GENERAL MATHEMATICS

LOGICAL REASONING

Simple & Compound statements

Definition of Simple Logical Statement
Simple logical statement as " A statement in a logical context is a declaration, verbal or written, that is either true or false, but not both".

A statement is ascribed **T** or **F**, called the truth value, depending on the truth level of the statement.
A simple statement as a statement which has only one main verb.
Example:
1) Tunde is a boy.
2) Mathematics is fun.
3) Girls are smart.
The above statements can be either true or false.

Compound Statement
A compound statement is made up of two or more simple statements.
Example 2

1) Hannah did not study and she did not pass her examination.
2) Tom is short but Andy is tall.

A compound statement makes use of logical symbols called connectives. The connectives are 'and', 'or', 'but', etc.

Connectives are used to make compound statements from simple statements.

Consider the following questions.
1) Identify the type of statement in each of the following:
i) Stop making a noise.
ii) What is this?
iii) Mali is an African country.
2. Write against each statement, T or F.
i) Sin A = Cos (90 - A)
ii) $2x > 7$, therefore, $x < 3$

Assignment

1. Distinguish between simple and compound statements.