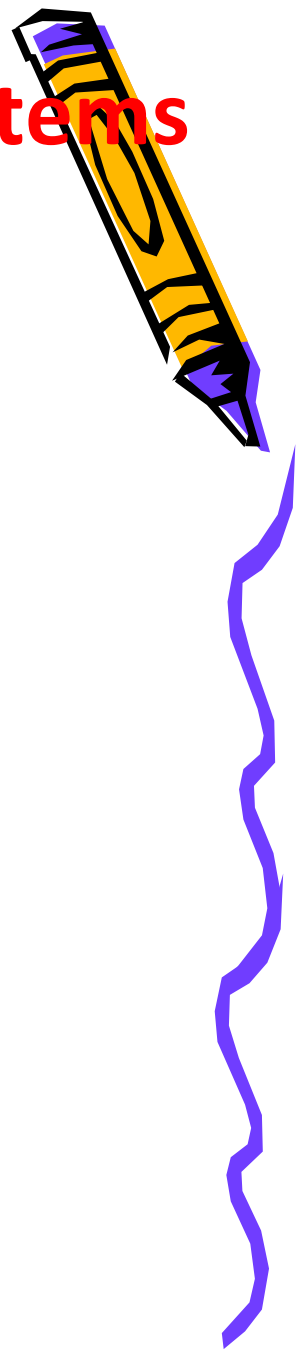
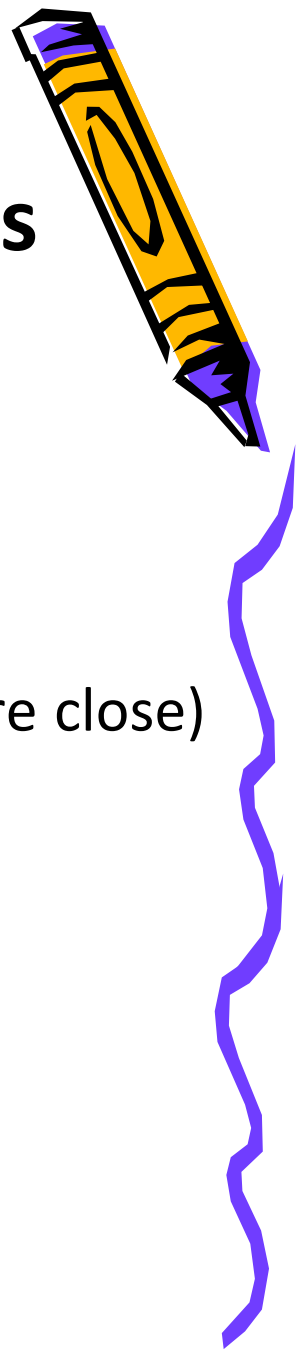


Construction of Objective Type Test Items



Nature of objective type test items

- Require a specific answer
- Usually have only one potential correct answer
(although there may be some room for answers that are close)
- No bias in scoring. (Reliability in marking)



Objective type test items

- Matching type test items
- True / false items
- Multiple Choice test items
- Short answer type test items -

Selection

Supply



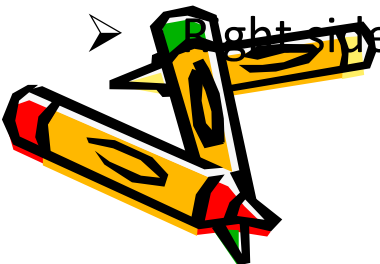
Matching type test items



Matching question is two **homogeneous** or similar lists (premises and responses) of related words, phrases, pictures, or symbols.

The matching type test item format provides a way for learners to connect a word, sentence or phrase in one column to a corresponding word, sentence or phrase in a second column. The items in the first column are called premises and the answers in the second column are the responses.

- Left side (the questions) is called the **premises**.
- Right side (the answers) is called the **responses**.

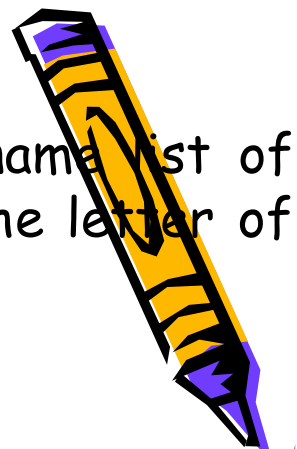


Rules for writing matching items



- Include only homogeneous material in each matching item.
- Include one or two responses than that of the premises.
- Present the directions for matching very clearly.
- Arrange the responses in logical order (alphabetical order or chronological).
- Place all of the items for one matching item on the same page.





