

STATISTICS FOR ECONOMICS

Textbook for Class XI



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FOREWORD

The National Curriculum Framework (NCF), 2005, recommends that children's life at school must be linked to their life outside the school. This principle marks a departure from the legacy of bookish learning which continues to shape our system and causes a gap between the school, home and community. The syllabi and textbooks developed on the basis of NCF signify an attempt to implement this basic idea. They also attempt to discourage rote learning and the maintenance of sharp boundaries between different subject areas. We hope these measures will take us significantly further in the direction of a child-centred system of education outlined in the National Policy on Education (1986).

The success of this effort depends on the steps that school principals and teachers will take to encourage children to reflect on their own learning and to pursue imaginative activities and questions. We must recognise that, given space, time and freedom, children generate new knowledge by engaging with the information passed on to them by adults. Treating the prescribed textbook as the sole basis of examination is one of the key reasons why other resources and sites of learning are ignored. Inculcating creativity and initiative is possible if we perceive and treat children as participants in learning, not as receivers of a fixed body of knowledge.

These aims imply considerable change in school routines and mode of functioning. Flexibility in the daily time-table is as necessary as rigour in implementing the annual calendar so that the required number of teaching days are actually devoted to teaching. The methods used for teaching and evaluation will also determine how effective this textbook proves for making children's life at school a happy experience, rather than a source of stress or boredom. Syllabus designers have tried to address the problem of curricular burden by restructuring and reorienting knowledge at different stages with greater consideration for child psychology and the time available for teaching. The textbook attempts to enhance this endeavour by giving higher priority and space to opportunities for contemplation and wondering, discussion in small groups, and activities requiring hands-on experience.

The National Council of Educational Research and Training (NCERT) appreciates the hard work done by the textbook development team

(iv)

responsible for this book. We wish to thank the Chairperson of the advisory group for Social Sciences textbooks at Higher Secondary Level, Professor Hari Vasudevan and the Chief Advisor for this book, Professor Tapas Majumdar for guiding the work of this committee. Several teachers contributed to the development of this textbook; we are grateful to them and their principals for making this possible. We are indebted to the institutions and organisations which have generously permitted us to draw upon their resources, material and personnel. We are especially grateful to the members of the National Monitoring Committee, appointed by the Department of Secondary and Higher Education, Ministry of Human Resource Development under the Chairmanship of Professor Mrinal Miri and Professor G.P. Deshpande, for their valuable time and contribution. As an organisation committed to systemic reform and continuous improvement in the quality of its products, NCERT welcomes comments and suggestions which will enable us to undertake further revision and refinement.

New Delhi
20 December 2005

Director
National Council of Educational
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THE CONSTITUTION OF INDIA

PREAMBLE

WE, THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a ¹**[SOVEREIGN SOCIALIST SECULAR DEMOCRATIC REPUBLIC]** and to secure to all its citizens :

JUSTICE, social, economic and political;

LIBERTY of thought, expression, belief, faith and worship;

EQUALITY of status and of opportunity and to promote among them all;

FRATERNITY assuring the dignity of the individual and the ²[unity and integrity of the Nation];

IN OUR CONSTITUENT ASSEMBLY this twenty-sixth day of November, 1949 do **HEREBY ADOPT, ENACT AND GIVE TO OURSELVES THIS CONSTITUTION.**

1. Subs. by the Constitution (Forty-second Amendment) Act, 1976, Sec.2, for "Sovereign Democratic Republic" (w.e.f. 3.1.1977)
2. Subs. by the Constitution (Forty-second Amendment) Act, 1976, Sec.2, for "Unity of the Nation" (w.e.f. 3.1.1977)



Introduction



Studying this chapter should enable you to:

- *know what the subject of economics is about;*
- *understand how economics is linked with the study of economic activities in consumption, production and distribution;*
- *understand why knowledge of statistics can help in describing consumption, production and distribution;*
- *learn about some uses of statistics in the understanding of economic activities.*

1. WHY ECONOMICS?

You have, perhaps, already had Economics as a subject for your earlier classes at school. You might have been

told this subject is mainly around what *Alfred Marshall* (one of the founders of modern economics) called “*the study of man in the ordinary business of life*”. Let us understand what that means.

When you buy goods (you may want to satisfy your own personal needs or those of your family or those of any other person to whom you want to make a gift) you are called a **consumer**.

When you sell goods to make a profit for yourself (you may be a shopkeeper), you are called a **seller**.

When you produce goods (you may be a farmer or a manufacturing company), or provide services (you may

be a doctor, porter, taxi driver or transporter of goods) you are called a **producer**.

When you are in a job, working for some other person, and you get paid for it (you may be employed by somebody who pays you wages or a salary), you are called an **employee**.

When you employ somebody, giving them a wage, you are an **employer**.

In all these cases you will be called **gainfully employed** in an **economic activity**. Economic activities are ones that are undertaken for a monetary gain. This is what economists mean by **ordinary business of life**.

Activities

- List different activities of the members of your family. Would you call them economic activities? Give reasons.
- Do you consider yourself a consumer? Why?

We cannot get something for nothing

If you ever heard the story of *Aladdin* and *his Magic Lamp*, you would agree that Aladdin was a lucky guy. Whenever and whatever he wanted, he just had to rub his magic lamp and a genie appeared to fulfill his wish. When he wanted a palace to live in, the genie instantly made one for him. When he wanted expensive gifts to bring to the king when asking for his daughter's hand, he got them at the bat of an eyelid.

In real life we cannot be as lucky as Aladdin. Though, like him we have unlimited wants, we do not have a magic lamp. Take, for example, the pocket money that you get to spend. If you had more of it then you could have purchased almost all the things you wanted. But since your pocket money is limited, you have to choose only those things that you want the most. This is a basic teaching of Economics.

Activities

- Can you think for yourself of some other examples where a person with a given income has to choose which things and in what quantities he or she can buy at the prices that are being charged (called the current prices)?
- What will happen if the current prices go up?

Scarcity is the root of all economic problems. Had there been no scarcity, there would have been no economic problem. And you would not have studied Economics either. In our daily life, we face various forms of scarcity. The long queues at railway booking counters, crowded buses and trains, shortage of essential commodities, the rush to get a ticket to watch a new film, etc., are all manifestations of scarcity. We face scarcity because the things that satisfy our wants are limited in availability. Can you think of some more instances of scarcity?

The resources which the producers have are limited and also have alternative uses. Take the case of food