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## SIXTH SEMESTER B.TECH. (ENGINEERING) DEGREE EXAMINATION, JUNE 2010

### IT 04 605—HUMAN COMPUTER INTERACTION

(2004 Admissions)

Time : Three Hours                                                                Maximum : 100 Marks

*Answer* **all** *questions.*

### Part A

1. (a) How individuals differ ? Explain.

   (b) What is Ergonomics ?

   (c) Explain software prototyping.

   (d) Discuss the components of WIMP.

   (e) Differentiate communication with collaboration.

   (f) What is dialog notation ? Explain.

   (g) List out the salient features of Groupware systems.

   (h) Give any example using augumented reality and discuss the same.

   (8 × 5 = 40 marks)

### Part B

2. (a) (i) What are the steps involved in designing interactive systems ?            (8 marks)

      (ii) Explain positioning and pointing devices used for input/output.          (7 marks)

   *Or*

   (b) (i) Discuss the characteristics of any display device.                        (8 marks)

      (ii) Explain various paradigms of interaction.                                 (7 marks)

3. (a) (i) What is usability engineering ? Explain.                                   (8 marks)

      (ii) Discuss the features of adaptive help systems.                            (7 marks)

   *Or*

   (b) (i) What is Rule learning from HCI patterns ? Explain.                         (8 marks)

      (ii) In the design process, how to choose an evaluation method.                (7 marks)

4. (a) (i) What are cognitive models ? Discuss in detail.                             (10 marks)

      (ii) With example, explain textual dialog notation.                            (5 marks)

   *Or*

**Turn over**

(b) Write note on dialog analysis and design.     (15 marks)

*Or*

5. (a) (i) Explain the framework for Groupware systems.     (8 marks)

      (ii) Describe the features of ubiquitous computing.     (7 marks)

*Or*

(b) (i) Explain any *one* software tool used for communication.     (9 marks)

      (ii) What is data visualization ? Give examples.     (6 marks)

[4 × 15 = 60 marks]