

VICTORIA UNIVERSITY BANGLADESH



Assignment On

Course Name : Computer Architecture

Course code : CSE-313

Submitted By

Name: Md. Abir Hossain

Reg: 2219150051

Batch: 15th

Program: B.sc in CSE

Submitted To

Md. Shahin Khan (Shanto)

Department of CSE/CSIT

Lecturer Victoria University Of Bangladesh

Ans. to the Q. NO - 4 (a)

a Fundamental Execution cycle:

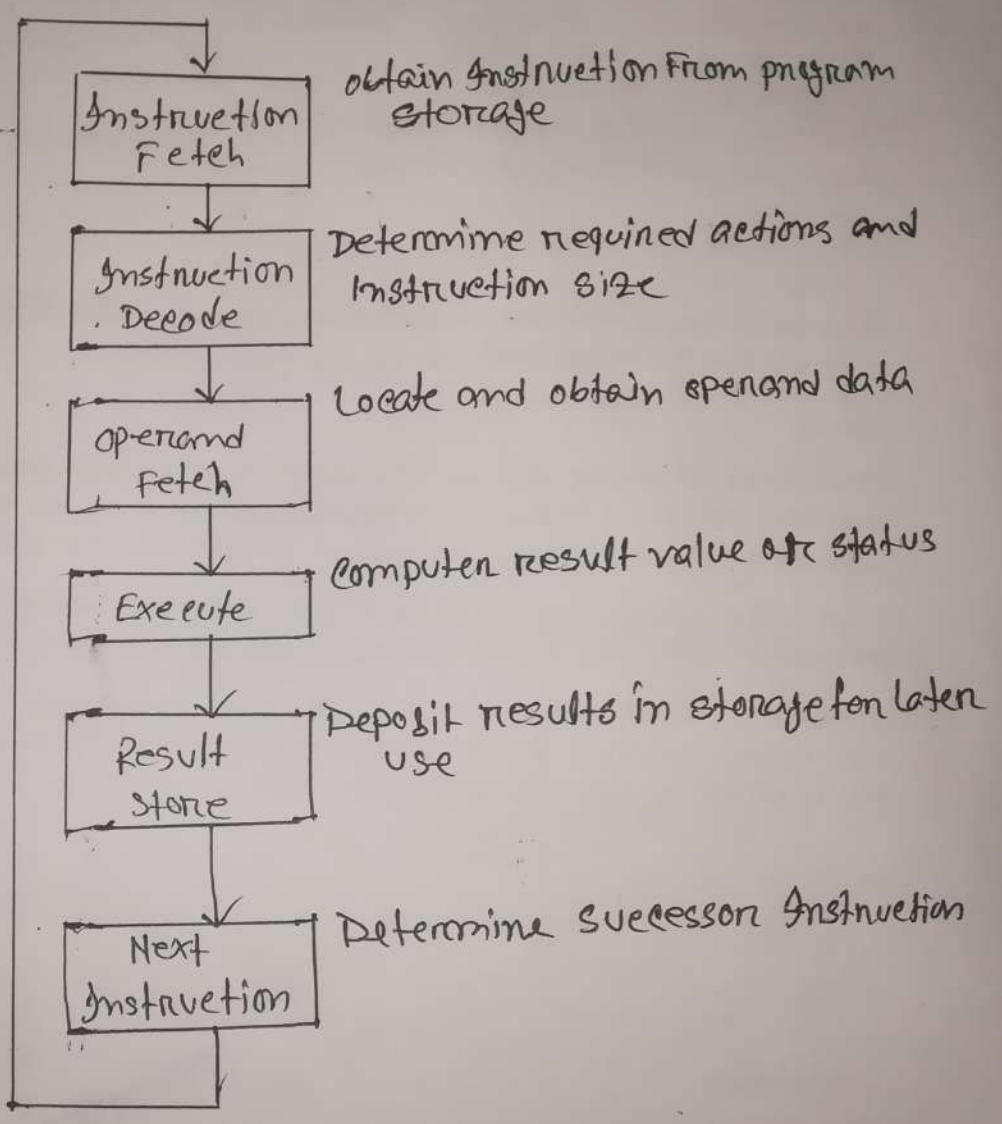


Fig - Fundamental Execution cycle.

