

APPROVED

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MASSACHUSETTS DEPARTMENT OF PERSONNEL ADMINISTRATION

Department of Personnel
Administration

CLASSIFICATION SPECIFICATION

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I. LABORATORY TECHNICIAN SERIES:

Laboratory Technician I
Laboratory Technician II

II. SUMMARY OF SERIES:

Incumbents of positions in this series perform routine laboratory tests in an assigned specialization such as biology, chemistry, histology, hematology, etc.; prepare and incubate cultures; collect blood and other samples; give instructions in the use of laboratory techniques and equipment; prepare reports on laboratory findings; and perform related work as required.

The basic purpose of this work is to provide technical support services to agency staff in the diagnosis and treatment of disease and the performance of scientific and research experiments.

III. ORGANIZATIONAL LEVELS:

Laboratory Technician I is the entry-level technical job in this series.

Laboratory Technician II is the first-level supervisory job in this series.

IV. EXAMPLES OF DUTIES COMMON TO ALL LEVELS IN SERIES:

1. Performs routine tests such as biological, chemical, histological, hematological, etc. using laboratory apparatus and testing equipment and following standardized procedures to provide data for use in the diagnosis and treatment of disease or for research or scientific experiments.
2. Prepares various culture media and chemical solutions following standard laboratory formulae and procedures; plants cultures in proper media; and incubates cultures at prescribed temperatures for specified times.
3. Collects human and animal specimens, such as blood and tissue samples for use in laboratory tests and analyses.
4. Operates laboratory equipment such as microscopes, counters and spectrophotometers for laboratory tests and research or scientific experiments.
5. Maintains the cleanliness and safety of laboratory according to established standards and procedures by disposing of contaminants, by washing and sterilizing glassware, by inspecting temperature control equipment, etc.

6. Gives instructions to individuals and groups concerning laboratory techniques and use of equipment and responds to inquiries from the public, other agencies and private industries on such matters as laboratory test results, normal test ranges, appropriate tests or collection of samples to provide information to those concerned with the work of the laboratory.
7. Maintains records on such matters as tests performed, test results, methods, materials and procedures used, inventory records, etc.
8. Prepares reports concerning such matters as test results, quality control, etc. to provide data for use in the diagnosis and treatment of disease or for research or scientific experiments.
9. Performs related duties such as maintaining stock of laboratory supplies and equipment; maintaining and calibrating laboratory equipment and ~~locating~~ ^{locating} appropriate personnel of mechanical problems; contacting outside laboratories to arrange for and track tests; arranging for the transportation of laboratory samples; recommending additions to and repetition of laboratory tests to verify accuracy of test findings; and attending meetings, seminars and workshops.
10. Based on assignment, may set up, operate and maintain complex equipment for special tests such as electrocardiographs, prepare patients for such tests and chart results to be included in patient records.
11. Based on assignment, may engage in field work by collecting samples for chemical, physical or biological analysis.
12. Based on assignment, may photograph tissue samples, slides and cultures using special equipment.

V. DIFFERENCES BETWEEN LEVELS IN SERIES:

Laboratory Technician II:

Incumbents of positions at this level also:

1. Provide on-the-job training for employees and interpret oral and written instructions, rules and policies for agency staff.
2. Conduct laboratory tours for new staff members or visitors.
3. Dissect laboratory animals during experiments.
4. Based on assignment, may perform diagnostic chromosomal studies by analyzing blood cultures.

VI. RELATIONSHIPS WITH OTHERS:

Major work contacts are with technical and professional staff members.

VII. SUPERVISION RECEIVED:

Laboratory Technician I:

Incumbents of positions at this level receive direct supervision from employees of higher grade who provide training and instruction, assign work and review performance through inspection, conferences and reports for accuracy and compliance with established standards.

Laboratory Technician II:

Incumbents of positions at this level receive general supervision from employees of higher grade who provide procedural guidance, assign work and review performance through inspection, conferences and reports for compliance with established standards.

VIII. SUPERVISION EXERCISED:

Laboratory Technician I:

None.

Laboratory Technician II:

Incumbents of positions at this level exercise direct supervision (i.e., not through an intermediate level supervisor) over, assign work to and review the performance of 1-5 laboratory personnel.

IX. WORKING CONDITIONS:

Laboratory Technicians work exposed to the harmful effects of chemicals, gases, fumes, inflammable and pathogenic materials and dangerous equipment; work varied shifts, irregular hours or on a standby (on call) work status; lift and carry heavy objects and patients; and stand for prolonged periods of time.

X. QUALIFICATIONS REQUIRED AT HIRE FOR ALL LEVELS IN SERIES:

1. Knowledge of general laboratory testing techniques and methods, including sample collection.
2. Knowledge of sanitation and sterilization methods, techniques and procedures followed in a laboratory.
3. Knowledge of the proper methods used in the disposal of laboratory materials.
4. Knowledge of the types and uses of sterilization equipment and devices used in a laboratory.

