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**B TECH**  
**(SEM V) THEORY EXAMINATION 2021-22**  
**HUMAN COMPUTER INTERFACE**

**Time: 3 Hours****Total Marks: 100****Note: 1.** Attempt all Sections. If require any missing data; then choose suitably.**SECTION A****1. Attempt all questions in brief.****2 x 10 = 20**

Qno.	Question	Marks	CO
a.	Discuss about the concept of direct manipulation.	2	CO1
b.	Define popularity of graphics.	2	CO1
c.	What are the guidelines for designing conceptual model?	2	CO2
d.	What are the capabilities and limitations of visual processing?	2	CO2
e.	Define graphical system.	2	CO3
f.	What are the devices for virtual reality and 3d interaction?	2	CO3
g.	Define usability.	2	CO4
h.	What are Screen design?	2	CO4
i.	Define Keystroke-level model?	2	CO5
j.	What is multimedia?	2	CO4

**SECTION B****2. Attempt any three of the following:****10 x 3 = 30**

Qno.	Question	Marks	CO
a.	Discuss the principles of good UI design. Evaluate the suitability of the manual tour booking form using UI design principles.	10	CO1
b.	Give a brief note about different widget supports and interface features supported in user-interface building tools.	10	CO2
c.	Distinguish between short term & long term memory. State requirements to perform cognitive walkthrough of a system?	10	CO3
d.	Explain various drag and drop methods in detail with examples	10	CO4
e.	Explain about Human interaction & Human interaction speeds computers.	10	CO3

**SECTION C****3. Attempt any one part of the following:****10 x 1 = 10**

Qno.	Question	Marks	CO
a.	Explain screen navigation and flow in screen design?	10	CO4
b.	Explain the various types of users and the organizational issues to be considered in designing an interactive system?	10	CO3

**4. Attempt any one part of the following:****10 x 1 = 10**

Qno.	Question	Marks	CO
a.	Explain Shneiderman's eight Golden rules of interface design.	10	CO3
b.	Write in brief the process of web interface design.	10	CO1



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**5. Attempt any *one* part of the following:****10 x 1 = 10**

Qno.	Question	Marks	CO
a.	Decide how the 'golden rules' and heuristic help interface designers take account of cognitive psychology? Illustrate your answer with the design of Microsoft office word.	10	CO2
b.	What are the roles of icons, graphics and color in providing feedback?	10	CO5

**6. Attempt any *one* part of the following:****10 x 1 = 10**

Qno.	Question	Marks	CO
a.	List various statistical graphic forms and explain surface charts, bar graphs and histograms with suitable examples.	10	CO2
b.	What is Usability in User Interface design? Why Usability is so important? Explain the principles of User Interface design.	10	CO1

**7. Attempt any *one* part of the following:****10 x 1 = 10**

Qno.	Question	Marks	CO
a.	Explain 8 Interaction Devices.	10	CO5
b.	Explain Norman's seven principle for transferring difficult task to simple one in design.	10	CO4