

Mississippi State Department of Health
Bureau of Public Water Supply
PSI Computer-Based Testing Information Bulletin

The Mississippi State Department of Health Bureau of Public Water Supply Drinking Water Certification Examinations are delivered at seven sites in Mississippi in Biloxi, Brookhaven, Cleveland, Jackson, Meridian, Prentiss and Starkville and at more than 300 PSI Test Centers geographically located throughout the United States. A current listing of PSI Test Centers, including addresses and driving directions, may be viewed at <http://schedule.psiexams.com>. The examinations are administered by appointment only, Monday through Saturday.

Nondiscrimination Policy

PSI does not discriminate among candidates on the basis of age, gender, race, color, religion, national origin, disability, marital status or any other protected characteristic.

Special Arrangements for Candidates with Disabilities

PSI complies with the Americans with Disabilities Act and strives to ensure that no individual with a disability (as defined by the ADA as a person who has a physical or mental impairment that substantially limits one or more major life activities, a person who has a history or record of such an impairment, or a person who is perceived by others as having such an impairment) is deprived of the opportunity to take the examination solely by reason of that disability. PSI will provide reasonable accommodations for candidates with disabilities. Candidates requesting special accommodations must call PSI at 833-256-1420 to schedule their examination.

1. Wheelchair access is available at all established Test Centers. Candidates must advise PSI at the time of scheduling that wheelchair access is necessary.
2. Candidates with visual, sensory, physical or learning disabilities that would prevent them from taking the examination under standard conditions may request special accommodations and arrangements.

Verification of the disability and a statement of the specific type of assistance needed **MUST BE MADE IN WRITING TO PSI** at least 45 calendar days prior to your desired examination date by completing the two-page *Request for Special Examination Accommodations* form. PSI will review the submitted forms and will contact you regarding the decision for accommodations.



After your application information is received by PSI from MSDH, you will receive confirmation of eligibility to schedule an examination appointment. You may schedule the examination by one of the following methods. Be prepared to confirm a date and location for testing. Individuals are scheduled on a first-come, first-served basis.

Online Scheduling: When you receive the email confirming your eligibility to sit for the examination, you may schedule an examination appointment online at any time at <http://schedule.psiexams.com>. Internet scheduling is available 24 hours-a-day. Go to <http://schedule.psiexams.com> and select "Begin Scheduling" from the home page.

1. Select a category – choose "Water/Wastewater" from the pull down menu.
2. Select a program – choose "Mississippi State Department of Health Bureau of Public Water Supply" from the pull down menu.
3. Select an examination – choose the examination listed from the pull down menu.
4. Click the "Register for this Exam" option. Enter your User name and Password to Log In if returning to this site.
5. First time users of PSI's online scheduling must select "New User."
6. Enter the information requested to create an account. When finished, select the "Continue" button to proceed.
7. If account creation is successful, a page requesting you to confirm/enter your contact information will appear. Enter the required information. When finished, select the "Next" button to proceed.
8. Select three security questions and provide answers which can be used to verify your identity when retrieving a username or password. Click the "Submit" button to proceed to the scheduling page.
9. Begin typing the zip code or city name of your preferred test area and select the name from the list displayed. Click "Search" to find the closest test centers. The closest Test Center may be in a neighboring state.
10. Select a test center location to see available dates. (All available dates are shown in green). Select the date, then time you want. Submit your request by clicking on the "Schedule" button. You will be sent a confirmation email of the appointment scheduled.

Telephone Scheduling: Call PSI at 833-256-1420 to schedule an examination appointment. This toll free number is answered from 7:00 a.m. to 9:00 p.m. (Central Time) Monday through Thursday, 7:00 a.m. to 7:00 p.m. on Friday and 8:30 a.m. to 5:00 p.m. on Saturday.



Examination Rescheduling

You may reschedule your examination once at no charge online at <http://schedule.psiexams.com> or by calling PSI at 833-256-1420 at least two business days prior to your scheduled examination appointment. The following schedule applies.

If your examination is scheduled on...	You must contact PSI by 3:00 p.m. Central Time to reschedule the examination by the previous...
Monday	Wednesday
Tuesday	Thursday
Wednesday	Friday/Saturday
Thursday	Monday
Friday	Tuesday

Missed Appointments / Forfeitures

You will forfeit the examination registration and all fees paid under the following circumstances.

