

## Quiz 3

This quiz is graded out of 15 marks. No books, watches, 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.** Factor completely:

a. (3 marks)  $2x^6 + 8x^5 - 42x^4$

b. (2 marks)  $64x^2 - 100$

**Question 2.** (5 marks) Add or subtract and simplify completely:

$$\frac{x^2 - 11}{x^2 + 7x + 6} - \frac{x}{x + 6} + \frac{2}{x + 1}$$

**Question 3.** Simplify completely:

a. (2 marks)  $4\sqrt{12} - \sqrt{27} + 2\sqrt{48}$

b. (3 marks)  $(\sqrt{5} - 2\sqrt{6})^2$