

ISBN 81-7450-678-0

First Edition

February 2007 Phalguna 1928

Reprinted

December 2007 Agrahayana 1929 December 2008 Pausa 1930 January 2010 Magha 1931 March 2013 Phalguna 1934 November 2013 Kartik 1935 December 2014 Pausha 1936 December 2015 Pausa 1937 February 2017 Magha 1938 January 2018 Magha 1939 December 2018 Agrahayana 1940

PD 300T BS

© National Council of Educational Research and Training, 2007

₹ 70.00

Printed on 80 GSM paper with NCERT watermark

Published at the Publication Division by the Secretary, National Council of Educational Research and Training, Sri Aurobindo Marg, New Delhi 110 016 and printed at Karan Printers, F-29/2, Okhla Industrial Area, Phase-II, New Delhi - 110 020

ALL RIGHTS RESERVED

- No part of this publication may be reproduced, stored in a retrieval system
 or transmitted, in any form or by any means, electronic, mechanical,
 photocopying, recording or otherwise without the prior permission of the
 publication.
- ☐ This book is sold subject to the condition that it shall not, by way of trade, be lent, re-sold, hired out or otherwise disposed of without the publisher's consent, in any form of binding or cover other than that in which it is published.
- The correct price of this publication is the price printed on this page, Any revised price indicated by a rubber stamp or by a sticker or by any other means is incorrect and should be unacceptable.

OFFICES OF THE PUBLICATION DIVISION, NCERT

NCERT Campus Sri Aurobindo Marg New Delhi 110 016

Phone : 011-26562708

108, 100 Feet Road Hosdakere Halli Extension Banashankari III Stage Bengaluru 560 085

Phone: 080-26725740

Navjivan Trust Building P.O.Navjivan Ahmedabad 380 014

Phone: 079-27541446

CWC Campus Opp. Dhankal Bus Stop Panihati Kolkata 700 114

Phone: 033-25530454

CWC Complex Maligaon **Guwahati 781 021**

Phone: 0361-2674869

Publication Team

Head, Publication

: M. Siraj Anwar

Division

: Shveta Uppal

Chief Editor Chief Business

Manager

: Gautam Ganguly

Chief Production

Chief Page 15 Officer

: Arun Chitkara

Assistant Editor

: R. N. Bhardwaj

Production Assistant : Sunil Kumar

Cover, Layout and Illustrations

Nidhi Wadhwa

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 of 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 committee responsible for this book. We wish to thank the Chairperson of the advisory group in Social Sciences, at the 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 their principals for making this possible. We are indebted to the institutions and organisations which have generously permitted us to draw upon their resources, materials 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 Chairpersonship 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 refinements.

New Delhi 20 November 2006 Director National Council of Educational Research and Training



Textbook Development Committee

CHAIRPERSON, ADVISORY COMMITTEE FOR SOCIAL SCIENCE TEXTBOOKS AT THE HIGHER SECONDARY LEVEL

Hari Vasudevan, *Professor*, Department of History, University of Calcutta, Kolkata

CHIEF ADVISOR

Tapas Majumdar, *Professor Emeritus of Economics*, Jawaharlal Nehru University, New Delhi

ADVISOR

Satish Jain, *Professor*, Centre for Economics Studies and Planning, School of Social Sciences, Jawaharlal Nehru University, New Delhi

Members

Harish Dhawan, *Lecturer*, Ramlal Anand College (Evening) New Delhi Papiya Ghosh, *Research Associate*, Delhi School of Economics, New Delhi Rajendra Prasad Kundu, *Lecturer*, Economics Department, Jadavpur University, Kolkata

Sugato Das Gupta, Associate Professor, CESP, Jawaharlal Nehru University, New Delhi

Tapasik Bannerjee, *Research Fellow*, Centre for Economics Studies and Planning, Jawaharlal Nehru University, New Delhi

MEMBER-COORDINATOR

Jaya Singh, *Lecturer*, Economics, Department of Education in Social Sciences and Humanities, NCERT, New Delhi

Acknowledgements

The National Council of Educational Research and Training (NCERT) acknowledges the invaluable contribution of academicians and practising school teachers for bringing out this textbook. We are grateful to Anjan Mukherjee, *Professor*, JNU, for going through the manuscript and suggesting relevant changes. We thank Jhaljit Singh, *Reader*, Department of Economics, University of Manipur for his contribution. We also thank our colleagues Neeraja Rashmi, *Reader*, Curriculum Group; M.V. Srinivasan, Ashita Raveendran, *Lecturers*, Department of Education in Social Sciences and Humanities (DESSH), for their feedback and suggestions.

We would like to place on record the precious advise of (Late) Dipak Banerjee, *Professor* (Retd.), Presidency College, Kolkata. We could have benefited much more of his expertise, had his health permitted.

