



**T.E. (Information Technology) (Semester – II) Examination, 2011
HUMAN COMPUTER INTERACTION AND USABILITY (New)
(2008 Pattern)**

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** answer sheet.
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) Write brief notes on keyboards, keyboard layouts, keys and function keys. 8

OR

2. a) What is the difference between recognition and recall in relation to human memory ? Explain with example. 8
b) Discuss general principles and goals of user interface design. 8
3. a) Describe how HCI affect use of Hospital Management system with respect to : 10
i) the aim of the program (what it is used for)
ii) describe its interface (picture of the screen)
iii) describe its interaction (how it is used)



b) Express your opinion- “A design should be User-Centric”. 8

OR

4. a) Describe briefly four different interaction styles used to accommodate the dialog between user and computer. What are the factors you would need to take into account when designing a screen layout for a database application ? 10

b) What is WIMP ? Explain how to use its elements to design user interface. 8

5. a) Compare and contrast expert reviews with usability testing. 8

b) How surveys help in better designing ? 8

OR

6. a) Evaluate Microsoft Word interface using the “Eight golden rules of interface design”. 8

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

SECTION – II

7. a) What is DECIDE ? Explain in detail DECIDE framework. 10

b) Compare the print page design and web page design. 8

OR

8. a) Discuss the following in respect of designing a web site. 10

a) Browsing

b) Search facilities.

b) Explain in brief Hutch-World Case Study evaluation framework. 8





9. a) What is Cognitive Model ? Discuss with example. 8
- b) What is Linguistic Model ? Give the BNF notation for a telephone book entry. 8

OR

10. a) Hierarchical Task Analysis (HTA) is used to describe the interactions between a user and a software system. Draw and explain HTA to borrow a book from library. 8
- b) What is Dialog ? Explain different diagrammatic dialog design notations. 8
11. a) Explain how following CSCW systems are useful for co-operative working. 8
- i) Meeting Rooms.
- ii) Shared Drawing Surfaces.
- b) Differentiate Augmented Reality versus Virtual Reality. 8

OR

12. Write a short note on : 16
- i) Information and data visualization
- ii) Ubiquitous Computing.