Indifference curve and its properties

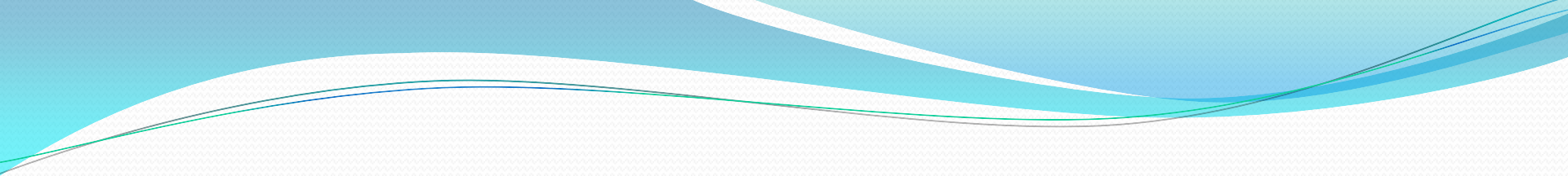## By

Gurmeet Singh
Assistant Prof.
GCG Ludhiana

Introduction

The theory of consumer behavior is based on an axiom that a consumer is a utility maximizing entity.

The classical and new classical economists held the view that utility is cardinally or quantitatively measureable.It can be measured in cardinal numbers like weight, height, length etc.

Acc. to Modern economist utility is ordinally measureable in terms of 'less than' or 'more than'

In 1881,british economist Edgeworth first of all propounded indifference curve analysis. After a decade later, Irving Fisher used indifference in 1892 to explain consumers equilibrium. Both Edgeworth and Fisher believed only in cardinal numbers. Later it was discussed in detail by Hicks in his book '***value and capital.***'

Definition and meaning

- " An indifference curve is a locus of all such points which shows different combinations of two commodities which yield equal satisfaction to the consumer."

- Acc to Kotsoyiannis, "An indifference curve is the locus of points – particular combination of good which yield the same utility to the consumer, so that he is indifferent as to the particular combination he consumes."

Indifference curve schedule

Combination of X and Y commodity	commodity X	Commodity Y	DMRS
A	1	10	--
B	2	7	3:1
C	3	5	2:1
D	4	4	1:1