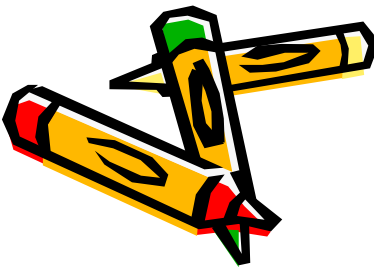
Column A contains a list of inventions Column B contains a name List of inventors. On the blank to the left of each invention, write the letter of the inventor in column B that best fits the invention.

A

B

- 1. Computer -----
- 2. Dynamite -----
- 3. Electric lamp -----
- 4. Radio -----
- 5. Telephone -----
- 6. X-Ray -----

- a. Alexander Graham Bel
- b. Alfred Nobel
- c. Charles Babbage
- d. Charles Darwin
- e. G. Marconi
- f. Michael Faraday
- g. Thomas Alva Edison
- h. Wilhelm Roentgen



Match A with B

A

B

The longest river in the world

Euro

The capital of Sweden

Olive

The first female Prime Minister in the world

Nile

Currency in Germany

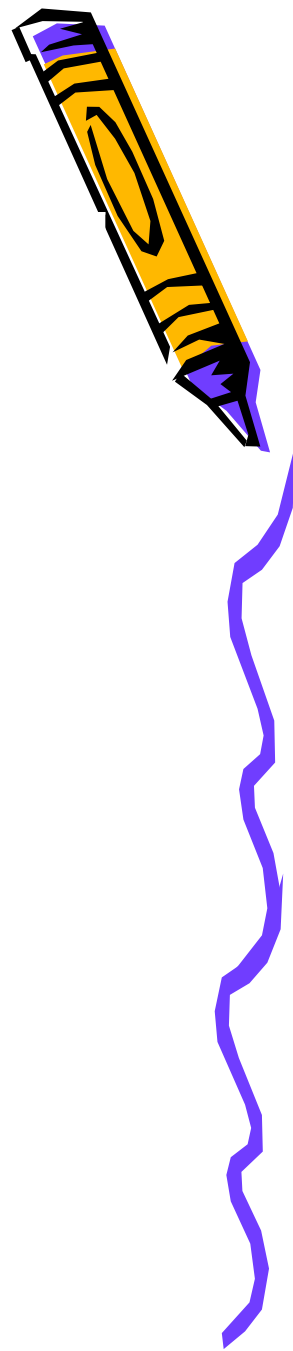
Stockholm

National tree in Greece

Sirimavo Bandaranaike



RDC Niroshinie FOE



True / false items

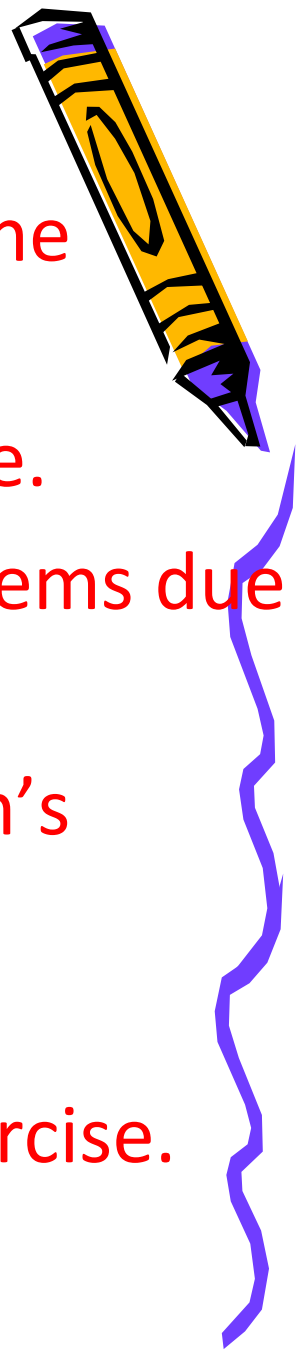
True/false item is a statement which presents a specific learning outcome that the students should mark as either true or false.

(Right or wrong/ yes or no).

