

Total No. of Questions : 12]

SEAT No. :

P3123

[4858] - 208

[Total No. of Pages : 3

T.E. (INFORMATION TECHNOLOGY)
Human Computer Interaction and Usability
(2008 Pattern)

Time : 3 Hours]

[Max. Marks : 100

Instructions 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, Q.9 or Q.10, Q.11 or Q.12
- 2) Draw neat diagrams whenever necessary.
- 3) Figures to the right side indicate full marks.
- 4) Assume suitable data if necessary.

SECTION - I

- Q1)** a) What is ergonomics? Explain its significance in interface design. [8]
b) Compare STM and LTM of human with respect to capacity, access time and forgetting. [8]

OR

- Q2)** a) Discuss general principles and goals of user interface design. [8]
b) Explain Inductive reasoning and Abductive reasoning with examples. [8]

- Q3)** a) List different interaction styles. Explain command line interface and menus interface with advantages and disadvantages. [10]
b) Express your opinion - "A design should be User-Centric". [8]

OR

- Q4)** a) What are the different life cycle models in HCI? Explain any one lifecycle model in detail. [10]
b) Describe briefly four different interactions styles used to accommodate the dialog between user and computer. Specify advantages and disadvantages of each interaction style. [8]

- Q5)** a) Explain scenarios and expert reviews [8]
b) Evaluate Microsoft Power Point interface using the "Eight golden rules of interface design". [8]

P.T.O.

OR

- Q6)** a) Why is context important in selecting and applying guidelines and principles for interface design? Illustrate your answer with examples. [8]
- b) With respect to Human Diversity how to accommodate users with disabilities and elderly users. [8]

SECTION - II

- Q7)** a) What is DECIDE? List and explain unique phases of DECIDE framework. [10]
- b) Explain any two evaluation paradigms for UI design [8]

OR

- Q8)** a) Discuss the characteristics, guidelines and principles of good web page design. [10]
- b) What usability standards are necessary in designing home page for e-governance websites? [8]

- Q9)** a) Explain GOMS model by taking appropriate task. Also discuss the issue of closure in terms of your GOMS description. [8]
- b) Give any two diagrammatic or textual notations used to design dialogs in effective user interface. Justify your notations with respective examples. [8]

OR

- Q10)a)** Explain status event analysis with example [8]
- b) Hierarchical Task Analysis (HTA) is used to describe the interactions between a user and a software system. Draw and explain HTA to online bus reservation system. [8]

- Q11)a)** Consider following two shared application. [8]
- Shared PCs and shared window systems
- Shared editors.

What are the main issues that need to be addressed in the design of these applications?

- b) Discuss Augmented reality use for Aircraft. [8]

OR

Q12) Write short notes on Any Three of the following :

[16]

- a) Information and data visualization
- b) Augmented reality
- c) Any three devices for virtual reality
- d) Ubiquitous computing

