PA-1502

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T.E. (E&TC)
INFORMATION TECHNOLOGY
Human Computer Interaction
(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 indicate full marks.*

4) *Assume Suitable data if necessary.*

Q1) a) Explain Goal and task hierarchy model with example. **[8]**

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

OR

Q2) a) Differentiate User Profiles with respect to Interface design with example. **[8]**

b) How does Diagrammatic dialog design notations help designers to design better interfaces. Justify your answer with an example. **[9]**

Q3) a) Explain the following golden rules with example. **[9]**

i) Strive for consistency

ii) Enable frequent users to use shortcuts

iii) Offer informative feedback

b) Explain the following with reference to interface design with example **[9]**

i) Scenarios

ii) Navigation Design

iii) Screen Design

OR

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

b) Consider any online digital library, draw Model -View- Controller (MVC) framework. Mention the necessary technology solutions available for each of MVC. **[9]**

Q5) a) What are the goals of evaluation? Explain Cognitive walkthrough and heuristics evaluation technique in detail. **[8]**

b) What is Usability testing? How will you perform Usability testing on an interactive interface? **[9]**

OR

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

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

Q7) a) Explain: i) Augmented Reality ii) Virtual Reality along with real life examples of both. **[9]**

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 input has enriched the experience. **[9]**

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