Roll No: [210050023]   Marks: 3.0/3.0
Question 1.

Consider the sequence $a_n = \dfrac{b^n}{n}$, where b is a real number. Consider the following statement: the sequence a_n is convergent for all values of b.
The statement is

☐ True

☑ False

Roll No: [210050023]   Marks: 2.0/2.0
Question 2.

Calculate the following limit

$$\lim_{x \to 0} x \sin \frac{1}{x} \cos x$$

0.0