

DESCRIPTION OF EXAMINATIONS -- PRIMARY

All examinations given by the American Board of Pathology are multiple-choice, computerized examinations given at the ABP examination center in Tampa, Florida. The examinations do not require any special computer skills or experience. A practice session is held before the certification examination begins. **It is important that candidates read and understand all material sent in advance by the ABP and that candidates for anatomic pathology go through the practice examination in virtual microscopy that is available on the ABP Web site.**

Anatomic Pathology

The anatomic pathology examination is a one-day, computer-based examination consisting of written and practical sections. The practical section is composed of a microscopic portion (traditional and virtual) and an image section. A candidate must pass both the written and the practical portions in the same administration in order to pass the examination. All questions are multiple-choice and are in the one-best-answer format. The examination is administered as follows:

Section	Questions	Time
Written	141	2.25 hours
Practical		
Images	108	1.75 hours
Microscopic/virtual	50/26*	3.5 hours

*Note: change from 2009.

Approximately 70% of the total examination is devoted to questions related to pathology of specific organ systems or multi-system disease. The remaining 30% of the examination deals with general pathology and laboratory management. General pathology topics include cellular injury, inflammation and repair, physical and chemical injury, congenital and genetic diseases, neoplasia, circulatory disturbances, molecular pathology, and infections. The number of questions related to a particular system or to a topic in general pathology is roughly correlated with the frequency with which the general pathologist receives specimens or encounters diseases in these areas. Questions related to any topic may be placed in the setting of any area of anatomic pathology of adults and children including surgical pathology, cytology, autopsy, or forensic pathology. The examination also includes questions on hematopathology and molecular pathology, which accounts for approximately 10-15% of the examination. Laboratory management questions may be related to quality assurance, safety, billing, inspection and accreditation processes, federal regulations, personnel issues, costs of running a laboratory, informatics, and other aspects of management.

Images used on the practical examination include gross specimens, histopathologic specimens, electron micrographs, karyotypes, pedigrees, and cytopathology specimens of various types (liquid-based preparations, fine-needle aspirates, cell blocks, etc.). A variety of histochemical and immunochemical stains may be used as well as molecular pathology preparations.

Clinical Pathology

The clinical pathology examination is a one-day examination composed of written and practical sections. The practical section has two parts. One part is primarily image questions, whereas the second part contains questions with graphs, charts, karyotypes, pedigrees, red cell panels, formulas, and other problem-solving exercises. A candidate must pass both the written and the practical portions in the same administration in order to pass the examination. All questions are

multiple-choice and are in the one-best-answer format. The examination is administered as follows:

<u>Section</u>	<u>Questions</u>	<u>Time</u>
Written	130	2 hours
Practical		
Practical	110	3.25 hours
Practical with Images	120	2 hours

The subject content of the clinical pathology examination includes blood banking/transfusion medicine, chemical pathology, immunopathology, hematology, medical microbiology, medical microscopy, cytogenetics, molecular pathology, and laboratory management. Questions related to laboratory management and medical microscopy make up 10-15% of the total examination. The remainder of the examination is roughly equally divided between blood banking/transfusion medicine, chemical pathology, hematology, and medical microbiology. Questions on molecular pathology are included in all content areas of the examination and account for 10-15% of the examination. Questions from all content areas are found on both written and practical portions of the examination.

Individual topics included in the subject content areas of the clinical pathology examination include, **but are not limited to:**

Blood Banking/Transfusion Medicine: donor criteria; collection, processing, labeling and storage of blood and components; indications for use; blood groups; antigen/antibody detection and identification; compatibility testing; immune hemolytic anemias; tissue and organ transplantation; component therapy; adverse reactions to transfusion; apheresis; laboratory standards and regulations specific to blood banking/transfusion medicine.

Chemical Pathology: patient preparation and specimen collection, analytic methods and techniques, statistics, disorders of metabolism, electrolyte and acid/base disorders, serum protein abnormalities, system and organ diseases/conditions as reflected in testing in the chemical pathology laboratory, chemistry of body fluids including amniotic fluid, toxicology, diagnostic applications of laboratory data.

Hematology: instrumentation and methodology; hematopoiesis; benign and malignant disorders of erythrocytes, leukocytes, lymph nodes, and spleen; coagulation and hemostasis; medical microscopy including urinalysis, semen analysis, and analysis of cerebrospinal fluid and other body fluids.

Medical Microbiology: collection, handling, and processing of specimens for microbiologic analysis; pathogenic mechanisms of infectious diseases; antimicrobial mechanisms of action and susceptibility testing; media, reagents, and stains; cultural and morphologic characteristics and infections related to aerobic and anaerobic bacteria, spirochetes, fungi, viruses, and rickettsia; morphologic characteristics and infections related to parasites.

Laboratory Management: quality assurance, safety, billing, inspection and accreditation processes; federal regulations; personnel issues; costs of running a laboratory; informatics.

Molecular Pathology: questions related to molecular pathology are distributed throughout the above content areas. These questions may include basic molecular techniques and methods, human genetic principles, types of mutations and their detection, and gene structure and function as well as application of these techniques and principles to inherited, neoplastic, and infectious diseases and to histocompatibility.