

Ref No:

SRI KRISHNA INSTITUTE OF TECHNOLOGY, BANGALORE



COURSE PLAN

Academic Year 2019-20

Program:	B E – Computer Science & Engineering
Semester :	8
Course Code:	15CS832
Course Title:	USER INTERFACE DESIGN
Credit / L-T-P:	3 / 3-0-0
Total Contact Hours:	40
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Academic Evaluation and Monitoring Cell

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Note : Remove "Table of Content" before including in CP Book Each Course Plan shall be printed and made into a book with cover page Blooms Level in all sections match with A.2, only if you plan to teach / learn at higher levels

A. COURSE INFORMATION

1. Course Overview

Degree:	BE	Program:	CS
Semester:	8	Academic Year:	2020
Course Title:	USER INTERFACE DESIGN	Course Code:	15CS832
Credit / L-T-P:	3 / 3-0-0	SEE Duration:	180 Minutes
Total Contact Hours:	60 Hours	SEE Marks:	80 Marks
CIA Marks:	20 Marks	Assignment	1 / Module
Course Plan Author:	RAJESH. V	Sign ..	Dt:
Checked By:		Sign ..	Dt:
CO Targets	CIA Target : 80 %	SEE Target:	70.00%

Note: Define CIA and SEE % targets based on previous performance.

2. Course Content

Content / Syllabus of the course as prescribed by University or designed by institute. Identify concepts in modules.

Module	Content	Teaching Hours	Identified Module Concepts	Blooms Learning Levels
1	The User Interface-Introduction, Overview, The importance of user interface. Defining the user interface, The importance of Good design.	4 4	Importance and characteristics of UID	L2
2	Characteristics of graphical and web user interfaces, Principles of user interface design. The User Interface Design process- Obstacles, Usability, Human characteristics in Design, Human Interaction speeds, Business functions-Business definition and requirement analysis, Basic business functions, Design standards	4 4	User Interface Design process AND Business functions	L2
3	System menus and navigation schemes- Structures of menus, Functions of menus, Contents of menus, Formatting of menus, Phrasing the menu, Selecting menu choices, Navigating menus, Kinds of graphical menus.	4 4	System menus ,navigation schemes	L3
4	Windows - Characteristics, Components of window, Window presentation styles, Types of window, Window management, Organizing window functions, Window operations, Web systems, Characteristics of device based controls.	4 4	Window characteristic and device based control	L2
5	Screen based controls- Operable control, Text control, Selection control,Custom control, Presentation control, Windows Tests-prototypes, kinds of tests.	4 4	Screen based controls and usability testing	L6
-	Total	40	-	-

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3. Course Material

Books & other material as recommended by university (A, B) and additional resources used by course teacher (C).

1. Understanding: Concept simulation / video ; one per concept ; to understand the concepts ; 15 – 30 minutes
2. Design: Simulation and design tools used – software tools used ; Free / open source
3. Research: Recent developments on the concepts – publications in journals; conferences etc.

Modules	Details	Chapters in book	Availability
A	Text books (Title, Authors, Edition, Publisher, Year.)	-	-
1, 2, 3, 4, 5	Wilbert O. Galitz, "The Essential Guide to User Interface Design", John Wiley & Sons, Second Edition 2002.	3, 4	In Lib
B	Reference books (Title, Authors, Edition, Publisher, Year.)	-	-
1, 2	Ben Sheiderman, "Design the User Interface", Pearson Education, 1998.		In Lib
1, 2	Alan Cooper, "The Essential of User Interface Design", Wiley- Dream Tech Ltd.,2002		Not Available
C	Concept Videos or Simulation for Understanding	-	-
C5	https://learnui.design/		
C6	https://www.coursera.org/learn/ui-design		
C7	https://onlinecourses.nptel.ac.in/noc19_ar10/preview .		
D	Software Tools for Design	-	-
E	Recent Developments for Research	-	-
F	Others (Web, Video, Simulation, Notes etc.)	-	-

4. Course Prerequisites

Refer to GL01. If prerequisites are not taught earlier, GAP in curriculum needs to be addressed. Include in Remarks and implement in B.5.

