Total	l No	o. of Questions : 8]	SE SE	EAT No.:			
P-437				[Total	No. of Pages : 2		
		[6003]	541				
T.E. (Artificial Intelligence and Data Science) (Semester - I)							
HUMAN COMPUTER INTERFACE							
(310245 (B)) (2019 Pattern) (Elective - I)							
Time	: 2	2½ Hours]		[M	lax. Marks : 70		
Instr	uct	tions to the candidates:					
	<i>1</i>)			2.8.			
	2)			90			
	3)		•	· •			
	<i>4</i>)	Make suitable assumption wheneve	r necessary.				
Q 1)	a)	Explain what is mean by Human ex	rr in detail.	Z.O.	[6]		
	b)	Elaborate Graphical User Interface	e in detail.		[6]		
	c)	Explain web user interface in detai			[6]		
		OR	3, 6,				
Q 2)	a)	Explain usability Engineering with	suitable examp	ole.	[6]		
	b)	Write down about interactive de	esign and prot	otyping	using suitable		
	example.			[6]			
	c) Write short note on:				[6]		
		i) Popularity of Graphics					
		ii) Concept of Direct Manipulat	ion				
Q 3)	a)	Explain analytic methods and mod	lel-based analy	sis.	[6]		
	b)	Elaborate universal design princip	les in detail.	9	[6] [6]		
	c)	Explain cognitive walkthrough in d	letail.	2	[5]		
		OR		7 8			
Q 4)	a)	Elaborate GOMS model.	R		[6]		
	b)	Elaborate evaluation Framework u	sing following	point:	[6]		
		i) Paradigms and Techniques		>			
		ii) DECIDE: A Framework to G	uide Evaluatio	n			
c) Discuss the concept of designing of			of diversity.		[5]		
					<i>P.T.O.</i>		
			8.		1.1.0.		

Q5)) a) What is mean by ubiquitous computing? Which are the application				
		Explain with suitable example.	[6]		
	b)	Compare data integrity and data immunity.	[6]		
	c)	Which are the social aspects of search? Explain.	[6]		
		OR OR			
Q6)	a)	Discuss about handling missing data using suitable example.	[6]		
	b)	What is the significance of machine learning in HCI? Describe.	[6]		
	c)	Explain sensor-based and context-aware interaction.	[6]		
Q 7)	a)	Explain Mobile Navigation, Content and Control dioms using appropr	iate.		
		Example.	[6]		
	b) \(\bar{\range}{\range}\)	Discuss Drawers used in HCI system. Explain item-level drawers.	[6]		
	c)	Describe the "Inter-app Integration"	[5]		
		OR			
Q8)	(8) a) What is use of "multi-touch gestures"? Explain various multi-touch gestures				
	used in mobile device. b) Describe Tap-to-Reveal and Direct Manipulation. c) Explain "Welcome and Help Screens". *** *** *** *** *** *** ***				
	c)	Explain "Welcome and Help Screens".	[5]		
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[600	[6003]-541 2				