

Section – 1

Ans. 2

Type I and Type II Errors

Type I errors are also called:

1. Producer's risk
2. False alarm
3. Alpha error

Type II errors are also called:

1. Consumer's risk
2. Misdetection
3. Beta error

Examples of Type I Errors

For **example**, let's look at the trial of an accused criminal. The null hypothesis is that the person is innocent, while the alternative is guilty.

A **Type I error** in this case would mean that the person is not found innocent and is sent to jail, despite actually being innocent.

Examples of Type II Errors

A **type II error** produces a false negative, also known as an **error** of omission. For **example**, a test for a disease may report a negative result, when the patient is, in fact, infected. This is a **type II error** because we accept the conclusion of the test as negative even though it is incorrect