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### A. Aspects of Item Conception and Construction

Basic Item Conception: Which item type to choose?

- 1. Keep the purpose of the item clearly in mind while considering how to make it relevant and appropriate for the:
  - **—Population:** What are the characteristics of the target audience? Experienced, inexperienced, a mix? Do they have to be there, or do they want to be there? Do they have any incentive for paying attention to you or learning the material being presented? What are the potential consequences of inattention?
  - -Circumstances: Are you preparing material to go with a brief overview or a long course? Who is sponsoring the course or seminar? Is the audience paying or being subsidized?

The briefer the course, the more likely that recall and definition questions alone would be appropriate; a full-blown course would use those in conjunction with increasingly demanding questions that require more sophisticated reasoning or detailed knowledge.

**-Outcome Objectives:** Are there specific outcomes with performance or knowledge expectations?

The answer to this helps guide your determination of how these outcomes will best be assessed. Discussion? Demonstration? Portfolio? Essay or short answer responses? Multiple choice or matching? A "Practice Test" simulating one that someone else will be administering?

#### Overall Item Construction Considerations for Multiple-Choice Items

(From this point on the observations will bear primarily on the construction of multiple-choice items.)

### 2. "Craft" the stem until it is focused and directed

One very widely used test question has this stem: "It is true that:"

This question has correct answers on subjects ranging from aardvarks to zoning.

"Focus" means you can tell the question is about zoning -- or aardvarks -- from reading the stem; "directed" means you can tell *what it is* about the subject that is being tested.

For example, imagine "focusing" on zoning, and directing your stem toward "nonconforming use."

Weak stem: "A type of zoning is:"

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Focused, directed stem: "When a municipality permits the continued use of a property for a purpose that zoning regulations have been established to restrict, this is referred to as:"

### 3. Make difficult items that way due to required knowledge or reasoning

Any question that is a maze or a catch-all of irrelevant information needs to be revised for clarity *unless* it is specifically testing a student's ability to navigate a maze or sort through a mess.

#### 4. Use direct questions or incomplete statements for the stem

These are known as "closed" and "open" stems:

Q: "Is this an example of a closed-stem question?"
A: "Yes"
Q: "A question with an open stem ends:"
A: "with options that complete it."

# 5. Put as much of the item's shared or necessary information in the stem as possible

For directness through reduction of repetition or belated introduction of important subject material, try to revise items that wind up with long options.

### **B.** Option Construction and Considerations

### 1. Craft the "key" called for by the stem

A well-focused and directed stem often has enough information in it that a knowledgeable person can "picture" the answer before reading any of the options. That is the answer you should strive to craft.

#### 2. Make all options logically consistent with the thought in the stem

Read the stem every time you work on an option. That way, the option will be more likely to "flow" from the stem than from a neighboring option.

#### 3. Make all options grammatically consistent with the stem

Same as above: read the stem before reading an option to make sure they are grammatically consistent.

#### 4. Make distractors plausible, reasonable, and attractive, but incorrect

This is where weak test takers get their mistaken beliefs that "there was more than one right answer," and "the questions were tricky."

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- It's also where the <u>better</u> test takers catch you for having more than one right answer or writing tricky questions.
- **–Common mistakes:** Think about what the less-informed test taker would find attractive, or the points that need to be clarified during class.
- **-Common misperceptions:** Think about reasonable misunderstandings. For example, VA loans and who pays for various standard loan points.
- **—Insufficient or excessive information:** Think about the elements essential to a particular answer, then craft distractors that are less than complete, or that include extraneous, but plausible, additional information.

#### 5. Make options approximately the same length

An item will attract undue attention to itself by having one option the size of an elephant while the rest are the size of Chihuahuas.

### 6. Vary the length and position of the key

- High-school test-taking logic has it that when in doubt, go for the longest answer. If there isn't one that is notably longer, or more complete, then go for (C).
- For that reason, a skilled item-writer will make sure that the longest, most complete answer is correct occasionally and wrong a fair number of times, and that the position of the key is as evenly distributed as possible.
- In other words, if you wait until the last few options to write the key, which is a natural tendency, revise it into the (A) or (B) position and craft the remaining options for length and consistency.

### 7. Arrange options in logical order

-Increasing length, increasing degree, etc.: If the options are single-words, terms, or short phrases, consider arranging them from shortest to longest. If they are numeric, arrange them in increasing order. If they have various degrees of detail, arrange them from least to most detailed.

#### 8. Work commonly repeated words or information back up into the stem

The first draft of an item often has common and/or vital information in the options. For example, a stem that begins as, "Which of the following statements about itemwriting is correct?" may have options that all begin with "Writing an item . . ."

The stem above is not yet directed, and the direction is probably given only in the key.

For example, imagine the key is: "Writing an item takes an average of 30 minutes per item for well-crafted real estate items." The key directs us to (1) time spent, (2) the kind of test question being considered, and (3) item quality.

