

PLANT TECHNICIAN SKILLS AND ABILITIES PRACTICE TEST

OVERVIEW

Welcome to the Plant Technician Skills and Abilities Practice Test. The purpose of this Practice Test is to help you get used to the questions on the tests that you will take and the speed at which you will need to work.

You will take three different paper-and-pencil tests. We call these tests the Plant Technician Skills Test (PTST) and Form I. Practice questions are provided for each of these tests.

When you take the real tests, you'll be provided with everything you need - including a test booklet, answer sheet, scratch paper and pencils. You will also be provided with a calculator to complete the PTST, although you may bring your own calculator if you're more comfortable using it.

You'll take each paper-and-pencil test separately. For each test, the test administrator will review instructions and give you an opportunity to ask questions. The tests are timed and you will need to work quickly and carefully. You will have 65 minutes to complete the PTST and 60 minutes to complete Form I.

During testing, you will read questions from a booklet, along with the 3-4 possible answers for each question, labeled A, B, C, or D. On a separate answer sheet you will mark ONE of the possible answers.

You must *mark only one* answer to each question. If you mark more than one answer to a question, it will NOT be counted as correct.

If you change an answer, it is important to completely erase your first answer so it does not appear that you have marked more than one answer.

Each correct answer adds one point to your score. Points are NOT taken off if you mark an incorrect answer. You should try to score as many points as possible.

Before you begin the tests, notify the test supervisor if you need special accommodations.

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HOW TO DO YOUR BEST ON THE PAPER AND PENCIL TESTS

When you first start each test, quickly look through the entire test to see what kind of work is required in each part.

- You do not have to start at the beginning of the test. You may start answering any part of the test first.
- Be sure to read the entire question and all of the possible answers before marking your Answer Sheet. You are to mark only the **best** answer to the question.
- Remember, a Test Supervisor will be there to help you do your best. If you have any questions, ask for assistance before the testing session begins.

When taking the tests, do not lose time on a difficult question – save it for later.

- It is important that you don't spend too long on any one question. If you are having trouble with a difficult question, you may want to skip it and come back to it later in the test..

Mark an answer to every question, even if you have to guess.

- If you are running out of time on a difficult question and have eliminated some, but not all, of the answer choices, go ahead and guess which answer is best.
- Because there is no penalty for guessing, you should mark an answer to each question, even if you aren't 100% sure of the correct answer.

Do not spend time verifying your answers until you have answered every question.

WRITE ON THE BOOKLET.

- Draw sketches to visualize movement or problem situations.
- Underline key words in directions or the problem itself. Notice the key points underlined in questions 13 and 14 and their directions.

Be sure you carefully read and understand the directions for the sample questions we've provided in this brochure. Although the questions on the actual tests will be different, similar instructions will be used.

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Below are sample questions that will be on the Plant Technician Skills Test (PTST). Answers to these practice questions appear at the end of the document.

TEST DESCRIPTION:

Plant Technician Skills Test (PTST) – The PTST is a 68-question, multiple-choice test which measures problem solving abilities, including: 1) mechanical aptitude; 2) numerical and general reasoning abilities; and 3) the ability to read and use measuring instruments, graphs, charts, and tables. No previous technical experience is required to do well on this test.

You will have 65 minutes to complete the real test. Therefore, you will have about 1 minute to answer each question. As you are answering the questions below, keep track of the time total time it takes you to answer the 14 questions. Your time on the Practice Test should be about 14 minutes.

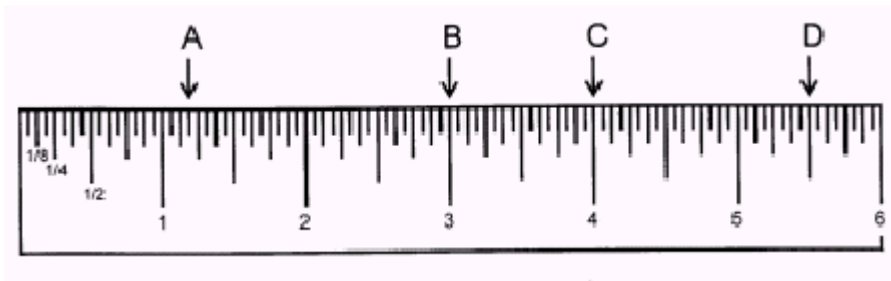
On the following pages are examples of the *kinds* of questions on the PTST. You will be provided with a calculator to take this test.

When you are ready, turn to the next page and begin.

