

## TECHNIQUES OF ASSESSMENT TESTS

### OBJECTIVE TYPE

There are four types of test items in selection category of test which are in common use today. They are multiple-choice, matching, true-false, and completion items.

#### 1. Multiple Choice Questions

Multiple-choice test items consist of a stem or a question and three or more alternative answers (options) with the correct answer sometimes called the keyed response and the incorrect answers called distracters. This form is generally better than the incomplete stem because it is simpler and more natural. Grounlund (1995) writes that the multiple choice question is probably the most popular as well as the most widely applicable and effective type of objective test. Student selects a single response from a list of options. It can be used effectively for any level of course outcome. It consists of two parts: the stem, which states the problem and a list of three to five alternatives, one of which is the correct (key) answer and the others are distracters (incorrect options that draw the less knowledgeable pupil away from the correct response). Multiple choice questions consist of three obligatory parts:

1. The question ("body of the question")
2. The correct answer ("the key of the question")
3. Several incorrect alternatives (the so called "distracters") and optional (and especially valuable in self-assessment)
4. Feedback comment on the student's answer.

The stem may be stated as a direct question or as an incomplete statement. For example:

Direct question

Which is the capital city of Pakistan? ----- (Stem)

A. Paris. ----- (Distracter)

B. Lisbon. ----- (Distracter)

C. Islamabad. ----- (Key)

D. Rome. ----- (Distracter)

Incomplete Statement

The capital city of Pakistan is

- A. Paris.
- B. Lisbon.
- C. Islamabad.
- D. Rome.

Multiple choice questions are composed of one question with multiple possible answers (options), including the correct answer and several incorrect answers (distracters). Typically, students select the correct answer by circling the associated number or letter, or filling in the associated circle on the machine-readable response sheet. Students can generally respond to these types of questions quite quickly. As a result, they are often used to test student's knowledge of a broad range of content. Creating these questions can be time consuming because it is often difficult to generate several plausible distracters. However, they can be marked very quickly.

## 2. True/False Questions

A True-False test item requires the student to determine whether a statement is true or false. The chief disadvantage of this type is the opportunity for successful guessing. According to Gronlund (1995) the alternative response test items that consists of a declaration statement that the pupil is asked to mark true or false, right or wrong, correct or incorrect, yes or no, fact or opinion, agree or disagree and the like. In each case there are only two possible answers. Because the true-false option is the most common, this type is mostly refers to true-false type. Students make a designation about the validity of the statement. Also known as a "binary-choice" item because there are only two options to select from. These types of items are more effective for assessing knowledge, comprehension, and application outcomes as defined in the cognitive domain of Blooms' Taxonomy of educational objectives.

## 3. Matching items

According to Cunningham (1998), the matching items consist of two parallel columns. The column on the left contains the questions to be answered, termed premises; the column on the right, the answers, termed responses. The student is asked to associate each premise with a response to form a matching pair.

For example;

Column "A" Capital City	Column "B" Country
Islamabad	Iran
Tehran	Spain
Istanbul	Pakistan

Madrid	Saudia Arabia
Jaddah	Turkey

Matching test items are used to test a student's ability to recognize relationships and to make associations between terms, parts, words, phrases, clauses, or symbols in one column with related alternatives in another column. When using this form of test item, it is a good practice to provide alternatives in the response column that are used more than once, or not at all, to preclude guessing by elimination. Matching test items may have either an equal or unequal number of selections in each column. Matching-Equal Columns. When using this form, providing for some items in the response column to be used more than once, or not at all, can preclude guessing by elimination.

#### 4. Completion Items

Like true-false items, completion items are relatively easy to write. Perhaps the first tests classroom teachers' construct and students take completion tests. Like items of all other formats, though, there are good and poor completion items. Student fills in one or more blanks in a statement. These are also known as "Gap-Fillers." Most effective for assessing knowledge and comprehension learning outcomes but can be written for higher level outcomes. e.g. The capital city of Pakistan is ----- . Suggestions for Writing Completion or Supply Items Here are our suggestions for writing completion or supply items: I. If at all possible, items should require a single-word answer or a brief and definite statement. Avoid statements that are so indefinite that they may be logically answered by several terms. a. Poor item: World War II ended in \_\_\_\_\_. b. Better item: World War II ended in the year \_\_\_\_\_.

### SUPPLY TYPE ITEMS

The aviation instructor is able to determine the students' level of generalized knowledge of a subject through the use of supply-type questions. There are four types of test items in supply type category of test. Commonly these are completion items, short answers, restricted response and extended response (essay type comprises the restricted and extended responses).

#### 1. Short Answer

Student supplies a response to a question that might consist of a single word or phrase. Most effective for assessing knowledge and comprehension learning outcomes but can be written for higher level outcomes. Short answer items are of two types.

## **Simple direct questions**

Who was the first president of the Pakistan?

## **Completion items**

The name of the first president of Pakistan is \_\_\_\_\_. The items can be answered by a work, phrase, number or symbol. Short-answer tests are a cross between essay and objective tests. The student must supply the answer as with an essay question but in a highly abbreviated form as with an objective question.

## **2. Essay**

Essay questions are supply or constructed response type questions and can be the best way to measure the students' higher order thinking skills, such as applying, organizing, synthesizing, integrating, evaluating, or projecting while at the same time providing a measure of writing skills. The student has to formulate and write a response, which may be detailed and lengthy. The accuracy and quality of the response are judged by the teacher. Essay questions provide a complex prompt that requires written responses, which can vary in length from a couple of paragraphs to many pages. Like short answer questions, they provide students with an opportunity to explain their understanding and demonstrate creativity, but make it hard for students to arrive at an acceptable answer by bluffing. They can be constructed reasonably quickly and easily but marking these questions can be time-consuming and grade agreement can be difficult. Essay questions differ from short answer questions in that the essay questions are less structured. This openness allows students to demonstrate that they can integrate the course material in creative ways. As a result, essays are a favoured approach to test higher levels of cognition including analysis, synthesis and evaluation. However, the requirement that the students provide most of the structure increases the amount of work required to respond effectively. Students often take longer time to compose a five paragraph essay than they would take to compose paragraph answer to short answer questions. Essay items can vary from very lengthy, open ended end of semester term papers or take home tests that have flexible page limits (e.g. 10-12 pages, no more than 30 pages etc.) to essays with responses limited or restricted to one page or less. Essay questions are used both as formative assessments (in classrooms) and summative assessments (on standardized tests).