

Total No. of Questions : 8]

SEAT No. :

**P273**

[Total No. of Pages : 2

**[6003] - 351**

**T.E. (Computer)**

**HUMAN COMPUTER INTERFACE**

**(2019 Pattern) (Semester - I) (Elective - I) (310245 B)**

*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, and Q.7 or Q.8.*
- 2) *Figures to the right side indicate full marks.*
- 3) *Neat diagrams must be drawn whenever necessary.*
- 4) *Make suitable assumption whenever necessary.*

**Q1) a)** Explain interaction styles: [6]

- i) Command-line and
- ii) Menu Selection.

b) Which are the characteristics of Graphical User Interface? Explain. [6]

c) Discuss software life cycle importance used in HCL using appropriate example. [6]

OR

**Q2) a)** Explain interaction styles: [6]

- i) Form fill-in and
- ii) Direct Manipulation.

b) Elaborate the characteristics of Web using Merging of Graphical Business Systems and Web characteristics of Intranet. [6]

c) Write down about Iterative design and Prototyping using suitable example. [6]

**Q3) a)** Describe GOMS model. [6]

b) Write short note on : [6]

- i) Formative evaluation.
- ii) Summative Evaluation.

c) Elaborate Heuristic Evaluation with example. [5]

OR

*P.T.O.*

- Q4)** a) Evaluate Evaluation Framework using DECIDE. [6]  
b) Write short note on : [6]  
i) Empirical Methods : Experimental Evaluation.  
ii) Field Studies.  
c) Elaborate Cognitive Walkthrough. [5]

- Q5)** a) Describe paradigms used for Interaction in HCI: [6]  
i) Time Sharing.  
ii) Video Display Unit.  
iii) Programming Toolkits.  
b) What is mean by ubiquitous computing? Which are the applications of it? Explain with suitable Example. [6]  
c) Explain sensor-based and context-based interaction. [6]

OR

- Q6)** a) What is mean by framework in HCI? Explain Five-stage search framework. [6]  
b) Explain “Dynamic queries and faceted search” used in HCI. [6]  
c) What is mean by pattern recognition? Explain phases involved in pattern recognition process with suitable example. [6]

- Q7)** a) Write short note on : [6]  
i) Mobile form factors.  
ii) Handheld format apps.  
b) Discuss Mobile Navigation, Content, and Control Idioms using appropriate example. [6]  
c) Write down about designing for automotive interfaces in HCI. [5]

OR

- Q8)** a) Describe Drawers used in HCL System. Explain Item-level drawers. [6]  
b) Discuss Tap-to-Reveal and direct manipulation in detail. [6]  
c) Write down about designing for mobile devices using HCI. [5]