Binary response format is defined as a response format in measurement with only two possible values



1. Democracy is a good policy.
2. High IQ children always get high score in the school.
3. All types of cars have some types of engine.
4. Children sometimes have emotional problems due to their parents' divorce.
5. The highest cognitive domain in the bloom's taxonomy is evaluation and the lowest is knowledge.
6. We need expensive instruments to do exercise.



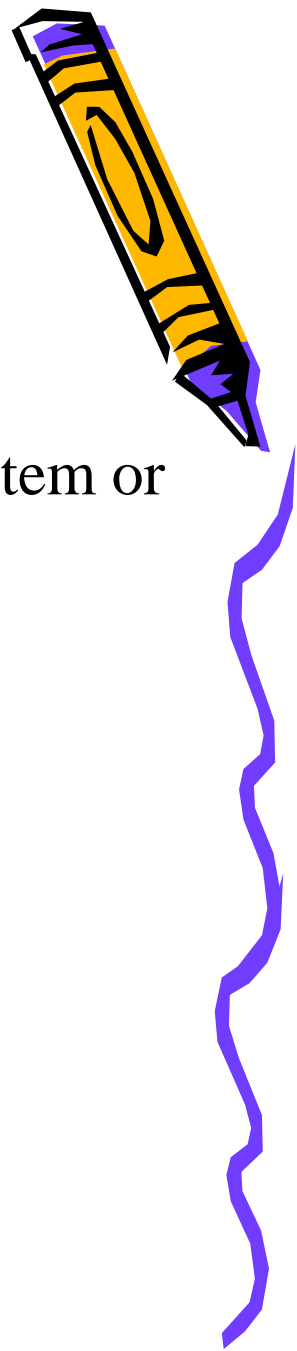
Rules for constructing True/false items

- Avoid broad general statements.
- Keep the items short and to the point.
- Avoid the use of negative statements, especially double negatives.

Contd...



Contd...



- Avoid measuring more than one specific objectives in one item or statement./Focus on a single concept.
- Avoid using opinion/Attitude as true/ false items

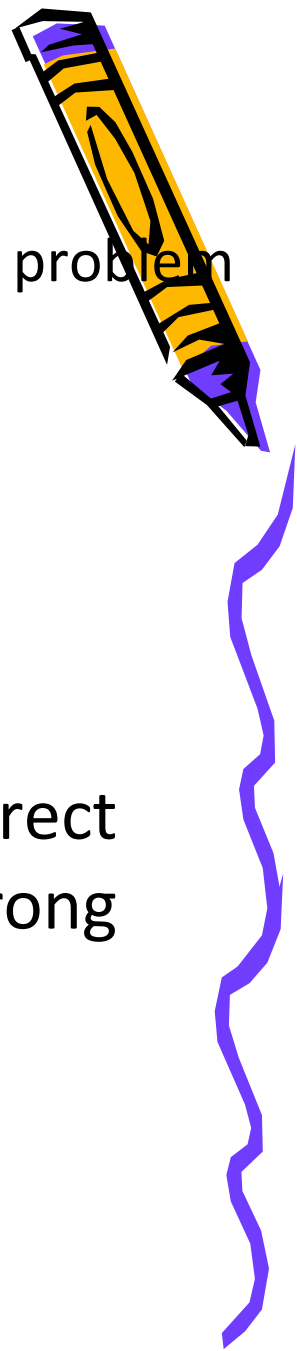




- Do not introduce ambiguity to the item by using words such as “sometimes” “ the majority” “usually” “ always” “ often”
- Avoid using true statement and false statements that are unequal in length./Keep item length similar for both true and false statements. Teachers tend to make true statements lengthier.
- Avoid using disproportionate numbers of true statements and false statements./Have approximately equal numbers of true and false statements. It doesn't have to be exactly half, but should be close.
- Randomize the order in which items based on true or false statements are presented.



