price (figure 5.1). The demand curve of the individual firm is also its average revenue and its marginal revenue curve (see page 156).

Free entry and exit of firms

There is no barrier to entry or exit from the industry. Entry or exit may take time, but firms have freedom of movement in and out of the industry. This assumption is supplementary to the assumption of large numbers. If barriers exist the number of firms in the industry may be reduced so that each one of them may acquire power to affect the price in the market.

Profit maximisation

The goal of all firms is profit maximisation. No other goals are pursued.

No government regulation

There is no government intervention in the market (tariffs, subsidies, rationing of production or demand and so on are ruled out).

The above assumptions are sufficient for the firm to be a price-taker and have an infinitely elastic demand curve. The market structure in which the above assumptions are fulfilled is called *pure competition*. It is different from *perfect competition*, which requires the fulfilment of the following additional assumptions.

Perfect mobility of factors of production

The factors of production are free to move from one firm to another throughout the economy. It is also assumed that workers can move between different jobs, which implies that skills can be learned easily. Finally, raw materials and other factors are not monopolised and labour is not unionised. In short, there is perfect competition in the markets of factors of production.

Perfect knowledge

It is assumed that all sellers and buyers have complete knowledge of the conditions of the market. This knowledge refers not only to the prevailing conditions in the current period but in all future periods as well. Information is free and costless. Under these conditions uncertainty about future developments in the market is ruled out.

Under the above assumptions we will examine the equilibrium of the firm and the industry in the short run and in the long run.

II. SHORT-RUN EQUILIBRIUM

In order to determine the equilibrium of the industry we need to derive the market supply. This requires the determination of the supply of the individual firms, since the market supply is the sum of the supply of all the firms in the industry.

A. EQUILIBRIUM OF THE FIRM IN THE SHORT RUN

The firm is in equilibrium when it maximises its profits (Π), defined as the difference between total cost and total revenue:

$$\Pi = TR - TC$$