Total No. of Questions :10]

SEAT No. :

P3639

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[5560]-595

T.E. (Information Technology)

HUMAN-COMPUTER INTERACTION (End Sem.)

(2015 Course) (Semester-I) (314445)

Time : 2½ Hours] *[Max. Marks : 70*

Instructions to the candidates:

1) ***Answer Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8, Q9 or Q10.***
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) Explain different User Centered Design Principles? **[6]**

b) Explain Shneiderman's Eight Golden Rules of Interface Design? **[4]**

OR

Q2) a) What are the Norman's Seven Principles for Transforming Difficult Tasks into Simple Ones? **[6]**

b) What is reasoning? Discuss with example Inductive versus Deductive Reasoning. **[4]**

Q3) a) The human eye has number of limitations. Give three example. For one of the limitations identified, describe how this should be taken into an account in the design of indivisible interface. **[6]**

b) What can a system designer do to minimize the memory load of the user? **[4]**

OR

Q4) a) Discuss RAM and short-term memory(STM) **[5]**

b) Explain significance of sensory memory in interface design? **[5]**

Q5) a) Describe briefly four different interactions styles used to accommodate the dialog between user and computer, Specify advantages and disadvantages of each interaction style? **[8]**

b) What is a prototype? Explain different types of rapid prototypingtechniques.

OR

P.T.O.

Q6) a) Write short note on process on Interaction design with respect to following points: **[8]**

i) Basic activities

ii) Characteristics.

b) Write a scenario for Music player design? **[8]**

Q7) a) Describe any four usability goals of Internet Explorer. **[8]**

b) Explain the following terms. **[8]**

i) Predictability

ii) Synthesizability

iii) Familiarity

iv) Consistency

OR

Q8) a) Explain Hill climbing approach with prototyping? **[8]**

b) What is the need of MVC pattern? Draw figure and explain? **[8]**

Q9) a) What is mental operator in the Keystroke Level Model (KLM)? How it is different from physical operators? **[9]**

b) Discuss the key differences between KLM and (CMN) GOMS. **[9]**

OR

Q10) a) Discuss the steps involved in estimating task execution time using KLM. How we can use KLM to compare competing designs? **[9]**

b) Use a state diagram to describe the dialogue between the system and the user. Note any additional issues this raises about the system that need to be resolved in the design. **[9]**