Smart Revision of COA (Aniket Shriram)

Q:#) Architecture of Computer

⇒ Means की हमें Computer के Attributes (Computer के Parts, उनके features के बारे में Explain) करना है |

→ Architectural design
→ Memory, RAM, ROM, CPU, ALU

 # Computer Organization

⇒ Computer के different units/parts/segment मिलकर कैसे operation करेंगे, उसको Explain करना है |

→ Interconnection, Buses
ये सब लिखना है C.O. में |

 # Embedded System ⇒ You have to Explain the working & functionalities of calculators, Cell Phones, Washing machines.

(मतलब वैसा System, जो Electronics & Software दोनों का Combination हो |)

 # IOT ⇒ आज के Time में जितने भी Smart devices हैं वो सब IOT के Use से Run हो रहे |

e.g :- Healtcare Field, Transpotation, Smart Industry

(ये सब ध्यान रखकर इनमें जो भी होता, explain करना features में)

Microprocessor | Microcontroller

⇒ Computer System में जो भी Use होगा वो Microprocessor में लिखो |

=) μprocessor में operations process होती है devices से |

=) Embedded System, Smart System / device से Related जो μController में Explain करो |

=) इसमें Control.

⇒ Complex↑   ⇒ Complex↓

C I S C & R I S C

Cloud Computing → For data security ⇒ Explain करना |
                  → More space
                  → Enhancement of services

Cloud Networking मतलब ⇒ Usage of Cloud Computing in multiple field.

Cloud Services → Software as a Service
                     (Keyword)
                 → Platform as a Service
                     (Keyword)
                 → Infrastructure as a Service
                     (Keyword)

Cloud से Related Kuch भी आये वो Explain करना |

Amdahl's Law

$$Speedup = \frac{1}{(1-f) + \frac{f}{N}}$$

$$= \frac{1}{(1-f) + \frac{f}{SU_f}}$$

Little's Law $(L = \lambda W)$

Clock Rate, Clock Speed, Clock Cycle, Clock tick
$$\parallel$$
"Relate with your watch &
find the concept"

Computer Components / Functions

⊢→ Processing Units
⊢) Memory
⊢) Buses   =) Thoda Thoda Explain
⊢) Add^r Modes   करो ! !
⊢) Registers
⊢) Instructions

Interrupts ⇒ Processing के Time delay को
Interrupts बोलते हैं।

⊢→ Interrupts होता q है;

⊢→ delay to passing the info.

⊢) To podogical delay

⊢) Not better working of ALU, CPU, M/M.

\# Transfers
- → Memory to Processor
- → Processor to M/m
- → I/o to Processor
- → Processor to M/M

ये सब भी Bus / Interconnection /

Interrupts में आ जायेगा !!

\# System Bus
- → (Data) Lines
- → (Add^n) lines
- → (Control) lines

\#

Protocol	⇒ Rules To communicate, Explain
Routing	⇒ Networking को Explain
Link	⇒ Bus को Explain
Physical	⇒ Data को Explain