A Guide to the Written Test

for the

Lower Level Fire Promotion
INTRODUCTION

The New York State Department of Civil Service has developed this test guide to familiarize you with the Lower Level Fire Promotion written test for positions such as Fire Captain and Fire Lieutenant. This test guide provides a general description of the subject areas to be tested and an explanation of the different types of questions that will be presented.

The Lower Level Fire Promotion written test has a time allowance of 6 hours. The test will cover the following subject areas:

1. **Preparing written material** - These questions test for the ability to present information clearly and accurately, and to organize paragraphs logically and comprehensibly. For some questions, you will be given information in two or three sentences followed by four restatements of the information. You must then choose the best version. For other questions, you will be given paragraphs with their sentences out of order. You must then choose, from four suggestions, the best order for the sentences.

2. **Fire prevention** - These questions test for a knowledge of fire prevention methods, principles, practices, and equipment. The questions cover such areas as the following: alarm systems; automatic smoke/fire detectors; automatic sprinklers; standpipes; dealing with building owners and managers; fire hazards; fire prevention education; and inspection of buildings.

3. **Firefighting practices and equipment** - These questions test for a knowledge of firefighting methods, principles, practices, and equipment. The questions cover such areas as the following: aspects of the Incident Management System; building materials and construction types; direction of subordinate firefighters; communications at emergency incidents; accountability; fire cause and origin; building inspections; extinguishing agents and application procedures; fire behavior characteristics; fire suppression; hand and power tools; hazardous materials; weapons of mass destruction; hoses, nozzles, and water streams; ladders and elevating platforms; self-contained breathing apparatus (SCBA); fire scene size-up; and ventilation.

4. **On-the-job training of fire personnel** - These questions test for a knowledge of the principles and practices of on-the-job training of fire personnel. The questions cover such areas as determining the necessity for training, selecting appropriate training methods, overcoming obstacles to learning, and evaluating the effectiveness of training.

5. **Rescue techniques and basic emergency medical response** - These questions test for a knowledge of rescue techniques and basic emergency medical treatment. You will be presented with brief descriptions of various fire, rescue, and personal injury and illness situations. Each situation will be followed by one or more questions that cover such areas as the following: triage; bleeding; broken bones; burns; respiratory failure; cardiac failure; rescue-related tools; knot tying; rescue and associated EMS equipment.

6. **Supervision** - These questions test for knowledge of the principles and practices employed in planning, organizing, and controlling the activities of a work unit toward predetermined objectives. The concepts covered, usually in a situational question format, include such topics as assigning and reviewing work; evaluating performance; maintaining work standards; motivating and developing subordinates; implementing procedural change; increasing efficiency; and dealing with problems of absenteeism, morale, and discipline.
7. **Administrative Supervision** - These questions test for knowledge of the principles and practices involved in directing the activities of a large subordinate staff, including subordinate supervisors. Questions relate to the personal interactions between an upper level supervisor and his/her subordinate supervisors in the accomplishment of objectives. These questions cover such areas as assigning work to and coordinating the activities of several units, establishing and guiding staff development programs, evaluating the performance of subordinate supervisors, and maintaining relationships with other organizational sections.

8. **Principles and practices of staff development and training** - These questions test for the knowledge and abilities used to develop and deliver training. They address topics such as the assessment of training needs; instructional design; training methods and techniques; the use of training aids, materials, and technology; motivation; learning theory; classroom management; the evaluation of learning outcomes; and the usage of training-related data.

The remainder of this test guide explains how you will be tested in each of the subject areas listed above. A **TEST TASK** is provided for each subject area. This is an explanation of how a question will be presented and how to correctly answer it. Read each explanation carefully. This test guide provides at least one **SAMPLE QUESTION** for each multiple-choice subject area. The sample job simulation exercises will be similar to what will be presented on the actual test. This test guide provides the **SOLUTION** and correct answer(s) to the sample multiple-choice questions and each sample section of the job simulation exercise. You should study these in order to understand how the correct or best answers were determined.
SUBJECT AREA 1

PREPARING WRITTEN MATERIAL: These 15 questions test for the ability to present information clearly, accurately, and completely, and for the ability to organize paragraphs logically and comprehensibly.

TEST TASK:

There are two separate test tasks in this subject area.

• For the first, Information Presentation, you will be given information in two or three sentences, followed by four restatements of the information. You must then choose the best version. There will be ten Information Presentation questions on the written test.

• For the second, Paragraph Organization, you will be given paragraphs with their sentences out of order, and then be asked to choose, from among four suggestions, the best order for the sentences. There will be five Paragraph Organization questions on the written test.

