Utility Analysis

T.U, MU

Utility → It refers to want satisfying power of a commodity

Hobson: Utility is the ability of a good to satisfy a want.

Cardinal approach
(Numerical way)
figures or nos.

Unit → Utils

Icecream – 20 utils
chocolate – 10 utils

Marshall → utility monetary

1 Util = 1 Rs

icecream = Rs 20
chocolate = Rs 10

Total Utility

Total Satisfaction obtained from the consumption of all possible units of a commodity

1st icecream = 20 utils
2nd " = 16 utils.
3rd icream = 10 utils.

T.U = 20+16+10 = 46 Utils.

$$TU_n = U_1 + U_2 + U_3 \ldots\ldots + U_n$$

n = Number of units consumed

Marginal Utility

It is an additional utility derived from the consumption of one more unit of given commodity

$1^{st} = 20$

$2^{nd} = 16$ | 46

$3^{rd} = 10$

T.U = = 36

$$MU_3 = TU_3 - TU_2$$

$$= 46 - 36$$

$$= 10 \text{ Utils.}$$

$$MU = \frac{\text{change in T.U}}{\text{change in number of units}}$$

$$\frac{\Delta TU}{\Delta Q}$$

1 Piece Bread = 15 utils

2 " " 25 utis.

T. U. 40 utils.

3 Piece of Bread 70 util

T.U = 70 utils

$MU_3 = TU_3 - TU_2$

$= 70 - 40$

$= 30$ utils

M.U = +ve

M.U = -ve

M.U = zero.

1) 1st Piece of bread gi
ves me 8.
2nd = 6 of U.

T.U = 8 + 6 = 14

6

2) zero

3rd bread — 20

4th — 20

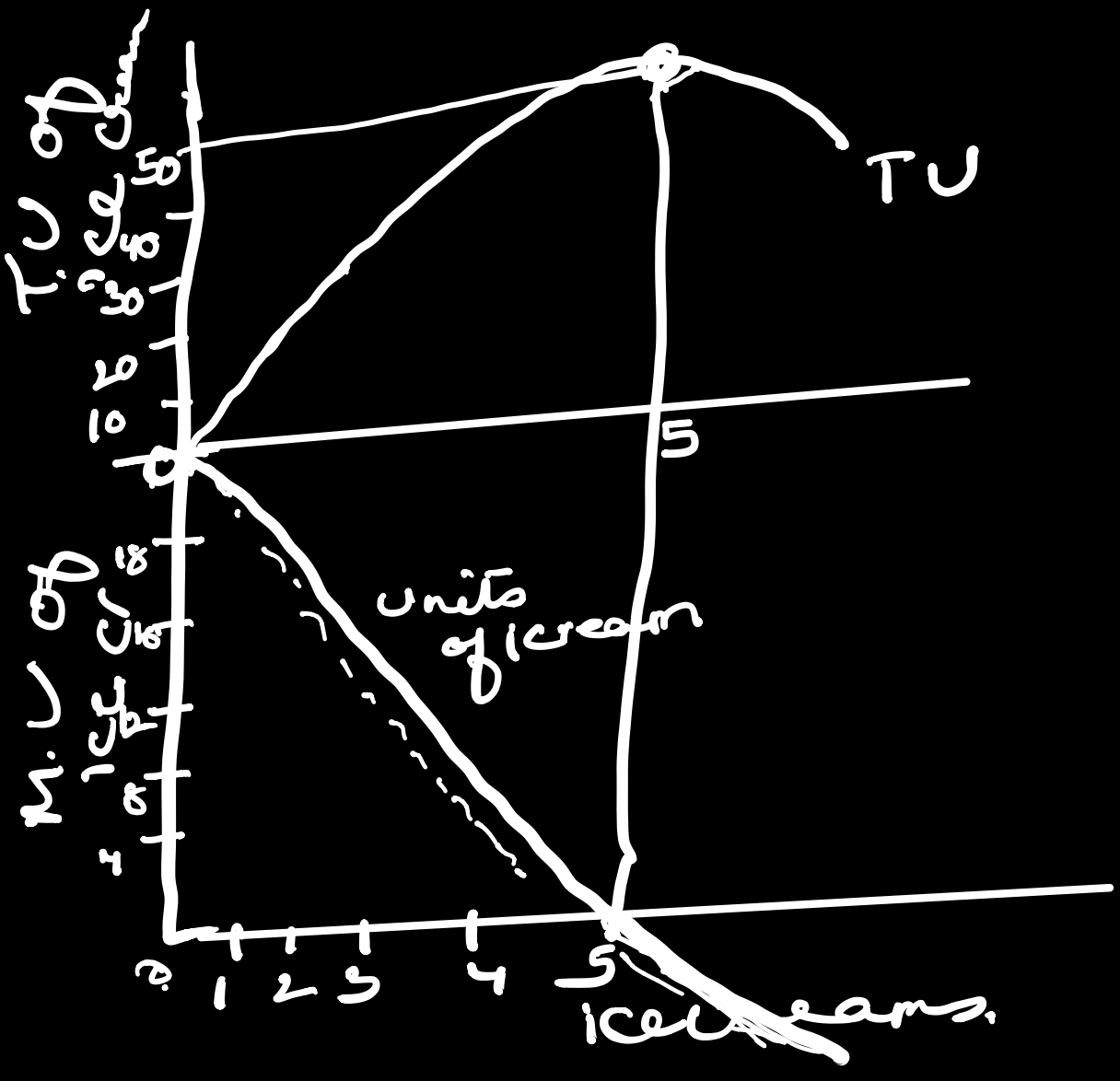
MU = zero.

3) Negative

5th TU = 18.

MU = 18 − 20 = −2

Ice Cream	M.U$_{\Delta T}$	T.U.
1	20	20
2	16	36
3	10	46
4	4	50
5	0	50
6	− 6	44


T.U of ice cream
50
40
30
20
10
0
TU
5
M.U of ice cream
18
16
14
12
8
4
units of ice cream
0
1
2
3
4
5
ice creams.

Ordinal approach

Utility of a commodity cannot be measured in absolute qty but it will be possible for a consumer to tell subjectivity which commodities deriving more or less or eq. satis when compared to another

Hicks. → tool analysing

Indiff curve.

Ordinal Assumption

1) Rationality → rational being

2) Ordinal Utility → ordinal terms preference for goods.

3) Transitivity & Consistency of choices

A to B ✓ B To C ✓

A To C

4) Non Satiety
non satisfied

5) Diminishing Marginal Rate of Substitution

apple X | Oranges Y

Rs 5 | Rs 10

Rs 20

20

20

4

0

0

2