

Total No. of Questions : 8]

SEAT No. :

P-7542

[Total No. of Pages : 2

[6180]-50

**T.E. (Computer Engineering / A.I & D.S)  
HUMAN COMPUTER INTERFACE  
(2019 Pattern) (Semester - I) (Elective - I) (310245B)**

*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 diagrams must be drawn whenever necessary.
- 4) Make suitable assumption whenever necessary.

**Q1) a) What is Ergonomics? Explain the Arrangement of controls and display with respect to cognitive aspects of design. [6]**

- b) List the interaction styles and explain any one in detail. [6]
- c) Write a short note on Human Memory and its types. [6]

**OR**

**Q2) a) What are the psychological reactions to poor interface designs? [6]**

- b) What is Usability Engineering? Explain Scenario based usability Engineering. [6]
- c) List the Principles of User Interface of design and explain any one in detail. [6]

**Q3) a) List the seven commandments and explain “Soliciting early and ongoing user involvement” in detail. [6]**

- b) Explain the importance of multimodal interaction with respect to “Sound in interface”. [6]
- c) Explain the Cognitive Walkthrough concept With example. [5]

**OR**

**P.T.O.**

- Q4)** a) Explain GOMS model with an example. [6]  
b) Explain the Summative and Formative Evaluation techniques. [6]  
c) Write a note on “Usability testing in Laboratory”. [5]

- Q5)** a) What is CSCW? Give example. [6]  
b) Explain Heuristic evaluation with example. [6]  
c) Explain the five stage search framework. [6]

OR

- Q6)** a) Write a comparison between Dynamic queries and faceted search in a user interface. [6]  
b) What is the role of Pattern Recognition in HCI? Explain with example. [6]  
c) What factors should be considered for data entry designing for any HCI? [6]

- Q7)** a) Explain the difference between good and bad interface in a mobile based app with example. [6]  
b) Which factors are important in designing an interface for a handheld device. [6]  
c) What are the important aspects to be considered when designing help screens in a mobile app? [5]

OR

- Q8)** a) Explain the design principles for user interface in mobile devices. [6]  
b) Explain the importance of using carousels in designing mobile apps. [6]  
c) How can drawers and secondary drawers help in better designing of a mobile app? [5]