Start time: _____ am/pm

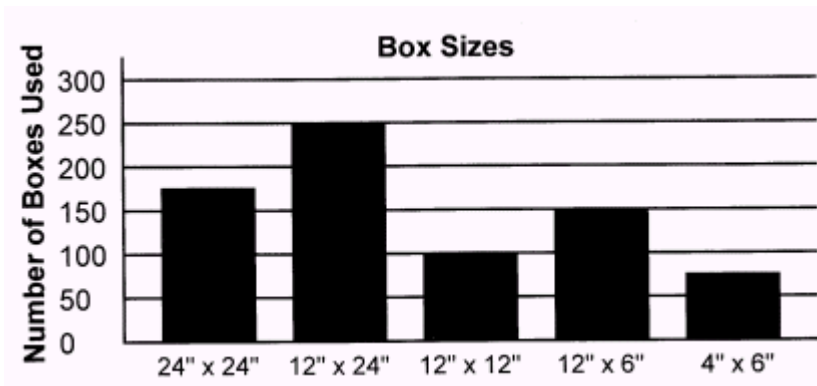
End time: _____ am/pm

Please refer to the ruler below for questions 1 and 2.



1. What is the measurement at Point B?
 A 1 1/2 inches C 3 inches
 B 4 inches D 3 1/2 inches
2. The measurement at Point C is exactly half of which of the following?
 A 1 inch C 4 inches
 B 2 inches D 8 inches

Directions: Below is a bar chart which shows the most frequently used sizes of boxes in a plant in a given week. Use the information provided on the chart to answer the following questions.



3. How many 24" x 24" boxes were used during this week?
 A 75 C 175
 B 150 D 250
4. How many of the box sizes shown in the chart were used at least 100 times during this week?
 A 1 C 3
 B 2 D 4

Directions: In the following problems, four raw materials are being used in making a finished product. Each material is stored in its own tank. For example, Tank A contains material A, Tank B contains material B, etc. The amount in a tank can be determined from a “tape reading,” as shown in the table below. In the problems which follow, you will need to convert the tape reading for a particular storage tank into the number of pounds of material that tank contains.

CONVERSION TABLE				
Tape Reading (in feet)	Number of Pounds of Material			
	Tank A	Tank B	Tank C	Tank D
6 (full)	6,000	1,800	7,500	9,600
5	5,000	1,500	6,250	8,000
4	4,000	1,200	5,000	6,400
3	3,000	900	3,750	4,800
2	2,000	600	2,500	3,200
1	1,000	300	1,250	1,600

5. How many pounds of material does Tank A contain when the tape reading is 4 feet?

- A 1,200 pounds C 5,000 pounds
 B 4,000 pounds D 2,000 pounds

6. How many pounds of material does Tank B contain when the tape reading is 2 feet, 6 inches?

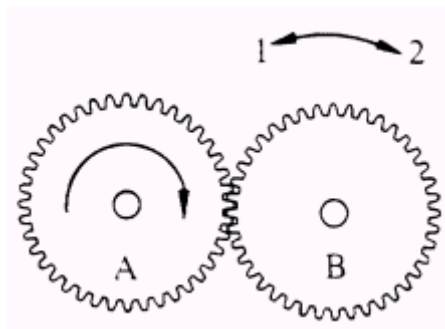
- A 900 pounds C 750 pounds
 B 600 pounds D 1,500 pounds

7. A 10,000 pound batch of finished product is made of 20% of material A, 10% of material B, 50% of material C and 20% of material D. Which tank is able to produce the most batches, assuming that all four tanks are full at the start of production?

- A Tank A C Tank C
 B Tank B D Tank D

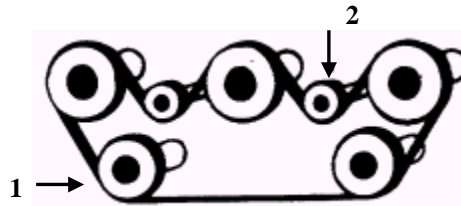
8. Which direction will Gear B turn?

- A Direction 1
 B Direction 2
 C Neither



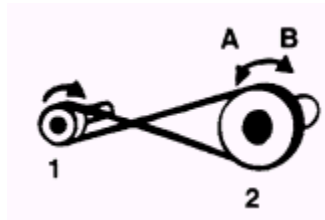
9. When in motion, pulleys 1 and 2 will turn:

- A In the same direction
- B In the opposite direction



10. If pulley 1 is turning as indicated, pulley 2 is turning:

- A In direction A
- B In direction B



Directions: Raw materials are combined to produce mixtures. Different combinations of materials form different mixtures. Batch recipes are used to make the correct mixtures. For example:

BATCH RECIPES	
Mixture A	Material 1 and Material 2
Mixture B	Material 1 and Material 4 OR Material 2 and Material 4

According to these batch recipes, Mixture A is made by combining Material 1 and Material 2. Mixture B can be made in either of two ways: (1) by combining Material 1 and Material 4; or (2) by combining Material 2 and Material 4.

