Code No: **R42052**

R10

Set No. 1

IV B.Tech II Semester Supplementary Examinations, April/May - 2017
HUMAN COMPUTER INTERACTION
(Common to Computer Science & Engineering and Information Technology)

Time: 3 hours   **Max. Marks: 75**
Answer any Five Questions
All Questions carry equal marks
*****

1 a) Define user interface and explain its importance.   [8]

   b) Explain the importance of good design.   [7]

2 a) Define and explain about graphical user interface.   [8]

   b) What is meant by direct manipulation in Graphical system? What are the   [7]
       characteristics?

3 a) Explain in detail human interaction with computers.   [8]

   b) Discuss briefly about human interaction speeds?   [7]

4   Give a brief note about the following headings types used in screen design.
            a) Control section heading
            b) Control sub- section/ row heading
            c) Field group heading   [15]
            d) Web page heading.

5 a) Discuss about GUI navigation elements?   [8]

   b) Discuss about web navigation elements?   [7]

6 a) Define Multimedia. Explain its components.   [8]

   b) Explain the terms RGB, JPEG and GIF.   [7]

7 a) Write short notes on CASE environments.   [8]

   b) Discuss briefly about specification methods.   [7]

8 a) Discuss about digital photography.   [8]

   b) Explain about continuous speech recognition?   [7]

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IV B.Tech II Semester Regular/Supplementary Examinations, April/May - 2016
HUMAN COMPUTER INTERACTION
(Common to Computer Science & Engineering and Information Technology)

Time: 3 hours   Max. Marks: 75
Answer any FIVE Questions
All Questions carry equal marks
*****

1 a) Define human computer interaction. Explain goals of human computer interaction. [8]

b) What are the different factors the human computer interaction designers must consider? Explain. [7]

2 a) Explain the graphical system advantages and disadvantages. [7]

b) Explain the characteristics of graphical user interface. [8]

3 a) Explain why people have trouble with computers in brief. [7]

b) Explain briefly the important human characteristics in design. [8]

4 a) Discuss the technical considerations in interface design. [7]

b) List and explain the factors that distract the screen user. [8]

5 a) Discuss different window presentation styles. [7]

b) List the screen based controls and explain how to choose proper screen based controls with example. [8]

6 a) Differentiate system messages and instructional messages. Explain with example. [8]

b) List and explain the factors that influence icon usability in detail. [7]

7 a) Explain transition diagram and state charts with suitable example. [7]

b) Explain the windowing system layer, the GUI tool kit layer, the application frame work and specified language layer in brief. [8]

8 a) List and explain different direct control pointing devices in detail. [7]

b) Why speech recognition still does not match the fantasy of science fiction? Explain. [8]

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R10

IV B.Tech II Semester Regular/Supplementary Examinations, April/May - 2016
HUMAN COMPUTER INTERACTION
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Time: 3 hours   **Max. Marks: 75**
Answer any FIVE Questions
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*****

1 a) Explain the importance of user interface. [8]

   b) Explain the history of screen design with suitable example. [7]

2 a) Discuss the popularity of graphics in detail. [7]

   b) Compare and contrast graphical user inter face and web page design. [8]

3 a) Discuss the typical psychological and physical responses to poor design. [7]

   b) Discuss guidelines for designing a conceptual model in detail. [8]

4 a) Explain the ordering of screen data and content in detail. [7]

   b) What is statistical graph? Explain the types of statistical graphs in brief. [8]

5 a) Explain the difference between primary window and secondary window with suitable examples. [8]

   b) Explain the selection of proper device based controls. [7]

6 a) List the characteristics of icons and explain the factors that influence icon usability. [8]

   b) Explain the good icon design guide lines in detail. [7]

7 a) Compare and contrast transition diagram with state chart. [7]

   b) What is the criterion for finding the right interface building tools? Explain. [8]

8 a) Compare and contrast direct control pointing devices and indirect control pointing devices. [8]

   b) Discuss different interactive novel devices in detail. [7]

IV B.Tech II Semester Regular/Supplementary Examinations, April/May - 2016
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Answer any FIVE Questions
All Questions carry equal marks
*****

1 a) Explain the benefits of good design.   [8]

   b) Compare the present screen the design with 1970's screen design with suitable
       example.   [7]

2 a) Compare and contrast direct manipulation and indirect manipulation system.   [7]

   b) Discuss the popularity of web user interface.   [8]

