

- 30** A detector is used for monitoring an α -source and a reading of 300 counts is observed. After a time equal to the half-life of the α -source, the reading has fallen to 155 counts. If a 5 mm thick lead sheet is inserted between the α -source and the detector, the reading would probably be

A 0 counts **B** 5 counts **C** 10 counts **D** 20 counts