

Total No. of Questions : 8]

SEAT No. :

PC-1804

[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) Mondel-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 the 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]

