

Math102 Term172
Sec 38 Quiz 6

Name	ID	Sr
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Instruction: choose the correct answer

Q1) The series

$$\sum_{n=1}^{\infty} \frac{(-1)^{n-1}}{4^n + n^4}$$

- a) is absolutely convergent.
- b) is conditionally convergent
- c) convergent by the integral test
- d) divergent by the integral test
- e) divergent by the Limit comparison test

Q2) The series

$$\sum_{k=2}^{\infty} \frac{k \ln k}{(k + 4)^3}$$

- a) is convergent by the Ratio test.
- b) is a convergent alternating series.
- c) is divergent by the integral test
- d) is convergent by the comparison test.
- e) is divergent by the Limit comparison test

Q3) The series

$$\sum_{n=1}^{\infty} n^{-p^3+124}$$

is convergent if p belongs to

- a) $(-\infty, -5)$
- b) $(-\infty, -124)$
- c) $(-124, 0)$
- d) $(-\infty, 1)$
- e) $(5, \infty)$

Q4) The series

$$\sum_{n=1}^{\infty} (-1)^n \frac{1 \cdot 4 \cdot 7 \cdots (3n-2)}{5^n n!}$$

- a) is absolutely convergent.
- b) is divergent by the Ratio Test.
- c) is conditionally convergent.
- d) is divergent by the root test
- e) is convergent by the comparison test.

