

Three separate review forms follow for conducting the internal validation.

One member of the exam team can be elected to serve as the coordinator to ensure that all changes have been made; typically, this may be the editor.

(1) Reviewer's Checklist

(2) Pilot Test/Tryout Checklist and

(3) Editor's Checklist

Reviewer's Checklist

MULTIPLE CHOICE TEST ITEM CRITERIA

- _____ 1. Does each test item have a documented link to important licensee tasks and K/As?
- _____ 2. Facility learning objective is documented (LOs preferred but not required)?
- _____ 3. Test items are clearly and precisely expressed.
- _____ 4. Test items examine only one concept or topic.
- _____ 5. Is there only one correct answer to the question?
- _____ 6. Test items include as much necessary information about the problem or situation in the stem, leaving only the solution, action, or effect for the answer.
- _____ 7. Answer options that are collections of true/false statements are not used.
- _____ 8. Is each question operationally oriented (i.e., is there a correlation between job demands and test demands)?
- _____ 9. Backward logic (items that ask for what should be provided in the stem and provide what should be required in the answer) is not used.

- _____ 10. Does the question discriminate a competent licensee from one who is not?
- _____ 11. Is the question at least at the comprehension-level of knowledge?
- _____ 12. Are tricky or irrelevant questions avoided?
- _____ 13. Are the answer options homogeneous, balanced, and symmetrical?
- _____ 14. The stem or demand of the question is operationally oriented.
- _____ 15. Is the question free of "specific determiners" (e.g., logical or grammatical inconsistencies, incorrect answers which are consistently different, verbal associations between the stem and the answer options)?
- _____ 16. Is each item stated positively, unless the intent is to test knowledge of what *not* to do?
- _____ 17. Negative logic is used only when necessary and is **HIGHLIGHTED** if present. Double negatives are not used.
- _____ 18. The simple answer group, "Increases, Decreases, Remains the same, Fluctuates" is not used. However, those answers combining the above with a reason are acceptable (i.e., "Increases because...").

- _____ 19. “None of the above” or “All of the above” and superlatives such as “most correct” or “best answer” are not used.**
- _____ 20. Are the 3 distractor options are plausible?**
- _____ 21. Are common misconceptions used as distractors?**
- _____ 22. Are the answer options of the items ordered sequentially?**
- _____ 23. Is the question free of trivial distractors?**
- _____ 24. There are no apparent clues within the examination (i.e., one test item does not give away the answer to another test item).**
- _____ 25. The answer distributions is not predictable (e.g., “c” in not most often correct).**
- _____ 26. Does the question pose situations and problems other than those directly presented during training?**

Pilot Test/Tryout Checklist

TEST ITEM TECHNICAL REVIEW FORM

NAME _____ REACTOR
CERTIFICATION (Circle all applicable)

TEST ITEM NO. _____ W CE BWR Other (Specify)
Cover the answer for the associated test item and read the test item carefully. Then, choose your answer and compare it with the keyed answer.

Answer the following questions. If any question is answered "NO," then edit the associated test item (red ink) or explain why the test item is unacceptable for use on the exam.

Provide any additional comments on the bottom/reverse of this page.

YES/NO/%

___ 1. Does this test item require knowledge that a competent RO or SRO should possess to perform his/her job in a manner that protects public health and safety?

___ 2. Is the keyed answer correct?

___ 3. Are the remaining answer options plausible?

- 4. Does this test item match the identified topic and knowledge?
- 5. Can this test item be answered correctly by a candidate who has NOT received detailed systems training?
- 6. Is all terminology in this test item appropriate for a candidate?
- 7. Is this item acceptable as is, without revision?
- 8. Assume 100 non-licensed examinees have satisfactorily completed LOIT. In your opinion, what percent of these individuals will be able to answer this test item correctly?
- 9. What percent of the job holders could answer it correctly?

Editor's Checklist

EDITORIAL CRITERIA

YES/NO

- 1. The question is clear, concise, and easy to read.
- 2. Punctuation, spelling, and grammar is correct.
- 3. Key words are highlighted.
- 4. Test items include as much necessary information about the problem or situation in the stem, leaving only the solution, action, or effect for the answer.
- 5. Is the question free of "specific determiners" (e.g., logical or grammatical inconsistencies, incorrect answers which are consistently different, verbal associations between the stem and the answer options)?
- 6. All references needed to answer the question are included with or follow the associated test item.
- 7. Test items are numbered sequentially 1 through 100.
- 8. Exams are page numbered and the proper examination title and form appear on each page.
- 9. Exam copies are clean and clear.