Tuesday, 10 September 2019 10:58 AM

Chapter2: Unit 2 Theory of consumer Behaviour

Human wants: Unlimited
Resources: Limited

→ not all human wants can be satisfied

He/She Demands only those goods & services which yield "more satisfaction" than the "money paid"

Utility: Perceived satisfaction

≠ satisfaction ≠ usefulness ≠ Pleasure

Ethically Neutral

Theories

- Marginal Utility Analysis
- Mixed Marshall
- Cardinal Approach

- Indifference Curve Analysis
- Hicks & Allen
- Ordinal Approach

Marginal Utility Analysis

Assumptions

a) Consumer is Rational : maximise his satisfaction
b) Utility can be measured : Cardinally
c) Money is used as a measuring rod of utility. Hence Money is Consider a Quality to pay.
d) Concept of marginal utility is used.
e) Independent Hypothesis of Utility

Qty	Total utility	Marginal utility
1	90	90
2	80	80
3	90	0
4	80	-10
5	80	

MU: Extra Benefit derived by consumption of one extra unit

Formula 1: $MU_n = TU_n - TU_{n-1}$

eg: $MU_4 = TU_4 - TU_3$
$= 90 - 90 = 0$

Formula 2: $MU = \frac{\Delta TU}{\Delta Q}$

eg: $TU_2 = 40$
$TU_1 = 20$
Find MU = $\frac{20}{2} = 10$

TU: Total utility Sum

Law of Diminishing marginal utility

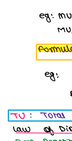
Extra Benefit derived from consumption of one extra unit goes on Diminishing.

Assumptions
i) Continuous consumption
ii) Homogeneous units
iii) Normal state of mind & preference

Exceptions
Rational: Education
Fashion: Money
Addiction: Drunkard
Habits: Miser
Music:
Movie:

Prestigious Goods

Diagram



Relationship between TU & MU

i. TU is Rising
MU is Falling

ii. TU is maximum
MU is zero

iii. TU is Falling
MU is negative

Consumer surplus

What the consumer is willing to pay (>) What the consumer actually pays

Marginal Utility | Market Price

Qty	MU	MP	CS
1	40	20	20
2	30	20	10
3	20	20	0
4	10	20	-10

Consumer Surplus
Consumer eq.

Consumer Equilibrium = Maximum satisfaction

Marginal Utility = Market Price

When consumer surplus is 0 we say consumer has reached in equilibrium point.

Illustration

Qty	MU	MP	MP
1	100	50	100	10
2	75	50	100	10
3	50	50	100	10
4	25	50	100	10
5	10	50	100	10

MP↑ Qty↓
MP↓ Qty↑

∴ Law of DMU is the basis of Law of Demand

Practical application of Consumer Surplus

a) Large Surplus: Repeated Purchase
b) Price Discrimination
c) Large scale investment Decisions
d) Passing Product prices
e) Finance Minister

Limitations of Consumer Surplus

a) It cannot be measured precisely (accurately)
b) Necessities → Consumer Surplus → Infinite
c) Consumer surplus is subjected by Marginal Utility

Tea	Coffee
MU 20	20
MP 10	10
CS 10	5

d) MU of money is assumed to be constant (unrealistic)
e) No scale for prestigious goods
f) Utility is measured in terms of money: not possible

Indifference Curve Analysis

Assumptions

i. Consumer is Rational
ii. Consumer has knowledge about market
iii. Consumer is capable of ranking different combinations
iv. Consistent consumption pattern

C>B, B>A
∴ C>A

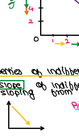
v. Combination which has high no of goods will be preferred as it yields higher level of satisfaction

Combination	Food	Clothing
A	1	10
B	2	10
C	3	10

Indifference Curve

a) is a curve
b) which shows the combination of 2 goods
c) which gives same level of satisfaction

combinations	Food (x)	clothing (y)	MRS = marginal Rate of substitution
A	1	12	-
B	2	6	6
C	3	4	2
D	4	3	1



Properties of Indifference Curve

a) Slope of Indifference curve is downward sloping from left to right

Reason: To gain extra units of x, they have to sacrifice some units of y.

b) Curve of IC is convex to origin

Reason: because of Decreasing marginal Rate of Substitution

* What if MRS is constant: when 2 goods are perfect substitutable to consumer
∴ IC will be Straight line

* What will be when goods are perfect complements
IC will be 'L' shaped

c) IC will never touch either of axis

A: $Y \neq 0$, $X = 0$
B: $X \neq 0$, $Y = 0$

Reason: Contradiction of 2 goods

d) Higher IC will give higher level of satisfaction

Reason: Higher IC will have more no of goods in its combination
∴ Higher level of satisfaction

e) Two IC will never intersect each other

IC_2 A = C
IC_1 B = C
$A \neq B$

Consumer's pattern → Contradiction

Indifference Curve Map

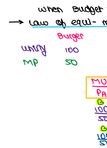
Collection of IC is called as IC map

Budget Line / Price Line

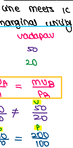
F 10,000 → can spend entire it.

Q Find price of Food & Clothing

Food = $\frac{10000}{100}$ = ₹100
Clothing = $\frac{10000}{50}$ = ₹200



Consumer Equilibrium



When budget line meets IC @ tangency

→ Law of equi-marginal utility.

	Burger	Lassagna	Pizza
Utility	100	50	200
MP	50	20	100

$\frac{MUa}{Pa} = \frac{MUb}{Pb}$

$\frac{100}{50} \neq \frac{50}{20}$

$\frac{100}{50} = \frac{200}{100}$