3 a) List the ten most common usability problems in graphical systems and explain.   [7]

   b) Explain human interaction speeds in brief.   [8]

4 a) What are the techniques used to focus a person's attention in screen navigation
       and flow? Explain.   [7]
   b) How to present the information simply and meaningfully in screen design?   [8]

5 a) Explain different navigation scemes of windows, structures of menu's with
       example.   [7]
   b) Explain property sheets and property inspectors with suitable examples.   [8]

6 a) Explain how to use the proper words for creating acceptable messages and
       texts.   [7]
   b) The proper use of colour in screen design suggests something to avoid, what
       are they explain.   [8]

7 a) Discuss different specification methods with examples.   [7]

   b) Discuss the user interface mockup tools in detail.   [8]

8 a) Explain different keyboard layouts for big and small devices.   [7]

   b) Explain the advantages and disadvantages of voice information system.   [8]

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R10

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Answer any FIVE Questions
All Questions carry equal marks
*****

1 a) Explain the importance of good design.   [8]

   b) Why is human computer interaction is important explain.   [7]

2 a) Explain the popularity web user interface.   [7]

   b) Discuss the principles of user interface design.   [8]

3 a) Explain how perception, memory, sensory storage influence on interface and
       screen design.   [8]
   b) Explain design standards or style guide documents in detail.   [7]

4 a) What are the qualities that are require to provide visually pleasing composition
       of screen design?   [8]
   b) Explain how to group screen elements meaningfully explain with example.   [7]

5 a) List and explain components of windows.   [7]

   b) Explain the selection of proper device based controls.   [8]

6 a) How to write message box text and explain message box controls.   [7]

   b) Explain the factors required for choosing colours for web pages.   [8]

7 a) Explain transition diagram and state chart with suitable example.   [7]

   b) Explain the features interface building tools.   [8]

8 a) Explain the six types of interaction tasks that are applicable by pointing
       devices.   [8]
   b) List and discuss the different display technologies.   [7]

IV B.Tech II Semester Supplementary Examinations, July/Aug - 2015
HUMAN COMPUTER INTERACTION
(Common to Computer Science & Engineering and Information Technology)

Time: 3 hours   **Max. Marks: 75**
Answer any FIVE Questions
All Questions carry equal marks
*****

1 a) Define and Discuss the importance of User Interface design.   [8]

   b) Give the brief history of screen design.   [7]

2   Define Graphical User Interface. Discuss the importance of GUI also write the
       characteristics of the Graphical User Interface.   [15]

3 a) Briefly discuss the main human characteristics that are to be considered in
       designing a good interface.   [8]
   b) Discuss how the physical characteristics of people affect their interaction with
       systems.   [7]

4 a) With a neat sketch, Explain various visually pleasing compositions of screen
       design.   [10]
   b) Write about the five important interface design goals.   [5]

5 a) With neat diagrams, Explain various structures of menus.   [7]

   b) Explain the various types of windows with suitable examples.   [8]

6 a) What is a message? Explain the types of system messages with neat diagrams. [8]

   b) What are the possible problems in choosing colors for screen design [7]

7 a) Explain in brief, various specification methods for building an interface. [8]

   b) Discuss the features of interface-building tools.   [7]

8   What is the function of an input device? List various input devices. Explain in
       detail about the function of Key board and its function keys.   [15]

R10

IV B.Tech II Semester Supplementary Examinations, July/Aug - 2015
HUMAN COMPUTER INTERACTION
(Common to Computer Science & Engineering and Information Technology)

Time: 3 hours   **Max. Marks: 75**
Answer any FIVE Questions
All Questions carry equal marks
*****

1	a)	Discuss the impacts of inefficient screen design on processing times.	[8]
	b)	Write the importance of well-designed interface.	[7]
2	a)	Write the characteristics of Direct manipulation systems. Is the concept of direct manipulation is preferable in all cases of screen design? Justify	[8]
	b)	Write any five important principles to be considered in designing a user interface	[7]
3		Explain in detail various human aspects that are important and must be considered in designing a good interface.	[15]
4	a)	With a neat example, Explain how the ordering of screen data and content affects the performance.	[8]
	b)	Explain the importance of statistical graphics in screen design. With neat diagrams, List various statistical graphics.	[7]
5	a)	What is a menu? Why menus are important and also Explain the functions of menus.	[8]
	b)	Write about various window presentation styles.	[7]
6		Discuss in detail various issues involved in designing an icon.	[15]
7	a)	Write about the Borland JBuilder interface building tool.	[8]
	b)	Discuss the benefits of using interface building tools.	[7]
8		Write short notes	
		i). Fitt's Law	[5]
		ii). Mobile Device Displays	[5]
		iii). Direct pointing devices	[5]

