

MCR - 20

Short =  $4 \times 5 = 20$

Board =  $3 \times 10 = 30$

Command = 15

Obe = 15 (3 short) mid

(3 code) Final

## Operating System

Operating System concepts of by Abraham Silbarkate  
10th Edition.

Software hardware connection.  $20 \times 10 = 200$

★ Computer System

① Hardware

② Software

③ OS

④

★ Computer system explanations b

★ OS responsibility b

Local buffer = data store small memory

★ Interrupt  $20 \times 10 = 200$  b

★ Interrupt handler = ISR (Interrupt Service Routine)

★ Computer system organization b

★ bootstrap program  $20 \times 10 = 200$  s

★ fireware  $20 \times 10 = 200$  s



## Lecture - 2

- Q Storage Diagram explain
- Q How to execute I/O
- Q DMA = Direct memory access (एक packet को  
में interrupt)
- Q Why we use multiprocessor vs sig
- Q Multiprocessor - 3 type and difference
- Q Clustering की? type की? vs Multipr
- Q How Multiprogramming and Multitasking works  
and differences.
- Q Two mode user & kernel
- Q Resource use करण Kernel model का
- Q User mode एकरा Kernel - 3 एकरा system call generate

करे



## Lecture - 3

- \* Q Operating system ko service karke
- \* Q system calls
- Q system call type
- Q system programs
- \* Q Linker and Loads ke baad ka kaam with example
- S Q Implementation - us policy
- \* Q Comparison of OS structure

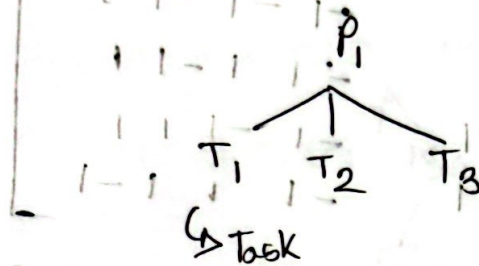


## Lecture-4

- Q Process definition :
- Q Process control \*\*  
Block Draw
- Q Process State \*\* with diagram
- Q Context switching \*\* (CPU switch) diagram
- Q Process scheduling \* diagram Queue Scheduler Job to read long term ready to dev short
- Q Process creation and terminating \*
- \* Q What and What type of Inter process communication diagram
- Q Message passing implementation issues
- Q Direct and indirect communication difference.
- Q Shared memory
- Q Buffer
- Q G - Scheduling criteria

## Lecture-6

Q Process ka kisi unit of execution = Thread



Q Benefit of multi-thread

Q Parallelism vs. concurrency

Q Data parallelism and Task (s)

Q Amdahl's Law :-

$S = 1.25$        $N = \text{Resources} = 2$   
 $P = 0.75$

$$\text{speedup} < \frac{1}{0.25 + \frac{0.75}{2}} = 1.6$$

Q Many to many vs one to one model

Q Fork-join

Q Threading issues

Q API