## 28 Lecture - CS402

## Important Mcqs

1. Which of the following best describes a pseudo theorem?
a) A statement that is always true
b) A statement that appears to be true, but is actually false
c) A statement that is neither true nor false
d) A statement that is too complex to understand

Answer: b) A statement that appears to be true, but is actually false
Pseudo theorems can be misleading because they:
a) Are always intentionally false
b) Are always presented with poor writing
c) Can appear to be rigorously proven
d) Are only found in mathematics

Answer: c) Can appear to be rigorously proven
What is the best way to identify a pseudo theorem?
a) By checking if it is always true
b) By checking if it is always false
c) By carefully scrutinizing its assumptions and logical steps
d) By asking a friend who is good at math

Answer: c) By carefully scrutinizing its assumptions and logical steps
Which of the following is an example of a pseudo theorem?
a) The sum of two odd numbers is always odd
b) Every prime number greater than 2 is odd
c) Every even number can be written as the sum of two prime numbers
d) All real numbers are rational

Answer: d) All real numbers are rational
Pseudo theorems can be harmful because they can:
a) Lead to incorrect conclusions and wasted effort
b) Improve our understanding of mathematics
c) Encourage critical thinking skills
d) Increase the popularity of mathematics

Answer: a) Lead to incorrect conclusions and wasted effort
What is the difference between a pseudo theorem and a paradox?
a) A pseudo theorem is always false, while a paradox is always true
b) A pseudo theorem appears to be true, while a paradox appears to be false
c) A pseudo theorem is a false statement, while a paradox is a self-contradictory statement
d) A pseudo theorem and a paradox are the same thing

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

Which of the following is a pseudo theorem related to calculus?
a) Every continuous function has a derivative
b) Every polynomial of odd degree has at least one real root
c) Every limit exists
d) Every function has a power series expansion

Answer: d) Every function has a power series expansion
Pseudo theorems are most commonly found in which subject area?
a) Geometry
b) Algebra
c) Calculus
d) Trigonometry

Answer: c) Calculus
Why is it important to be aware of pseudo theorems?
a) They are always true
b) They are never true
c) They can be misleading and cause incorrect conclusions
d) They are always easy to identify

Answer: c) They can be misleading and cause incorrect conclusions
Which of the following is an example of a pseudo theorem related to geometry?
a) The sum of the interior angles of a triangle is always 180 degrees
b) The Pythagorean theorem
c) The formula for the area of a circle
d) Every regular polygon can be inscribed in a circle

Answer: d) Every regular polygon can be inscribed in a circle