Students must have learnt the following Courses / Topics with described Content . . .

Modules	Course Code	Course Name	Topic / Description	Sem	Remarks	Blooms Level
1	15CS42	Software	Understanding	business 4	Chapter 4	Understa

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		Engineering requirements. Testing.			Chapter 8	nd L2
2	15CS45	OOA Introduction to OO Concepts. Applet Class	4	Chapter 1	Chapter 28, 29, 30	Understand L2
3	15CS71	Web programming introduction	7	Chapter 1		Understand L2
4	15CS652	Software Architecture Analysis a System	6	Module 2		Understand L2
5	15CS552	Introduction to Software Test execution Testing	5	Chapter 1	Chapter 17	Understand L2

5. Content for Placement, Profession, HE and GATE

The content is not included in this course, but required to meet industry & profession requirements and help students for Placement, GATE, Higher Education, Entrepreneurship, etc. Identifying Area / Content requires experts consultation in the area.

Topics included are like, a. Advanced Topics, b. Recent Developments, c. Certificate Courses, d. Course Projects, e. New Software Tools, f. GATE Topics, g. NPTEL Videos, h. Swayam videos etc.

Modules	Topic / Description	Area	Remarks	Blooms Level
1	https://onlinecourses.nptel.ac.in/noc19_ar10/preview	User interface design	Overview of user interface design	L2

B. OBE PARAMETERS

1. Course Outcomes

Expected learning outcomes of the course, which will be mapped to POs. Identify a max of 2 Concepts per Module. Write 1 CO per Concept.

Modules	Course Code.#	Course Outcome At the end of the course, student should be able to . . .	Teach. Hours	Concept	Instr Method	Assessment Method	Blooms' Level
1	15CS832.1	Understand Importance and Characteristics of User interface design	8	User interface design	ICT	CIA tests and Assignments	L2
2	15CS832.2	Understand User Interface Design process AND Business functions	8	Business functions	ICT	CIA tests and Assignments	L2
3	15CS832.3	Apply System menus ,navigation schemes and windows characteristics.	8	System menus and navigation screens	ICT	CIA tests and Assignments	L3
4	15CS832.4	Understand screen based controls and device based controls	8	Screen based	ICT	CIA tests and	L2

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5	15CS832.5	Design the prototypes and test plans of user interface	8	controls Device based controls Prototyping and test plans	ICT	Assignments CIA tests and Assignments	L6
-	-	Total	40	-	-	-	L2-L4

2. Course Applications

Write 1 or 2 applications per CO.

Students should be able to employ / apply the course learnings to ...

Modules	Application Area Compiled from Module Applications.	CO	Level
1	User interface plays very importance in Human computer interaction.	CO1	L2
2	Helps to understand the business functions.	CO2	L4
3	Helps in better navigation of the system	CO3	L3
4	Screen based controls and Device based controls helps in better communication with computers.	CO4	L2
5	User Interface Design helps in creating prototypes and to develop test plans	CO5	L2

3. Articulation Matrix

CO – PO Mapping with mapping level for each CO-PO pair, with course average attainment.

Modules	CO.#	Course Outcomes At the end of the course student should be able to ...	Program Outcomes															Level	
			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3		
1	CO1	Understand Importance and Characteristics of User interface design	3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	L2
2	CO2	Understand User Interface Design process AND Business functions	3	3		1	-	-	-	-	-	-	-	2	1	-	-	1	L2
3	CO3	Apply System menus ,navigation schemes and windows characteristics.	3	3	3	1	3	-	-	-	1	1	-	2	1	1	3		L2
4	CO4	Understand screen based controls and device based controls	3	-	-	-	3	-	-	-	-	-	-	-	1	-	-	1	L3
5	CO5	Design the prototypes and test plans of user interface	3	3	3	3	3	-	-	-	1	1	-	2	1	1	3		L2
		Average attainment (1, 2, or 3)	3	2.5	3	1.7	3	-	-	-	1	1	-	2	1	1	1.8	-	
-	PO, PSO	<i>1.Engineering Knowledge; 2.Problem Analysis; 3.Design / Development of Solutions;</i>																	

