Writing Test Questions for CME Activities

• Ensure that learners’ attainment of each objective is assessed by at least 1 question
• Use multiple choice format whenever possible
• Assess the important, take-home concepts of the educational activity: focus on decision making and practical application rather than recall of facts
• Use mini case studies whenever possible to measure application of the content

General Guidelines for Item Construction
• Make sure the item can be answered without looking at the options OR that the options are 100% correct or 100% incorrect.
• Include as much of the item as possible in the stem (the question); the stems should be long and the options short.
• Avoid superfluous information.
• Avoid “tricky” and overly complex items.
• Write options that are grammatically consistent and logically compatible with the stem; list them in logical or alphabetical order.
• Write distractors (the incorrect answers) that are plausible and the same relative length as the correct answer.
• Avoid using absolutes such as always, never, and all in the options; also avoid using vague terms such as usually and frequently.
• Avoid negatively phrased items (eg, those with except or not in the lead-in). If you must use a negative stem, use only short (preferably single word) options.

And most important of all: Focus on important concepts; don’t waste time testing trivial facts.

Avoid the following
• Grammatical cues—one or more distractors don’t follow grammatically from the stem
• Long correct answer—correct answer is longer, more specific, or more complete than other options
• Word repeats—a word or phrase is included in the stem and in the correct answer
• The easy way out— “None of the above” or “all of the above” is used as an option

Ensure that
• Numeric data are stated consistently
• Language in the options is parallel
• Options are in a logical order
• The answer to an item is not “hinged” to the answer of a related item
Examples of test questions assessing competence

Figure X is an axial CT image of the lungs in a patient with cryptogenic organizing pneumonia. Which one of the following is the predominant imaging pattern?
A. Peribronchovascular distribution
B. Multiple, bilateral, peripheral opacities
C. Localized pulmonary involvement
D. The crazy-paving pattern

What type of patient may be a good candidate for closed intramedullary nailing of the femur?
A. Individuals who cannot lie supine
B. Large or obese individuals
C. Pediatric patients
D. Individuals with an unstable spine

Which of the following might be most amenable to treatment with atropine eyedrops?
A. Strabismic amblyopia with 20/400 acuity
B. Bilateral high myopia
C. Moderate amblyopia with poor patching compliance
D. Newly diagnosed accommodative esotropia

A patient with a history of café-au-lait spots on the trunk and scoliosis with dystrophic changes presents with a plexiform tumor involving the lumbar spine. The likely diagnosis is:
A. Neurofibromatosis
B. Hemangiopericytoma
C. Angiomatus lesions
D. Schwannoma

A 30-year-old woman presents with balance problems. Her MRI scan reveals an eccentric lesion at C4 with hyperintensity on T2-weighted images and no contrast enhancement. The most likely diagnosis is
A. Astrocytoma
B. Ependymoma
C. Multiple sclerosis
D. Infection

A patient presents with copious watery vaginal discharge 1 week after a difficult abdominal hysterectomy. The most appropriate next step is:
A. Observation with repeated exam in 1 to 2 weeks
B. A 1-week course of a broad-spectrum antibiotic
C. An intravenous pyelogram
D. Instillation of methylene blue to observe for vaginal leakage