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

## Quiz 10

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. (3 marks) §25.2 #23 Integrate.

 $\int (1+12x^2)^2 dx$ 

Question 2. (3 marks) §25.4 #27 Evaluate the given definite integral.

$$\int_0^2 2x(9-2x^2)^2 \, dx$$

**Question 3.** (4 marks) §25.5 #9 Approximate the value of the integral by use of the trapezoidal rule, using the given value of *n*. Round to 3 significant digits.

$$\int_0^5 \sqrt{25 - x^2} \, dx \quad n = 5$$