

P5288**TE/S/Insem. - 645****T.E. (IT)****HUMAN COMPUTER INTERACTION****(2015 Pattern) (In -Sem. -I)****Solution & Marking**

Q1	a	<p>Explain principles of Human Computer Interaction</p> <p>Ans: Description of any five principles ----- 5 Marks</p> <ol style="list-style-type: none"> 1 Know Thy User 2 Understand the Task 3 Reduce Memory Load 4 Strive for Consistency 5 Remind Users and Refresh Their Memory 6 Prevent Errors/Reversal of Action 7 Naturalness 	5
Q1	b	<p>Explain Design Of everyday things with example?</p> <p>Ans :</p> <ol style="list-style-type: none"> 1. Affordance 2. Constraints 3. Mapping 4. Causality 5. Transfer effects 6. Consistency 7. Mental Models 	5
OR			
Q2	a	<p>Explain disciplines contributing to Human Computer Interaction.</p> <p>Ans: Description of any 5 disciplines ----- 5 Marks</p> <ol style="list-style-type: none"> 1. Sociology 2. Engineering 3. Computer Science 4. Linguistics 5. Anthropology 6. Design 7. Ergonomics and Human factors 8. Cognitive psychology 9. Artificial Intelligence 10. Social and Organizational Psychology 11. Philosophy 	5

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Q2	b	Why empathy is important for human centered design? Ans : Explanation with example.	5
Q3	a	List human Input-output channels and discuss briefly about	5

		<p>it.</p> <p>Ans:</p> <p>Short explanation of :</p> <p>Input Channels: Vision, Hearing, Touch, Taste, Smell -----..... 2.5 Marks</p> <p>Output Channels: Limbs, Fingers, Eyes, Head, Vocal system ---- 2.5 Marks</p>	
Q3	b	<p>Write a long term memory model script for case given below :</p> <p>An Owner went to veterinary hospital along with dog.</p> <p>Ans : Script for LTM</p> <p>Entry conditions:</p> <p><i>dog ill</i></p> <p><i>vet open</i></p> <p><i>owner has money</i></p> <p>Result: <i>dog better</i></p> <p><i>owner poorer</i></p> <p><i>vet richer</i></p> <p>Props: <i>examination table</i></p> <p><i>medicine</i></p> <p><i>instruments</i></p> <p>Roles: <i>vet examines</i></p> <p><i>diagnoses</i></p> <p><i>treats</i></p> <p><i>owner brings dog in</i></p> <p><i>pays</i></p> <p><i>takes dog out</i></p> <p>Scenes: <i>arriving at reception</i></p> <p><i>waiting in room</i></p> <p><i>examination</i></p> <p><i>paying</i></p> <p>Tracks: <i>dog needs medicine</i></p> <p><i>dog needs operation</i></p>	5
OR			
Q4	a	<p>What is reasoning? Explain different types of reasoning with examples?</p> <p>Ans:</p> <p>Reasoning explanation ----- 2 Marks</p> <p>Types: Deductive with example ----- 1 Marks</p> <p>Inductive with example ----- 1 Marks</p> <p>Abductive with example ----- 1 Marks</p>	5

Q4	b	Explain the role of Senses which plays an important role in HCI ?	5
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		<p>Ans :</p> <ol style="list-style-type: none"> 1. Touch & its role-----2 Marks 2. Vision & its role.....2 Marks 3. Ears & role1 Mark 	
Q5	a	<p>Enlist different interaction styles and describe different interaction styles used to accommodate the dialog between user and computer.</p> <p>Ans:</p> <p>Description of at least 5 interaction styles ----- 5 Marks</p> <ol style="list-style-type: none"> 1. Command line interface 2. Menus 3. Natural language 4. Question/answer and query dialogue 5. Form-fills and spreadsheets 6. WIMP 7. Point and click 8. Three-dimensional interfaces 	5
Q5	b	<p>Explain Donald Norman's Seven stages Of interaction.</p> <p>Ans :</p> <ol style="list-style-type: none"> 1. Perceiving the State of action 2. Interpreting the perception 3. Evaluating of interpretation 4. Intension to act 5. Sequence of action 6. Execution of action sequence 	5
OR			
Q6	a	<p>What is Ergonomics?</p> <p>Ans :</p> <ol style="list-style-type: none"> 1. Arrangement of controls and displays 2. Surrounding environment 3. Health issues 4. Use of Colour 	5

Q6	b	<p>What is WIMP? Explain elements of WIMP interfaces?</p> <p>Ans:</p> <p>WIMP explanation ----- 1 Marks</p> <p>Elements of WIMP explanation: ----- 4</p> <p>Marks</p> <ol style="list-style-type: none"> 1. Windows 2. Icons 3. Pointers 4. Menus 	5
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