The practising school teachers have helped in many ways. The Council expresses its gratitude to A.K. Singh, *PGT* (Economics), Kendriya Vidyalaya, Varanasi, Uttar Pradesh; Ambika Gulati, *Head*, Department of Economics, Sanskriti School; B.C. Thakur, *PGT* (Economics), Government Pratibha Vikas Vidyalaya, Surajmal Vihar; Ritu Gupta, *Principal*, Sneh International School, Shoban Nair, *PGT* (Economics), Mother's International School, Rashmi Sharma, *PGT* (Economics), Kendriya Vidalaya, JNU Campus, New Delhi.

We thank Savita Sinha, *Professor and Head*, DESSH, for her support. Special thanks are due to Vandana R. Singh, *Consultant Editor*, NCERT for going through the manuscript.

The council also gratefully acknowledges the contributions of Dinesh Kumar, *In-charge*, Computer Station; Amar Kumar Prusty and Neena Chandra, *Copy Editors*; in shaping this book. The contribution of the Publication Department in bringing out this book is duly acknowledged.

This textbook has been reviewed with the support of experts like Meeta Kumar, *Associate Professor*, Miranda House, University of Delhi; Shalini Saksena, *Associate Professor*, DCAC; and Bharat Garg, *Assistant Professor*, Shyam Lal College, University of Delhi. Their contributions are duly acknowledged.

The council is also thankful to Tampakmayum Alan Mustofa, *JPF*; Ayaz Ahmad Ansari, Farheen Fatima and Amjad Husain, *DTP Operators*, in shaping this textbook.

contents

Forev	word	iii
1. In	TRODUCTION	1
1.1	A Simple Economy	1
1.2	Central Problems of an Economy	2
1.3	Organisation of Economic Activities	4
	1.3.1 The Centrally Planned Economy	4
1.4	1.3.2 The Market Economy	5
	Positive and Normative Economics	6
	Microeconomics and Macroeconomics	6
	Plan of the Book	6
	HEORY OF CONSUMER BEHAVIOUR	8
2.1	Utility	8
	2.1.1 Cardinal Utility Analysis2.1.2 Ordinal Utility Analysis	9
22	The Consumer's Budget	15
2.2	2.2.1 Budget Set and Budget Line	15
	2.2.2 Changes in the Budget Set	17
2.3	Optimal Choice of the Consumer	19
2.4	Demand	21
	2.4.1 Demand Curve and the Law of Demand	21
	2.4.2 Deriving a Demand Curve from Indifference Curves and Budget Constraints	23
	2.4.3 Normal and Inferior Goods	24
	2.4.4 Substitutes and Complements	25
	2.4.5 Shifts in the Demand Curve	25
	2.4.6 Movements along the Demand Curve and Shifts	26
0.5	in the Demand Curve Market Demand	96
		26 27
2.0	Elasticity of Demand 2.6.1 Elasticity along a Linear Demand Curve	29
	2.6.2 Factors Determining Price Elasticity of Demand for a Good	
	2.6.3 Elasticity and Expenditure	31
3. Pi	RODUCTION AND COSTS	36
3.1	Production Function	36
3.2	The Short Run and the Long Run	38
3.3	Total Product, Average Product and Marginal Product	39
	3.3.1 Total Product	39
	3.3.3 Marginal Product	39

3.4	The Law of Diminishing Marginal Product and the Law of Variable Proportions	40
3.5	Shapes of Total Product, Marginal Product and Average Product Curves	41
	Returns to Scale	42
3.7	Costs	43
	3.7.1 Short Run Costs	43
	3.7.2 Long Run Costs	48
4. T	HE THEORY OF THE FIRM UNDER PERFECT COMPETITION	53
4.1	Perfect competition: Defining Features	53
4.2	Revenue	54
4.3	Profit Maximisation	56
	4.3.1 Condition 1	56
	4.3.2 Condition 2	56
	4.3.3 Condition 3	57
	4.3.4 The Profit Maximisation Problem: Graphical Representation	58
4.4	Supply Curve of a Firm	59
	4.4.1 Short Run Supply Curve of a Firm	59
	4.4.2 Long Run Supply Curve of a Firm 4.4.3 The Shut Down Point	60 61
	4.4.4 The Normal Profit and Break-even Point	61
45	Determinants of a Firm's Supply Curve	62
1.0	4.5.1 Technological Progress	62
	4.5.2 Input Prices	62
4.6	Market Supply Curve	63
	Price Elasticity of Supply	65
5. M	ARKET EQUILIBRIUM	71
	Equilibrium, Excess Demand, Excess Supply	71
	5.1.1 Market Equilibrium: Fixed Number of Firms	72
	5.1.2 Market Equilibrium: Free Entry and Exit	80
5.2	Applications	84
	5.2.1 Price Ceiling	84
	5.2.2 Price Floor	85
6. No	ON-COMPETITIVE MARKETS	88
6.1	Simple Monopoly in the Commodity Market	88
	6.1.1 Market Demand Curve is the Average Revenue Curve	89
	6.1.2 Total, Average and Marginal Revenues	92
	6.1.3 Marginal Revenue and Price Elasticity of Demand	93
	6.1.4 Short Run Equilibrium of the Monopoly Firm	93
6.2	Other Non-perfectly Competitive Markets	98
	6.2.1 Monopolistic Competition	98
	6.2.2 How do Firms behave in Oligopoly?	99
Gloss	sary	102