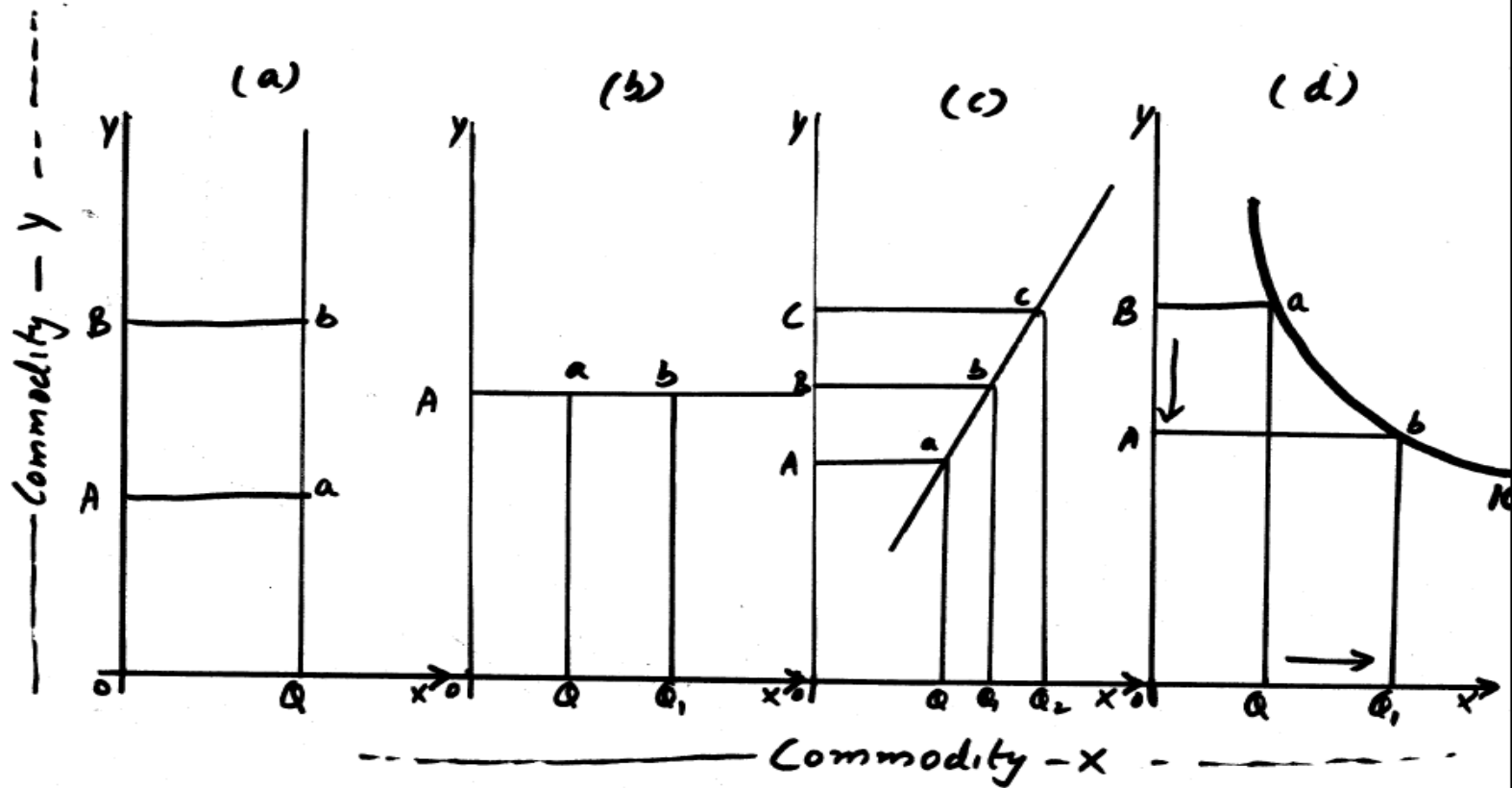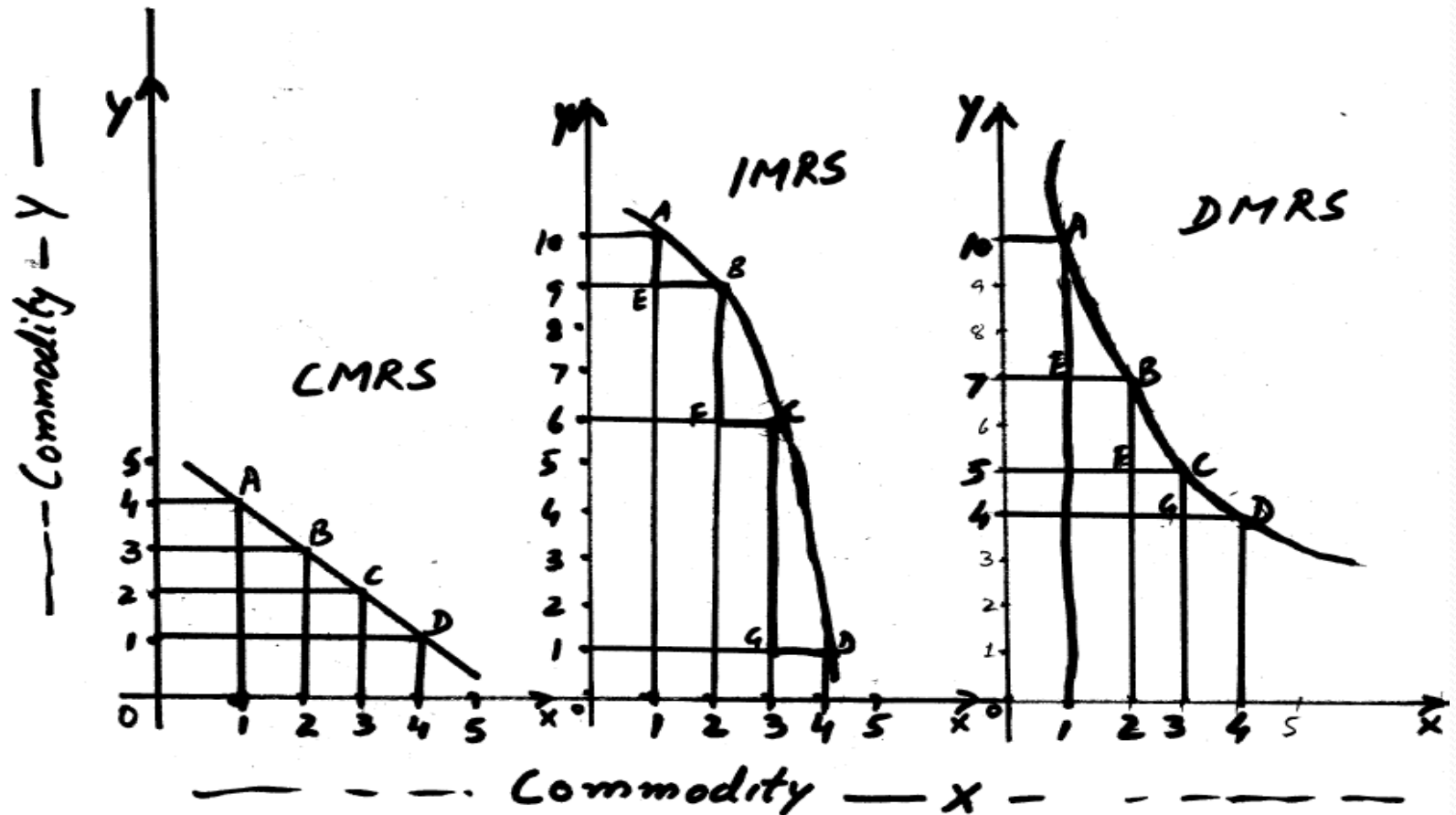# Indifference