- You wish to reschedule an examination but fail to contact PSI at least two business days prior to the scheduled testing session.
- You wish to reschedule a second time.
- You appear more than 15 minutes late for an examination, or
- You fail to report for an examination appointment.

Inclement Weather/Power Failure/Other Emergency

In the event of inclement weather or unforeseen emergencies on the day of an examination, PSI will determine whether circumstances warrant the cancellation, and subsequent rescheduling, of an examination. The examination will usually not be rescheduled if the Test Center personnel are able to open the Test Center.

You may visit www.psonline.com/openings prior to the examination to determine if PSI has been advised that any Test Centers are closed. Every attempt is made to administer the examination as scheduled; however, should an examination be canceled at a Test Center, all scheduled candidates will receive notification following the examination regarding rescheduling or reapplication procedures.

If power to a Test Center is temporarily interrupted during an administration, your examination will be restarted. The responses provided up to the point of interruption will be intact.

Identification

To gain admission to the Test Center, you must present two forms of identification. The primary form must be government issued, current and include your name, signature and photograph. Temporary ID is not accepted. You will also be required to sign a roster for verification of identity.

- Examples of valid primary forms of identification are current: driver's license with photograph; state identification card with photograph; passport; military identification card with photograph.
- The secondary form of identification must display your name and signature for signature verification (e.g., credit card with signature, social security card with signature, employment/student ID card with signature).
- If your name on your registration is different than it appears on your identification, you must bring proof of your name change (e.g., marriage license, divorce decree or court order).

You must have proper identification to gain admission to the Test Center. Failure to provide appropriate identification at the time of the examination is considered a missed appointment.

Security

PSI administration and security standards are designed to ensure all candidates are provided the same opportunity to demonstrate their abilities. The Test Center is continuously monitored by audio and video surveillance equipment for security purposes.

The following security procedures apply during the examination:

- Examinations are proprietary. No cameras, notes, tape recorders, pagers or cellular/smart phones are allowed in the testing room. Possession of a cellular/smart phone or other electronic devices is strictly prohibited and will result in dismissal from the examination.
- Only silent, non-programmable calculators without alphabetic keypads or printing capabilities are allowed in the testing room.
- No guests, visitors or family members are allowed in the testing room or reception areas.

Personal Belongings

No personal items, valuables, or weapons should be brought to the Test Center. Only wallets and keys are permitted. Coats must be left outside the testing room. You will be provided a soft locker to store your wallet and/or keys with you in the testing room. You will not have access to these items until after the examination is completed. Please note

the following items will not be allowed in the testing room except securely locked in the soft locker:

- watches
- hats
- wallets
- keys

Once you have placed your personal items into the soft locker, you will be asked to pull out your pockets to ensure they are empty. If all personal items will not fit in the soft locker you will not be able to test. The site will not store or be responsible for any personal belongings.

If any personal items are observed or heard (cellular/smart phones, alarms) in the testing room after the examination is started, you will be dismissed and the administration will be forfeited.

Examination Restrictions

- Pencils and the ABC Formula & Conversion Table will be provided during check-in. (See pages 9-10 of this handbook.)
- You will be provided with one piece of scratch paper at a time to use during the examination, unless noted on the sign-in roster for a particular candidate. You must return the scratch paper to the proctor at the completion of testing, or you will not receive your score report.
- No documents or notes of any kind may be removed from the Test Center.
- No questions concerning the content of the examination may be asked during the examination.
- Eating, drinking or smoking is not permitted in the Test Center.
- You may take a break whenever you wish, but you will not be allowed additional time to make up for time lost during breaks.

Misconduct

If you engage in any of the following conduct during the examination you may be dismissed, your scores will not be reported and examination fees will not be refunded. Examples of misconduct are when you:

- create a disturbance, are abusive, or otherwise uncooperative;
- display and/or use electronic communications equipment such as pagers, cellular/smart phones;
- talk or participate in conversation with other examination candidates;
- give or receive help or are suspected of doing so;
- leave the Test Center during the administration;

- attempt to record examination questions or make notes;
- attempt to take the examination for someone else;
- are observed with personal belongings, or
- are observed with notes, books or other aids without it being noted on the roster.