Chapter 1

Introduction



1.1 A SIMPLE ECONOMY

Think of any society. People in the society need many goods and services¹ in their everyday life including food, clothing, shelter, transport facilities like roads and railways, postal services and various other services like that of teachers and doctors. In fact, the list of goods and services that any individual² needs is so large that no individual in society, to begin with, has all the things she needs. Every individual has some amount of only a few of the goods and services that she would like to use. A family farm may own a plot of land, some grains, farming implements, maybe a pair of bullocks and also the labour services of the family members. A weaver may have some yarn, some cotton and other instruments required for weaving cloth. The teacher in the local school has the skills required to impart education to the students. Some others in society may not have any resource³ excepting their own labour services. Each of these decision making units can produce some goods or services by using the resources that it has and use part of the produce to obtain the many other goods and services which it needs. For example, the family farm can produce corn, use part of the produce for consumption purposes and procure clothing, housing and various services in exchange for the rest of the produce. Similarly, the weaver can get the goods and services that she wants in exchange for the cloth she produces in her yarn. The teacher can earn some money by teaching students in the school and use the money for obtaining the goods and services that she wants. The labourer also can try to fulfill her needs by using whatever money she can earn by working for someone else. Each individual can thus use her resources to fulfill her needs. It goes without saying that no individual has unlimited resources compared to her needs. The amount of corn that the family farm can produce is limited by the amount of resources it has, and hence, the amount of different goods



12103CH01

¹By goods we means physical, tangible objects used to satisfy people's wants and needs. The term 'goods' should be contrasted with the term 'services', which captures the intangible satisfaction of wants and needs. As compared to food items and clothes, which are examples of goods, we can think of the tasks that doctors and teachers perform for us as examples of services.

²By individual, we mean an individual decision making unit. A decision making unit can be a single person or a group like a household, a firm or any other organisation.

³By resource, we mean those goods and services which are used to produce other goods and services, e.g. land, labour, tools and machinery, etc.

and services that it can procure in exchange of corn is also limited. As a result, the family is forced to make a choice between the different goods and services that are available. It can have more of a good or service only by giving up some amounts of other goods or services. For example, if the family wants to have a bigger house, it may have to give up the idea of having a few more acres of arable land. If it wants more and better education for the children, it may have to give up some of the luxuries of life. The same is the case with all other individuals in society. Everyone faces scarcity of resources, and therefore, has to use the limited resources in the best possible way to fulfill her needs.

In general, every individual in society is engaged in the production of some goods or services and she wants a combination of many goods and services not all of which are produced by her. Needless to say that there has to be some compatibility between what people in society collectively want to have and what they produce⁴. For example, the total amount of corn produced by family farm along with other farming units in a society must match the total amount of corn that people in the society collectively want to consume. If people in the society do not want as much corn as the farming units are capable of producing collectively, a part of the resources of these units could have been used in the production of some other good or services which is in high demand. On the other hand, if people in the society want more corn compared to what the farming units are producing collectively, the resources used in the production of some other goods and services may be reallocated to the production of corn. Similar is the case with all other goods or services. Just as the resources of an individual are scarce, the resources of the society are also scarce in comparison to what the people in the society might collectively want to have. The scarce resources of the society have to be allocated properly in the production of different goods and services in keeping with the likes and dislikes of the people of the society.

Any allocation of resources of the society would result in the production of a particular combination of different goods and services. The goods and services thus produced will have to be distributed among the individuals of the society. The allocation of the limited resources and the distribution of the final mix of goods and services are two of the basic economic problems faced by the society.

In reality, any economy is much more complex compared to the society discussed above. In the light of what we have learnt about the society, let us now discuss the fundamental concerns of the discipline of economics some of which we shall study throughout this book.

1.2 Central Problems of an Economy

Production, exchange and consumption of goods and services are among the basic economic activities of life. In the course of these basic economic activities, every society has to face **scarcity** of resources and it is the scarcity of resources that gives rise to the problem of **choice**. The scarce resources of an economy have competing usages. In other words, every society has to decide on how to use its scarce resources. The problems of an economy are very often summarised as follows:

⁴Here we assume that all the goods and services produced in a society are consumed by the people in the society and that there is no scope of getting anything from outside the society. In reality, this is not true. However, the general point that is being made here about the compatibility of production and consumption of goods and services holds for any country or even for the entire world.

⁵By an allocation of the resources, we mean how much of which resource is devoted to the production of each of the goods and services.