Code No: **R42052**

R10

Set No. 3

IV B.Tech II Semester Supplementary Examinations, July/Aug - 2015
HUMAN COMPUTER INTERACTION
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Time: 3 hours   **Max. Marks: 75**
Answer any FIVE Questions
All Questions carry equal marks
*****

1 a) Define Human Computer Interaction. Discuss the importance of User Interface design. [8]

  b) Discuss the chronological history of Graphical User Interfaces [7]

2   What are the advantages and disadvantages of Graphical Systems? Explain [15]

3 a) Why the user's knowledge and experience are to be considered in designing a good interface? Explain. [8]

  b) List various direct and indirect methods for determining the requirements [7]

4   Discuss various technological considerations involved in designing an interface. [15]

5 a) What are the various components of a window? Explain. [8]

  b) Discuss the technical issues and problems in web site navigation. [7]

6 a) Write the guidelines for writing the message box text. [5]

  b) What is an Icon? What are the types of Icons? What are the characteristics of Icons and list the factors that influence icon's usability. [10]

7   Explain in detail about Backus-Naur form and transition diagram with suitable example [15]

8 a) Explain any four kinds of display technologies. [8]

  b) What is meant by digitization? Explain various issues in continuous speech generation and recognition. [7]

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IV B.Tech II Semester Supplementary Examinations, July/Aug - 2015
HUMAN COMPUTER INTERACTION
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Time: 3 hours   **Max. Marks: 75**
Answer any FIVE Questions
All Questions carry equal marks
*****

1 a) Write are the benefits of Well-designed interfaces.   [8]

   b) Give the brief history of screen design.   [7]

2   Discuss the similarities and differences between Graphical User Interface and
       Web Interface design.   [15]

3 a) Explain in detail the various human characteristics that are to be considered in
       designing a good user interface.   [10]
   b) Discuss various indirect methods of requirements determination.   [5]

4 a) Explain the importance of grouping screen elements with a suitable example.   [8]

   b) Write the principles and various types of grouping screen elements.   [7]

5   Explain in brief about Device-based controls and Screen-based controls? Give
       the guidelines for selecting the proper controls in screen design.   [15]

6 a) Give the guidelines for selecting images in designing icons.   [8]

   b) Write the various factors that must be considered in choosing colors for
       information.   [7]

7 a) Give the main criteria for selecting the right tool for building an interface. [8]

   b) Write about Microsoft Visual Studio.   [7]

8   Write short notes on
            i).   Indirect pointing devices   [5]
           ii).   Function keys of Keyboard   [5]
          iii).   Mobile device displays   [5]

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R10

IV B.Tech II Semester Supplementary Examinations, July - 2016
HUMAN COMPUTER INTERACTION
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Time: 3 hours   **Max. Marks: 75**
Answer any FIVE Questions
All Questions carry equal marks
*****

1 a) What are the keying procedures are used in screen design?   [8]

b) What is the importance of paper printouts in the screen design?   [7]

2 a) Define graphical user interface.   [8]

b) What is meant by direct manipulation in Graphical system? What are the
characteristics?   [7]

3 a) How the human Computer Interaction and user Interface design are related.
Explain about each.   [8]

b) Discuss about cognitive processing.   [7]

4   Compare among 1970s, 1980 and1990s screen design.   [15]

5   Explain the following screen based controls, and also explain their respective
advantages and disadvantages:

a) Drop-down/pop-up list boxes   [8]

b) Drop-down/pop-up combo boxes   [7]

6 a) What are uses of color?   [5]

b) What are the possible problems with color?   [5]

c) How to choose the colors for textual graphic screens?   [5]

7 a) Write short notes on software engineering tools?   [8]

b) How to construct more robust systems using software engineering tools?   [7]

8 a) How to recognize speech?   [5]

b) How many variations are there in speech technology?   [5]

c) Discuss briefly about discrete word recognition.   [5]

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