**2** **(a)** Define *pressure*.

..... [1]

**(b)** A cylinder is placed on a horizontal surface, as shown in Fig. 2.1.

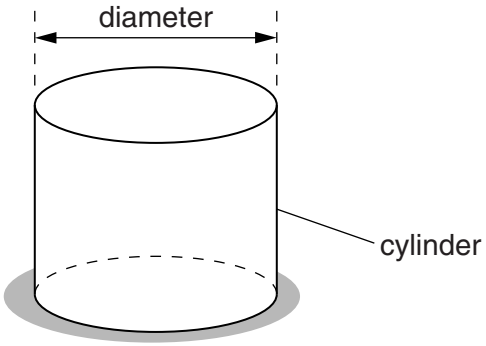


**Fig. 2.1**

The following measurements were made on the cylinder:

mass = 5.09 ± 0.01 kg
diameter = 9.4 ± 0.1 cm.

**(i)** Calculate the pressure produced by the cylinder on the surface.

pressure = ..... Pa [3]

**(ii)** Calculate the actual uncertainty in the pressure.

actual uncertainty = ..... Pa [3]

**(iii)** State the pressure, with its actual uncertainty.

pressure = ..... ± ..... Pa [1]