6 Levels of the memory Hierarchy.

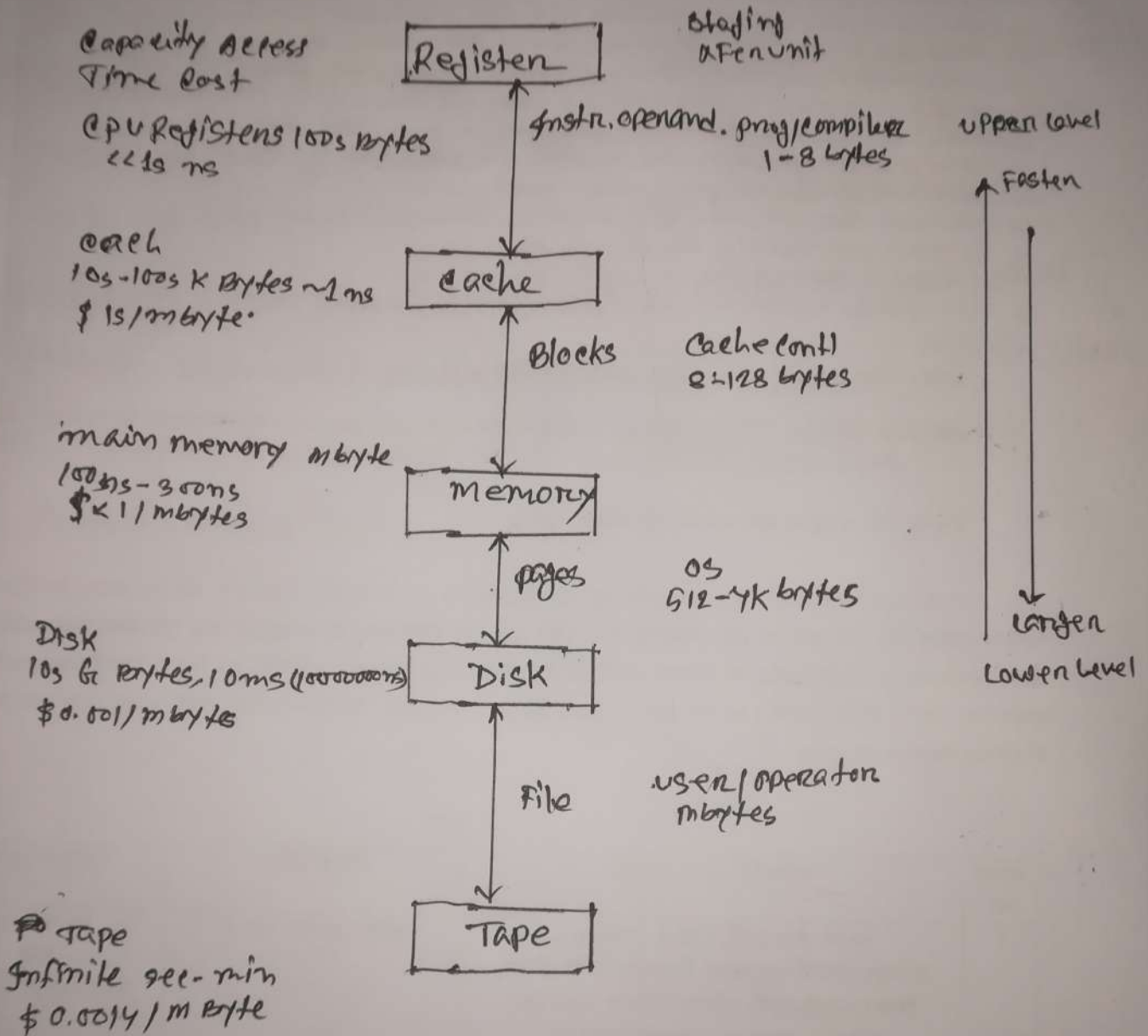


Fig: Levels of the memory Hierarchy,

* A finite state machines (FSMs) are at the heart of most of Digital Design. The basic idea of an FSM is to store a sequence of different unique states and transition between them depending on the values of the input and the current state of the machine. The FSM can be of two types:

Moore (where the output of the state machine is purely dependent on the state variables) and Mealy (where the output can depend on the current state variable values and the input values).

Ans. to the Q. NO-3 (b)

b Fini state machine - mod-3

- * System state is explicit in representation.
- * Transitions between states representation as arrows with inputs on arcs.
- * Output may be either part of state or on arcs.

mod 3 machine:

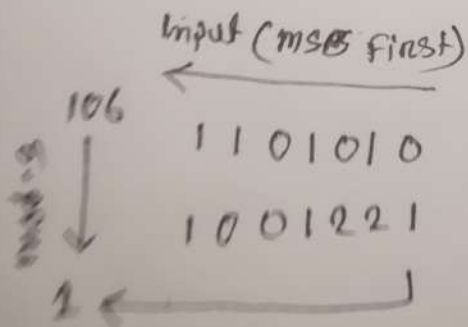
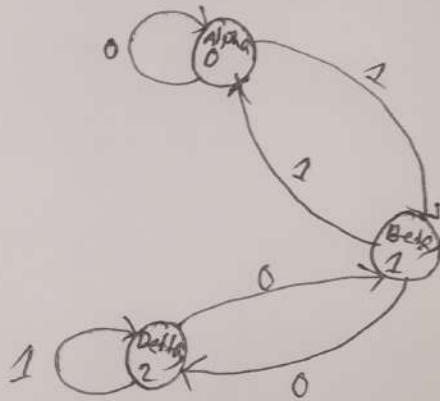
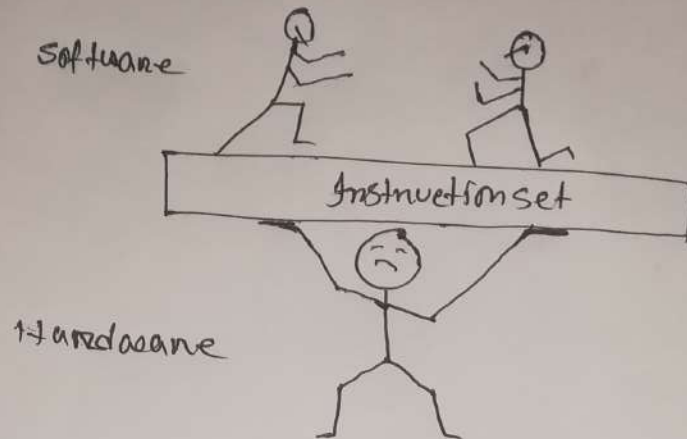


Fig. mod-3 machine,

Ans. to the QNO - 2 (a)

a The instruction set: a critical interface!



- * properties of a good abstraction.
 - = lasts through many generations (portability),
 - = used in many different ways (generality)
 - = provides convenient functionality to higher levels,
 - = permits an efficient implementation at lower levels.