**General Instructions:**

1. All questions are compulsory.
2. Show all necessary working steps.
3. Use of calculators is not permitted.

**Question 1:** Solve the quadratic equation and find the values of x: **[10 Marks]**

*2x² + 5x - 12 = 0*

**Question 2:** If the area of a circle is 154 square units, find its radius using the formula: **[10 Marks]**

*A = πr²*

**Question 3:** Solve the following system of linear equations: **[10 Marks]**

*3x + 2y = 14*

*5x - 3y = 7*

**Question 4:** Find the derivative of the following function: **[10 Marks]**

*f(x) = x³ + 4x² - 8x + 3*

**Question 5:** Calculate the volume of a sphere using the formula: **[10 Marks]**

*V = (4/3)πr³*

where r = 6 units