#### **HCI MST SYLLABUS**

## Chapter1

- 1.3 Human Memory
  - 1.3.2 Short-term memory
  - 1.3.3 Long-term memory
  - 1.4 Thinking: Reasoning and problem solving
    - 1.4.1 Reasoning
    - 1.4.2 Problem solving

(Worked exercise pg no. 45)

## **Chapter 2**

- 2.1 Introduction
  - 2.2 Text Entry Devices
    - 2.2.1 The alphanumeric keyboard
    - 2.2.2 Chord Keyboard
  - 2.3 Positioning, Pointing and Drawing
    - 2.3.1 The Mouse
    - 2.3.2 Touchpad
    - 2.3.4 Joystick and keyboard nipple
    - 2.3.5 Touch-sensitive screens (touchscreen)
    - 2.3.7 Digitizing tablet
    - 2.3.8 Eyegaze
  - 2.7 Paper: Printing and Scanning
    - 2.7.1 Printing (Common type of dot-based printers)
    - 2.7.2 Fonts and page description languages

(Paper-based interaction) (Worked Exercise pg no. 105)

- 2.8 Memory
  - 2.8.1 RAM and Short-term memory
  - 2.8.2 Disks and long-term memory
  - 2.8.3 Understanding speed and capacity
  - 2.8.4 Compression

(Worked Exercise pg no. 114 and 119)

#### Chapter 3

- 3.2 Models of Interaction (All 3 points)
- 3.4 Ergonomics (All 5 points)

(Design Focus pg no 133)

- 3.5 Interaction Styles (All 8 points)
- 3.6. Elements of the WIMP Interface (3.6.1, 2, 3, 4, 5 points)

# **Chapter 5**

- 5.1 Introduction
- 5.2 What is Design? (All points 1, 2, 3)
- 5.3 The Process of Design
- 5.4 User Focus
- 5.5 Scenarios
- 5.6 Navigation Design (5.6.1, 2, 3)
- 5.7 Screen Design and Layout (All 3 points)

## Chapter 6

- 6.2 The Software life cycle (All 4 Points)
- 6.3 Usability Engineering
- 6.4 Iterative Design and Prototyping
  - 6.4.1 Techniques for Prototyping
- 6.5 Design Rationale (6.5.1, 6.5.2)

(Worked Exercise pg no 255)

## **Chapter 7**

7.2 Principles to Support Usability (All 3 points)

(Worked exercise pg no 273)

7.4 Guidelines

(Worked Exercise pg no 281)

7.5 Golden Rules and Heuristics