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		4. Conduct Investigations of Complex Problems; 5. Modern Tool Usage; 6. The Engineer and Society; 7. Environment and Sustainability; 8. Ethics; 9. Individual and Teamwork; 10. Communication; 11. Project Management and Finance; 12. Life-long Learning; S1. Software Engineering; S2. Data Base Management; S3. Web Design
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5. Curricular Gap and Content

Topics & contents not covered (from A.4), but essential for the course to address POs and PSOs.

Mod ules	Gap Topic	Actions Planned	Schedule Planned	Resources Person	PO Mapping
1					
2					

6. Content Beyond Syllabus

Topics & contents required (from A.5) not addressed, but help students for Placement, GATE, Higher Education, Entrepreneurship, etc.

Mod ules	Gap Topic	Area	Actions Planned	Schedule Planned	Resources Person	PO Mapping

C. COURSE ASSESSMENT

1. Course Coverage

Assessment of learning outcomes for Internal and end semester evaluation. Distinct assignment for each student. 1 Assignment per chapter per student. 1 seminar per test per student.

Mod ules	Title	Teach. Hours	No. of question in Exam						CO	Levels
			CIA-1	CIA-2	CIA-3	Asg	Extra Asg	SEE		
1	The User Interface. Web user interfaces .	8	2	-	-	1	1	2	CO1	L2
2	The User Interface Design process. Business definition and requirement analysis.	8	2	-	-	1	1	2	CO2	L2
3	System menus and navigation schemes.	8	-	2	-	1	1	2	CO3	L3
4	Windows. Device based controls	8	-	2	-	1	1	2	CO4	L2
5	Screen based controls. Interface testing	8	-	-	4	1	1	2	CO5	L6
-	Total	54				5	5	10	-	-

2. Continuous Internal Assessment (CIA)

Assessment of learning outcomes for Internal exams. Blooms Level in last column shall match with A.2.

Mod ules	Evaluation	Weightage in Marks	CO	Levels
1, 2	CIA Exam – 1	15	CO1, CO2,	L2,L2
3, 4	CIA Exam – 2	15	CO3, CO4	L3,L2
5	CIA Exam – 3	15	CO5	L6

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1, 2	Assignment - 1	05	CO1, CO2,	L2,L2
3, 4	Assignment - 2	05	CO3, CO4	L3,L2
5	Assignment - 3	05	CO5	L6
Final CIA Marks		20	-	-

D1. TEACHING PLAN - 1

Module – 1

Title:	The User Interface-Introduction, Overview, The importance of user interface. Defining the user interface, The importance of Good design. Characteristics of graphical and web user interfaces, Principles of user interface design.	Appr Time:	8 Hrs
a	Course Outcomes	CO	Blooms Level
-	At the end of the topic the student should be able to . . .	-	
	Understand Importance and Characterstics of User interface design	CO1	L2
b	Course Schedule	-	-
Class No	Portion covered per hour	-	-
1	Module 1	CO1	L2
2	The User Interface-Introduction,	CO1	L2
3	Overview of User Interface	CO1	L2
4	The importance of user interface	CO1	L2
5	Defining the user interface,	CO1	L2
6	The importance of Good design	CO1	L2
7	Characteristics of graphical and web user interfaces,	CO1	L2
8	Principles of user interface design	CO1	L2
c	Application Areas	-	-
-	Students should be able employ / apply the Module learnings to . . .	-	-
1	User interface plays very importance in Human computer interaction.	CO1	L2
d	Review Questions	-	-
-	The attainment of the module learning assessed through following questions	-	-
1	What is the impact of Human characteristics in UID?	CO1	L2
2	Define Human Computer Interaction.	CO1	L2
3	What is the need for direct manipulation?	CO1	L2
4	What are the benefits of good design?	CO1	L2
5	List any four Graphical system disadvantages.	CO1	L2
6	State the Characteristics of Direct Manipulation.	CO1	L2
7	What are visually presented elements in a graphical system?	CO1	L2
8	Define the User Interface.	CO1	L2

