# Chapter 1: Introduction

## Exercises — Exercises

**Q1** Discuss the central problems of an economy.

Every society has limited resources that have competing uses, so scarcity forces choices. These choices are summarised as the central problems. (1) What is produced and in what quantities: how much food, clothing, housing or luxuries; agricultural or industrial goods; education and health or military services; consumption goods or investment goods such as machines. (2) How are these goods produced: how much of each resource to use, whether to use more labour or more machines, and which available technology to adopt. (3) For whom are they produced: how the output is distributed among individuals, who gets more and who gets less, and whether a minimum consumption level, basic education and health care should be ensured for everyone. In short, the allocation of scarce resources and the distribution of the final goods and services are the central problems of any economy.

**Q2** What do you mean by the production possibilities of an economy?

Given a fixed amount of resources and a given stock of technological knowledge, the resources can be allocated among goods and services in many different ways, each giving a different mix of output. The collection of all possible combinations of goods and services that can be produced from these resources and technology is called the production possibility set of the economy. For example, an economy producing only corn and cotton can produce 4 units of corn and no cotton, 10 units of cotton and no corn, or intermediate mixes such as 1 corn and 9 cotton, 2 corn and 7 cotton, or 3 corn and 4 cotton, when its resources are fully utilised. The economy has to choose one of these possibilities.

**Q3** What is a production possibility frontier?

The production possibility frontier (PPF) is the curve that shows the maximum amount of one good that can be produced for any given amount of the other good, when the economy's resources are fully utilised and technology is given. In the corn and cotton example, it joins points such as A, B, C, D and E. Any point on or below the curve is attainable. A point strictly below the frontier means resources are underemployed or used wastefully. Because moving along the frontier means shifting resources from one good to the other, producing more of one good requires giving up some of the other, which is the opportunity cost of the additional unit.

Q4 Discuss the subject matter of economics.

Economics studies how individuals and societies deal with scarcity of resources, which gives rise to the problem of choice. It covers the basic activities of production, exchange and consumption of goods and services. Its fundamental concerns are the allocation of scarce resources among competing uses and the distribution of the resulting output, that is, what, how and for whom to produce. It examines how these problems can be solved, either through the market by free interaction of individuals or by a central authority through planning, and what outcomes each mechanism produces. It also evaluates how desirable these outcomes are (positive and normative analysis). Traditionally it is studied in two branches, microeconomics and macroeconomics.

Q5 Distinguish between a centrally planned economy and a market economy.

In a centrally planned economy, the government or a central authority plans all important activities and takes the major decisions on production, exchange and consumption. It may try to achieve an allocation and distribution it considers desirable for society, for example by producing or encouraging services like education and health, or by intervening to ensure equitable distribution. In a market economy, economic activities are organised through the market, where individuals freely pursue their own objectives and exchange goods. Coordination comes from prices, which signal what society wants: a rising price tells producers to produce more. Thus the central problems are solved by price signals rather than by an authority. In reality, all economies are mixed, differing only in how large the government's role is.

Q6 What do you understand by positive economic analysis?

Positive economic analysis studies how a particular economic mechanism or system actually functions. It tries to figure out the outcomes likely to result from the mechanism, such as how resources would be allocated and how output would be distributed, without judging whether those outcomes are good or bad. For example, it explains how a market system solves the problems of what and how much to produce through price signals. It deals with what is, rather than what ought to be, and is therefore concerned with describing and explaining the working of the economy.

Q7 What do you understand by normative economic analysis?

Normative economic analysis evaluates economic mechanisms by asking whether they are desirable for the economy as a whole. After the outcomes of a mechanism are understood, normative analysis judges how good those outcomes are, for instance whether the resulting distribution of goods is fair or whether the government should ensure a minimum level of consumption, free elementary education and basic health services for all. It therefore deals with what ought to be. The distinction from positive analysis is not sharp, since the two are closely related and one cannot be properly understood in isolation from the other.

Q8 Distinguish between microeconomics and macroeconomics.

Microeconomics studies the behaviour of individual economic agents, such as consumers and producers, in the markets for different goods and services, and how prices and quantities are determined through their interaction in these markets. Macroeconomics studies the economy as a whole by focusing on aggregate measures such as total output, employment and the aggregate price level. It asks how these aggregates are determined and how they change over time, for example what the level of total output is, how it grows, whether resources are fully employed, why unemployment arises and why prices rise. Thus, microeconomics looks at individual markets, while macroeconomics looks at aggregate performance.