5. Knowledge of calibration and adjustment techniques as applied to laboratory equipment.
6. Knowledge of the properties and characteristics of chemicals, acids and materials used in a laboratory.
7. Knowledge of the techniques used in the handling and transportation of laboratory specimens.
8. Ability to understand and apply the policies, procedures, specifications, standards and guidelines governing assigned unit activities.
9. Ability to explain the policies, procedures, specifications, standards and guidelines governing assigned unit activities.
10. Ability to follow oral and written instructions.
11. Ability to gather information through observing and questioning individuals and by examining records and documents.
12. Ability to maintain accurate records.
13. Ability to prepare and use charts, graphs and tables.
14. Ability to perform arithmetical computations with speed and accuracy (addition, subtraction, division and multiplication).
15. Ability to communicate effectively in oral expression and in writing.
16. Ability to establish and maintain harmonious working relationships with others.
17. Ability to deal tactfully with others.
18. Ability to exercise sound judgment.
19. Ability to work in a team setting.
20. Ability to distinguish colors visually.
21. Ability to lift and carry heavy objects or persons.
22. Manual dexterity.

Based on assignment the following additional qualifications may be required at hire:

1. Knowledge of the terminology and standard abbreviations used in the assigned specialization such as histology, biochemistry, cytology, chemistry, hematology, microbiology, serology, etc.

2. Knowledge of the types and uses of laboratory tests used in the assigned specialization such as histology, biochemistry, cytology, chemistry, hematology, microbiology, serology, etc.
3. Knowledge of the practices and procedures followed in laboratory work in assigned specialization such as histology, biochemistry, cytology, chemistry, hematology, microbiology, serology, etc. including safety practices and procedures.
4. Ability to conduct and interpret laboratory tests in assigned specialization such as histology, biochemistry, cytology, chemistry, hematology, microbiology, serology, etc.
5. Ability to interact with people who are under physical and/or emotional stress.

Additional qualifications required at hire for Laboratory Technician II positions:

1. Ability to supervise, including planning and assigning work according to the nature of the job to be accomplished, the capabilities of subordinates and available resources; controlling work through periodic reviews and/or evaluations; determining subordinates' training needs and providing or arranging for such training; motivating subordinates to work effectively; determining the need for disciplinary action and either recommending or initiating disciplinary action.
2. Ability to give written instructions in a precise and understandable manner.
3. Ability to determine proper format and procedures for assembling items of information.

XI. QUALIFICATIONS ACQUIRED ON JOB AT ALL LEVELS IN SERIES:

1. Knowledge of the policies, procedures, specifications, standards, guidelines, laws, rules and regulations governing assigned unit activities.
2. Knowledge of the types and uses of agency forms.
3. Knowledge of the types and availability of public or private community based organizations and sources for conducting laboratory tests, for providing equipment repair and equipment calibration and for the purchase of laboratory equipment.

Additional qualifications acquired on the on the in Laboratory Technician II positions:

1. Knowledge of the principles, practices and techniques of supervision.

XII. MINIMUM ENTRANCE REQUIREMENTS:

Laboratory Technician I:

Applicants must have at least (A) one year of full-time, or equivalent part-time, technical or professional experience in laboratory work in a recognized clinical, medical, hospital, chemical, water quality, public health, bacteriological, marine sciences or materials testing laboratory, or (B) any equivalent combination of the required experience and the substitutions below.

Substitutions:

- I. An Associate's degree or higher with a major in medical technology, chemistry, bacteriology, food science and technology, environmental science, chemical or environmental engineering, wastewater technology, oceanography or the biological sciences may be substituted for the required experience.
- II. The successful completion of one year of full-time, or equivalent part-time, education toward a degree at a recognized medical or dental school may be substituted for the required experience.
- III. The successful completion of training in a recognized school or hospital course or an American Medical Association (AMA) approved training program for laboratory technicians or medical technologists may be substituted for the required experience.
- IV. Registration as a medical technologist by the American Society of Clinical Pathologists, the International Society for Clinical Laboratory Technicians of American Medical Technologists or as a bacteriologist by the National Registry of Microbiologists may be substituted for the required experience.

Laboratory Technician II:

Applicants must have at least (A) two years of full-time, or equivalent part-time, technical or professional experience in laboratory work in a recognized clinical, medical, hospital, chemical, water quality, public health, bacteriological, marine sciences or materials testing laboratory, or (B) any equivalent combination of the required experience or the substitutions below.

Substitutions:

- I. An Associate's degree or higher with a major in medical technology chemistry, bacteriology, food science and technology, environmental science, chemical or environmental engineering, wastewater technology, oceanography or the biological sciences may be substituted for a maximum of one year of the required experience.
- II. The successful completion of one year of full-time, or equivalent part-time, education toward a degree at a recognized medical or dental school may be substituted for a maximum of one year of the required experience.

III. The successful completion of training in a recognized school or hospital course, or an American Medical Association (AMA) approved training program for laboratory technicians or medical technologists may be substituted for a maximum of one year of the required experience.

IV. Registration as a medical technologist by the American Society of Clinical Pathologists, the International Society for Clinical Laboratory Technicians or American Medical Technologists or as a bacteriologist by the National Registry of Microbiologists may be substituted for the required experience.

XIII. SPECIAL REQUIEMENTS:

None.

Occupational Group 24

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