

# 28 Lecture - CS402

## Important Subjective

1. **What is a pseudo theorem?**

Answer: A pseudo theorem is a statement that appears to be a theorem, but is actually false.

**Why are pseudo theorems dangerous?**

Answer: Pseudo theorems can be misleading and can lead to incorrect conclusions if not identified and corrected.

**How can we identify a pseudo theorem?**

Answer: By carefully scrutinizing its assumptions and logical steps.

**What is the difference between a true theorem and a pseudo theorem?**

Answer: A true theorem is a statement that has been rigorously proven to be true, while a pseudo theorem is a statement that appears to be true but is actually false.

**Give an example of a pseudo theorem related to mathematics.**

Answer: All real numbers are rational.

**What is the significance of pseudo theorems in mathematics?**

Answer: Pseudo theorems can lead to wasted effort and can hinder progress in mathematics.

**How can we avoid falling for pseudo theorems?**

Answer: By developing critical thinking skills and by carefully scrutinizing any purported theorem before accepting it as true.

**What is the difference between a paradox and a pseudo theorem?**

Answer: A pseudo theorem is a false statement, while a paradox is a self-contradictory statement.

**What is an example of a pseudo theorem related to physics?**

Answer: The laws of physics are different in different parts of the universe.

**Why is it important to correct pseudo theorems?**

Answer: To prevent incorrect conclusions and to ensure that mathematical progress is based on solid, rigorous foundations.