Multiple Choice test items



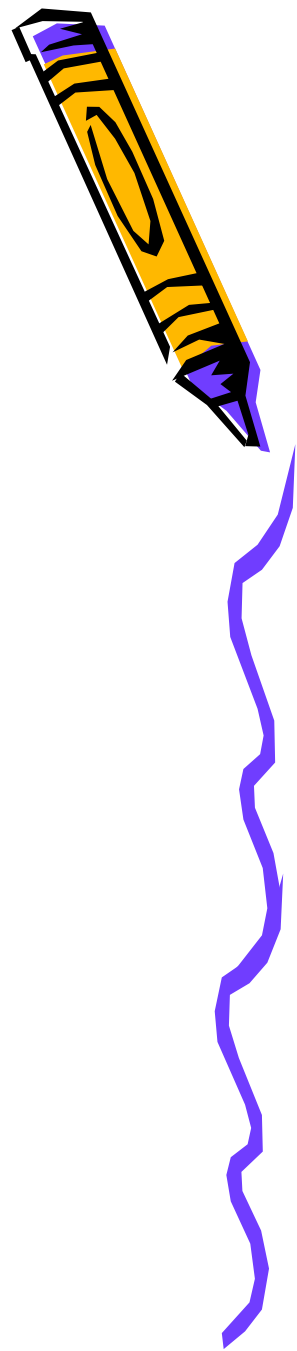
The multiple choice item consists of a stem, which presents a problem situation and several alternatives.

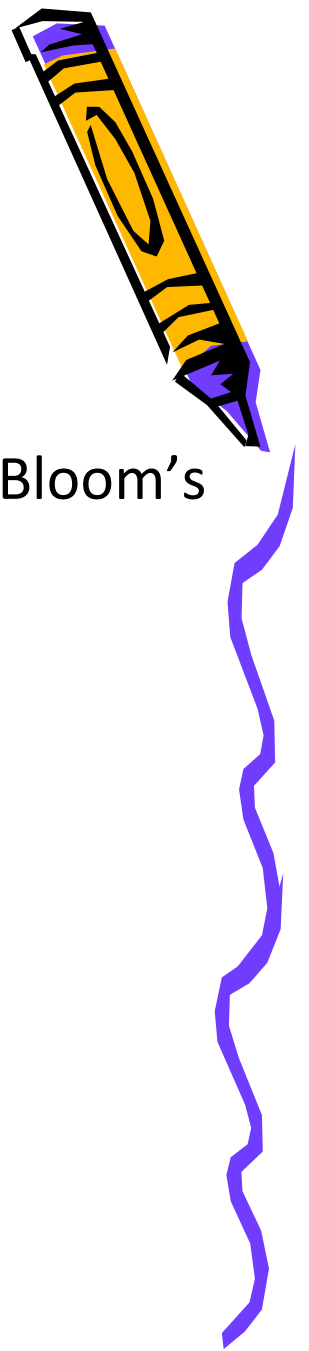
- **Stem** – presents a problem
- **Alternatives (Choices / options)** – correct answer and several plausible wrong answers (distracters)



Types of MCQs

- Direct question type
- Incomplete statement type
- Best answer type
- Negative type
- Cluster type





Direct question type

What is the highest level in cognitive domain according to Bloom's taxonomy?

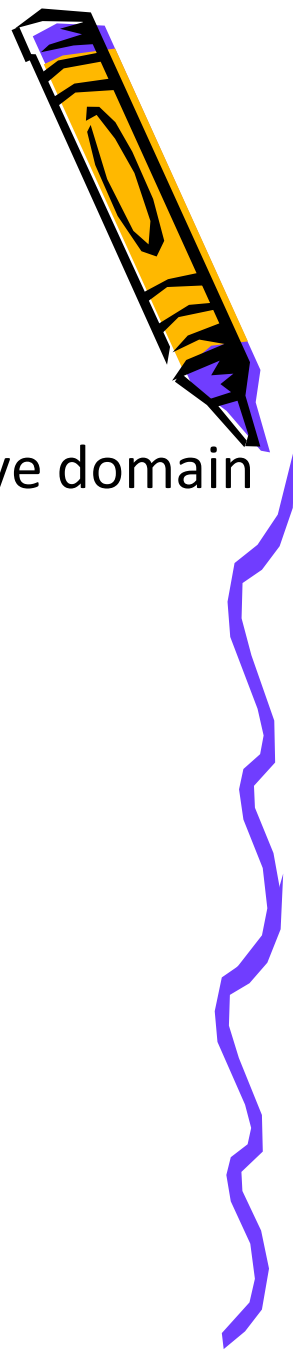
1. Analysis
2. Application
3. Evaluation
4. Synthesis



