



## DEPARTMENT OF HUMAN RESOURCES

### **Study Guide** Treatment Plant Operator Trainee Written Examination

- This booklet contains SAMPLE QUESTIONS ONLY. Studying this booklet will not necessarily improve your exam score.

OCTOBER 2018

## **PURPOSE AND CONTENT OF THIS EXAM PREPARATION GUIDE**

This guide was developed to help you prepare to take the written exam for Treatment Plant Operator Trainee. It contains general exam-taking advice and also provides specific information related to the exam content. This information includes the subject areas covered by the exam, the kinds of questions to expect, strategies for approaching the questions, and sample questions. Though this information cannot guarantee a higher exam score, it can give you direction for your exam preparation that will assist you in doing your best.

## **PREPARING TO TAKE THE EXAM**

### **Before the Day of the Exam**

- Review this guide to get familiar with the content of the exam. Knowing about the topics and kinds of questions that will be in the exam will ensure that you will not be surprised by the content of the exam or the manner in which it is presented. This can improve your ability to demonstrate your job potential.
- Make sure that you know where the exam will be administered and all of the relevant details, such as where to park, where to report for the exam, and what identification is required.

### **On the Day of the Exam**

- Make sure that you are well rested and have eaten. These things will help your concentration during the exam.
- Plan your day to allow plenty of time to get yourself prepared and get to the exam site. Allow enough time to cope with weather, traffic, parking, etc. Hurrying creates anxiety, so do not put yourself in the position of having to hurry.
- Listen carefully to all instructions from the exam administrator. Make sure that you understand the instructions and carry them out correctly. Ask questions at the proper time before the exam begins if you are unsure of any aspect of what you should do during the exam.

## GENERAL EXAM TAKING TIPS

- Use your time carefully. The time limit should provide you with more than enough time if you move through the exam steadily and do not spend too much time on any one question.
- Read the questions and answer choices carefully. Read all of the answer choices before you select an answer.
- If you come to a question that is especially difficult, skip that question and come back to it later if you have time.
- Answer every question. Scores are based on the number of correct answers. You will receive no credit if you leave an answer space blank. It is to your advantage to use your best judgment to make a choice among the answer choices provided.

## TREATMENT PLANT OPERATOR TRAINEE EXAM

The written exam for Treatment Plant Operator Trainee is based upon a job study that identified the most important knowledge, skills, and abilities required to perform the job successfully. These areas include:

- your knowledge of basic safety practices.
- your ability to read and interpret gauges and scales.

All of the exam questions are presented in a multiple-choice format. Each question is identified by a question number that is followed by a question statement. After the question statement, there are between two and four answer choices. You should read all of the answer choices and then choose the best answer. **Each question has only one correct answer.**

## EXAM SECTION 1: BASIC SAFETY

This exam section contains eighteen (18) questions related to performing physical tasks and responding appropriately to indoor and outdoor safety concerns. An effective strategy for answering questions in this section is to create a picture in your mind of the situation described in each question and its response choices. This should help you to clarify what types of hazards might be associated with the situation and how they are affected by the different choices.

Examples of these types of questions are shown below. The sample questions are followed by brief explanations of the correct answers.

1. When lifting a heavy object, you should avoid doing which of the following?
  - A. Twisting or turning motions.
  - B. Lifting the object above your waist.
  - C. Holding the object close to your body.
  - D. Having your feet spaced widely apart.

**Answer:** The correct answer to sample question #1 is response option "A". Twisting or turning while lifting may cause injury to your lower back. All of the other response options are recommended techniques for safe lifting.

2. The safest way to remove a tick that is attached to your skin is to:
  - A. coat the tick with petroleum jelly.
  - B. burn the tick with the flame from a match.
  - C. scrape the tick off with a flat surface, such as a credit card.
  - D. grasp the tick with tweezers as close to the skin as possible.

**Answer:** The correct answer to sample question #2 is response choice "D". A common hazard associated with working outdoors is insect bites and stings. Therefore, it is important to know how to properly treat bites or stings from different types of insects. A tick embeds its head under the skin and must be promptly and carefully removed. The recommended technique is to use tweezers to pull the tick out. The other response choices pose the risk of

additional injury by leaving the tick in place too long or breaking the head off under the skin. Methods for treating insect bites and stings are described in materials provided online by the Occupational Health and Safety Administration (OSHA) and the Centers for Disease Control (CDC).

3. Which of the following is the most important reason for a rule that requires the reporting of all accidents at work?
- A. This is the best way to identify and document who was responsible.
  - B. This discourages workers from claiming that they were injured at work when it is not true.
  - C. This allows the City to report required accident statistics to state and federal safety organizations.
  - D. This ensures that the causes of accidents are identified so that those accidents can be prevented in the future.

**Answer:** The correct answer to sample question #3 is response choice "D". Making the workplace safer for employees is always the primary purpose of safety rules and policies. Assigning blame, discouraging dishonest employee behavior, or satisfying government reporting requirements do not directly contribute to protecting employees from accidents that could have been prevented.

