

**Grade 12 - AL (2023)**  
**Information & Communication Technology**

**Competency 1: Data and Information**

**Work Sheet 01**

**Answer All Questions**

1. Define the term “data” and “information” using relevant examples.
2. Describe the main difference between data and information by using a suitable system.
3. Represent the Life cycle of data in graphically. Briefly describe each steps of life cycle.
4. What is the difference between quantitative data and qualitative data?
5. To make a smart decision we need to have valuable information.
  - a. List the five characteristics of valuable information?
  - b. Briefly explain them with suitable examples.
6. Define the term “Golden Rule of Information” and how to represent the “Golden Rule of Information” in graphically.
7. Briefly describe “Big Data Analytics”.

Select the most suitable answer.

1) Information is

- 1) Data
- 2) Processed Data
- 3) Manipulated input
- 4) Computer output

2) Data by itself is not useful unless

- 1) It is massive
- 2) It is processed to obtain information
- 3) It is collected from diverse sources
- 4) It is properly stated

3) For taking decisions data must be

- 1) Very accurate
- 2) Massive
- 3) Processed correctly
- 4) Collected from diverse sources

4) Consider the space voyage for landing a human being on the surface of the moon for the first time in 1969. The entire event was broadcast on the radio in Sri Lanka by several commentators based in Sri Lanka and the USA.

Which of the following events relates to the highest value of information?

- 1) counting down for the launching of the rocket that carried the space shuttle
- 2) the moment the space shuttle escaped from the gravitational field of the earth
- 3) the moment the space shuttle entered the moon's gravitational field
- 4) the moment the astronaut Neil Armstrong placed his first step on the surface of the moon
- 5) the moment the astronauts landed on the sea in their return voyage to earth