

Total No. of Questions : 12]

SEAT No. :

[Total No. of Pages : 4

P597

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[4461] - 44

**S.Y. M.C.A. (Engineering) (Semester - IV)**

**HUMAN COMPUTER INTERFACE**

**(2008 Course) (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 the difference between direct control pointing devices and indirect control pointing devices? Explain both types of devices with 3 examples. [6]
- b) Explain the similarities and differences in human memory and computer memory. [6]

OR

- Q2)** a) What do you mean by 'use of Metaphor' in HCI? Explain any five metaphors used to teach new concept in interactive interface design. [6]
- b) What is reasoning? Explain different types of reasoning with examples. [6]
- Q3)** a) With help of Norman's Model of interaction explain the process of execution evaluation cycle. [6]
- b) Explain the Goals, Operator, Methods and Selection (GOMS) cognitive model. [6]

OR

- Q4)** a) Give an example and discuss the implementation of one of Shneiderman's Golden Rules of Interface Design. [6]
- b) Task analysis breaks user's activities into a series of goals and sub goals. In order to print a document, you must first select the 'print' command. You must then select the printer, the number of copies and so on. Briefly describe the benefits that task analysis can offer to the design of interactive computer systems. [6]

**P.T.O.**

- Q5) a)** Write short note on : [5]  
i) Designing tools.  
ii) S/W engineering tools.  
**b)** Comments on arguments usually given for and against participatory design. [6]

OR

- Q6) a)** Describe Logical User Centered Interactive Design Methodology. [6]  
**b)** Explain how scenarios help in the design process of interactive systems. [5]

## SECTION - II

- Q7) a)** What are important issues while designing multiple window interface for an application? [6]  
**b)** List and explain the steps of usability testing. What are some of the limitations of such testing? [6]

OR

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

- Q9) a)** Explain in brief any three applications of hypermedia. [6]  
**b)** Explain issues in face-to-face communications for CSCW. How will you apply CSCW to education? [5]

OR

- Q10) a)** Compare online help and documentation Vs Printed documentation. [6]  
**b)** Write a short note Hypertext. [5]

- Q11) Write a short note on (any two) :** [12]  
**a)** Multimedia document searches.  
**b)** Shared Editors.  
**c)** Information visualization.

OR

- Q12) a)** Give benefits and problem of touch screen and voice recognition input. [6]  
**b)** Discuss important design issues *involved in designing* a web page. [6]

