VIDYA JYOTHI INSTITUTE OF TECHNOLOGY
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
Human Computer Interaction--Question Bank

UNIT I
FOUNDATIONS OF HCI

Short Answers Type Questions: (20qsns)

1. What is HCI?
2. What are the input and output channels of human?
3. What is reading?
4. What is meant by processing sound?
5. What is touch?
6. What is sensory memory?
7. What is long term memory? And mention its types
8. What is Short term memory? And mention its types
9. What is semantic memory?
10. What is problem space theory?
11. List out common interaction styles.
12. What is meant by visual perception?
13. What are the two stages of vision?
14. What is ergonomics?
15. What is WIMP? List its elements.

Long Answers Type Questions:

1. Explain in detail about human input and output channels
2. i)Explain in detail about Reasoning and problem solving?
   ii)Explain in detail about Gestalt theory and problem space theory?
3. i)Explain in detail about different types of memory, storage format and method of access?
   ii)Explain in detail about finite processor speed and interactive performance?
4. i)Describe the Execution-Evaluation cycle in Interaction.
   ii)Define Ergonomics? Explain how ergonomics define standards and guidelines related to systems.
5. Briefly explain about Interaction styles.
6. Describe the elements of WIMP interface.

UNIT II

DESIGN & SOFTWARE PROCESS

Short Answers Type Questions: (20qsns)

1. State the golden rule of design.
2. What is meant by interaction design process?
3. What is meant by Navigation design?
4. List screen design tools
5. What are the tools used for layout design.
6. What is meant by scenarios
7. What is meant by linearity?
8. What is grouping and structure?
9. What are the elements of design model?
10. What are the activities involved in waterfall model?
11. What is usability engineering?
12. Mention the parts of usability specification for VCR
13. List some ISO usability standards 9241
14. What are techniques used for prototyping.
15. Define model of software life cycle.

Long Answers Type Questions:

1. i)Explain in detail about process of design with suitable examples
   ii)Explain in detail about global structure hierarchical organization and dialog?
2. Explain in brief about Screen design layout? Give the guidelines for designing the proper layouts.
3. Explain iterative waterfall software life cycle and discuss various activities in each phase
4. i) Explain in detail about design rationale?
   ii)Explain in detail about principles to support usability?
5. i)Explain in detail about design rules, principles and standards'
   ii)Discuss aboutShneiderman's8 Golden Rules of interface design and Norman's 7Principles for transforming difficult task in to a simple one

UNIT III

MODELS AND THEORIES

Short Answers Type Questions: (20qsns)

1. What is meant by GOMS?
2. Define cognitive complexity theory.
3. What is meant by Backus Naur Form? Give an example.
4. What is Task Action Grammar?
5. What is Keystroke Level Model?
6. What is critical mass?
7. Who are stakeholders? What roles do they play?
8. What is meant by socio technical models?
9. What is CUSTOM?
10. What is open system task analysis (OSTA)?
11. Define speech act theory.
12. What is meant by text based communication?
13. What is meant by breakdown and repair?
14. What is cognitive model?
15. What is meant by group dynamics?
16. What are states in Three- State model?
17. What is meant by Face-to-Face communication?
18. What is meant by Free rider problem?

Long Answers Type Questions: (5 questions)

1. (i)Explain in detail about goal and task hierarchies.
   (ii) Explain in detail about linguistic models .
2. i)What are the different types of physical device models available in cognitive model?
   ii) Explain in detail about socio- technical modeling and soft system methodology.
3. What are the organizational issues present in socio organization?
4. Explain in detail about conversation based communication.
5. Briefly describe about communication and collaboration models