Taking the Examination

Report to the Test Center no later than your scheduled appointment time. Look for signs indicating PSI Test Center check-in. If you arrive more than 15 minutes after the scheduled testing time you will not be admitted. You may bring a non-programmable calculator to the examination. Calculators built into cellular/smart phones are not permitted in the Test Center.

Computer Login

After your identification has been confirmed, you will be directed to a testing carrel. You will be instructed on-screen to enter your identification number. Your photograph, taken before beginning the examination, will remain on-screen throughout your examination session. This photograph will also print on your score report.

Practice Examination

Prior to attempting the examination, you will be given the opportunity to practice taking an examination on the computer. The time you use for this practice examination is NOT counted as part of your examination time or score. When you are comfortable with the computer testing process, you may quit the practice session and begin the timed examination.

Timed Examination

Before beginning the examination, instructions for taking the examination are provided on-screen. The computer monitors the time you spend on the examination. The examination will terminate if you exceed the time allowed. You may click on the Time box in the lower menu bar on the screen to monitor your time. A digital clock indicates the time remaining for you to complete the examination. The Time feature may be turned off during the examination.

Only one examination question is presented at a time. The question number appears in the lower right portion of the screen. Choices of answers to the examination question are identified as A, B, C, or D. You must indicate your choice by either typing in the letter in the response box in the lower left portion of the computer screen or clicking on the option using the mouse. To change your answer, enter a different option by typing in the letter in the response box or by clicking on the option using the mouse. You may change your answer as many times as you wish during the examination time limit.

To move to the next question, click on the forward arrow (>) in the lower right portion of the screen. This action will move you forward through the examination question by question. If you wish to review any question or questions, click the backward arrow (<) or use the left arrow key to move backward through the examination.

An examination question may be left unanswered for return later in the examination session. Questions may also be bookmarked for later review by clicking in the blank square to the right of the Time button. Click on the double arrows (>>) to advance to the next unanswered or bookmarked question on the examination. To identify all unanswered and bookmarked questions, repeatedly click on the double arrows (>>). When the examination is completed, the number of examination questions answered is reported. If not all questions have been answered and there is time remaining, return to the examination and answer those questions.

Candidate Comments

During the examination, you may make comments for any question by clicking on the Comment button to the left of the Time button. This opens a dialogue box where comments may be entered. Comments will be reviewed, but individual responses will not be provided.

Following the Examination

After completing the examination, you are asked to answer a short evaluation of your examination experience. Then, you are instructed to report to the test center supervisor to receive a score report.

Failing to Report for an Examination

If you fail to report for an examination, you will forfeit the registration and all fees paid to take the examination. A completed application form and examination fee are required to reapply for examination.

Confidentiality

Information about candidates for testing and their examination results are considered confidential. Studies and reports concerning candidates will contain no information identifiable with any candidate, unless authorized by the candidate.

Duplicate Score Report

Requests for a duplicate score report must be made in writing to PSI within one year of the examination date. The request must include the candidate's name, mailing address, telephone number, date of examination and examination taken. Submit this information along with a fee of \$25.00 payable to PSI Services Inc. by cashier's check or money order. Duplicate score reports will be processed and mailed within approximately five business days following receipt of the request.



Re-Examination

If you are not successful in your examination attempt, you must wait 30 days before you may retake the examination. Candidates are allowed up to three (3) total attempts per year.

ABC FORMULA & CONVERSION TABLE

Conversion Factors

1 ft³ = 7.5 gallons
 1 ft = 0.305 meters
 1 gallon = 3.79 liters
 1 gallon = 8.34 pounds
 1 gpg = 17.1 mg/L
 1 horsepower = 0.746 kilowatts
 1 MGD = 694 gpm
 1 lb = 0.454 kilograms
 1 psi = 2.31 ft
 2000 pounds = 1 ton
 1440 minutes = 1 day
 1 gpm/ft² = 1.6 in/min
 π = 3.1416

