## KING FAHD UNIVERSITY OF PETROLEUM AND MINERALS DEPARTMENT OF MATHEMATICS AND STATISTICS **MATH 102 - QUIZ 6**

Name:

Student ID #:

Question 1. Determine whether the sequence  $a_n = \left(\frac{3}{n}\right)^{1/n}$  converges or diverges. If it convegres find its limit.

Question 2. Find the sum of the series  $\sum_{n=1}^{\infty} (-1)^{n+1} \frac{2}{5^n}$ Question 3. Find the sum of the series  $\sum_{n=1}^{\infty} \ln \left( \frac{3n+1}{3n-2} \right)$ .

Your Solution.