INFORMATION PRESENTATION SAMPLE QUESTION:

Martin Wilson failed to take proper precautions. His failure to take proper precautions caused a personal injury accident.

Which one of the following best presents the information above?

A. Martin Wilson failed to take proper precautions that caused a personal injury accident.
B. Proper precautions, which Martin Wilson failed to take, caused a personal injury accident.
C. Martin Wilson’s failure to take proper precautions caused a personal injury accident.
D. Martin Wilson, who failed to take proper precautions, was in a personal injury accident.

The best answer to this sample question is C.

SOLUTION:

Choice A conveys the incorrect impression that proper precautions caused a personal injury accident.

Choice B conveys the incorrect impression that proper precautions caused a personal injury accident.

Choice C best presents the original information: Martin Wilson failed to take proper precautions and this failure caused a personally injury accident.

Choice D states that Martin Wilson was in a personal injury accident. The original information states that Martin Wilson caused a personal injury accident, but it does not state that Martin Wilson was in a personal injury accident.
SUBJECT AREA 1 (continued)

PARAGRAPHS ORGANIZATION SAMPLE QUESTION: The following question is based upon a group of sentences. The sentences are shown out of sequence, but when correctly arranged, they form a connected, well-organized paragraph. Read the sentences, and then answer the question about the best arrangement of these sentences.

1. Eventually, they piece all of this information together and make a choice.
2. Before actually deciding upon a human services job, people usually think about several possibilities.
3. They imagine themselves in different situations, and in so doing, they probably think about their interests, goals, and abilities.
4. Choosing among occupations in the field of human services is an important decision to make.

Which one of the following is the best arrangement of these sentences?

A. 2-4-1-3
B. 2-3-4-1
C. 4-2-1-3
D. 4-2-3-1

The best answer to this sample question is D.

SOLUTION:

Choices A and C present the information in the paragraph out of logical sequence. In both A and C, sentence 1 comes before sentence 3. The key element in the organization of this paragraph is that sentence 3 contains the information to which sentence 1 refers; therefore, in logical sequence, sentence 3 should come before sentence 1.

Choice B also presents the information in the paragraph out of logical sequence. Choice B places sentence 4 in between sentence 1 and sentence 3, thereby interrupting the logical sequence of the information in the paragraph.

Choice D presents the information in the paragraph in the best logical sequence. Sentence 4 introduces the main idea of the paragraph: “choosing an occupation in the field of human services.” Sentences 2-3-1 then follow up on this idea by describing, in order, the steps involved in making such a choice. Choice D is the best answer to this sample question.
SUBJECT AREA 2

FIRE PREVENTION: These questions test for a knowledge of fire prevention methods, principles, practices, and equipment. The questions cover such areas as the following: alarm systems; automatic smoke/fire detectors; automatic sprinklers; standpipes; dealing with building owners and managers; fire hazards; fire prevention education; and inspection of buildings.

TEST TASK: You will be presented with situations in which you must apply knowledge of the principles and practices of fire prevention to answer the questions correctly.

SAMPLE QUESTION:

Which one of the following is the temperature rating of a sprinkler head with an ordinary temperature classification?

A. 135 to 170 degrees Fahrenheit  
B. 175 to 225 degrees Fahrenheit  
C. 250 to 300 degrees Fahrenheit  
D. 325 to 375 degrees Fahrenheit

The correct answer to this sample question is A.

SOLUTION:

Choice A is the correct answer to this question. The temperature rating of a sprinkler head with an ordinary temperature classification is 135 to 170 degrees Fahrenheit.

Choice B is not correct. The sprinkler head with a temperature rating between 175 and 225 degrees Fahrenheit has an intermediate temperature classification.

Choice C is not correct. The sprinkler head with a temperature rating between 250 and 300 degrees Fahrenheit has a high temperature classification.

Choice D is not correct. The sprinkler head with a temperature rating between 325 and 375 degrees Fahrenheit has an extra high temperature classification.
SUBJECT AREA 3

FIREFIGHTING PRACTICES AND EQUIPMENT: These questions test for a knowledge of firefighting methods, principles, practices, and equipment. The questions cover such areas as the following: aspects of the Incident Management System; building materials and construction types; direction of subordinate firefighters; communications at emergency incidents; accountability; fire cause and origin; building inspections; extinguishing agents and application procedures; fire behavior characteristics; fire suppression; hand and power tools; hazardous materials; weapons of mass destruction; hoses, nozzles, and water streams; ladders and elevating platforms; self-contained breathing apparatus (SCBA); fire scene size-up; and ventilation.

