STEP 1 ALIGN ASSESSMENT QUESTIONS WITH LEARNING OBJECTIVES

Posttest assessment questions must measure each learning objective designed for the course.

EXAMPLE

Learning objective: Assessment question: writing multiple Upon completion of this course, learners will be able to write effective multiple-choice questions (MCQs).

Assessment Question: Which of the following criteria should be applied when choice questions for an exam?

STEP 2 DETERMINE THE TYPE AND NUMBER OF QUESTIONS

Question type

Multiple choice question (4 answer options)

Number of questions for a post-test

ACOEP requires 4 Multiple-choice post-test assessment questions with 4 possible answers.



STEP 3 APPLY BEST PRACTICES WHEN WRITING QUESTIONS

- Write succinct, clear <u>questions</u>. Do not add extra information as this can confuse learners.
- Write clear and unambiguous <u>answers</u>. The shorter the better!
- Keep distractors (i.e., the wrong answers) the same length and style as the correct answer(s) to prevent learners from guessing the correct answer(s).
- Avoid using "not" and "except" when phrasing the question as this can confuse learners.

STEP 4 WRITE A FEEDBACK STATEMENT FOR EACH QUESTION

Typically, a feedback statement is a **brief** overview of information that answers the question being asked. It is provided <u>after</u> the learner answers correctly or incorrectly to help reinforce learning. For some assessments, individual feedback statements may be requested for each correct and incorrect answer.

KEY POINTS

- Keep feedback statements succinct (12 sentences).
- Only include information relevant to the question being asked.
- Avoid leading language when constructing individual feedback statements for incorrect responses to avoid giving away the correct answer for the user's next attempt.



MULTIPLE CHOICE QUESTIONS (SINGLE ANSWER)

What is the primary function of nutritional insulin?

- a) Control glucose excursions after food is absorbed CORRECT
- b) Correct hyperglycemia prior to food intake
- c) Control blood glucose levels during times of fasting.
- d) Correct hypoglycemia prior to food intake

<u>Feedback statement</u>: Prandial (pre-meal) bolus insulin covers the extra requirements after food is absorbed, thereby decreasing postprandial glucose excursions.

Note: ACOEP advises against using options like "A and C" or "All of the above" for single answer questions as this can give away the correct answer.

The majority of cocaine and psychostimulant-related overdose deaths in the U.S. involve which of the following?

- a) Opioids CORRECT
- b) Synthetic opioids
- c) Cannabinoid
- d) Naloxone

Correct Answer Feedback: That's correct! The majority of cocaine and psychostimulant-related overdose deaths in the U.S. involve opioids

Incorrect Answer Feedback: That's incorrect. The majority of cocaine and psychostimulant- related overdose deaths in the U.S. involve opioids

Reference: Refer to https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm for more information.



SCENARIO-BASED QUESTIONS (WITH INDIVIDUAL FEEDBACK)

A patient presents to the emergency department (ED) with dizziness and syncope. A twelve-lead electrocardiogram (ECG) demonstrated ST segment wave inversion but not ST-elevation myocardial infarction. Which of the following diagnoses is consistent with the ECG abnormalities observed?

- A) Acute pericarditis
- B) Chronic obstructive pulmonary disease (COPD)
- C) Ventricular aneurysm
- D) Intracranial hemorrhage -- CORRECT

Feedback statements:

- a) Incorrect Concave ("saddleback") ST segment elevation with PR segment depression are not indicated.
- b) Incorrect Sinus tachycardia, P pulmonale, rightward axis, right bundle branch block (RBBB), and low QRS voltage are not indicated.
- c) Incorrect Residual ST elevation and deep Q waves are not indicated.
- d) Correct In addition to the classic finding of deep, inverted T-waves intracranial hemorrhage frequently presents with other non-specific ECG changes. In a study of patients with confirmed intracranial hemorrhage, 25% demonstrated ST-segment depression, and 1 in 5 showed T-wave inversion. Intracranial hemorrhage can also cause ST-segment elevation or cardiac arrhythmias.