curve – A diagrammatic representation
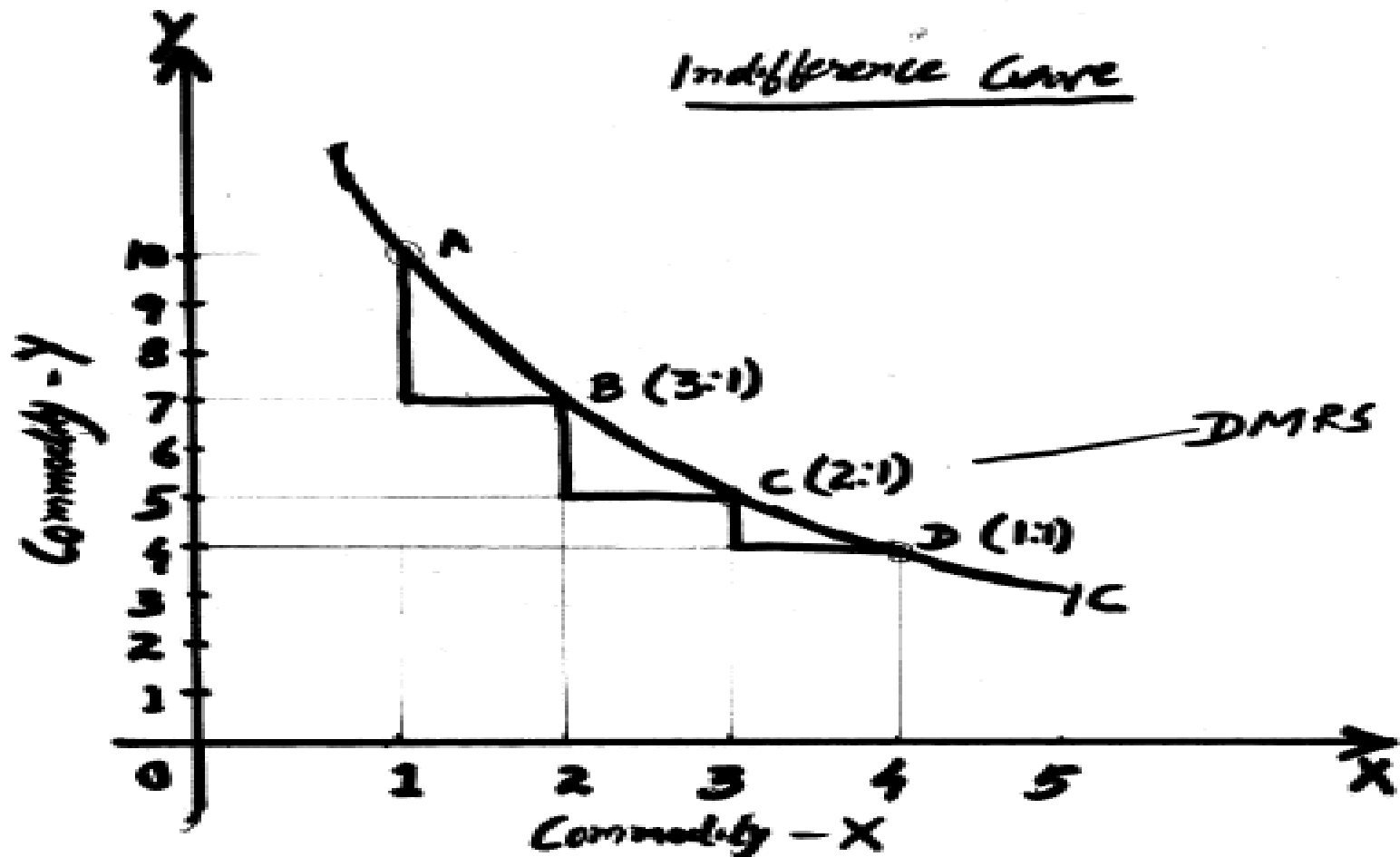
Assumptions

