Total No.	of Questions : 8] SEAT No. :
PD424	16 [Total No. of Pages : 2
	T.E. (Computer) (AIDS)
	HUMAN COMPUTER INTERFACE
(2019	9 Pattern) (Semester - V) (310245 B) (Elective - I) (Theory)
(	
Time : 21/2	
Instructio	ons to the candidates:
1)	Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8.
2)	Figures to the right induate full marks.
3)	Neat diagram must be drawn whenever necessary.
<i>4</i> )	Make suitable assumption whenever necessary.
	6.
<b>Q1</b> ) a)	What is GUI? Elaborate Graphical user Interface in Details. [6]
b)	What is mean by interaction styles? Explain any two interaction styles.[6]
c)	Discuss software life cycle used in HCI system using appropriate example.[6]
,	OR
<b>Q2</b> ) a)	Explain Principles for UI/UX Design in details. Also give some application
<b>22</b> ) (1)	name. [6]
b)	What is design Rationals? Explain Usability Engineering with suitable
,	example. [6]
c)	List down Norman's Seven rules. [6
0)	Zist down rooman speven raies.
<b>Q3</b> ) a)	Discuss the GOMS Models with example. [6]
b)	Elaborate the objective measures of Usability, formative and summative
	evaluation. [6]
c)	Explain Cognitive walkthrough in detail. [5]
	OR OR

**Q4**) a) Elaborate evaluation framework using following points:

[6]

- i) Paradigms and techniques.
- ii) DECIDE: a framework to guide evaluation.
- b) Discuss the concept of designing in diversity [6]
- c) Write short note on Heuristic evaluation and Usability testing in laboratory. [5]

Q5)	a)	Explain vision based hand gesture recognition system using HC Paradigms. [6]	
	b)	Discuss about handling missing data. What are the roles of Machin learning in HCI.	
	c)	Describe following paradigms used for interaction in HCI [6	6]
		i) Time sharing	
		ii) Programming toolkit	
		iii) Agent based Interfaces	
00	,	OR	-1
<b>Q6</b> )	a)	Explain with example pattern recognition in HCI. [6	
	b)	What do you mean by Ubiquitous Computing? What is its application Explain with suitable example.	
	c)	Compare Data Integrity versus Data immunity. [6]	
	C)	Compare Data Integrity versus Data Infinitinty.	ני
<i>Q7</i> )	0)	What is significance of "navigation and toolbar" in HCI? Explain wit	h
<i>Q</i> 7)	a) °	example. [6	
	b)	Write short note on:	<b>6</b> ]
		i) Mini tablet format app.	
		ii) Searching, Sorting and Filtering.	<b>~</b>
	c)	Describe anatomy of mobile app. [5	
		OR	•
<b>Q</b> 8)	a)	What is used of "Multi-touch gestures"? Explain various multi textur	
	1. \	gesture used in Mobile devices. [6	
	b)	Write short note on based on various devices: [6	)]
		i) Designing for kiosks	
	<b>\</b>	ii) Designing for audible interfaces	
۸,	c)	Describe the "Inter-app integration". [5	,]
-		6.	
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