Quality
Question Writing

Mickie S. Rops, CAE
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General Characteristics
of Quality Test Questions

- Universal and traditionally accepted practices
- Meaningful
- Realistic
- Go beyond recollection of information

2

1

Types of Questions by Competency Level

Knowledge Questions

Recall data or information without modification.

Comprehension Questions

Understand the meaning, translation and interpretation of material, instructions and problems.

3

Types of Questions by Competency Level

SITUATION QUESTIONS

Application: Use a concept, method, principle in a new or changing situation.

Analysis: Break down information into its parts and understand its organization structure, the relationship among the parts and the principles involved.

4

ASPEN GOAL

Less Knowledge

More Comprehension,
Application and Analysis

5

Knowledge Questions

Ask the learner to:
- Define a term
- Match a term to its definition
- Recall information from resource material
- Recognize elements of methodology
- Recognize steps in a process
- Recognize an example

6

Comprehension Questions

Ask the learner to:

- Explain something in their own words
- Summarize a principle
- Identify examples or metaphors
- Convert data from one form to another
- Interpret the meaning of a statement

7

Application Questions

Ask the learner to:

- Apply a concept, method or principle to identify the most appropriate action in a given situation.
- ….to apply the most appropriate first action in a given situation.
- ….to identify inappropriate actions in given situation.
- Use a formula to calculate something.
- Apply a policy in a given situation.
- Construct a graph or chart of given data.

8

Analysis Questions

Asks the learner to:

- Troubleshoot a problem using logical deduction.
- Recognize flaws in reasoning.
- Distinguish between facts and inferences.
- Compare methods and select the appropriate one.
- Compare options and select the best one for a given situation.
- Identify the cause of a problem and predict what would have happened if a different action had been taken.
- See correlations.
- See patterns in behavior or data.
- Draw conclusions from data.
- Recognize unstated assumptions.
- Evaluate the relevancy of data to a particular situation.
- Recognize underlying themes.

9

Question Examples

Knowledge

   What is TPN?

Comprehension

   What is an example of TPN?

 Application

   Given a situation, what would be the most appropriate mix of macronutrients in TPN?

10

What's Wrong?

Oral Phenytoin:
a. Should be given with food
b. Works at the muscular level
c. Is used to prevent seizures
d. Should be given in two consecutive doses

11

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Unfocused!

Stem should present all information needed to respond to question

Alternatives should be similar in content.

12

Better

Oral Phenytoin should be given in what frequency?

13

Same Issue: UNFOCUSED

Which of the following is NOT a true statement about Oral Phenytoin?

a. It should be given with food.
b. It works at the muscular level.
c. It is used to prevent seizures.
d. It should be given in two consecutive doses.

14

What's Wrong?

Which of the following is not an appropriate use for parenteral nutrition?

15

What's Wrong?

Which of the following is not an appropriate use for parenteral nutrition?

Negative questions are misleading.
Limit use of:
– Not
– Least
– Except

16

What's Wrong?

If an RD receives a consult on a C.Diff patient who will begin CPN today, and learns that the patient is demented from a nursing home and has a PEG in place which is currently clamped, which is the most appropriate recommendation?

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Keep the details in the stem. The question should contain only the question.

Better

An RD receives a consult on a C.Diff patient who will begin CPN today. The chart indicates the patient is demented from a nursing home and has a PEG in place which is currently clamped. Which is the most appropriate recommendation?

19

What's Wrong?

In which of the following cases might parenteral nutrition be indicated?
   a. Enteral nutrition is not feasible
   b. Moderate Protein-Calorie malnutrition exists
   c. Evidence of required bowel rest exists
   d. All of the above

20

What's Wrong?

In which of the following cases <u>might</u> parenteral nutrition be indicated?

Item should not include indefinite qualifiers (may, might, often)

21

Better

In which of the following cases <u>is</u> parenteral nutrition indicated?

22

Can You Guess?

The red rocco was rompin in the romo. What is the most important first action to take?

    a. Fix the bunca

    b. Move the romo

    c. Add a manney

    d. Remove a tanet

23

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Word in the stem repeated in the options.

24

Can You Guess?

When is ark bark?

    a. Itsy is always bitsy

    b. Rala is partly pala

    c. Utza is never mutza

    d. All ika are mika

25

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- Alternative that contains all-inclusive words is usually incorrect
  - All, always, every, never, none, no

26

13

Can You Guess?

According to Theory X, the most important color scheme rule is:

a. red is blue

b. blue is red

c. yellow is orange

d. orange is blue

27

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When two alternates are opposites, usually one is correct.

28

Can You Guess?

In the most effective demonstration of coordination, a boy could:

a. Eat green food while walking.

b. Eat orange food while smiling.

c. Eat green food while running.

d. Eat yellow food while frowning.

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In the most effective demonstration of coordination, a boy could:

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Question Review Checklist

- Is the content of the question important (versus a trivial fact)?
- Is the question focused on one point? (You should be able to answer the question without viewing the options.) If not, pick a focus and rewrite the question.
- Is the question worded clearly? Make sure there is no way readers can misinterpret the question.
- Is the question succinct? Eliminate any unnecessary wording.
- Is all relevant info included? Make sure the reader doesn't have to make any assumptions.
- Is the answer unequivocally correct and the only right answer? Are there any qualifiers necessary? (most important? best? first step?)
- If the question uses a case scenario, is it a usual and realistic case?
- Is the case needed to answer the question?
- Are the distractors plausible? They should represent answers that an unknowledgeable individual would reasonably select.

31

Item Writing Steps

- Identify item objective (e.g., to identify the implication of…, to distinguish among…)
- Create item stem (the situation/scenario)
- Write the clearly correct response
- Write three plausible distractors

32

Next Steps

- ASPEN will send assignments, handout, and due dates
- Review question writing guide
- Refer to both in writing and reviewing your drafts

33