

May 1<sup>st</sup>, 2014

QUIZ#5 Math102-sec14.

Net Time Allowed: 20 minutes

Name:

ID #:

Serial #:

**Exercise1:**(06 points)

Determine whether the series is convergent or divergent. If it is convergent, find its sum:

a)-  $\sum_{n=1}^{\infty} n \sin\left(\frac{1}{n}\right)$

b)-  $\sum_{n=1}^{\infty} \frac{(-2)^n}{3^n}$

**Exercise2:**(04 points)

Test the series  $\sum_{n=1}^{\infty} \frac{5 - \sqrt{n}}{n^3}$ .