A 0.4 A current is charging a capacitor that has parallel circular plates 13 cm in radius. The plate separation is 5 mm. Show your work below.

(a) What is the magnitude and direction of the magnetic field at point \( a \), which is between the plates at a distance of 7 cm from their center?

Magnitude: ___________________

Direction: ____________________

(b) What is the magnitude and direction of the magnetic field at point \( b \), which is far away from the plates at a distance of 7 cm from the current?

Magnitude: ___________________

Direction: ____________________

(a verbal description)