

BACHELOR OF TECHNOLOGY (CBCS) (2021-COURSE)
B. Tech. Sem - VIII Computer Science & Engineering AI & ML : SUMMER : 2025
SUBJECT: HUMAN MACHINE INTERACTION

Day : Thursday
Date : 29/05/2025

S-23998-2025

Time : 02:30 PM-05:30 PM
Max. Marks : 60

N.B.

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Assume suitable data **WHEREVER** necessary.
- 4) Draw neat diagrams **WHEREVER** necessary.

Q.1 Explain the Design Principles for Aesthetics with example. Comment on its importance in achieving Usability. (10)

OR

Q.1 What is the role of prototype in Interaction Design? Differentiate between high fidelity and low fidelity prototype with respect to its types, advantages and disadvantages. (10)

Q.2 Explain the types of Predictive engineering models. List the limitations of the Model-based Design. (10)

OR

Q.2 What are the types of Operators in Keystrokes Level model? How does it differ from operators in GOMS model? (10)

Q.3 State the Interface design guidelines proposed by Jacob Nielsen. Explain any three with suitable design. (10)

OR

Q.3 Explain the Command line interface, Menus and Natural language Interaction Styles with an example. (10)

Q.4 What is ConcurTaskTree (CTT)? Explain its task categories and temporal operators with example. (10)

OR

Q.4 Explain Hierarchical Task Analysis (HTA). Create HTA model for Online shopping application. (10)

Q.5 Write a note on PetriNet technique of dialogue Design. (10)

OR

Q.5 Explain the State Transition Network (STN) dialog design technique. Comment on state and transition with suitable example. (10)

Q.6 Draw and explain the components of Model Human Processor (MHP). (10)

OR

Q.6 Explain the Object oriented modelling for user interface. Create use case diagram for Internet book shopping. (10)