11. Material 1 is required to make:

- A Mixture A
- B Mixture B
- C Both of these mixtures

12. Which material is required to make Mixture B?

- A Material 1
- B Material 2
- C Material 4
- D None of the materials

Directions: Below are two tables which provide information about the amount and types of tissue produced in a given day. To produce tissue, paper machines convert raw materials to paper. The paper is fed into production lines where it is cut, dyed, and packaged. The table below (Table 1) gives the percentage (%) of packages for each line and each kind of tissue that were made from each of four paper machines. For example, Table 1 indicates that 70% of the packages produced on Line 1 came from paper machine A and 30% of those produced on Line 1 came from paper machine B. None of the packages produced on Line 1 came from paper machines C or D.

Line	Paper Machine			
	A	B	C	D
1	70%	30%	0%	0%
2	50%	0%	35%	15%

The following table (Table 2) describes the number of packages produced by each line and the size, pack count, and color of those packages. For example, according to Table 2, Line 1 produced 28 thousand packages of regular, 6-roll, blue tissue and 43 thousand packages of regular, 4-roll, white tissue.

Line	Number of Packages (in thousands)	Size	Pack Count	Color
1	28	Regular	6-roll	Blue
	43	Regular	4-roll	White
2	12	Jumbo	9-roll	White
	25	Jumbo	4-roll	White
	4	Regular	12-roll	Yellow
	4	Regular	6-roll	Yellow

The information in both tables can be put together to track the tissue production process. For example, Table 2 shows that Line 1 produced 28 thousand packages of regular, 6-roll, blue tissue and 43 thousand packages of regular, 4-roll, white tissue. Table 1 shows that 70% of the paper used to make the tissue from Line 1 came from paper machine A and 30% of the paper came from paper machine B. This means that 70% of the paper for the regular, 6-roll, blue tissue on Line 1 and 70% of the paper for the regular, 4-roll, white tissue on Line 1 came from paper machine A.

Use the information in the two tables to answer the following questions.

13. How many paper machines were used to make jumbo, 9-roll, white tissue?

- A 1 C 3
 B 2 D 4

14. A technician found quality problems in a package of regular, 6-roll, yellow tissue. The technician wanted to check the paper machine that was used to make the tissue. Which paper machine was most likely used to make the tissue?

- A Paper machine A C Paper machine C
 B Paper machine B D Paper machine D

PRACTICE PLANT TECHNICIAN SKILLS TEST - ANSWERS:

- | | | | | | | |
|------|------|------|------|-------|-------|-------|
| 1. C | 3. C | 5. B | 7. D | 9. B | 11. A | 13. C |
| 2. D | 4. D | 6. C | 8. A | 10. A | 12. C | 14. A |
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PLANT TECHNICIAN SKILLS AND ABILITIES PRACTICE TEST

Below is information on the Form I Test.

TEST DESCRIPTION:

Form I - Form I is a 60-minute video-based test designed to measure teamwork, personal leadership, communication and interpersonal abilities.

TAKING THE TEST:

You will watch a videotape which presents a series of conflict or problem situations that may be faced by Plant Technicians. After each situation, you are asked to look at a list of ways to deal with the situation. The tape stops for one minute and 45 seconds while you mark on an answer sheet as to what you would most likely do and what you would least likely do if you were in the situation. A total of 24 situations are presented.

The following is an example of the type of situation shown in the Form I Test. You will be asked to watch and listen to videotaped re-enactments of similar situations and mark your responses on an answer sheet.

EXAMPLE:

At the end of your shift, an outside vendor is brought in to fix a faulty meter on an important piece of equipment that can't be run without the meter. He tells you that he'll need his maintenance person to come in and fix it but that his person has gone home for the day. He offers to have someone come in the next day to fix it.

What would you MOST and LEAST likely do? (circle your responses)

- A. Tell the vendor to work with the next shift's team leader because your shift is almost over.
- B. Tell the vendor to find another one of his maintenance people to fix the problem as soon as possible.
- C. Tell the vendor that you and he should discuss this with your team leader.
- D. Tell the vendor to try to find an alternate meter on site because there are other meters in the plant that could do the job.
- E. Tell the vendor that our plant maintenance people might have some ideas on how to deal with the problem.

Would Most Likely Do	Would Least Likely Do
A	A
B	B
C	C
D	D
E	E