Reg. No.

QUESTION PAPER CODE: X10303

B.E. / B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2020
Seventh Semester
Computer Science and Engineering
CS8079 –HUMAN COMPUTER INTERACTION

(Common to Information Technology, Computer and Communication Engineering)
(Regulations 2017)
Answer ALL Questions

Time: 3 Hours   Maximum Marks:100

PART-A   (10×2=20 Marks)

1. What is Reasoning? List its different types.

2. Define anti-aliasing. Why do we need it?

3. Sketch the phases in interaction design process.

4. Compare between learnability and flexibility in the context of usability in design rules.

5. Define congruence.

6. Differentiate Linear text and hypertext.

7. List the advantages and disadvantages of mobile game applications.

8. How Clickstream is used to show the behaviour of users on websites?

9. Write down the advantages of Toggle Selection.

10. Compare between Overlays and inlays with respect to the situation of usage.

PART-B   (5×13=65 Marks)

11. (a) (i) Compare and contrast between short term memory and long term memory of
          Human memory.   (7)

         (ii) Exemplify the emerging of ubiquitous computing in the paradigms for interaction. (6)

(OR)

    (b) Illustrate briefly the different interaction styles used to accommodate the dialog between
        user and computer with diagram

12. (a) Explain in detail about the waterfall model of the software life cycle with diagram.

(OR)

(b) (i) Explain query based evaluation technique through user participation   (6)

    (ii) Discuss the designing techniques for users with disabilities.   (7)

13. (a) Discuss in depth about Text-based communication model with example.

(OR)

(b) Describe in detail about the static web content and dynamic web content with block diagrams.

14. (a) (i) Exemplify the layers of mobile ecosystems with diagram   (7)

    (ii) Illustrate the good and bad example of mobile site map with diagram.   (6)

(OR)

(b) (i) Compare and contrast between different layouts of mobile design   (7)

    (ii) Illustrate the convergence of the Web and Mobile in Mobile 2.0   (6)

15. (a) Compare and contrast different types of Contextual Tools with examples.

(OR)

(b) (i) Exemplify the best practices for designing Detail Overlay in web pages   (6)

    (ii) Illustrate the difference between Virtual Panning and Zoomable User Interface with proper examples.   (7)

<u>**PART-C**</u>   (1×15=15 Marks)

16. (a) A group of universities has decided to collaborate to produce an information system to help potential students find appropriate courses. The system will be distributed free to schools and careers offices on CD-ROM and will provide information about course contents and requirements, university and local facilities, fees and admissions procedures. Identify the main stakeholders for this system, categorize them and describe them and their activities, currently and with regard to the proposed system, using the CUSTOM framework. Produce a rich picture showing the problem situation.

(OR)

(b) Group of following functions under appropriate headings, assuming that they are to form the basis for a menu-driven word-processing system - the headings you choose will become the menu titles, with the functions appearing under the appropriate one. You can choose as many or as few menu headings as you wish.

save, save as, new, delete, open mail, send mail, quit, undo, table, glossary, preferences, character style, format paragraph, lay out document, position on page, plain text, bold text, italic text, underline, open file, close file, open copy of file, increase point size, decrease point size, change font, and footnote, cut, copy, paste, clear, repaginate, add page break, insert graphic, insert index entry, print, print preview, page setup, view

page, find word, change word, go to, go back, check spelling, view index, see table of contents, count words, renumber pages, repeat edit, show alternative document, help

After grouping, answer the following questions:

- Why this grouping is important?
- What is the problem with using lots of menu headings? And what if for very few menu headings? What is the tradeoff?

Consider the following:

"I can group my functions either into three menus, with lots of functions in each one, or into eight menus with fewer in each."

Which will be easier to use? Why?

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