2. The Haber Process involves the following equilibrium reaction:

$$N_2(g) + 3 H_2(g) \rightleftharpoons 2 NH_3(g)$$

A number of closed reaction vessels were set up containing the gases shown in the table below.

Reaction vessel	Gases initially present
i	nitrogen, hydrogen
ii	nitrogen
iii	ammonia
iv	hydrogen, ammonia

In which of the above closed reaction vessels would equilibrium be established after a period of time?

- (a) i only
- (b) i and iii only
- (c) i, iii and iv only
- (d) ii, iii and iv only