- Rational consumer
- Ordinal utility
- Diminishing marginal rate of substitution
- Non satiety
- Transitivity
- Consistency in selection
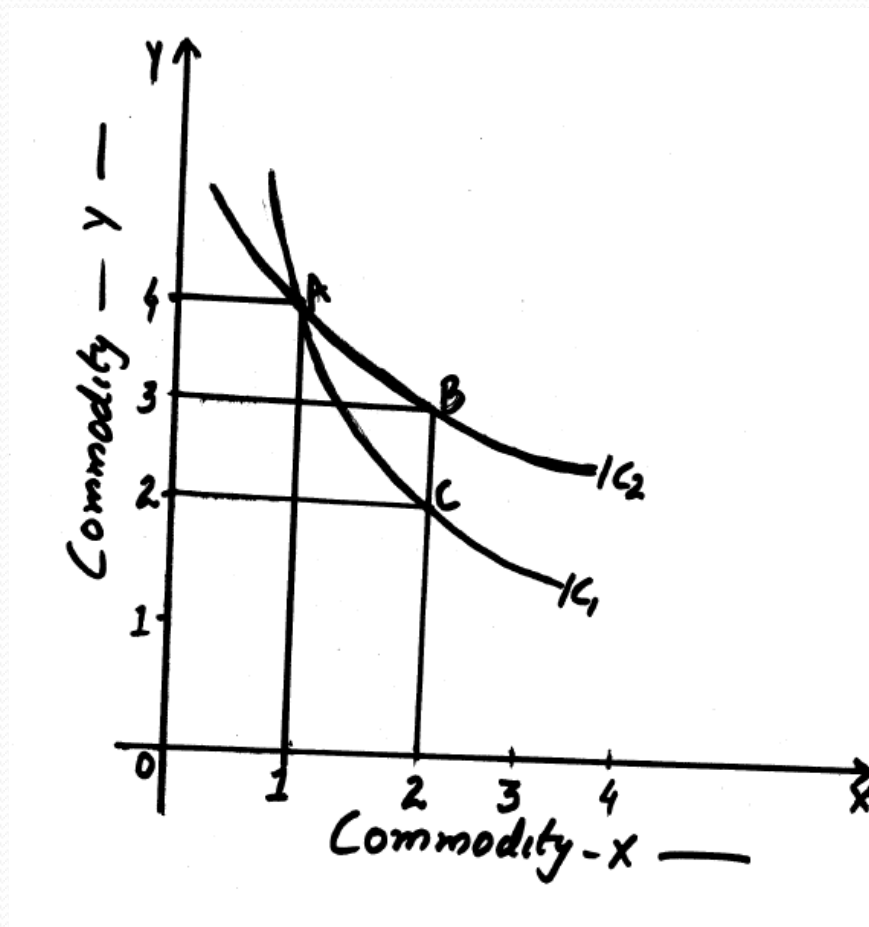- Independent scale of preferences

