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## SIXTH SEMESTER B.TECH. (ENGINEERING) DEGREE MAY 2012

IT 09 605—HUMAN COMPUTER INTERACTION

(2009 Admissions)

Time: Three Hours

Maximum: 70 Marks

## Part A

Answer all questions.

Short answer questions(one/two sentences)

- 1. What is the myth of the infinitely fast machine?
- 2. Give any four examples of imaging models.
- 3. How can design rationale benefit interface design and why might it be rejected by design teams?
- 4. Who are the stakeholders? List the categories of stakeholders.
- 5. List the evaluation challenges for ubiquitous computing.

 $(5 \times 2 = 10 \text{ marks})$ 

## Part B

Answer any four questions.

Analytical/Problem solving questions:

- 6. Draw the block diagram representing human-computer interaction framework and explain it.
- 7. Compare deductive reasoning, inductive reasoning and abductive reasoning.
- 8. What are the two main architectures used for groupware systems? Identify the strength and limitations of each and suggest how they can be resolved.
- 9. Discuss about the benefits and problems of using video in experimentation.
- 10. Write short notes on evaluation through user participation.
- 11. Illustrate the stages of soft systems methodology.

 $(4 \times 5 = 20 \text{ marks})$ 

## Part C

Answer all questions.

Descriptive/Analytical/Problem solving questions:

12. (a) Give some ideas for an interface which uses the properties of sound effectively.

Or

(b) How user performance is improved using ergonomics? Explain.

13. (a) Discuss about the usability engineering related to design process.

Or

- (b) What are the four main types of help that users may require? For each type, give an example of a situation in which it would be appropriate.
- 14. (a) Explain the pros and cons in conversation and text-based communication.

Or

- (b) List any three diagrammatic notations used in dialog design. Explain each of them with an example.
- 15. (a) Name some application themes of ubiquitous computing. Explain them in brief.

Or

- (b) Explain the following:
  - (i) Shared window systems
  - (ii) Shared editors
  - (iii) Co-authoring systems.

 $(4 \times 10 = 40 \text{ marks})$