## **EXAM SECTION 2: READING GAUGES AND SCALES**

This exam section contains twenty (20) questions designed to assess your ability to read and understand gauges and scales. The questions will involve looking at drawings of various gauges and scales. A good strategy to use for these types of questions is to first look carefully at the drawing and determine what kind of information it is providing.

Note the range of numbers presented and the direction in which the values ascend: from left to right or right to left; clockwise or counterclockwise. Note the units between the scale values shown, for example: tenths or eighths of a unit; 5 or 10 units. Then carefully read each question and identify the information for which the question is specifically asking. Now, looking back at the drawing, determine the value to which the question is referring, and find it among the response choices provided.

Examples of these types of questions are shown below. The sample questions are followed by brief explanations of the correct answers.

4. Which of the following values is closest to the value indicated by the gauge in Figure A?

- A. 63.
- B. 66.
- C. 72.
- D. 74.

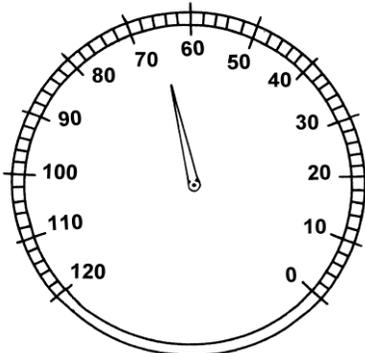


Figure A

**Answer:** The correct answer to sample question #4 is response choice "B". The gauge is designed to show values ranging from zero through 120. These values ascend in a counterclockwise direction starting from zero at the bottom right of the circular gauge. There are 5 intervals of 2 units each between the scale values shown. The needle on the gauge is indicating the value that is approximately 3 intervals counterclockwise from the scale value of 60, or 60 plus 3 intervals of 2 units each, which is 60 plus 6 or 66. This is response choice "B" in sample question #4.

5. Which of the following values is closest to the value indicated by the gauge in Figure B?

- A. 10.75
- B. 11.50
- C. 12.50
- D. 13.00

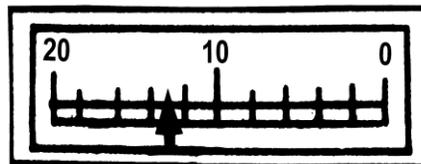
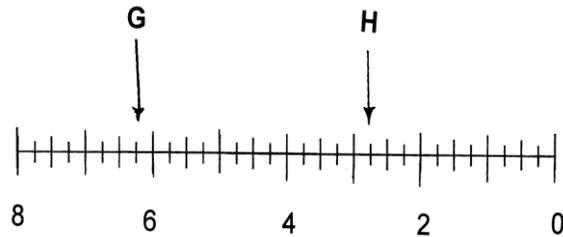


Figure B

**Answer:** The correct answer to sample question #5 is response choice "D". The scale values range from zero through 20, ascending from the right to the left. There are 10 units between the minimum and midpoint and between the midpoint and maximum. There are five (5) intervals of 2 units each between the scale values that are shown. The needle of this gauge is indicating the value that is  $1\frac{1}{2}$  intervals to the left of the midpoint. Therefore, the value being depicted by the gauge is 10 plus 1.5 times 2, which is 10 plus 3, or 13. This is response choice "D" in sample question #5.

Questions 6 and 7 are based on the scale in Figure C below. These questions ask about the values indicated by the arrows labeled "G" and "H".



**Figure C**

6. Which of the following values is closest to the value indicated by the arrow labeled "G" in Figure C?
- A.  $6\frac{1}{8}$
  - B.  $6\frac{1}{4}$
  - C.  $7\frac{3}{4}$
  - D.  $8\frac{7}{8}$

**Answer:** The correct answer to sample question #6 is response choice "B". The scale values range from zero through 8, ascending from the right to the left. The scale values shown are ascending 2 units at a time with 8 intervals between each pair of adjacent scale values. Therefore, the scale is marked off in quarters of a unit, that is, 2 units divided by 8 intervals. This means that each interval equals one-quarter unit. Arrow G is indicating the value that is 1 interval to the left of 6, or  $6\frac{1}{4}$  and this is response choice "B" in sample question #6.

7. Which of the following values is closest to the value indicated by the arrow labeled "H" in Figure C?
- A.  $2\frac{3}{4}$
  - B.  $2\frac{3}{8}$
  - C.  $3\frac{1}{4}$
  - D.  $3\frac{1}{8}$

**Answer:** The correct answer to sample question #7 is response choice "A". It has been determined that the scale ranges from zero through 8 and is marked off into intervals that are equal to one quarter of a unit. Arrow H is indicating the value that is 3 intervals to the left of 2, or  $2\frac{3}{4}$ . This is response choice "A" in sample question #7.

### **ADDITIONAL ASSISTANCE**

If you feel that you would benefit from more practice, your local library or relevant Internet web sites may have reference materials that can be helpful. This is true for all of the subject areas covered by the Treatment Plant Operator Trainee written exam.