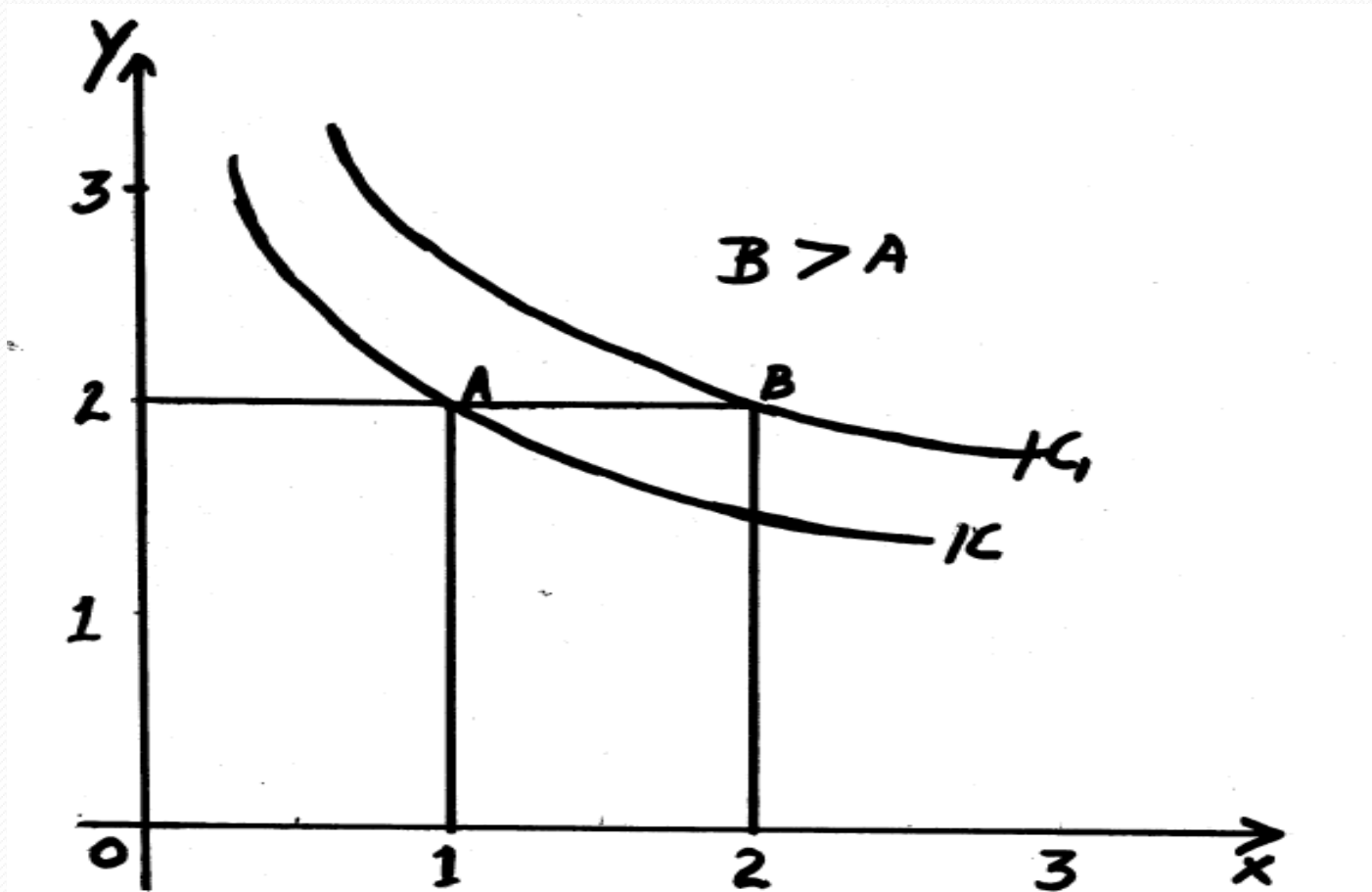# 1.An indifference curve has negative slope