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9	What Are The Characteristics Of The Graphical User Interface?	CO1	L2
10	List Graphical System Advantage	CO1	L2
e	Experiences	-	-
1	Still we can give some more Practical examples	CO1	L2

Module – 2

Title:	The User Interface Design process- Obstacles, Usability, Human characteristics in Design, Human Interaction speeds, Business functions-Business definition and requirement analysis, Basic business functions, Design standards	Appr Time:	8 Hrs
a	Course Outcomes	CO	Blooms Level
-	At the end of the topic the student should be able to . . .	-	
	Understand User Interface Design process AND Business functions	CO2	L2
b	Course Schedule	-	-
Class No	Portion covered per hour	-	-
9	The User Interface Design process	CO2	L2
10	Obstacles in user interface design process	CO2	L2
11	Usability,	CO2	L2
12	Human characteristics in Design,	CO2	L2
13	Human Interaction speeds,	CO2	L2
14	Business functions-Business definition and requirement analysis,	CO2	L2
15	Basic business functions	CO2	L2
16	Design standards	CO2	L2
c	Application Areas	-	-
-	Students should be able employ / apply the Module learnings to . . . Helps to understand the business functions.	CO2	L2
		CO2	L2
d	Review Questions	-	-
1	State the Different types of users.	CO2	L2
2	Give any 2 applications which utilize the human interaction speed.	CO2	L2
3	Write the Merits of Cascade Menus.	CO2	L2
4	What is the need for Design standards?	CO2	L2
5	Give any three Guide lines for designing conceptual model.	CO2	L2
6	Define usability.	CO2	L2
7	What are the direct methods in requirement analysis?	CO2	L2
8	Functions of Menus?	CO2	L2
9	What are the Contents of Menus?	CO2	L2
10	What Are the Kinds of Graphical Menus?	CO2	L2

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11	Define pull down menu.	CO2	L2
12	What is known as Tabbing?	CO2	L2
13	What are the Usability Problems?	CO2	L2
e	Experiences	-	-
1	We need to explain more business requirements from Software engineering	CO2	L2

E1. CIA EXAM – 1

a. Model Question Paper – 1

Crs Code:	15CS832	Sem:	VIII	Marks:	30	Time:	75 minutes	
Course:	PRINCIPLES OF USER INTERFACE DESIGN							
-	-	Note: Answer all questions, each carry equal marks. Module : 1, 2				Marks	CO	Level
1	a	What is User interface design.				5	1	L2
	b	Explain the importance of good user interface design				5	1	L2
	c	Write down the benefits of good user interface design.				5	1	L2
OR								
2	a	Explain the techniques for determining user requirements using indirect method and direct method.				5	1	L2
	b	How business functions is determined using physical model.				5	1	L2
	c	Explain the design standards.				5	1	L2
3	a	Explain the characteristics of the GUI.				5	1	L2
	b	Differentiate the characteristics of GUI and Web Page.				5	1	L2
	c	General principles of User interface Design.				5	1	L2
OR								
4	a	List the five commandments in designing user interface for people.				5	1	L2
	b	Explain the common usability problems in web based systems.				5	1	L2
		What are psychological and physical responses to poor design				5	1	L2

b. Assignment -1

Note: A distinct assignment to be assigned to each student.

