## Pulse width modulation # 157 is a switching offeehniques Whene different width of pulses is generated from an analog signal. in migro seconds and give linear output Q. what is duty cycle? Ans! It is the reaso of time as nugged construction: Signal is ON companed to the time the signality off. 1) Low output: The signal picoducal 1 # Modulation technique can be used to encode information for transmission. # Allows control of power supplied desired shape to the crystals.

totot to Harimonics How mon: 6 Distanction # Hanmonics are integer multiples of a fun damental frequency. effect on engineent and conducto 5 KHZ Effects \* 1St Hanmonic 22011 X 5 KHZH ( \* 2nd Hanmonie 2x 50 KH7 (s \* 3nd Hunmorn 4 3 3 5 KHZ (E \* 4th Hanmonic YX5 KHZ etc Hene, art would # 193 -> old Hanmonics # 25 4 -> Even Harmonics. 3) High efficiency. # Essential to diminish THD of multilievel invented

# Harmonic Distortion

# This of HD has an advense of effect on equipment and conduction.

#### Effects

1) Heating loss inominal tel \*

E KH E

- 2) False truggering worth bas x
- 3) Reduced lifthme not but &
- 4) Increased cost and size!

### LOW THD

- D Advanced Powen factor
- 2) smooth Less pick currents
- 3) High efficiency.

# Essential to diminish THD of multilevel inventer.

(Transducere)

#### Simusoidal Pulse Width

# pulse will have different widths

# Height of the pulsers kept as

Constant. and book retailed

# Reduces numbered Harmonics

# odd multiples of 3 and even harmonics

are suppressed reference

Reference

the modulated pulses

The first of the pulses

The first of the pulses o