Abbreviations

ft = feet
 gpd = gallons per day
 gpg = grains per gallon
 gpm = gallons per minute
 lbs = pounds
 mg/L = milligrams per liter
 MGD = million gallons per day
 ml = milliliter
 psi = pounds per square inch
 SWL = static water level
 PWL = pumping water level
 DD = drawdown

Formulas

$$\text{Alkalinity} = \frac{(\text{mL of titrant})(\text{acid normality})(50,000)}{\text{mL of sample}}$$

$$\text{Area of a circle} = 0.785 \times \text{diameter}^2$$

$$\text{Area of a rectangle} = \text{length} \times \text{width}$$

$$\text{Area of a triangle} = \frac{\text{base} \times \text{height}}{2}$$

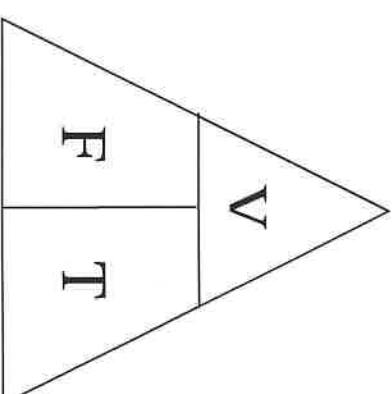
$$\% \text{ stroke of a chemical feed pump} = \frac{\text{desired flow}}{\text{maximum flow}} \times 100$$

Circumference of a circle = π x diameter

$$\text{Time} = \frac{\text{volume}}{\text{flow}}$$

$$\text{Flow} = \frac{\text{volume}}{\text{time}}$$

$$\text{Volume} = \text{flow} \times \text{time}$$



Dose = demand + residual

Contact Time (CT) = (residual in mg/L) (time in minutes)

Dosage:

$$\text{a.) } \frac{\text{lbs}}{\text{day}} = 8.34 \times \frac{\text{mg}}{\text{L}} \times \text{MGD}$$

$$\text{b.) } \frac{\text{lbs}}{\text{day}} = 0.012 \times \frac{\text{mg}}{\text{L}} \times \text{gpm}$$

Fluoride dosage:

$$\text{Rate (gpm)} = \frac{(\text{capacity in gpm})(\text{dosage in } \frac{\text{mg}}{\text{L}})}{18000 \frac{\text{mg}}{\text{L}}}$$

Drawdown = Pumping Water Level – Static Water Level

Efficiency Rates:

$$\text{a.) Removal} = \frac{(\text{in-out})}{\text{in}} \times 100 = \% \text{ efficiency}$$

$$\text{b.) Pumping} = \frac{\text{out}}{\text{in}} \times 100 = \% \text{ efficiency}$$

$$\text{Backwash Rate} = \frac{\text{flow}}{\text{area}}$$

$$\text{Hydraulic Loading Rate} = \frac{\text{flow}}{\text{area}}$$

$$\text{Rise Rate} = \frac{\text{rise in inches}}{\text{time in minutes}}$$

$$\text{Gallons per capita per day} = \frac{\text{GPD}}{\text{population}}$$

$$\text{Hardness} = \frac{\text{mL of titrant} \times 1000}{\text{mL of sample}}$$

$$\text{Horsepower} = \frac{(\text{flow in gpm})(\text{head in ft})}{3960}$$

$$\text{Brake Horsepower} = \frac{(\text{flow in gpm})(\text{head in ft})}{(3960)(\text{efficiency})}$$

$$\% \text{ of flow reduction} = \frac{\text{original flow} - \text{reduced flow}}{\text{original flow}} \times 100$$

$$\text{Slope} = \frac{\text{drop or rise}}{\text{distance}}$$

Velocity:

$$\text{a.)} = \frac{\text{flow}}{\text{area}}$$

$$\text{b.)} = \frac{\text{distance}}{\text{time}}$$

Volume of a rectangle in ft³ = length x width x height

Volume of a cone in ft³ = (1/3) x 0.785 x diameter² x height

Volume of a cylinder in ft³ = 0.785 x diameter² x height

$$= \pi \times \text{radius}^2 \times \text{height}$$

Volume in gallons = volume in ft³ x 7.5 $\frac{\text{gal}}{\text{ft}^3}$

$$\text{Weir overflow rate} = \frac{\text{flow}}{\text{weir length}}$$