Model Assignment Questions								
Crs Code:	15CS832	Sem:	VIII	Marks:	5	Time:	90 – 120 minutes	
Course:	PRINCIPLES OF USER INTERFACE DESIGN Module : 1, 2							
Note: Each student to answer 2-3 assignments. Each assignment carries equal mark.								
SNo	USN	Assignment Description				Marks	CO	Level
1		What is User interface design.				6	1	2
2		Explain the importance of good user interface design				5	1	2
3		Write down the benefits of good user interface design.				6	1	2
4		Explain the concept of direct manipulation and indirect manipulation for graphical system				5	1	2
5		Explain the advantages of the graphical system advantages.				6	1	2
6		Explain the graphical system disadvantages.				8	1	2
7		Explain the characteristics of the GUI.					1	2
8		Differentiate the characteristics of GUI and Web Page.				6	1	2
9		Write down the differences between printed page and web				6	1	2

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		page			
10		Describe the characteristics of internet and intranet.	6	1	2
11		Principles of Zerox star.	6	1	2
12		General principles of User interface Design.	10	1	2
13		Explain the common usability problems in web based systems.	8	2	2
14		Why people have trouble with computers ?	6	2	2
15		What are psychological and physical responses to poor design ?	6	2	2
16		Describe in detail important human characteristics of computers in user interface design.	6	2	2
17		Explain human consideration in design.	6	2	2
18		Explain the human interaction speed.	6	2	2
19		Explain the techniques for determining user requirements using indirect method and direct method.	6	2	2
20		How business functions is determined using user mental model.	6	2	2
21		How business functions is determined using physical model.	6	2	2
22		Explain the design standards.	10	2	2

D2. TEACHING PLAN - 2

Module - 3

Title:	System menus and navigation schemes- Structures of menus, Functions of menus, Contents of menus, Formatting of menus, Phrasing the menu, Selecting menu choices, Navigating menus, Kinds of graphical menus.	Appr Time:	8 Hrs
a	Course Outcomes	CO	Blooms Level
-	At the end of the topic the student should be able to . . .	-	
	Apply System menus ,navigation schemes and windows characteristics.	CO3	L3
b	Course Schedule		
Class No	Portion covered per hour	-	-
17	System menus and navigation schemes-	CO3	L2
18	Structures of menus,	CO3	L2
19	Functions of menus,	CO3	L2
20	Contents of menus,	CO3	L2
21	Formatting of menus,	CO3	L3
22	Phrasing the menu,	CO3	L3
23	Selecting menu choices..	CO3	L3
24	Navigating menus, Kinds of graphical menus	CO3	L3
c	Application Areas	-	-
-	Students should be able employ / apply the Module learnings to . . .	-	-
	Helps in better navigation of the system	CO3	L3
d	Review Questions	-	-
-	The attainment of the module learning assessed through following questions	-	-
1	What is the need of tool bar? Name the components of windows.	CO2	L2
2	What are the types of Presentation Styles?	CO2	L2
3	List is the need for Text boxes?	CO2	L2
4	What are the Merits of Track ball?	CO2	L2
5	Define Window	CO2	L2
6	Define Device Based Controls:	CO2	L2
7	Define Popup List	CO2	L2
8	Define Spin Boxes.	CO2	L2

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9	Differentiate between cascading and unfolding.	CO2	L2
10	What is meant by graphic tablet?		
e	Experiences	-	-
1	Still we can give much more practical examples	CO3	L3