Incomplete statement type

According to Bloom's taxonomy the highest level in cognitive domain is

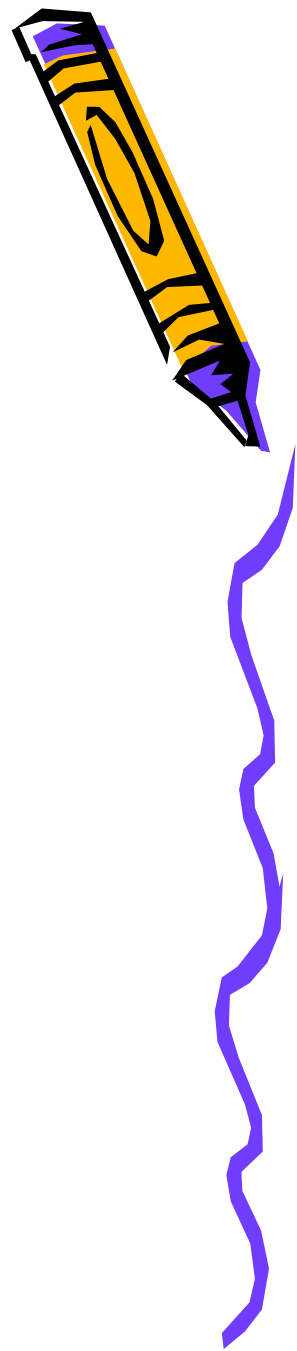
1. Analysis.
2. Application.
3. Evaluation.
4. Synthesis.



The best answer type

The major purpose of the United Nations is to

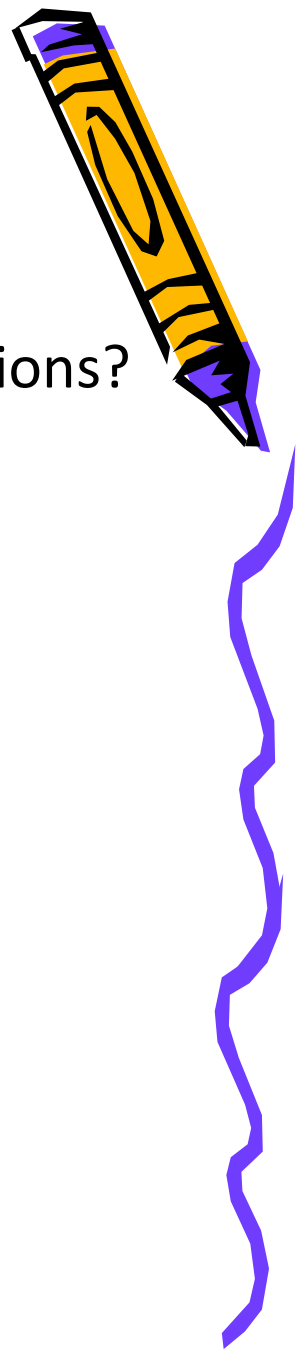
1. establish international law.
2. maintain worldwide peace and security.
3. developing relations among nations.
4. solve humanitarian international problems.



Negative type

What is incorrect regarding the purposes of the United Nations?

1. Establishing international law.
2. Maintaining worldwide peace and security.
3. Developing relations among nations.
4. Solving political problems of each country.



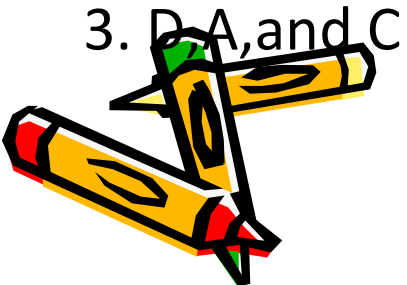
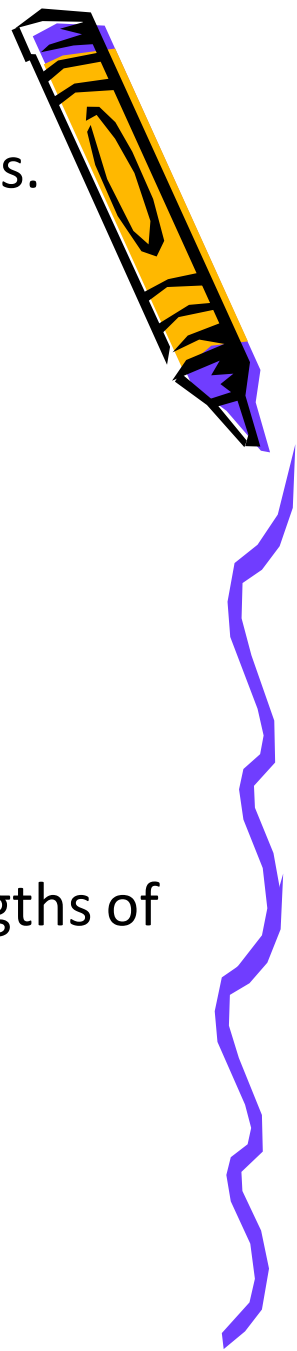
Cluster type

Read the following characteristics of written type questions.