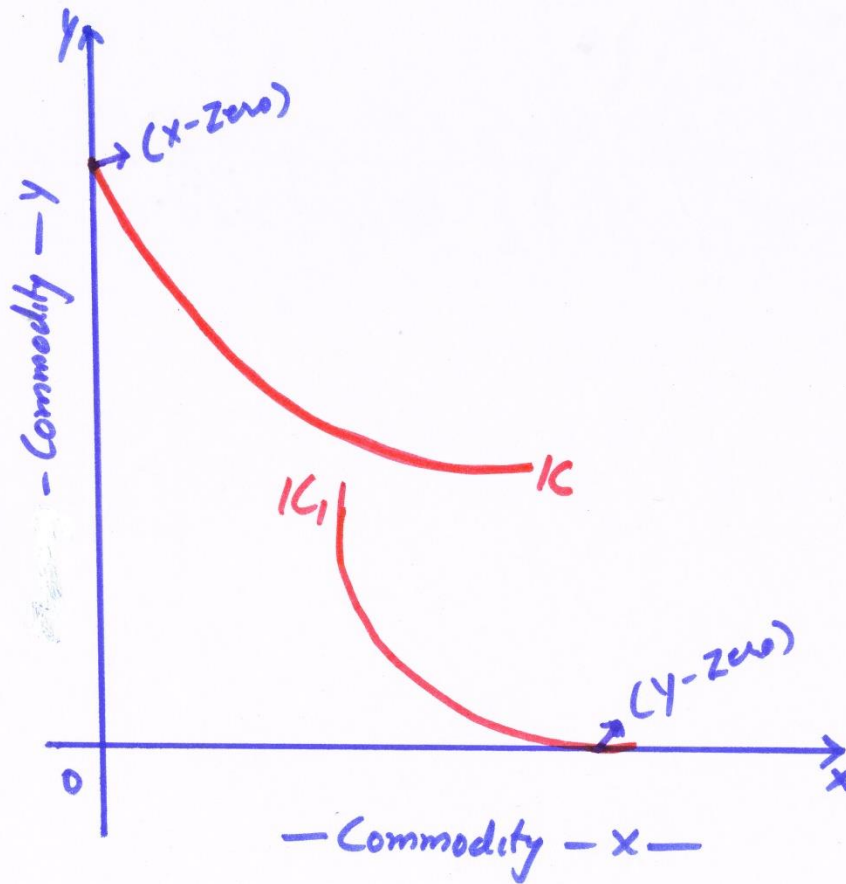# 2.An indifference curve is convex towards the origin

