

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

## Quiz 2

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.** (1 mark each) Integrate the following indefinite integrals:

a.

$$\int \frac{1}{x^{2/3}} dx$$

b.

$$\int \csc x dx$$

c.

$$\int \tan x dx$$

d.

$$\int \frac{1}{x\sqrt{x^2-5}} dx$$

e.

$$\int e^x dx$$

f.

$$\int \cos x dx$$

**Question 2.** (4 marks) §4.7 #25 Find  $f(t)$ .

$$f''(t) = 2e^t + 3 \sin t, \quad f(0) = 0, \quad f(\pi) = 0$$