

# Delaware Department of Agriculture Weights and Measures

## Examination for Registered Scale Technicians

1. The Delaware Weights and Measures Act is Delaware Code Title 6 Chapter \_\_\_\_\_.
2. The Act gives weights and measures officials authority over the following equipment:
  1. Devices used solely by a manufacturer for its own purposes
  2. Devices used in the buying and/or selling of a product
  3. Devices used only in determining the weight of raw material used in production
3. Test weights used by scale technicians are required to be certified by an accredited NIST laboratory:
  1. As often as determined by the Department of Agriculture
  2. Every two years
  3. Every year
  4. Every three years
4. Following an inspection and test, the weights and measures inspector has the authority to take the following official action:
  1. Approve
  2. Reject
  3. Condemn and seize for evidence
  4. All of the above
5. A registered service technician has the authority to:
  1. Remove from a device an official weights and measures seal of tag
  2. Take a device out of service when it is found to be out of tolerance
  3. Place a device into commercial service following corrective service
  4. All of the above
6. A registered service technician is required to notify weights and measures (send in a Placed in Service Report) within \_\_\_\_\_ day (s) after placing a device into service.
7. A registered service technician should have a current year N.I.S.T. Handbook \_\_\_\_\_.
8. The General Code of Handbook 44 applies to all commercial devices. Paragraphs in The General Code begin with the letter \_\_\_\_\_. Scale Code paragraphs begin with \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.

9. G-S.1. is both retroactive and non-retroactive. Subparagraphs (a) and (b) are \_\_\_\_\_; b-1, (c), (d), (e), and (f) are \_\_\_\_\_.
10. All commercial devices must be marked with the name, initials or trademark of the (a) manufacturer and (b) the model designation.
1. True
  2. False
11. Scales at the checkout of a supermarket are in error favorable to the owner/operator (scale indications are fast - over registering). They are considered to be improperly maintained according to Paragraph G-UR.\_\_\_\_\_.
12. General Code Paragraph\_\_\_\_\_states that, whenever equipment is adjusted, the adjustments shall bring performance errors as close as practicable to \_\_\_\_\_.
13. Tolerances applied to devices being placed into service for the first time, being officially tested for the first time, after calibration, and following major service or overhaul is \_\_\_\_\_ tolerance. Scales in service over 30 days:\_\_\_\_\_ tolerance.
14. The maintenance tolerance values for scales are found in tolerance Table \_\_\_\_\_.
15. The allowable range of results for the shift test is in Scale Code, Paragraph T.N. . (Note: This applies to maintenance tolerance tests only.)
16. Paragraph N.1.3.7. states that the shift test of a bench or counter scale is conducted at 1/3 capacity test load. What is the maintenance tolerance for the shift test of a 30 lb x 0.01 lb scale?
1. 0.005 lb
  2. 0.010 lb
  3. 0.01 lb
  4. 0.02 lb

17. These are the results of the shift test of a Class III scale 50 lb x 0.01 lb conducted using 15lbs of known weight: (maintenance tol.)

<u>Scale Indication (lb)</u>	<u>Circle In or Out of Tolerance</u>	
15.00	In	Out
15.02	In	Out
15.01	In	Out
14.98	In	Out
The <u>scale is</u> <u>In</u> <u>Out</u>		

18. The shift test of a 5,000lb Class III floor scale is tested at \_\_\_\_\_ capacity on the corners, or at \_\_\_\_\_ capacity in the center of each quadrant, according to (Scale Code) N.1.3.7.b.

19. The shift test of a vehicle scale is conducted at a minimum of \_\_\_\_\_ test load (s) according to (Scale Code) N.1.3.3.1. Scale Code, Para (a)
20. The minimum test weight and test load for a scale test are found in Scale Code, Table \_\_\_\_\_.
21. The amount of test weight required for a 1,000 lb capacity scale is \_\_\_\_\_ Lb.  
Test weight required for a vehicle scale 100 ton x 20 lb is \_\_\_\_\_ Lb  
Test weight required for a retail scale 30 lb x 0.01 lb is \_\_\_\_\_ Lb
22. For the increasing-load test:
  - A. The tolerance for the substitution test is applied to the scale based on \_\_\_\_\_.
  - B. The tolerance for the strain load test applies to \_\_\_\_\_.
23. Scales and all attachments (e.g. indicators, bases, load cells, etc.) shall be maintained in proper operating condition throughout the term of service.  
  
(Paragraph \_\_\_\_\_)
24. A security seal shall be appropriately affixed to any adjustment mechanism designed to be sealed is found in HB 44, Paragraph \_\_\_\_\_
25. Marking requirements for all scales and attachments are found in the sale code tables \_\_\_\_\_ and \_\_\_\_\_.