

At A Glance: American Board of Radiology Item Format

This sheet is meant to be used as a quick reference when writing items for an American Board of Radiology (ABR) written exam. It briefly demonstrates what is, and is not, ABR-accepted format. It is to be used as a supplement to, **not** a replacement for, the Item Writers' Guide. All issues listed below are covered in more detail in the guide.

ABR Format

General

Multiple choice (single best answer), R-type, and hotspot items are used in written exams.

State the needed information as concisely as possible and at a comfortable language level.

In addition to being geared to the understanding of a resident, all items should be clinically relevant, pertinent, and up to date.

Focus the stem and options and avoid clues.

Cite your references and code (classify) your items!

Stems

The stem should present all information necessary for the candidate to determine the answer without having to look for clues in the option list.

The stem should be positively worded and presented in a linear fashion (moving from past to present information).

Some negative items reflect the process of elimination inherent in the practice of radiology. Negative items written for this purpose are acceptable (but are not common).

Options

All options should be plausible, but there should be only one best answer among the choices and, to the prepared candidate, it should clearly be the right answer.

Keep options homologous (in similar format—same part of speech, verb tense, structure, etc.—and same conceptual topic—treatment, symptom, diagnosis, etc.). Test one type of specific information/knowledge with each item.

To focus an item, think of what the question is asking the candidate to do (e.g., recall information, apply knowledge, solve a problem, etc.).

Most items have four or five answer options. In some cases, three answer options are acceptable (e.g., increase, decrease, stay the same).

The key should be similar in length to the distractors, and all options should properly complete the stem.

Not ABR Format

General

True/False, multiple answer, and fill-in-the-blank items are **NOT** used in written exams.

Avoid excessive verbiage and unnecessarily difficult vocabulary.

Avoid controversial subject matter. Items that relate to specific studies, regional practices, or the methods of particular doctors should not be used. Avoid items that focus on trendy subjects or practices and theories that are open to debate.

Stems

Do not use stems such as “Which of the following is true?” and “[Something] is:”. They are unfocused and do not pass the “cover test”; that is, the item cannot be answered with the options covered.

Avoid negative stems, e.g., “Which of the following is NOT. . . ?” “All of the following are true EXCEPT,” “Which of the following is FALSE?” (refer to exceptions at left).

A stem that delivers information randomly or includes too much information not directly related to the question being asked can be confusing and can draw the candidate away from the task at hand.

Options

Options may **NOT** include: “All of the above,” “None of the above,” and/or multiple answers (e.g., “Both A and C” or “A, D, and E”).

Do not make the candidate think about several different topics. Avoid options that are not similar in content (e.g., apples and frogs [bad] vs. apples and oranges [good]) or in part of speech (e.g., observing, performing, exam [bad] vs. observing, performing, testing [good]).

Avoid using ambiguous terms (e.g., *might*, *may*, *can*), and absolute terms (e.g., *always*, *never*) in the options (okay to use in stem).

Mutually exclusive options only work if two pairs in the option list effectively cancel each other out. A single pair of mutually exclusive options is **NOT** acceptable. Also avoid groupings of options in which three out of four or five choices are similar and one or two don't “fit.”