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The stem should provide this direction through the following revision:

Well-crafted real estate items take an average of how many minutes to produce?

- (A) Five
- (B) Ten
- (C) Thirty
- (D) Sixty

### 9. Revise unnecessary information out of options as well as out of the stem

- -May "cue" other items;
- -May overlap with other items;
- -May provide key component for a separate question.

Stem: "In addition to meeting the continuing education requirement of thirty hours per renewal period, a licensee must pay which of the following amounts for annual license renewal?"

The stem provides information that answers questions about continuing education requirements and frequency of license renewal. Why give all that away?

Revise the stem to read: "A licensee must pay which of the following amounts for license renewal?"

This revision opens up the following additional questions:

- (1) "A licensee must complete a minimum of how many hours of continuing education per renewal period?" Key: Thirty
- (2) "How often must an active real estate licensee renew the license?" Key: annually

# 10. Minimize the use of "negative stem" format ("All of the following . . . except:")

- -Easy to write, so they tend to be low quality;
- -Reverses normal thought pattern, so mistakes are often based on misreading, not weak grasp of material;
- -- Can be used to advantage for multi-element topics.

Negative stem items require careful consideration and crafting to overcome the likelihood that they will simply be weak or confusing.

However, they are useful when the intent is to identify the "odd-man-out," or to reinforce a list of multiple requirements.

For example:

In order to be considered valid, a listing agreement must include all of the following elements EXCEPT the:

- (A) date of the agreement
- (B) time of the agreement
- (C) signature of the seller
- (D) signature of the listing agent

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### 11. Make sparing use of absolute terms

**-"Always," "never," "every," "only," etc.** Qualifiers are essential in test questions, but absolute terms are commonly abused through overuse. Typically they appear in distractors, where their strength essentially drives the candidate to a more reasonable-looking answer. Use them sparingly; use them skillfully.

### 12. Avoid using "All of the above" and "None of the above"

-Principle: A responsibly written item should include correct information that completes the thought presented in the stem.

These items are among the fastest and easiest to write. Novice item writers can list three correct or three incorrect options in no time at all.

While these items can serve as a springboard for fruitful class discussion, they are considered suspect for more serious examinations: most test vendor standards prohibit using them on the general portion of the real estate exam and strongly recommend against them in the state-specific exam.

### 13. Avoid using opposites within the options

-Principle: A true/false contrast in the options directs attention *from* the "wrong" one *to* the other one.

Consider the following item:

Which of the following statements about maintaining a real estate license is CORRECT?

- (A) It must be renewed to remain in effect
- (B) It need not be renewed to remain in effect
- (C) It must be kept in the licensee's real estate files
- (D) It needs to be notarized at least every three years

Why even read (C) and (D) when (A) and (B) are working as a pair, one of which has to be correct?

### 14. Make sure that "set" items are independent of each other

When you create a group of items that refer back to the same stimulus or scenario, pay extra attention to making sure that information in one does not help answer another one.

### C. General Style and Item-Crafting Considerations

#### 1. Make sure the item as a whole is appropriate, relevant, and accurate

This means that a final read-through of the item will show that it integrates the points above and is internally consistent.

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Accuracy is of ultimate importance for the key, but also keep in mind that test takers often learn new information while taking the test. So, if a question bears on which government agency is responsible for a particular function, avoid providing fictitious agencies: the test taker might know the correct answer, but go away having "learned" about a new government agency.

#### 2. Use language that is simple, direct, clear, and free of ambiguity

This point merely summarizes many of those above. One further consideration of how to stay on track with these points is to follow any "Which of the following/All of the following" phrases with a noun or descriptive term that characterizes the direction of the item, e.g., "Which of the following contract provisions . . . "

The direction provided by the noun in the stem will help you recognize instantly if you are maintaining a parallel structure and consistent logic among the options.

And remember that as your revise genuine ambiguity out of your items, that plausible, but incorrect answers may always provide "ambiguity" for the less informed test takers, whereas the same question will not be ambiguous at all to those with a confident grasp of the material.

## 3. Use language that is appropriate for the reading level of the population tested

Real estate material requires students to gain familiarity with terms and concepts that are commonly used within the profession. But it does not demand that they be equally responsible for unfamiliar words that are not real-estate related.

So, when writing an item, consider the material you expect them to learn as well as the general reading ability of your students. Then go ahead and use words like "novation" and "hypothecation," while revising out "quotidian" and "fatuous."

## 4. Reject language that may be offensive to subgroups of the population tested

Clearly, references to any identifiable subset of the general population in test material puts the creator in sensitive territory.

This commonly occurs through the use of proper names or illustrative scenarios that might make some test takers feel included and respected and the rest excluded or diminished.

Regardless of intent or degree, if test material provides challenges outside the scope of the knowledge and skills it is designed to test, those extraneous challenges must be revised out of the material. Period.

### -- End of Annotated Outline --