King **F**ahd **U**niversity for **P**etroleum and **M**inerals
Department of Mathematics & Statistics
Term 132 Math 102 (32) Quiz#6 (10.7 & 10.8)
Family Name: S.r#

Q1. Find the interval and radius of convergence.

$i.\ \sum_{n=1}^{\infty} \frac{(-1)^n x^{2n+1}}{n}$

I : and $R =$

Q3. If $\frac{1}{3+x} = \sum_{n=0}^{\infty} \frac{(-1)^n x^n}{3^{n+1}}$, use term by term integration to find the taylor series generated by $f = \ln(3+x)$.

$\ln(3+x) =$

Q2. Find the taylor polynomial of order 3 generated by $f(x) = \cos x$.