Total No. of Questions : 8]

SEAT No. :

P6778

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[6181] - 401

B.E. (Electronics and Computer Engineering)

HUMAN COMPUTER INTERFACE

(2019 Pattern) (Semester - VII) (410345 B) (Elective - IV)

Time : 2 ½ 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 Q8.***
2) ***Neat diagrams must be drawn whenever necessary.***
3) ***Figures to the right side indicate full marks.***
4) ***Assume suitable data if necessary.***

Q1) a) Explain following WIMP interface elements with respect to any text editor. **[6]**

- Icons
- Menus
- Toolbars
- Dialog boxes

b) What is Ergonomics? List and explain different disciplines of Ergonomics. **[6]**

c) Describe different interaction styles used to accommodate dialog between user and computer. **[6]**

OR

Q2) a) Explain theory of User experience by Honeycomb Model. **[6]**

b) Explain paradigms of Interaction design. **[6]**

c) Explain the context of interaction with an example? **[6]**

Q3) a) What is a prototype? Explain different types of prototyping techniques in detail. **[9]**

b) List out five main design frameworks in HCI. Explain Wire framing and MVC framework in detail. **[8]**

OR

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Q4) a) Explain UI layer and its execution framework. **[9]**

b) What are different types of scenarios? Write scenarios for purchasing an airline ticket. **[8]**

Q5) a) Discuss Shneiderman's 8 golden rules of interface design with an example. **[9]**

b) What are the goals of evaluation? Explain Evaluation through Expert Analysis. **[8]**

OR

Q6) a) What is Usability? Explain the principles that support Usability. **[9]**

b) Explain Nielsen's ten heuristics. **[8]**

Q7) a) Explain Keystroke-Level-Model (KLM). **[9]**

b) Discuss applications meant for computer-mediated communication. **[9]**

OR

Q8) a) A Hierarchical Task Analysis (HTA) provides an understanding of the tasks users need to perform to achieve a certain goal. Perform HTA of the task to cook food(rice). Illustrate using diagram. **[9]**

b) List out different Diagrammatic Dialog Design notations. Explain State Charts with an example. **[9]**

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