5E1357

Roll No. _____ [Total No. of Pages : 2

5E1357

B.Tech. V-Sem. (Back) Examination, January/February - 2024

PCC/PEC Computer Sc. & Engg.

5CS5-12 Human -Computer Interaction

Time : 2 Hours **Maximum Marks : 80**

Mm. Passing Marks: 28

Instructions to Candidates:

Attempt all five questions from Part A, four questions out of six questions from Part B and two questions out of three from Part C.

Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly. Units of quantities used/ calculated must be stated clearly.

Use of following supporting material is permitted during examination. (Mentioned in form No.205)

PART - A

(Answer should be given up to 25 words only)

All questions are compulsory. **(5×2=10)**

1. List the fields involved in HCI
2. Define Fitt's law.
3. List the seven stages of Donald Norman's model.
4. Define the significance of Empirical Research.
5. Define Class Model and State Model

PART - B

(Analytical/Problem solving questions)

Attempt any Four questions. **(4×10=40)**

1. Discuss in detail the concept of usability elaborating its advantages.

2. Create a GOMS description of the task of photocopying an article from a journal

3. Explain the use of Nielsen's ten heuristics with suitable example.

4. How are research questions formulated in Empirical research methods. What are the issues in Empirical Research.

5. Analyze the difference between dialog design using FSM, State Charts and Petri Nets.

6. Evaluate the relevance of CA in IS design Model.

PART - C

(Descriptive/Analytical/Problem Solving/Design question)

Attempt any Two questions. **(2×15=30)**

1. Explain the GOMS family of models describing the design and evaluation of each.

2. Discuss the Experiment Design and Data Analysis using one-way ANOVA.

3. Write a note on:

   a) Model Human Processor

   b) Concur Task Tree

   c) Cognitive Walkthrough