1 question 1

The equation of the fundamental matrix is $x_r^T F x_l = 0$. Now consider an epipolar line $l^{'} = F x_l$. The right epipolar line e_r lies on this line, so $e_r^T l^{'} = 0$ or $e_r^T F x_l = 0$ for all x_l.
This implies that $e_r^T F = 0$. in similar way we can show that $F e_l = 0$. Hence F has a null space which is not just the zero vector (we found that e_l is in the null space of F), means that F is not full rank