

Total No. of Questions : 8]

SEAT No. :

**P484**

[Total No. of Pages : 2

**[6003]-704**

**T.E. (Information Technology)**

**HUMAN COMPUTER INTERACTION INFORMATION  
TECHNOLOGY**

**(2019 Pattern) (Semester - I) (314444)**

*Time : 2½ Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

- 1) *Answers : Q.1. or Q.2, Q.3 or Q.4,, Q.5 or Q.6, Q.7 or Q.8.*
- 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)** What are User Profiles explain with example? **[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)** Explain Norman's 7 stage model with example. **[8]**

b) Differentiate between Goals Vs Tasks. How does GOMS help in improving usability? Draw GOMS for CLOSE-WINDOW. **[9]**

**Q3) a)** Explain the principle of learnability and principle of flexibility with example. **[9]**

- b) i) Draw and explain Software design process. **[9]**  
ii) Explain the importance of User Focus from HCI perspective. **[9]**

OR

**Q4) a)** What is Prototyping? Explain the low-fidelity and High-fidelity designs with example. **[9]**

b) Consider any online food ordering system, draw model-view-controller (MVC) framework. Mention the necessary technology solutions available for each of MVC. **[9]**

**Q5) a)** Explain DECIDE framework with necessary diagram and an example of the same. **[8]**

b) What are the goals of evaluation? Explain Cognitive walkthrough and heuristics evaluation technique in detail. **[9]**

OR

**P.T.O.**

- Q6)** a) Explain user interface management system (UIMS) in detail along with its architecture? [8]  
b) Write a short note on. [9]  
i) Toolkits  
ii) Usability testing

- Q7)** a) Explain [9]  
i) Augmented Reality  
ii) Virtual Reality along with real life examples of both.  
b) Discuss in the detail the Challenges faced by designer while designing interfaces for [9]  
i) smart homes  
ii) smart devices

OR

- Q8)** a) Draw and explain Design thinking in detail for any suitable application.[9]  
b) In today's world finding things on the web has become easy. Discuss how multimodal interaction has enriched the experience. [9]

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