T.E. (Information Technology) (Semester – II) Examination, 2009
(2003 Course)
HUMAN COMPUTER INTERFACE

Time: 3 Hours   Max. Marks: 100

Instructions : 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

1. a) Explain following terms related to the human short-term memory.   8

    i) Digit span   ii) Chunking

    iii) Recency effect   iv) Closure.

   b) Explain different Human factors that should be considered while designing the
   user interface.   8

OR

2. a) Explain the effect of cultural background and international diversity on the
   interface design.   8

   b) Enumerate different user categories and explain how to design an interface to
   attract user's attention.   8

3. a) Explain key stroke-level model (KLM) with the help of suitable example.   8

   b) You need to develop an interface for 'Banking Application'. Find out task
   hierarchies of objects and actions and interface hierarchies.   8

OR

4. a) Explain the linguistic model and Task Action Grammer in brief.   8

   b) How can we use 8 golden rules of interface design to design a good interface ? 8

5. a) Explain three pillars of interface design process. 8

   b) Compare ethnography and participatory design. What are the drawbacks of partcipatory design ? 10

OR

6. Write short notes on **any three** : 18
   i) LUCID
   ii) User Centred Design
   iii) Participatory Design
   iv) WIMP interface.

SECTION – II

7. a) List and explain the steps of usability testing. What are some of the limitations of such testing ? 8

   b) Frequent menu users may become annoyed if they must make several menu selections to complete a simple task. How can an interface designer solve this issue ? 8

OR

8. a) What are important issues while designing a multiple window interface ? 8

   b) Why is item presentation sequence important in designing menus ? 8

9. a) Explain applications of asynchronous interactions and synchronous distributed interactions in cooperative work. 8

   b) Enumerate at least five error message encountered by you. Suggest important guidelines for presenting these error message in an effective style. 8

OR

10. a) Some of the favourite techniques of web pages these days include automatic scrolling text boxes, moving marquees and constantly running animations. Discuss these features in terms of web design guidelines. 8

    b) Compare and contrast online help with offline help. 8

11. Write short notes on (**any three**) : 18
    i) Multimedia Document Searches
    ii) Information visualization
    iii) Shared Editors
    iv) Hypertext Document Design.

OR

12. a) Give four benefits and three problems of touch screens and voice recognition input. 8

    b) Explain various diagrammatic notations for Human Computer Dialoque. 10

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