The American Society for Clinical Pathology Board of Certification (ASCP BOC) MLA certification examination is composed of 100 questions given in a 2-hour 30-minute time frame. All examination questions are multiple-choice with one best answer. More information is available on the ASCP BOC website.

The examination questions may be both theoretical and/or procedural. Theoretical questions measure skills necessary to apply knowledge. Procedural questions measure skills necessary to perform appropriate laboratory techniques and follow quality assurance protocols.

Examination Content Areas

The examination questions encompass the following content areas within the medical laboratory assistant field. Each of these content areas comprises a specific percentage of the overall 100-question examination.

Content Area	Description	Examination Percentage
Patient Accessioning and Specimen Collection	Review, clarification, and verification of test orders; patient identification; patient communication; specimen collection procedures; recognition and follow-up with adverse specimen collection reactions; specimen handling (e.g., labeling, storage, transport)	**20 – 25%**
Specimen Preparation and Processing	Assessment of specimen acceptability for testing; specimen prioritization, distribution, and transport; specimen processing; specimen storage	**40 – 45%**
Support for Clinical Testing	Reagents, standards, and controls (e.g., preparation, storage); analytical instrumentation; quality control; critical value notification and documentation; result retrieval and review; inventory management; waived and point-of-care testing	**15 – 20%**
Laboratory Operations	Laboratory regulations; safety regulations; waste disposal; laboratory equipment maintenance; professionalism and ethics; laboratory information system (LIS) functions; quality assurance/improvement	**20 – 25%**

For a more detailed overview of the examination, refer to the content outline starting on page 2.

Examination Content Outline

- Regulatory questions on the examination are based on U.S. sources (e.g., AABB, FDA, CLIA, etc.).
- The examples provided in this topic outline (as indicated by e.g.,) are not limited to those listed.
- The laboratory results and reference ranges on the examination will be provided in both conventional and SI units.

I. Patient Accessioning and Specimen Collection (including blood and other specimen types)

20 – 25% of total examination

- **A.** Review, Clarification, and Verification of Test Orders
- **B.** Patient Identification
- **C.** Patient Communication (pre- and post-collection instructions, age-specific needs, special needs, ADA, informed/implied consent)
- **D.** Collection Procedures (e.g., blood, urine)
  1. Patient assessment/preparation (e.g., appropriate needle gauge)
  2. Site selection (e.g., vein choice, IV)
  3. Collection techniques (e.g., selection of tubes/anticoagulants, tourniquet application, order of draw, specimen volume)
  4. Specimen types for common tests
  5. Special procedures (e.g., chain of custody)
- **E.** Recognition and Follow-up with Adverse Reactions (e.g., fainting, hematoma)
- **F.** Specimen Handling (e.g., labeling, storage, transport)

II. Specimen Preparation and Processing

40 – 45% of total examination

- **A. Assessment of Specimen Acceptability for Testing (e.g., blood, urine, body fluids)**
  1. Correct specimen type for test requested
  2. Evaluate specimen quality (e.g., hemolysis, quantity not sufficient [QNS], clotted sample, lipemia)
  3. Specimen labeling requirements
  4. Verify appropriate specimen handling
     a. Time of collection
     b. Transport/storage temperature
     c. Protection from light
  5. Specimen suitability for add-on requests
  6. Special specimen types (e.g., chain of custody, alcohol, forensic, newborn screening)
- **B. Specimen Prioritization, Distribution, and Transport**
  1. Correct laboratory department for test/sample
  2. Pneumatic tube system
  3. Packaging and shipment to external facilities (e.g., DOT, IATA, category A and B)
- **C. Specimen Processing**
  1. Centrifugation
  2. Aliquoting
  3. Non-blood specimens (e.g., urine, body fluids)
  4. Microbiology culture setup and plating
  5. Slide preparation (e.g., peripheral blood smear, Gram stain)
- **D. Specimen Storage (pre- and post-testing)**

III. Support for Clinical Testing

15 – 20% of total examination

- **A. Reagents, Standards, and Controls**
  1. Preparation
  2. Storage
  3. Integrity assessment
  4. Documentation
- **B. Analytical Instrumentation**
  1. Loading specimens
  2. Test initiation
  3. Technical and analytical error recognition and reporting
  4. Instrument maintenance
- **C. Quality Control**
  1. Performance
  2. Evaluation/troubleshooting
- **D. Critical Value Notification and Documentation**
- **E. Result Retrieval and Review**
- **F. Inventory Management (e.g., order/receive/restock reagents, gloves, tubes, and other related supplies)**
- **G. Waived and Point-of-Care Testing (e.g., urinalysis, rapid respiratory tests, pregnancy tests)**
  1. Instrument operation and maintenance
  2. Reagent handling
  3. Result evaluation and reporting
  4. Quality control

IV. Laboratory Operations

20 – 25% of total examination

- **A. Laboratory Regulations (e.g., TJC, CLSI, COLA)**
- **B. Safety Regulations (e.g., OSHA, NFPA, CDC)**
  1. Chemical safety practices (e.g., SDS, chemical labeling, health hazards)
  2. Fire safety practices (e.g., response protocols, classes of fire, fire safety equipment)
  3. Infection control
     a. Standard Precautions
     b. Biological safety cabinet
     c. Signs and labels
     d. Disinfection and decontamination
     e. Hand hygiene
     f. Personal protective equipment (PPE)
     g. Sharps safety
     h. Exposure control plan
- **C. Waste Disposal**
  1. Biological
  2. Hazardous
- **D. Laboratory Equipment Maintenance**
  1. Basic (e.g., pipettes, centrifuges, microscopes, balances, glassware)
  2. Environmental (e.g., refrigerators, incubators, thermometers)
- **E. Professionalism and Ethics**
  1. Patient confidentiality (e.g., HIPAA)
  2. Customer support and service
- **F. Laboratory Information System (LIS) Functions (e.g., data entry, specimen accessioning, label generation, specimen tracking)**
- **G. Quality Assurance/Improvement**

END OF CONTENT GUIDELINE