PRIYADARSHINI COLLEGE OF ENGINEERING, NAGPUR
CAT- 1 (2023-2024)

Department :- Computer Technology

Subject :- Human Computer Interface

Duration : 1.5 Hrs

Semester :- VII 'A/B'

Subject Code :- BTCT702T

Max Marks :- 35

Note: 1) All Questions are Compulsory

2) All Questions Carry Marks as Indicated

Q. No.	Questions	Marks	CO	BL
Q 1. I. A)	What is a semantic network? A. A model of short-term memory B. A model of long-term memory C. A model of physical memory D. A model of short and long-term memory	1 M	CO1	I
II.	For a product to be successful, it must be: A. Useful by humans B. Usable by humans C. Used by humans D. All of the above	1 M 4		I
B)	Explain in detail about Reasoning and problem solving?	5 M		II
C)	Describe five important differences between Short Term Memory and Long-Term Memory	7 M		II
	OR			
Q 2. I. A)	What are the major input senses? A. Sight, Hearing B. Touch C. Taste, Smell D. All the above	1 M	CO1	I
II.	A sensory memory exists for _____ channel A. haptic B. Visual C. iconic D. All of the above	1 M		I
B)	Define interaction. Explain the Models – frameworks of it?	5 M		I
C)	Briefly discuss about the types of memory in detail.	7 M		II
Q 3. I. A)	Which of the following are important in the design focus of HCI? A. Thinking of the user B. Testing the HCI C. Involving the users D. All of the above	1 M 4	CO2	I
II.	What are the steps involved in designing A. Communication B. Validation of models C. Time constraints D. All of the above	1 M		I
B)	Explain in detail about process of design with suitable examples.	5 M		II
C)	Briefly discuss about the three main approaches to prototyping.	7 M		II

OR

Q 4. I. A)	Design involves
	  A. achieving goals within constraints and trade-off between these
	  B. understanding the raw materials: computer and human
	  C. accepting limitations of humans and of design
	  D. All of the above
		1 M CO2	I

Q 4. I. A) Design involves
   A. achieving goals within constraints and trade-off between these
   B. understanding the raw materials: computer and human
   C. accepting limitations of humans and of design
   D. All of the above
<div align="right">1 M CO2 I</div>

II. There are _____ Normans principles
  A. 6
  B. 7
  C. 8
  D. 9
<div align="right">1 M I</div>

B) Explain the software life cycle process in a HCI software process.
<div align="right">5 M II</div>

C) With a neat sketch, describe about Interaction design process and golden rule of Design.
<div align="right">7 M I</div>

Q 5. I. A) Cognitive model represents
  A. interactive user
  B. Design of a model
  C. Screen
  D. None of theabove
<div align="right">1 M CO3 I</div>

II. Who are stakeholders?
  A. users in potential interest
  B. users are affected by success or failure of a system
  C. None of the above
  D. All of the above
<div align="right">1 M I</div>

B) What is meant by GOMS? give an example.
<div align="right">2 M I</div>

C) Describe cognitive model and its techniques.
<div align="right">3 M II</div>

<div align="center">OR</div>

Q 6. I. A) Difference between goal and task?
  A. goals – intentions what you would like to be true and internal, tasks – actions how to achieve it,actions external
  B. goals – intentions what you would like to be true and external, tasks – actions how to achieve it,actions external
  C. goals – intentions what you would like to be true and external, tasks – actions how to achieve it,actions internal
  D. None of the above
<div align="right">1 M CO3 II</div>

II. What is GOMS?
  A. Goals
  B. operator
  C. methods
  D. selections
  E. All of the above
<div align="right">1 M I</div>

B) What are the organizational issues present in socio organization?
<div align="right">2 M I</div>

C) Explain in detail about goal and task hierarchies.
<div align="right">3 M II</div>