

Total No. of Questions : 12]

SEAT No. :

P1153

[Total No. of Pages : 2

[4163] - 359

May - June 2012

T.E. (Information Technology)

HUMAN COMPUTER INTERACTION AND USABILITY

(2008 Pattern) (Sem. - II)

Time : 3 Hours]

[Max. Marks : 100

Instructions to the candidates:-

- 1) *Answer question 1 or 2, 3 or 4 and 5 or 6 from section - I and question 7 or 8, 9 or 10, and 11 or 12 from section - II.*
- 2) *Answers to the two sections should be written in separate books.*
- 3) *Neat diagrams must be drawn wherever necessary.*
- 4) *Figures to the right indicate full marks.*
- 5) *Assume suitable data, if necessary.*

SECTION - I

Q1) a) Explain a model of the structure of memory. What are the types of long - term memory? Explain with example. [8]

b) What is reasoning? Explain the different types of reasoning with examples. [8]

OR

Q2) a) Explain the stages in Norman's model of interaction. What is gulf of execution and gulf of evaluation? [8]

b) The human eye has number of limitations. Give three examples. For one of the limitations identified, describe how this should be taken into account in the design of a visual interface. [8]

Q3) a) Explain the interaction design process in detail with suitable diagram. [8]

b) Explain basic activities of interaction design in detail. [8]

OR

Q4) a) How menus and pointers are helpful as interaction styles? Explain advantages and disadvantages of these interaction styles. [8]

b) What are the different life cycle models in HCI? Explain the star lifecycle model in detail. [8]

Q5) a) Explain the eight golden rules of user interface design in detail. Evaluate microsoft word editor using above eight golden rules. [10]

b) What are the activities involved in usability engineering life cycle? Explain each activity in brief. [8]

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OR

- Q6) a) How can HCI Pattern help for an effective interface design? Explain the characteristics of patterns. [10]
b) Explain the principles to support usability. [8]

SECTION - II

- Q7) a) Explain the DECIDE evaluation frame work in detail. [8]
b) Write useful ideas and guidelines for good web page design. [10]

OR

- Q8) a) List the different evaluation approaches. Explain different evaluation paradigms. [10]
b) Write a note on Hutch - world case study evaluation framework. [8]

- Q9) a) Explain GOMS description of task hierarchy for 'copy and paste a line' in microsoft word. Identify goals, sub - goals, methods, operators and selection rules: [8]
b) Explain different dialog design notations. [8]

OR

- Q10) a) Perform a detailed task analysis to design an interface for 'student admission system'. Identify task domain objects and actions. [8]
b) Explain status - event analysis in brief. Describe status - event analysis for email delivery from sender to receiver. [8]

- Q11) a) Explain following applications for computer - mediated communication : [8]
i) Email
ii) Video and virtual environment.
b) Explain differences between virtual reality and augmented reality. [8]

OR

- Q12) Write short notes on : [16]
a) Information and data visualization.
b) Framework for groupware

