

16. Preparatory to and during the above process, what precaution should be taken to insure obtaining a correct result?
17. Describe the method of taking a "Special Test," and state what special memorandum it is necessary to make in your official diary, in addition to the detailed record of the result of such test?
18. What special precautions are necessary in relation to this test?
19. Under what circumstances is it specially necessary to take the above test, and where should the result be recorded?
20. Describe fully the method of "Testing for Duty," and what precautions should be taken to ensure correct result?
21. Give the net product of the following charge, and state its alcoholic value :—
- | | | |
|---|-----------|-------------------|
| Charge, 430 gallons beer. | | |
| Entire contents of tun, 11,325 gallons. | | |
| Made from 15,000 lbs. grain. | | |
| Low wines preceding charge..... | 50 Gals @ | 34·4 under-proof. |
| Product of charge..... | 30 " | 10·3 over-proof. |
| Low wines from charge distilled..... | 53 " | 41·4 under-proof. |
22. How does a sudden mixture of alcohol with water affect the volume and temperature of the mixture?
23. Describe the meaning of the term "Low Wines," and how they are treated?
24. Is it necessary to have that portion of the apparatus, used in the re-distillation of low wines, secured, and if not so secured, how might the revenue be seriously affected?
25. When about to take a "Special Test" of tun No. 3, it was found that the product of two tuns was in close receiver, viz:—2,750 wine-gallons at 25·9 over-proof. After tun No. 3 was distilled there were 3,910 wine-gallons at 28·4 over-proof. What was the strength of the spirits produced from contents of the former tun?
26. Examine the accompanying return, (D. 16) and state at what dates, in accordance with the established order of use tuns Nos. and may be expected next to come into use.

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No. 6.
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SACCHAROMETER.

Time.—1 hour.

1. What is meant by the term "Specific gravity" applied to beer or wash and of what is it a criterion?
2. Explain how the stem of Bates' saccharometer is divided, and why the divisions are not equi-distant.