



End Semester Examination – Nov/Dec – 2016

Code : **14CS2020**
Sub. Name : **Fundamentals of Human Computer Interaction**

Semester : **2016-17 ODD**
Duration : **3hrs**
Max. marks : **100**

ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)

Q. No.	Sub Div.	Questions	Course Outcome	Marks
1.	a.	Draw the architecture of Interactive Systems and describe the functions of the various components. Design interactive system for controlling the room temperature using Temperature Control Model consists of Min, Max, Temp integer values, also describe view and controller for the following scenario. 1. Graphical temperature control 2. Speech temperature control 3. Physical world temperature control		1 5
	b.	Which leads to the problem described by Don Norman as the “Gulf of Evaluation”?		5
	c.			
	d.			
	e.			
(OR)				
2.	a.	In designing a new abstract model widget, how would you decide whether piece of information should be the widget (or) should be something to put in model?		1 0
	b.	What are the limitations in standard widget architecture? Draw the architecture of abstract model widget and show how it overcomes the limitations of standard widget architecture.		1 0
	c.			
	d.			
	e.			
3.	a.	Differentiate Layout and Constraints. Discuss any two layout algorithms with example.		1 5
	b.	List out the steps for implementing model-view-controller.		5
	c.			
	d.			
	e.			
(OR)				
4.	a.	Explain about the physiology and vision system of visual design in terms of “look” computing culture.		1 0
	b.	What are the different types of fields in Propositional Production Systems?		5
	c.	How does MAC Operating System uses struts and springs in widget placement?		3
	d.	Which Java class can be used to tune a group of resources into a particular language?		2
	e.			
5.	a.	Illustrate the user interface distribution that takes place in pixel/event level?		5
	b.	Explain World Wide Web interaction technologies.		5
	c.	Let example.doc file contains the following details.		1
		(12)		0

		i) 20 byte text ii) 1 byte table iii) 3 byte image Explain the appropriate data transfer and making connection methods while coping the above contents and pasting it to some other word file.		
	d.			
	e.			
(OR)				
6.	a.	Sketch the architecture of Model-View-Controller and mention the places where interface distribution can occur.		10
	b.	Why does the clipboard information last for longer time in deferred posting?		3
	c.	Give an example for synchronous and asynchronous collaboration.		2
	d.	Why is a type naming standard so important to the success of cut/copy/paste?		5
	e.			
7.	a.	Draw and explain a mouse event diagram for the simple pressing on-screen push button.		10
	b.	Explain about the state machine diagram for the following vent methods: (i) mouseDown (), (ii) mouseMove (), (iii) mouseUp()		5
	c.	Mention the two problems of using bar codes.		5
	d.			
	e.			
(OR)				
8.	a.	What are the advantages and disadvantages of each? a. Pixel Distribution b. Graphics Interface Distribution c. Programmable Clients d. Model Semantics Distribution e. Data Layer Distribution		12
	b.	State the Fitts' Law?		3
	c.	Illustrate one of the Carpendale's fisheye techniques that is used to implement a view of a very large image.		5
	d.			
	e.			
<u>Compulsory:</u>				
9.	a.	Briefly explain about the three pieces of web application.		12
	b.	Explain about the use of Facades?		5
	c.	What is meant by Functional Design?		3
	d.			
	e.			

ALL THE BEST