

Books, watches, notes or cell phones are **not** allowed. The **only** calculators allowed are the Sharp EL-531***. You **must** show all your work, the correct answer is worth 1 mark the remaining marks are given for the work.

Question 1. (5 marks) Given the planes $\mathcal{P}_1 : x + 3y - z = 5$ and $\mathcal{P}_2 : 2x - 5y + z = 7$. Determine the equation of the line of intersection and find the angle between the given planes.

Question 2. (5 marks) Find the equation of the plane \mathcal{P} which is equidistant from $\mathcal{P}_1 : x + 2y + 3z = 0$ and $\mathcal{P}_2 : x + 2y + 3z = 6$.