

ID# _____

Quiz 6 MATH 102-19-T142
[Write name of test(s). Show all steps]

Serial # _____

Q1. Check if the series converges Absolutely
Convergent, Conditionally Convergent or

Divergent: $\sum_{n=1}^{\infty} \frac{\cos \pi n}{1 + \sqrt{n}}$

Q2. Find the Taylor Series of $\ln(x + 1)$ about $x = 1$.

Q3. Find the Interval of Convergence of the Series:

$$\sum_{n=2}^{\infty} \frac{(x+3)^n}{n(\ln n)^2}$$

(Use other side of paper)

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Serial # _____

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Q1. Check if the series converges Absolutely
Convergent, Conditionally Convergent or

Divergent: $\sum_{n=2}^{\infty} \frac{(-1)^{n+1}}{n \ln n}$

Q2. Find the Maclaurin's series $f(x) = \frac{1}{3+27x^2}$
and find its radius of convergence.

Q3. Find the Interval of Convergence of the Series:

$\sum_{n=0}^{\infty} \frac{2^n (x-2)^n}{1+3^n}$

(Use other side of paper)