

[4366]- 405
SYMCA (Engg. Faculty)
HUMAN COMPUTER INTERFACE (Elective-I)
(Semester - IV) (2008 Pattern) (610913)
MAY/JUNE 2013 EXAMINATIONS

Time: 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

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

SECTION I

- Q1) a) Compare life critical system against commercial computer systems with reference to goals of user interface design. [6]
b) What is reasoning? Explain different types of reasoning with examples. [6]

OR

- Q2) a) Explain following terms related to the human short – term memory. [6]
1) Digit Span 2) Chunking
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) Evaluate Microsoft Excel interface using the ‘Eight golden rules of interface design’. [12]

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) State and explain Three pillars of interface design process. [6]
b) Comments on arguments usually given for and against participatory design. [5]

OR

- Q6) a) Explain how scenarios help in the design process of interactive system. [6]
b) Explain with valid examples how alignment and use of white spaces in text matter in designing layouts of screens in a user interface. [5]

SECTION II

- Q7) a) Explain different menu styles with examples. [6]
b) The primary goal for menu, form fill in and dialog box designer is to create a [6]

sensible, comprehensible, memorable and convenient organization relevant to user's task. Explain with examples.

OR

- Q8) a) What are important issues while designing multiple window interfaces for an application?
b) Describe different command organization strategies.

- Q9) a) Explain how following CSCW systems are useful for co-operative working.
1) Meeting Rooms
2) Shared Drawing Surface
b) Discuss important design issues involved in designing a web page.

OR

- Q10) a) Compare online help and documentation Vs Printed documentation.
b) Enumerate any three error messages encountered by you in GUI based interactive System. What guidelines can you suggest for presenting these error messages in an effective style?

- Q11) a) Write note on (any **two**)
1) Information visualization
2) Evaluation of interface during active use
3) Indirect pointing devices
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 page design guidelines.

OR

- Q12) a) Give four benefits and three problems of touch screens and voice recognition input.
b) Write a short note on: Social acceptability of user interface.