

Total No. of Questions : 8]

**PC-1804**

SEAT No. :

[Total No. of Pages : 2

**[6353] - 123**

**T.E. (I.T.)**

**HUMAN COMPUTER INTERACTION**  
**(2019 Pattern) (Semester - I) (314444)**

*Time : 2½ Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

- 1) Answers Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right side indicate full marks.
- 4) Assume Suitable data if necessary.

**Q1) a)** Categorize user profiles for any social media application based on usage. [8]

**b)** Hierarchical task analysis (HTA) is used to describe the interactions between a user & software system. Draw & explain HTA to online bus reservation system? [9]

**OR**

**Q2) a)** Consider designing a user interface for “on-line video store” or “student admission system”. Perform a detailed task analysis. Identify task domain object & actions. Relate task domain & actions with interface objects & actions. [9]

**b)** Create a GOMS description of the task of photocopying a paper from a journal. Discuss the issue of closure in terms of your GOMS description? [8]

**Q3) a)** What is a prototype? Explain low-fidelity, medium-fidelity and high-fidelity prototyping technique with relevant example. [9]

**b)** Explain the principle of Learnability and principle of Flexibility with relevant examples. [9]

**OR**

**P.T.O.**

**Q4) a)** Write short notes on: [9]

- i) Wire-Framing
- ii) Model-View-Controller (MVC) Framework

b) Consider two different ATM machines. One giving away the cash & then ejecting the bank card & the other one ejecting the bank card first & then dispensing the cash. Which is a better interface from interaction design point of view? justify. [9]

**Q5) a)** List & explain the steps of usability testing? What are some of the limitations of such testing? [8]

b) Explain user interface management system (UIMS) with its architecture? [9]

**OR**

**Q6) a)** What are the goals of evaluation? Explain Cognitive Walkthrough and heuristics evaluation technique in detail. [8]

b) Explain DECIDE framework with necessary diagram and an example of the same. [9]

**Q7) a)** Draw and explain the design thinking process. [10]

b) Discuss in detail the challenges faced by designer while designing interfaces for [8]

- i) Smart homes
- ii) Smart devices

**OR**

**Q8) a)** Differentiate Augmented and Virtual Reality. Also explain both with real life examples. [8]

b) Explain Ubiquitous Computing Definition, key features, Applications, Advantages & disadvantages, [10]

