



May- June - 2011

[3963] – 370

**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) Human memory plays an important role in how well people deal with an interface. Describe two important differences between Short-Term Memory and Long-Term Memory. 8
- b) Discuss general principles and goals of user interface design. 8

OR

2. a) What is the difference between recognition and recall in relation to human memory ? Explain with example. 8
- b) What is ergonomics ? Describe with the help of example. 8
3. a) Describe how HCI affects use of Library 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

P.T.O.



4. a) Describe briefly four different interaction styles used to accommodate the dialog between user and computer. Specify advantages and disadvantages of each interaction style. 10

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

5. a) A practical usability engineering process that can be incorporated into the software product development process to ensure the usability of interactive computer products is presented. Explain your view regarding usability engineering life cycle for online hospital management system. 8

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

OR

6. a) Explain the guidelines for data display and data entry. 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) Write a short note on HCI Pattern. 8

OR

8. a) Discuss the characteristics, guidelines and principles of good web page design. 10

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

9. 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 Linguistic Model ? Explain BNF and TAG Linguistic Notations. 8

OR



10. a) What is Cognitive Model ? Discuss with example. 8
- b) What is Dialog ? Explain different diagrammatic dialog design notations. 8
11. a) Explain various design issues related to Computer Support Co-operative Work (CSCW). How to tackle these issues through intelligent use of Computers and Networks ? 8
- b) Differentiate Augmented Reality versus Virtual Reality. 8

OR

12. Write a short note on :

- i) Information and data visualization
- ii) Synchronous and asynchronous groupware applications.

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