TEST TASK: You will be presented with situations in which you must apply knowledge of firefighting practices and equipment to answer the questions correctly.

SAMPLE QUESTION:

You are the officer assigned to an engine company responding to a call about an electrical transformer. At the scene of the incident, a small distribution unit mounted at the top of a power pole is burning. Which one of the following practices should you follow?

A. Apply a fog stream to extinguish the fire.
B. Apply foam to extinguish the fire.
C. Disconnect the electrical supply to the transformer.
D. Allow the fire to burn itself out.

The correct answer to this sample question is D.

SOLUTION:

Choice A is not correct. Applying water to an energized electrical component is an unsafe practice.

Choice B is not correct. Foam contains up to 94-97% water and is an unsafe practice.

Choice C is not correct. Disconnecting the electrical supply to the transformer is the responsibility of the power company.

Choice D is the correct answer to this question. Allowing the fire to burn itself out is the safest practice in this situation.
ON-THE-JOB TRAINING OF FIRE PERSONNEL: These questions test for a knowledge of the principles and practices of on-the-job training of fire personnel. The questions cover such areas as determining the necessity for training, selecting appropriate training methods, overcoming obstacles to learning, and evaluating the effectiveness of training.

TEST TASK: You will be presented with situations in which you must apply knowledge of the principles and practices of on-the-job training of fire personnel to answer the questions correctly.

SAMPLE QUESTION:

Which one of the following actions is most important to take in following up on a new firefighter's performance of a technique after the firefighter has received on-the-job training in the technique?

A. Let the firefighter know how she is progressing on her performance of the technique.
B. Encourage the firefighter to share with other firefighters what she has learned about performing the technique.
C. Ask the firefighter to comment on the kinds of work problems she is now able to handle by using the technique.
D. Prepare a written evaluation of the firefighter's performance on the technique for her file.

The correct answer to this sample question is A.

SOLUTION:

Choice A is the correct answer to this question. Providing feedback on the firefighter’s progress is an essential task performed by the firefighter’s supervisor. Feedback helps to ensure proper performance of job task.

Choice B is not correct. The choice does not specify if the task is being performed and explained correctly to the other firefighters.

Choice C is not correct. The new firefighter may not know how this task is utilized in the field or performance of future duties.

Choice D is not correct. Although written evaluations are good practice, it does not provide immediate feedback to the new firefighter on their performance of the task.
**SUBJECT AREA 5**

**RESCUE TECHNIQUES AND BASIC EMERGENCY MEDICAL RESPONSE:** These questions test for a knowledge of rescue techniques and basic emergency medical treatment. You will be presented with brief descriptions of various fire, rescue, and personal injury and illness situations. Each situation will be followed by one or more questions that cover such areas as the following: triage; bleeding; broken bones; burns; respiratory failure; cardiac failure; rescue-related tools; knot tying; rescue and associated EMS equipment.

**TEST TASK:** You will be presented with situations in which you must apply knowledge of the principles and practices of rescue techniques and basic emergency medical response to answer the questions correctly.

**SAMPLE QUESTION:**

Which one of the following types of shock should always be treated as immediately life threatening by a first responder?

A. septic shock  
B. hypovolemic shock  
C. anaphylactic shock  
D. neurogenic shock

*The correct answer to this sample question is C.*

**SOLUTION:**

**Choice A** is not correct. *The early stages of septic shock are not as severe as anaphylactic shock.*

**Choice B** is not correct. *The early stages of hypovolemic shock are not as severe as anaphylactic shock.*

**Choice C** is the correct answer to this question. *Anaphylactic shock has a respiratory and airway component that the other forms of shock do not usually display in the early stages. Symptoms of anaphylactic shock can occur within 30 minutes of exposure.*

**Choice D** is not correct. *The early stages of neurogenic shock are not as severe as anaphylactic shock.*
SUBJECT AREA 6

SUPERVISION: These questions test for knowledge of the principles and practices employed in planning, organizing, and controlling the activities of a work unit toward predetermined objectives. The concepts covered, usually in a situational question format, include such topics as assigning and reviewing work; evaluating performance; maintaining work standards; motivating and developing subordinates; implementing procedural change; increasing efficiency; and dealing with problems of absenteeism, morale, and discipline.

TEST TASK: You will be presented with situations in which you must apply knowledge of the principles and practices of supervision in order to answer the questions correctly.

SAMPLE QUESTION:

The staff you supervise are given a work assignment that is new to your department. You are unsure about the proper procedure to use in performing this assignment. Which one of the following actions should you take first in this situation?

