

T.E. (Computer) (AIDS)

HUMAN COMPUTER INTERFACE

(2019 Pattern) (Semester - V) (310245 B) (Elective - I) (Theory)

Time : 2½ Hours]

[Max. Marks : 70

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.
- 2) Figures to the right indicate full marks.
- 3) Neat diagram must be drawn whenever necessary.
- 4) Make suitable assumption whenever necessary.

Q1) 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

Q2) a) Explain Principles for UI/UX Design in details. Also give some application name. [6]
b) What is design Rationals? Explain Usability Engineering with suitable example. [6]
c) List down Norman's Seven rules. [6]

Q3) 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

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 HCI Paradigms. [6]

b) Discuss about handling missing data. What are the roles of Machine learning in HCI. [6]

c) Describe following paradigms used for interaction in HCI [6]

- Time sharing
- Programming toolkit
- Agent based Interfaces

OR

Q6) 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. [6]

c) Compare Data Integrity versus Data immunity. [6]

Q7) a) What is significance of “navigation and toolbar” in HCI? Explain with example. [6]

b) Write short note on : [6]

- Mini tablet format app.
- Searching, Sorting and Filtering.

c) Describe anatomy of mobile app. [5]

OR

Q8) a) What is used of “Multi-touch gestures”? Explain various multi texture gesture used in Mobile devices. [6]

b) Write short note on based on various devices : [6]

- Designing for kiosks
- Designing for audible interfaces

c) Describe the “Inter-app integration”. [5]

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