Module – 4

Title:	Windows - Characteristics, Components of window, Window presentation styles, Types of window, Window management, Organizing window functions, Window operations, Web systems, Characteristics of device based controls.	Appr Time:	8 Hrs
a	Course Outcomes	CO	Blooms Level
-	At the end of the topic the student should be able to ...	-	
	Understand screen based controls and device based controls	CO4	L2
b	Course Schedule		
Class No	Portion covered per hour	-	-
25	Windows - Characteristics,	CO4	L2
26	Components of window,	CO4	L2
27	Window presentation styles,	CO4	L2
28	Types of window,	CO4	L2
29	Window management,	CO4	L3
30	Organizing window functions,	CO4	L3
31	Window operations, Webs systems,	CO4	L3
32	Characteristics of device based controls	CO4	L2
c	Application Areas	-	-
-	Students should be able employ / apply the Module learnings to ...	-	-
	Screen based controls and Device based controls helps in better communication with computer	CO4	L4
d	Review Questions	-	-
-	The attainment of the module learning assessed through following questions	-	-
1	What do you mean by internationalization of user interface?	CO2	L2
2	State the Categories of Users.	CO2	L2
3	Characteristics of Icons 5. Kinds of Icon	CO2	L2
4	What type of words used in effective communication?	CO2	L2
5	What are the 3 properties of color? 8. What are the characteristics of a successful Icon?	CO2	L2
6	Purpose of Graphics	CO2	L2
7	What is meant by response time?	CO2	L2
8	What is meant by icon? 12. Mention the properties of a color.	CO2	L2
9	What is meant by contextual Help?	CO2	L2
e	Experiences	-	-
1	Still we can give more practical examples	CO2	L2

E2. CIA EXAM – 2

a. Model Question Paper - 2

Crs Code:	15CS832	Sem:	VIII	Marks:	30	Time:	75 minutes	
Course:	PRINCIPLES OF USER INTERFACE DESIGN							
-	-	Note: Answer all questions, each carry equal marks. Module : 3, 4				Marks	CO	Level
1	a	Explain the different structure of menus.				5	CO3	L2
	b	Explain the different functions of the menus				5	CO3	L2
	c	Explain the different functions of the menus				5	CO3	L2
		Write down the Problems of website navigation						
		OR						
1	a	Explain the goals of website navigation				5	CO3	L2
	b	Write down the guidelines for navigation				5	CO3	L2
	c	Write the kinds of menus and explain briefly.				5	CO3	L2
2	a	Explain how windows are useful ? Explain its components				5	CO3	L2
	b	Explain about window management				5	CO3	L2
	c	Discuss briefly about the types of windows.				5	CO3	L2
		OR						
2	a	Explain the types of device based controls.				5	CO3	L2
	b	Explain the guidelines and characteristics for selecting the proper device-based controls				5	CO3	L2
	c	Explain the types of operable controls				5	CO3	L2

b. Assignment – 2

Note: A distinct assignment to be assigned to each student.

Model Assignment Questions								
Crs Code:	15CS832	Sem:	VIII	Marks:	5	Time:	90 – 120 minutes	
Course:	PRINCIPLES OF USER INTERFACE DESIGN			Module : 3, 4				
Note: Each student to answer 2-3 assignments. Each assignment carries equal mark.								
SNo	USN	Assignment Description				Marks	CO	Level
1		Explain the different structure of menus.				6	CO3	L2
2		Explain the different functions of the menus				6	CO3	L2
3		Explain the different ways of formatting the menus.				6	CO3	L2
4		Problems of website navigation				6	CO3	L2
5		goals of website navigation				8	CO3	L2
6		Write down the guidelines for navigation				10	CO3	L2
7		Write the kinds of menus and explain briefly.				8	CO3	L2
8		Explain the components of the menu bar				6	CO3	L2
9		Write a note on cascading menu				6	CO3	L2
10		Explain briefly about pop up menus				6	CO3	L2
11		explain pull down menus				6	CO3	L2
12		Explain how windows are useful ? Explain its components				8	CO4	L2
13		Explain about window management				10	CO4	L2
14		Discuss briefly about the types of windows.				10	CO4	L2
15		Write a note on organizing window functions.				6	CO4	L2
16		Write a note on window operations				6	CO4	L2
17		Explain briefly about the presentation styles of windows.				6	CO4	L2
18		Explain the types of device based controls.				6	CO4	L2
19		Explain the guidelines and characteristics for selecting the				6	CO4	L2

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		proper device-based controls			
20		Explain the types of operable controls	6	CO4	L2
21		Explain the types of controls rather than operable controls	8	CO4	L2
22		Explain the guidelines for selecting proper controls.	8	CO4	L2

