

Total No. of Questions : 8]

SEAT No. :

P-7620

[Total No. of Pages : 2

[6180]-140

T.E. (Information Technology)
HUMAN COMPUTER INTERACTION
(2019 Pattern) (Semester - I) (314444)

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) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right side indicate full marks.
- 4) Assume suitable data if necessary.

- Q1)** a) User Profiles are very important from design point of view. Interface with such profiles is helpful. Justify your answer? [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) How does GOMS help in improving usability? Draw GOMS for CLOSE-WINDOW. Differentiate between Goals Vs Tasks. [9]

- Q3)** a) Explain the following principles with example. [9]
- i) Learnability
 - ii) Flexibility
- b) i) Draw and explain Software design process.
- 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]

P.T.O.

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

Q6) a) Explain user interface management system (UIMS) in detail along with its architecture? [8]

b) Write a short note on- i) Toolkits ii) Usability testing [9]

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 web has become very easy. Discuss how the multimodal interaction has enriched the experience. [9]