- A. aaaaaaaaaaaaaaaaaaaaaa
- B. cccccccccccccccccccccccc
- C. ffffffffffffffffffffffffffff
- D. ppppppppppppppppppppp
- E. xxxxxxxxxxxxxxxxxxxxxxxxx
- F. yyyyyyyyyyyyyyyyyyyyyyyy

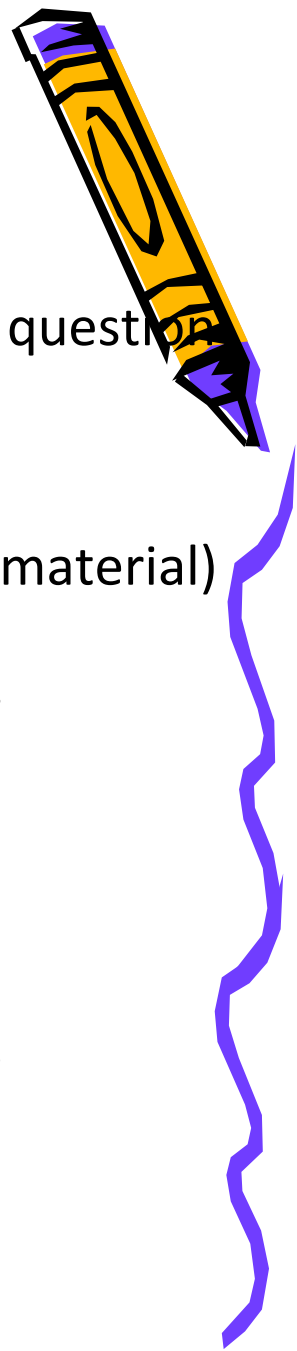
When compared with true/false items, what are the strengths of multiple choice test items?

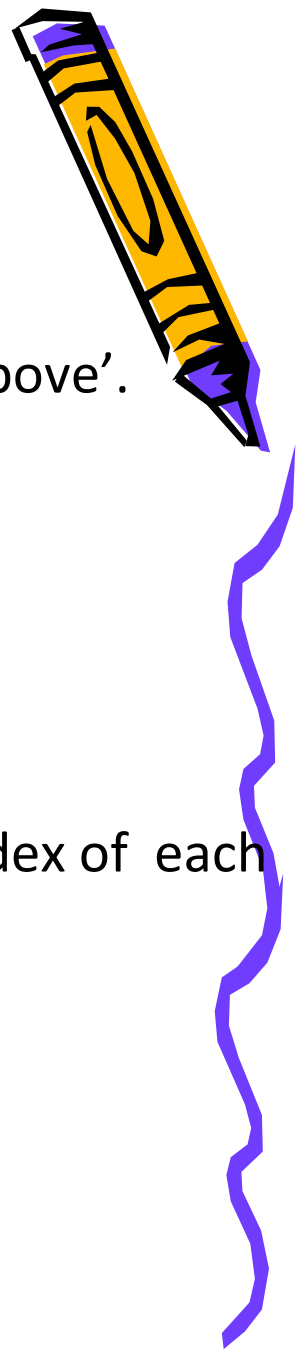
- 1. A,B and E
- 2. C,D, and F
- 3. D, A, and C
- 4. C,E and F



Rules for constructing MCQs

- Present a single clearly formulated problem in the stem of the question.
- Make the distracters plausible.
- State the stem in simple and clear language (free of irrelevant material)
- Try to avoid repeating the same word or words in each option.
- Whenever possible, state the stem in positive form.
- Whenever negative wording is used in the stem, emphasize it.
- Check all alternatives are grammatically correct with the stem.



