Reg. No. : | | | | | | | | | | |

Question Paper Code: 31923

B.E. / B.Tech. DEGREE EXAMINATION, MAY 2016

Elective

Computer Science and Engineering

01UCS920 - HUMAN COMPUTER INTERACTION

(Regulation 2013)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1. Differentiate between episodic memory and semantic memory.

2. What are the elements of WIMP interface?

3. Design an experiment to test whether adding color coding to an interface will improve accuracy. Identify your hypothesis, participants group, dependent variables and independent variables.

4. State the factors that distinguishing evaluation techniques.

5. Who are the stakeholders? List the categories of stake holders.

6. Illustrate the stages of soft system methodologies.

7. What are the pros and cons of mobile widgets?

8. Discuss the mobile design tools and interface tool kits available.

9. List out the different types of selection pattern.

10. Give one-sentence explanation of each of the following:
    Blog, LinkedIn, Flikr and MySpace.

PART - B (5 x 16 = 80 Marks)

11. (a) (i) It's has been said that the human mind can remember 7 ± 2 chunks of information. Discuss the truth of this statement, and cite two situations in which it has been misused in the design of computer interface.   (4)

(ii) Illustrate the few devices used for manipulating virtual reality and 3D spaces. (12)

Or

(b) (i) Describe briefly various interaction styles used to accommodate the dialog between user and computer. (8)

(ii) Explain in briefly about the features of following keyboard layouts:

(1) QWERTY layout   (2) DVORAK layout (8)

12. (a) (i) How can design rationale benefit interface design and why might it be rejected by design teams? (8)

(ii) Explain QOC design rationale using an example. (8)

Or

(b) Give a brief explanation of Shneiderman's eight golden rule and Norman's seven principles. (16)

13. (a) (i) What is keystroke level modeling? When and how would you use keystroke level modeling in the user interface design process? Provide an example illustrating the use of keystroke level modeling. (12)

(ii) Use an airline booking systems as an example to explain the categories of the stakeholders from CUSTOM framework. (4)

Or

(b) (i) What is speech act theory? Describe positive and negative issues that have arisen when it has been embodied in a specific system. (8)

(ii) Explain in detail about dynamic web content. (8)

14. (a) Describe in detail about the following layers of mobile ecosystem.

(i) Platform   (ii) Application framework (16)

Or

(b) Explain in detail about the elements of mobile design. (16)

15. (a) Explain the purpose of drag and drop module with suitable example. (16)

Or

(b) Discuss in detail about the different types of overlays with suitable example. (16)

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2

31923