

Name: \_\_\_\_\_  
Student ID: \_\_\_\_\_

## Quiz 11

This quiz is graded out of 10 marks. No books, calculators, notes or cell phones are allowed. You must show all your work, the correct answer is worth 1 mark the remaining marks are given for the work. If you need more space for your answer use the back of the page.

**Question 1.** (5 marks) §8.2 #28 Determine whether the series is convergent or divergent by expressing  $s_n$  as a telescoping sum. If it is convergent, find its sum.

$$\sum_{n=1}^{\infty} [e^{1/n} - e^{1/(n+1)}]$$

**Question 2.** (5 marks) §8.3 #19 Determine whether the series is convergent or divergent

$$\sum_{n=2}^{\infty} \frac{1}{n \ln n}$$