A. Obtain input from your staff.
B. Consult other department supervisors who have had similar assignments.
C. Use an appropriate procedure from a similar assignment that you are familiar with.
D. Discuss the matter with your supervisor.

The correct answer to this sample question is D.

SOLUTION:

Choice A is not correct. Since this assignment is new for your department, your staff would not be expected to be more knowledgeable than you about the proper procedure.

Choice B is not correct. Although discussing this matter with other supervisors may increase your knowledge of the new assignment, similar assignments performed in other departments may differ in some important way from your new assignment. Other departments may also function differently from your department, so the procedures used to perform similar assignments may differ accordingly.

Choice C is not correct. Since this assignment is new for your department, you would have no way of knowing whether the procedure from a similar assignment is appropriate to use. You would need someone with the appropriate knowledge, usually your supervisor, to determine if the procedure from a similar assignment could be used before you actually employed this procedure in the performance of your new assignment.

Choice D is the correct answer to this question. Your supervisor is more likely to be informed about what procedure may be appropriate for work that he or she assigns to you than would other department supervisors or your staff. Even if your supervisor does not know what procedure is appropriate, a decision regarding which procedure to use should be made with his or her participation, since he or she has the ultimate responsibility for your department’s work.
**SUBJECT AREA 7**

**ADMINISTRATIVE SUPERVISION:** These questions test for knowledge of the principles and practices involved in directing the activities of a large subordinate staff, including subordinate supervisors. Questions relate to the personal interactions between an upper level supervisor and his/her subordinate supervisors in the accomplishment of objectives. These questions cover such areas as assigning work to and coordinating the activities of several units, establishing and guiding staff development programs, evaluating the performance of subordinate supervisors, and maintaining relationships with other organizational sections.

**TEST TASK:** You will be presented with situations in which you must apply knowledge of the principles and practices of administrative supervision to answer the questions correctly. You will be placed in the role of a supervisor of a section, which is made up of several units. Each unit has a supervisor and several employees. All unit supervisors report directly to you.

**SAMPLE QUESTION:**

In a hallway, you observe two employees strongly arguing about which one of them is responsible for a set of tasks in a collaborative work project that you have delegated to two unit supervisors in your section. The arguing employees work for different units. Which one of the following actions is most appropriate for you to take in this situation?

A. Intercede in the employees’ argument and settle it.
B. Meet with the unit supervisors of the two employees and inform them of the situation you observed.
C. Inform one unit supervisor of the situation and ask this supervisor to take care of it.
D. Set up a meeting that includes both unit supervisors and both employees to resolve the situation.

*The correct answer to this sample question is B.*

**SOLUTION:**

**Choice A** is not correct. It is not reasonable that you would be able to settle the employees’ dispute. Earlier you delegated the work project to two unit supervisors, who would normally be responsible for assigning tasks related to the project. The two unit supervisors must be consulted.

**Choice B** is the correct answer to this question. The two unit supervisors are collaborating on the work project and therefore giving the assignments. You should meet with them and tell them about the employees’ argument and the work tasks they discussed. Along with learning the point of contention, it is useful for the unit supervisors to learn that two employees had a heated argument. The unit supervisors can work out a way to handle the situation.

**Choice C** is not correct. Speaking to only one supervisor about the situation leaves the second supervisor uninformed of the situation. You cannot be assured that the first supervisor will even include the second supervisor in finding a way to settle the issue. In taking this action, you are favoring one supervisor and slighting the other.

**Choice D** is not correct. The unit supervisors need to come up with a way of handling the situation that you observed. To do this, they must be informed without the employees present. Also, by including the employees in the meeting, you may get a replay of the hallway argument, which is not helpful.
SUBJECT AREA 8

PRINCIPLES AND PRACTICES OF STAFF DEVELOPMENT AND TRAINING: These questions test for the knowledge and abilities used to develop and deliver training. They address topics such as the assessment of training needs; instructional design; training methods and techniques; the use of training aids, materials, and technology; motivation; learning theory; classroom management; the evaluation of learning outcomes; and the usage of training-related data.

TEST TASK: You will be presented with a variety of situations in which you must apply knowledge of the principles and practices of staff development and training to answer the questions correctly.

SAMPLE QUESTION:

Which one of the following is the most important reason why a trainer who is teaching a task to a class should demonstrate the task slowly?

A. to give the trainees the time to ask questions
B. to help the trainees understand key points in the demonstration
C. to make the trainees feel more comfortable watching the demonstration
D. to aim the demonstration at the ability level of the least skilled member of the class.

The correct answer to this sample question is B.

