# Name: Student ID: 

## Quiz 8

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. pg.142\#26 (2 marks) Express in terms of a simple logarithm:
$\ln \sqrt[3]{x \sqrt{y}}$

Question 2. pg.142\#36 (2 marks) Express as a single logarithm with coefficient of one:

$$
\frac{1}{2} \log x+\frac{3}{2} \log 2 y-\log x^{2} y
$$

Question 3. pg.144\#73 (6 marks) Solve for $x$ :

$$
\log _{2}(x+1)+\log _{2}(x+4)=2
$$

