

GENERAL DESCRIPTION OF CLASS

The LABORATORY TECHNICIAN 2 performs chemical, biochemical, microbiological, immunological, microscopic, and/or instrumental testing and analyses on a variety of specimens or samples, on a production basis, using standardized tests and recognized laboratory techniques. Employees in this class may, under close supervision, perform analyses requiring highly complex analytical techniques.

DISTINGUISHING FEATURES

This is the second level of a two-level series. It is distinguished from the lower level by the performance of a number of laboratory tests utilizing a full range of commonly applied laboratory principles, theories, methods, procedures, and analyses. Procedures at this level have greater complexity and detail than at the lower level. Laboratory Technician 2's are expected to interpret results of analyses and to run correlations with other tests before reporting results.

DUTIES AND RESPONSIBILITIES

- 1. Testing.** Typical tasks: performs a variety of standardized nonclinical laboratory tests to isolate, characterize, and identify bacteria, fungi, yeasts, viruses, algae, protozoa, nonhuman hematology, serology, cytology, histology, and virology; performs auto analyzer testing for substances such as chloride, sulfate, ammonia, nitrate, protein, and fat; performs spectrophotometric testing on phosphates; performs chromatographic testing of pesticides or other organic compounds; performs microscopic testing of foods for foreign substances; performs testing for moisture and fiber content of foods and feeds; performs testing for nitrogen, phosphorus, and potassium content of fertilizers and other tests as required; interprets results of specific tests to the person or agency submitting the sample; may perform technically complex procedures in a specialized area under close supervision.
- 2. Equipment.** Typical tasks: operates laboratory equipment common to laboratories such as spectrophotometers, autoanalyzers, dissolved oxygen meters, microscopes, etc.; adjusts, fine-tunes (calibrates), and maintains laboratory instruments and equipment; recognizes and corrects malfunctions of simple instruments and analytical procedures; assembles laboratory equipment and apparatus.
- 3. Preparation.** Typical tasks: collects specimens from appropriate sources; receives, logs, and accepts samples for analysis from qualified collectors; determines which tests must be performed on certain specimens or samples; prepares specimens or samples for analysis (identifies, labels, weighs, etc.); prepares laboratory stains, solutions, reagents, and media; handles samples and materials with proper aseptic techniques; sterilizes media and instruments; maintains laboratory in a neat and orderly fashion and free of recognizable hazards.
- 4. Reports.** Typical tasks: maintains accurate and up-to-date quality control records; writes reports showing results of tests and analysis; transmits laboratory results via telephone, teletypewriter, computer, or written report.
- 5. Miscellaneous.** Typical tasks: may direct the work of student employees in the laboratory.

RELATIONSHIPS WITH OTHERS

Employees in this class have daily in-person or telephone contact with agency staff to exchange information or discuss test results. Employees in this class also have regular telephone contact with county health departments, physicians, industrial and business representatives, and other agencies to notify them of test results or to discuss issues pertaining to a sample or specimen.

SUPERVISION RECEIVED

Employees in this class work under close supervision of a laboratory supervisor, physician, dentist, scientist, academician, or other administrative superior. Test data and its interpretation are reviewed routinely for accuracy and precision. Reports are reviewed upon completion for thoroughness and accuracy (which may be used in cases of litigation). Records are reviewed routinely for quality control. Guidelines used in performance of duties include standardized testing procedures, accepted aseptic and sterilization procedures, established laboratory procedures, and applicable State and Federal regulations.

GENERAL INFORMATION

Positions are found in central and remote locations throughout State government (e.g., general government agencies, human or natural resource agencies, correctional, mental health, or higher education institutions, hospitals, etc.). They require the willingness to work within the environment associated with the position's location.

KNOWLEDGE, SKILLS, AND ABILITIES (KSA)

General knowledge of laboratory terminology, materials, equipment, procedures, and techniques.

General knowledge of chemistry, mathematics, microbiology, biology, and metrics.

General knowledge of standard laboratory testing procedures.

General knowledge of the operation and maintenance of various standard laboratory instruments and equipment.

General knowledge of the techniques required for general laboratory safety and the proper handling of hazardous materials.

Basic knowledge of quality control procedures.

Skill in preparing laboratory specimens, reagents, solutions, and stains for testing.

Skill in the care and handling of laboratory specimens and/or samples.

Skill in operating standard laboratory equipment and instruments.

Skill in performing standardized laboratory tests.

Skill in preparing written reports which contain analysis of laboratory test results.

Skill in reading and following scientific laboratory methods and procedures.

Skill in calibrating and maintaining standard laboratory equipment.

Skill in aseptic bacterial culture techniques.

Ability to determine appropriate test equipment or instruments to be used.

Ability to interpret test results.

Ability to learn new complex laboratory procedures.

Ability to perform highly repetitive tasks while maintaining accuracy and speed.

Ability to provide direction and leadership to students.

Ability to organize and prioritize work.

Ability to work with potentially hazardous chemicals and ionizing radiation.

Some positions in this class may require one or more of the following:

Ability to program computer for special uses and to design spreadsheets for data analysis.

Ability to use computer for data input.

Ability to use teletypewriter.

Ability to work in the presence of x-ray sources.

Ability to work near high temperatures, open flames, and fumes.

NOTE: The KNOWLEDGE and SKILLS are required for initial consideration. ABILITIES may be required for initial consideration, at any time during the selection process, or during a trial service period as a final stage of the selection process. Some duties performed by positions in this class may require different KSA's. No attempt is made to describe every KSA required for **all** positions in this class. Additional KSA requirements will be explained on the recruiting announcement.

Adopted 1/90

Revised

Examples of work are typical of duties assigned to this class. No attempt is made to describe every duty performed by all positions in this class.