D3. TEACHING PLAN – 3

Module – 5

Title:	Screen based controls- Operable control, Text control, Selection control, Custom control, Presentation control, Windows Tests-prototypes, kinds of tests.	Appr Time:	8 Hrs
a	Course Outcomes	CO	Blooms Level
-	At the end of the topic the student should be able to . . .	-	
	Design the prototypes and test plans of user interface	CO5	L6
b	Course Schedule	-	-
Class No	Portion covered per hour	-	-
33	Screen based controls.	CO5	L3
34	Operable controls	CO5	L3
35	Text control,	CO5	L3
36	Selection control,	CO5	L3
37	Custom control,	CO5	L3
38	Presentation control,	CO5	L3
39	Windows Tests-prototypes,	CO5	L6
40	kinds of test	CO5	L6
c	Application Areas	-	-
-	Students should be able employ / apply the Module learnings to . . .	-	-
	User Interface Design helps in creating prototypes and to develop test plans	CO5	L2
d	Review Questions	-	-
-	The attainment of the module learning assessed through following questions	-	-
1	Explain the Importance of Usability Testing:	CO2	L2
2	Explain Usability Test Disadvantages	CO2	L2
3	Write Visualization techniques:	CO2	L3
4	Define hypermedia.	CO2	L2

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5	What is the need for Prototypes?	CO2	L3
6	What are the advantages of walkthrough?	CO2	L2
7	What is meant by think-aloud evaluation?	CO2	L2
8	Define Visualization.	CO2	L2
9	Define transition diagram.	CO2	L2
10	List some techniques utilized for information searching.	CO2	L2
11	What are the features of user-interface building tools?	CO2	L2
e	Experiences	-	-
1	More test cases can be given to the students		

E3. CIA EXAM – 3

a. Model Question Paper - 3

Crs Code:	15CS832	Sem:	VIII	Marks:	30	Time:	75 minutes	
Course:	PRINCIPLES OF USER INTERFACE DESIGN							
-	-	Note: Answer all questions, each carry equal marks. Module : 5				Marks	CO	Level
1	a	Explain the Importance of Usability Testing:				7	CO5	L2
	b	Explain Usability Test Disadvantages				8	CO5	L2
OR								
1	a	What are the features of user-interface building tools?				7	CO5	L2
	b	What are the advantages of walkthrough?				8	CO5	L2
OR								
2	a	Write the steps for Developing and conducting tests.				7	CO5	L2
	b	Explain the Importance of Usability Testing:				8	CO5	L2
OR								
2	a	write the guidelines for testing process				7	CO5	L2
	b	what are the different stages involved in usability testing.				8	CO5	L2

b. Assignment – 3

Note: A distinct assignment to be assigned to each student.

Model Assignment Questions								
Crs Code:	15CS832	Sem:	VIII	Marks:	5	Time:	90 – 120 minutes	
Course:	PRINCIPLES OF USER INTERFACE DESIGN				Module : 5			
Note: Each student to answer 2-3 assignments. Each assignment carries equal mark.								
SNo	USN	Assignment Description				Marks	CO	Level
1		Briefly explain the various operable controls				6	CO5	L2
2		Text entry/ read only controls				6	CO5	L2
3		Explain briefly all the selection control				6	CO5	L2
4		Write a note on list boxes and drop down list boxes.				6	CO5	L2
5		Explain Other operable controls.				6	CO5	L2
6		Write a note on scope of testing				6	CO5	L2

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7		write the guidelines for testing process	6	CO5	L2
8		what are the different stages involved in usability testing.	8	CO5	L2
9		Explain the different kinds of test in detail	8	CO5	L2
10		write a note on information search	6	CO5	L2

