18CS734

Seventh Semester B.E. Degree Examination, Feb./Mar. 2022 User Interface Design

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

a. Define User Interface? Explain the important benefits of a good design.

(08 Marks)

b. Explain the concept of Direct and indirect manipulation.

(08 Marks)

c. Write any four advantages and graphical system?

(04 Marks)

OR

2 a. List and explain the characteristics of Graphical User Interface (GUI).

(08 Marks)

b. Compare the characteristic of Graphical User Interface Versus Web User Interface.

(08 Marks)

c. Discuss the general principles of User Interface Design [any 4].

(04 Marks)

Module-2

- 3 a. What are the common pitfalls identified in the design process? Explain the five commandments to eliminate the pitfalls in designing the Interface? (08 Marks)
 - Define the term Usability. List any 8 usability problems as defined by Model in graphical system.
 - c. Explain briefly about human Interaction speeds

consistency.

(04 Marks)

OR

4 a. Explain the techniques for determining the user requirements using Direct Methods.

(08 Marks)

b. Explain the guidelines for designing the conceptual model.

(08 Marks)

List the various design standards or guideline to be followed in user design to achieve

(04 Marks)

Module-3

5 a. List out the major functions of menus. Explain the structure of menus with illustration.

(08 Marks)

b. Explain the guidelines to be followed for formatting the menus.

(08 Marks)

c. What are the elements of menu contents? Explain.

(04 Marks)

OR

- 6 a. Describe the various guidelines to be followed in phrasing of menus during the development of system menus? (08 Marks)
 - b. Describe the components of Web navigation system with illustration.

(08 Marks)

c. What are disadvantages of popup menus?

(04 Marks)

Module-4

7 a. Explain the major components of windows.

(08 Marks)

b. Discuss in brief, the different types of windows with an example.

(08 Marks)

c. What are the different windows management schemes? Discuss any two schemes in detail.

(04 Marks)

OR

8 a. List the characteristics of device based controls. Identify various device based control.

(08 Marks)

- b. Write a short note on:
 - i) Trackball
 - ii) Joystick

(08 Marks)

c. Explain the general guidelines followed in designing of windows operations.

(04 Marks)

Module-5

- 9 a. What are Operable Controls? Explain usage of buttons along with their advantages and disadvantages. (10 Marks)
 - b. Explain the following controls with an example
 - i) Radio Buttons
 - ii) Check Boxes
 - iii) Tool Tips
 - iv) Progress Indicators

(10 Marks)

OR

10 a. Explain Slider and Tree view operable controls with advantage and disadvantages. (10 Marks)

b. Explain cognitive Walkthrough, Thick aloud Evaluation and Usability tests conducted in the User Interface Design. (10 Marks)