

SIXTH SEMESTER B.TECH. (ENGINEERING) D **EXAMINATION, JUNE 2008**

IT 04 605 - HUMAN COMPUTER INTERACTION

(2004 admissions)

Time: Three Hours

Maximum: 100 Marks

Answer all Questions.

- (a) Describe the term ergonomics with the help of an example.
 - (b) What can a system designer do to minimize the memory load of a user?
 - (c) Discuss the four main phases of interaction design process with the help of a diagram.
 - (d) Briefly explain QOC design rationale using an example to illustrate.
 - (e) What do you mean by the term evaluation? What are the three main goals of evaluation?
 - (f) Briefly explain the open systems task analysis (OSTA).
 - (g) How effective is the time/space matrix as a tool for classifying and analysing group ware?
 - (h) Briefly explain the term ubiquitous computing.

 $(8 \times 5 = 40 \text{ marks})$

Write briefly about the text entry devices, positioning and pointing devices, and display devices.

- (b) Discuss the various interaction styles used between a user and the computer.
- (a) Explain in detail the importance of usability engineering in software processes. What are the problems related with usability engineering.

- (b) Explain in detail the principles to support usability.
- (a) Write short notes on IV.
 - (i) GOMS; (ii) CCT; (iii) BNF; (iv) TAG.

Or

- (b) Write short notes on : (i) Task decomposition ; (ii) knowledge-based analysis.
 - (iii) Entity-relation-based analysis.
- (a) How can we implement synchronous groupware? Explain

(b) Write short notes on: (i) Virtual reality; (ii) Augumented reality; (iii) information visualization.

 $(4 \times 15 = 60 \text{ marks})$