F. EXAM PREPARATION

1. University Model Question Paper

Course:	PRINCIPLES OF USER INTERFACE DESIGN				Month / Year	May /2020		
Crs Code:	15CS832	Sem:	VIII	Marks:	80	Time:	180 minutes	
Mod ule	Note	Answer all FIVE full questions. All questions carry equal marks.				Marks	CO	Level
1	a	Explain the Importance and Benefits of good user Interface Design.				4	CO1	L2
	b	Write any four differences between GUI and Webpage Design				4	CO1	L2
	c	Explain in detail, the characteristics of GUI.				8	CO1	L2
OR								
1	a	Explain the concept of Direct Manipulation for Graphical Systems				4	CO1	L2
	b	Discuss the characteristics of Intranet and Internet and bring out the differences between				4	CO1	L2
	c	Discuss the general principles of User Interface Design (any 8).				8	CO1	L2
OR								
2	a	List and explain the five commandments in designing for people				6	CO2	L2
	b	Describe in detail, the important human characteristics in user Interface Design				10	CO2	L2
OR								
2	a	Explain the common usability problems in web based systems.				6	CO2	L2
	b	Explain the techniques for determining the user requirements using Indirect methods				10	CO2	L2
OR								
3	a	Explain the structure of with illustrations				6	CO3	L2
	b	Describe the components of a Web Navigation System with illustration				10	CO3	L2
OR								
3	a	Describe the functions of menus				6	CO3	L2
	b	List all kinds of Graphical Menus and explain any one in details				10	CO3	L2
OR								
4	a	Explain the components of a window with example.				8	CO4	L2
	b	Discuss briefly about the types of windows with examples (any four)				8	CO4	L2
OR								
4	a	Describe overlapping windows and tiled windows presentation styles with examples				8	CO4	L2
	b	Explain the characteristics of touch Screen and keyboard.				8	CO4	L2
OR								
5	a	Explain Radio Buttons and List Boxes selection controls.				8	CO5	L2
	b	Explain any two types of testing prototypes used in User Interface Design				8	CO5	L2
OR								
5	a	Explain Slider and Tree View operable controls				8	CO5	L2
	b	Explain Cognitive Walkthroughs, Think aloud Evaluations and Usability tests conducted in user Interface Design.				8	CO5	L2

2. SEE Important Questions

Course:	PRINCIPLES OF USER INTERFACE DESIGN				Month / Year	May /2020	
Crs Code:	15CS832	Sem:	VIII	Marks:	80	Time:	180 minutes
Note		Answer all FIVE full questions. All questions carry equal marks.				-	-
Module	Qno.	Important Question	Marks	CO	Year		
1	a	Write down the differences between printed page and web page	6	1	2		
	b	General principles of User interface Design.	10	1	2		
	c	Explain human consideration in design.	6	2	2		
	d	Explain the concept of direct manipulation and indirect manipulation for graphical system	5	1	2		
	e	Explain the advantages of the graphical system advantages.	6	1	2		
2	a	Explain the human interaction speed.	6	2	2		
	b	Explain the techniques for determining user requirements using indirect method and direct method.	6	2	2		
	c	How business functions is determined using user mental model.	6	2	2		
	d	How business functions is determined using physical model.	6	2	2		
	e	Explain the design standards.	10	2	2		
3	a	Write down the guidelines for navigation	10	CO3	L2		
	b	Write the kinds of menus and explain briefly.	8	CO3	L2		
	c	Explain the components of the menu bar	6	CO3	L2		
	d	Write a note on cascading menu	6	CO3	L2		
	e	Explain briefly about pop up menus	6	CO3	L2		
4	a	Explain briefly about the presentation styles of windows.	6	CO4	L2		
	b	Explain the types of device based controls.	6	CO4	L2		
	c	Explain the guidelines and characteristics for selecting the proper device-based controls	6	CO4	L2		
	d	Explain the types of operable controls	6	CO4	L2		
	e	Explain the types of controls rather than operable controls	8	CO4	L2		
5	a	Explain briefly all the selection control	6	CO5	L2		
	b	Write a note on list boxes and drop down list boxes.	6	CO5	L2		
	c	Explain Other operable controls.	6	CO5	L2		
	d	Write a note on scope of testing	6	CO5	L2		
	e	write the guidelines for testing process	6	CO5	L2		