

(3 Hours)

[ Total Marks : 100

- N.B.** (1) Question No. 1 is **compulsory**.  
 (2) Attempt any **four** questions out of **remaining**.  
 (3) **Figures** to the **right** indicate **full** marks.  
 (4) Assume **suitable** data wherever **required** and justify the **same**.

1. (a) Explain principles of user interface. 5  
 (b) Explain various types of statistical graphics in brief. 5  
 (c) Explain influence on icon usability. 5  
 (d) Explain various types of messages 5
  
2. (a) Explain the difference between proper menu design and poor menu design with diagrams. 10  
 (b) Explain following techniques in determining requirements. Categorize them as direct or indirect method. 10
  - (i) Electronic survey
  - (ii) Card sorting
  - (iii) Facilitated Team Workshop
  - (iv) Trade Show.
  
3. (a) Explain various New and Navigation schemes selection of window with example. 10  
 (b) What are mental models and why are they important in interface design ? 10
  
4. (a) Explain various Color models. Explain various considerations for choosing background and foreground color for web page. 10  
 (b) Explain proper device based and screen based controls. 10
  
5. (a) What are Pointing devices ? What tasks and explain about direct control pointing devices. 10  
 (b) What are human considerations in sources design ? Also explain organizing screen elements, ordering of screen data and contents. 10
  
6. (a) Explain various interface building tools. 10  
 (b) Differentiate between Graphical User interface and Web Page design. 10
  
7. Write short notes on :— (Any two) 20
  - (a) Speech recognition digitization and generation
  - (b) Designing for visually impaired
  - (c) Software tools and specification methods
  - (d) Designing process to understand business junctions.