

P1085

[4066] - 405

**S.Y. M.C.A. (Under Faculty of Engineering)**  
**HUMAN COMPUTER INTERFACE**  
**(2008 Pattern) (Sem. - IV) (610913) (Elective - I)**

*Time : 3 Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:-*

- 1) *From section I, answer (Q1 or Q2), (Q3 or Q4), (Q5 or Q6).*
- 2) *From section II, answer (Q7 or Q8), (Q9 or Q10), (Q11 or Q12).*
- 3) *Answers to the two sections should be written in separate books.*
- 4) *Neat diagrams must be drawn wherever necessary.*
- 5) *Figures to the right indicate full marks.*
- 6) *Assume suitable data, if necessary.*

**SECTION - I**

- Q1)** a) What is reasoning? Explain different type of reasoning with example. [6]  
b) Justify the following statement "Extensive knowledge about the human eye or visual system can be made applicable in the practical user interface design". [6]

OR

- Q2)** a) Explain the following terms related to human short term memory Digital Span, Chunking, Regency Effect, Closure. [6]  
b) What do you mean by 'use of Metaphor' in HCI? Explain any five metaphors used to teach new concept in interactive interface design. [6]

- Q3)** a) Explain eight golden rules of interface design. Give suitable examples to justify your answer? [6]  
b) Explain GOMS and Keystroke level model. [6]

OR

- Q4)** a) Explain the linguistic model - BNF and task action grammar in brief? [6]  
b) With help of Norman's Model of interaction explain the process of execution evaluation cycle. What is meant by gulf of execution and gulf of evaluation with respect to this model. [6]

- Q5)** a) Explain three Pillars of Interface Design. [6]  
b) Explain how scenarios help in the design process of interactive systems. [5]



OR

- Q6)** a) What is participatory design? Explain with suitable examples. [5]  
b) Wrote note on: [6]  
i) LUCID.  
ii) Ethnographic observation.

**SECTION - II**

- Q7)** List different type of menus. Explain when and why to use a particular menu system with example. [12]

OR

- Q8)** a) Explain different command organization strategies. [6]  
b) Write a note on Expert reviews. [6]

- Q9)** Discuss advantage and disadvantage of online manuals. Also discuss the facilities that can be provided in online manuals which might not be practical in printed manuals. [11]

OR

- Q10)** a) Explain in brief any three application of hypermedia. [6]  
b) Explain with example face to face communication and asynchronous interaction in CSCW? [5]

- Q11)** Write a note on (any three): [12]

- a) Share Editors
- b) Multimedia document searches
- c) Comparisons of pointing devices
- d) Organization design to support usability

OR

- Q12)** a) Give benefits and problem of touch screen and voice recognitions input. [6]  
b) Some of the favorite techniques of web pages these days include automatic scrolling text boxes, moving marquees and constantly running animations. Discuss these features in terms of web pages design guideline. [6]