SOLUTION:

Choice A is not correct. A demonstration is typically given uninterrupted by questions. A trainer may encourage trainees to write down any questions that they may want to ask at the conclusion of a demonstration, but this would not be the most important reason that a trainer may demonstrate a task slowly.

Choice B is the correct answer to this question. The main purpose of a demonstration is to present subject matter in a way that can be understood easily by viewers of the demonstration. By slowing down the speed of the demonstration, a trainer would help to maximize trainees understanding of key points in the demonstration.

Choice C is not correct. The primary way that trainers make trainees feel more comfortable is by showing confidence in themselves and in the subject matter of a class. To make trainees feel more comfortable watching a demonstration would not be the most important reason to slow down a demonstration.

Choice D is not correct. Training or in this case, demonstration, should be given at the average ability level of the trainees.
RECOMMENDED RESOURCES

LOWER LEVEL FIRE PROMOTION RECOMMENDED RESOURCES

The following resources are recommended for the Lower Level Fire Promotion examination. Please note that the suggested materials listed below is by no means intended to be a comprehensive list.

- Command and Control of Fires and Emergencies, 1st Edition by Vincent Dunn
- Crew Resource Management for the Fire Service by Randy Okray and Thomas Lubnau II
- Emergency Care, 14th Edition by Daniel Limmer and Michael F. O'Keefe
- Fire and Rescue Incident Command: A Practical Guide to Incident Ground Management, by Tony Prosser
- Fire Inspection and Code Enforcement, 8th Edition by IFSTA (International Fire Service Training Association)
- Fire Officer’s Handbook of Tactics, 5th Edition by John Norman
- Fire Service Hydraulics and Water Supply, 3rd Edition by Mike Wieder
- Fireground Strategies, 3rd edition by Anthony Avillo
- From Buddy to Boss: Effective Leadership Principles, 2nd Edition by Chase Sargent
- National Fire Protection Association (NFPA)
- National Incident Management System (NIMS), [https://www.fema.gov/emergency-managers/nims](https://www.fema.gov/emergency-managers/nims)
- New York State Fire Code
- Occupational Safety and Health Administration (OSHA) Regulations (Standards – 29 CFR); 1910
- Pipeline Emergencies, by Gregory G. Noll and Michael S. Hildebrand
- Private Fire Protection and Detection, by IFSTA (International Fire Service Training Association)
- Structural Fire Fighting: High-Rise Fire Fighting, 2nd Edition by IFSTA (International Fire Service Training Association)
- Structural Fire Fighting: Truck Company Skills and Tactics, 2nd Edition by IFSTA (International Fire Service Training Association)
- The Rescue Company, by Ray Downey
- Truck Company Fireground Operations, 2nd Edition by Harold Richman
TEST SECURITY

The test you will be taking is the property of the New York State Department of Civil Service. Candidates may not remove test material from the test site and may not reproduce, reconstruct, or discuss the test content with others. Unauthorized possession or disclosure of the test material is prohibited by law and punishable by imprisonment and/or a fine. Additionally, candidates may be disqualified from appointment to the positions for which the examination is being held and from being a candidate for any civil service examination for five years. After you take the test, other individuals may want to talk with you about the test. You should not discuss the questions and answers, even in general terms. You should be careful that you do not inadvertently violate test security and put yourself at risk.

CONCLUSION

Your attitude and approach to the test will influence how well you perform. A positive attitude will help you do your best.

Before the test ...
- Study and review this guide to familiarize yourself with what the test will cover.
- Study and review the subject areas to be covered on the test.

On the day of the test ...
- Arrive at the test site on time.
- Bring your Admission Notice, two No. 2 pencils, a photo ID containing your signature, a quiet lunch or snack, and any other allowed materials.
- Do NOT bring this test guide to the test site.

At the test site ...
- Do NOT bring cell phones, beepers, headphones, or any electronic or other communication devices to the test site.
- The use of such devices anywhere on the grounds of the test site (this includes the test room, hallways, restrooms, building, grounds, and parking lots) could result in your disqualification.

During the test ...
- Read and follow all directions on your Admission Notice, test booklets, answer sheets, and Candidate Directions.
- Follow the Monitor's instructions.
- Keep track of the time.

After the test ...
- Do NOT remove any test materials from the test room.
- Do NOT paraphrase, reconstruct, or reproduce the test material in any way.
- Do NOT discuss the test material with others.
It is the policy of the New York State Department of Civil Service to provide reasonable accommodation to ensure effective communication of information to individuals with disabilities. If you need an auxiliary aid or service to make the information in this test guide available to you, please contact the New York State Department of Civil Service Public Information Office at (518) 457-9375.