RSNA SAM Brief Guide to Writing Good Questions

BEFORE YOU START: Aim to test key concepts and vital information of your presentation. Provide at least **THREE** questions containing the most important key teaching points from your lecture. All questions must include a reference. You may submit only **ONE** True/False question. Image based questions are preferred.

Definitions:

Stem: the "question" part of the item

Multiple Choice Distractors: the

incorrect choices

Key: the correct answer

Sample Multiple Choice Question:

Where do gastrointestinal stromal tumors most commonly occur? **[STEM]**

A. Esophagus [DISTRACTOR]

B. Stomach [KEY]

C. Small bowel [DISTRACTOR]

D. Colon [DISTRACTOR]

The Stem:

Should be "focused": that is, contain the *main idea* of the question. (Use the "cover test": can you cover the options and still answer the question?)

Do not use negative constructions such as:

- A. "What finding is **NOT** associated with..."
- B. "...all of the following **EXCEPT**..."
- C. "Which of the following is **LEAST** likely..."

Multiple Choice Focused Stem:

What is the most common site of hematogenous metastases from colon carcinoma?

Multiple Choice <u>Unfocused</u> Stem:

Which of the following is true regarding autoimmune pancreatitis?

Negative constructions will be discarded as submitted SAM questions

Do use simple wording and sentence structure. No jargon or unusual abbreviations. Include no unnecessary information, and no "red herrings" that might be misleading.

The Key (correct answer):

- MUST be 100%, no doubt, accepted as correct
- Avoid nebulous, relative terms, like "frequently", "rarely", or "often".
- Randomize the position of the correct answer (most test-takers guess B or C).
- Each question must include a reference to back-up why it is the correct answer.

RSNA SAM Brief Guide to Writing Good Multiple Choice Questions

The Multiple Choice Distractors (wrong choices):

- How many---must include at least 3
- **MUST** be plausible

DO: Keep the distractors:

- All about the same length (and the answer, too)
- Focused and parallel (for example, all are diagnoses, or radiographic findings, or therapies)
- Short and simple. Avoid lengthy modifiers or combining concepts in one item

DON'T:

- Use "always" or "never" (and no "maybe" terms, such as "...can sometimes...", or "...is often...")
- Use "all of the above" or "none of the above "
- Use mutually exclusive, paired options. For example:
 - A. Worse with head turned to the right
 - B. Worse with head turned to the left
- "Highlight" any choices, such as with quotation marks or parentheses
- Give grammar clues. For example, if the stem asks for a plural response, be certain the distractors are plural, too.

If using Images in your questions:

- A. They must be technically superb.
- B. Choose classic examples.
- C. The findings must be readily apparent. (no "eye tests")