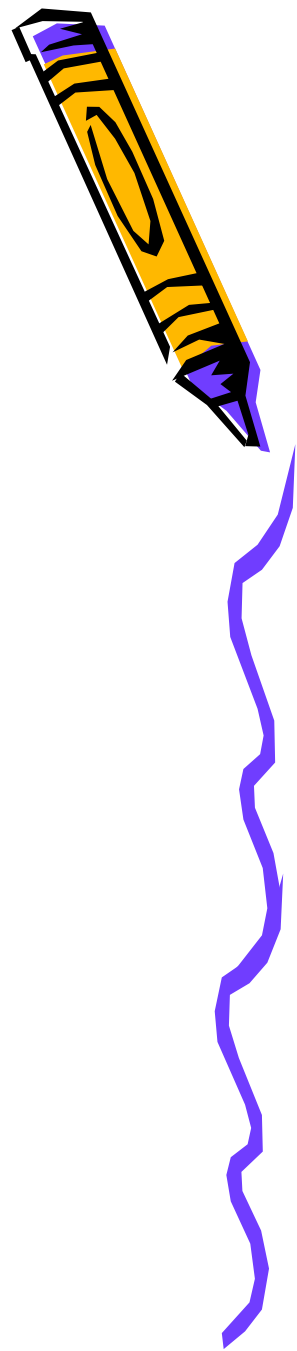


- Alternatives should be approximately equal in length.
- Avoid using the alternative 'all of the above' and 'none of the above'.
- Keep verbal alternatives in alphabetical order.
- Keep numerical alternatives in ascending or descending order.
- Vary the position of the correct answer in a random manner
- Arrange the items in the test paper considering the difficulty index of each item.

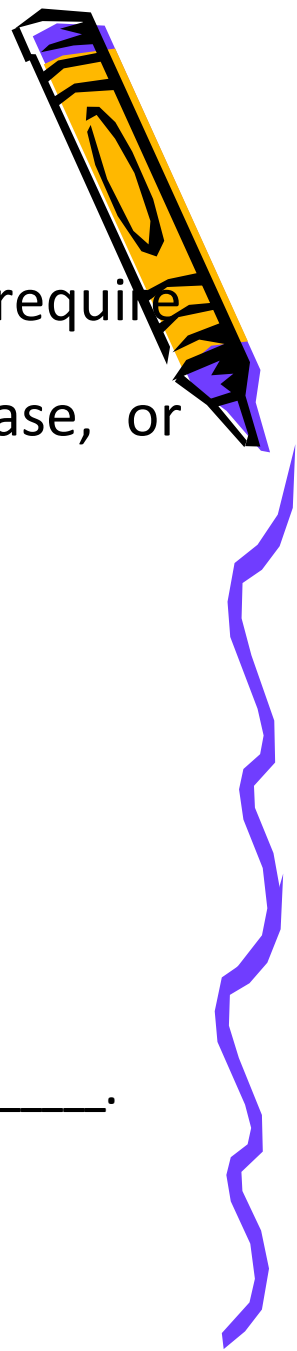


Sweden

1. has a long coastline.
2. uses Swedish krona.
3. has extensive forests, numerous lakes and mountains.
4. capital is Stockholm.



Short answer type items



Short-answer questions are open-ended questions that require students to create a specific answer with a word, phrase, or sentence etc..

Basically two types

- **Direct question type**

What is the highest level of the cognitive domain in Bloom's taxonomy?

- **Completion Type/ fill in the blanks**

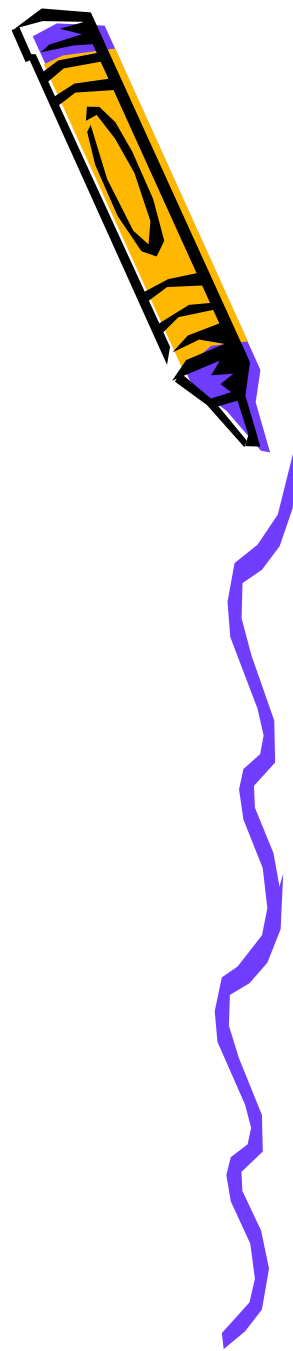
The highest level of the cognitive domain in Bloom's taxonomy is _____.