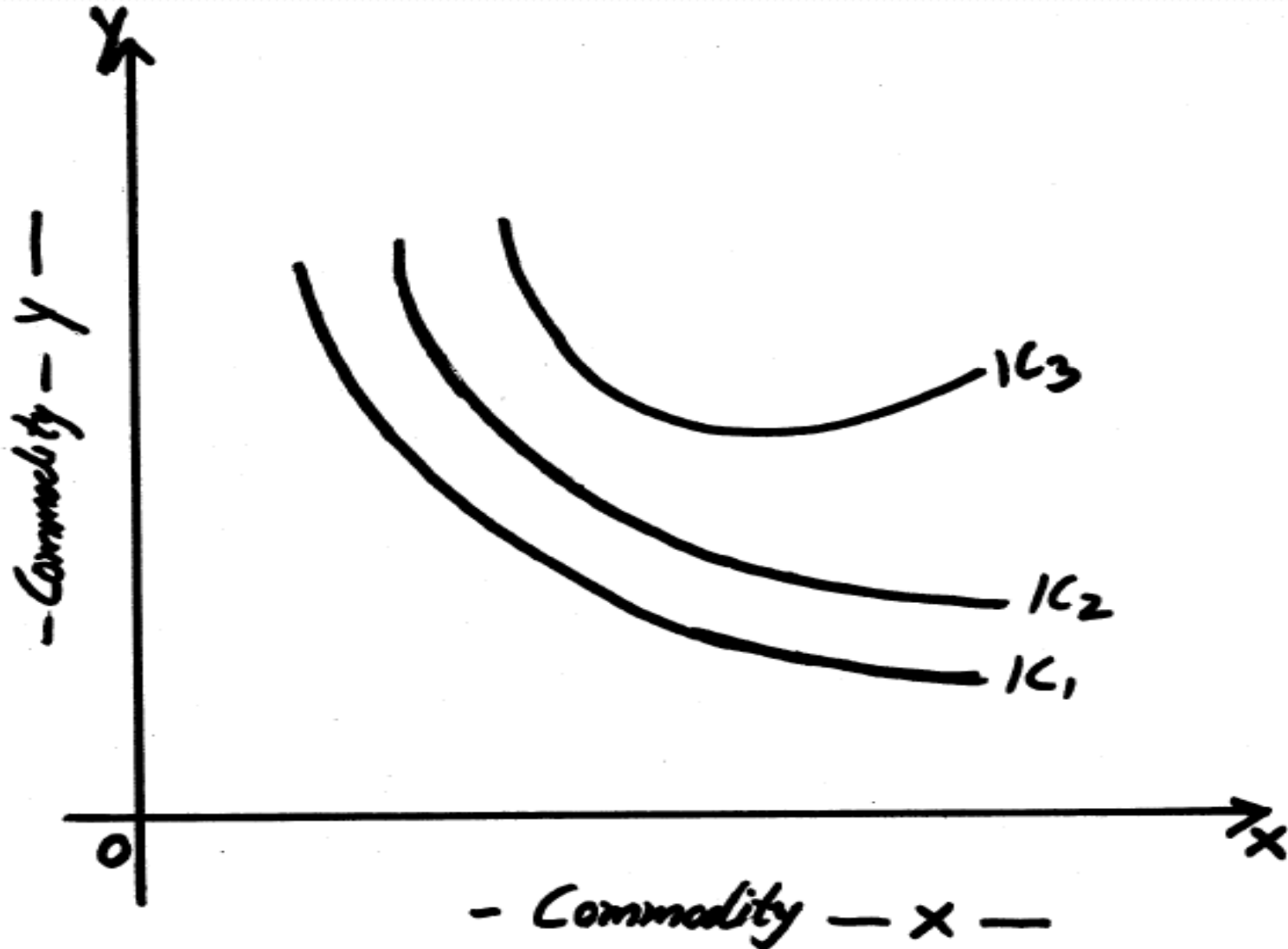# 3. Two indifference curves never cut each other

4.Higher indifference curve represent higher satisfaction level

5. Indifference curve touches neither x-axis nor y-axis

6. Indifference curve need not be parallel to each other

7. Indifference curve becomes complex in case of more than two commodities

conclusion

There are several unrealistic assumptions of cardinal utility analysis but still it was the first theory to explain consumer equilibrium. Marshallian theory left the distinction between the income and substitution effects of the price change unanalyzed. It has too many weaknesses and these limitations has been removed by the Hicks-Allen indifference curve approach. Indiffernce curve is superior than utility analysis because of its less assumptions.

Important reference books

1) Price theory and distribution by   P.N.Chopra
2) Advanced economic theory   by H.L.Ahuja
3) Micro economic theory   by P.N.Chopra