Rules for writing short answer questions

- Ensure there is only one clearly correct answer in each question.
- Set the questions precisely.
- Express the questions with clear wordings and language.
- Do not use too many blanks in a completion item.
- Consider whether the positioning of the item blank promote efficient scoring.
- When an answer is to be expressed in numerical units, the unit should be stated.





Who landed on the moon first?

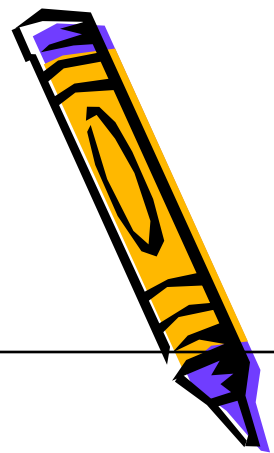
An American
Neil Armstrong
Laika

Who was the first person landed on the moon?

Neil Armstrong



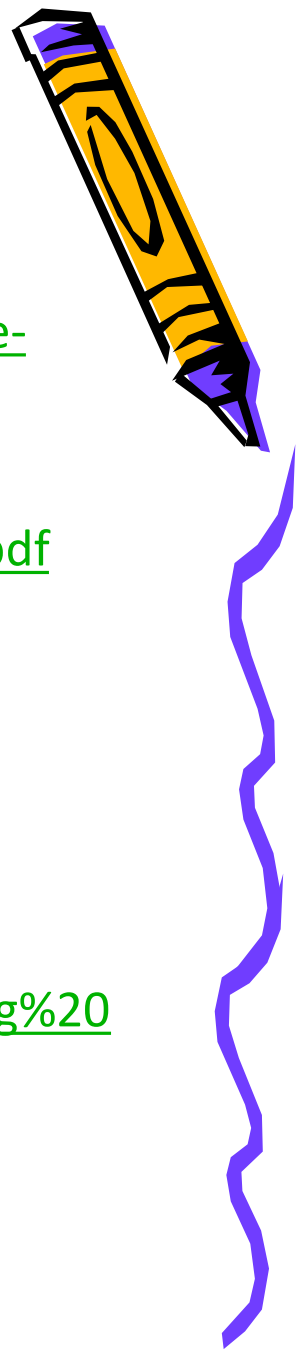
Strengths and limitations



Strengths	Limitations
Reliability of marks	Creative ability can not be measured.
Easy to construct the test items (Except MCQ)	Obtaining marks by guessing the answer
Wide sampling of content or objectives	
Scoring efficiency	
No need of subject experts to mark the answers	
Can measure higher cognitive levels	



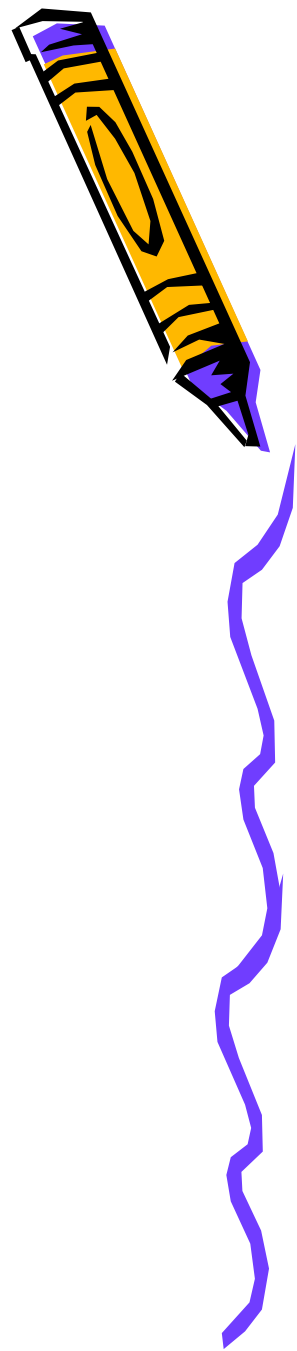
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- https://www.polyu.edu.hk/obe/GuideOBE/objective_tests.pdf
- <http://egyankosh.ac.in/bitstream/123456789/7308/1/Unit-12.pdf>
- <https://testing.byu.edu/handbooks/14%20Rules%20for%20Writing%20Multiple-Choice%20Questions.pdf>



Thank you



RDC Niroshinie FOE