VIT
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)
CHENNAI

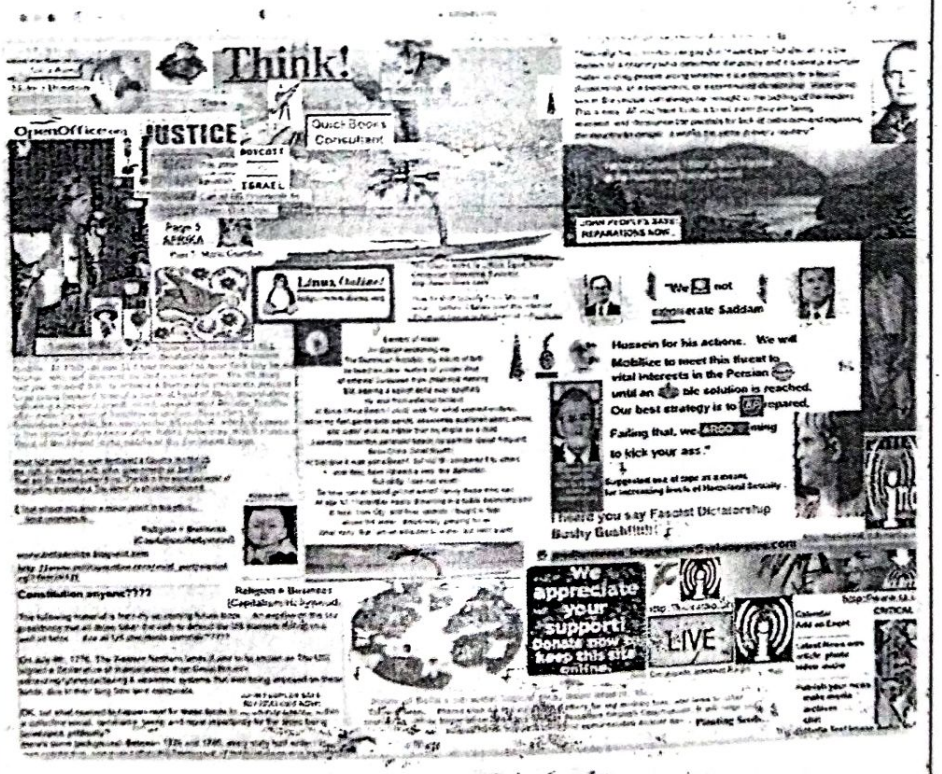
Reg. Number:	

Re-Continuous Assessment Test (ReCAT) – I - SEP 2024

Programme	:	B.Tech Computer Science and Engineering (Common to all branches)	Semester	:	Fall 24-2025
Course Code & Course Title	:	BCSE415L - Human Computer Interaction	Class Numbers	:	CH2024250100654 CH2024250101755 CH2024250101754 CH2024250101759 CH2024250101760 CH2024250101757 CH2024250101762 CH2024250101763 CH2024250101767 CH2024250100657 CH2024250100555 CH2024250101769 CH2024250100556
Faculty(s)	:	Dr. Deepika Roselind J Dr. Sandosh Dr. Ancy Micheal A Dr. Premanand V Dr. Arthi M Dr. Sudha C Dr. P Lakshmi Harika Dr. V Nivethitha	Slot	:	C1+TC1 C2+TC2 E1+TE1 E2+TE2
Duration	:	1 hour 30 Minutes	Max. Mark		50

Answer all questions

Q. No	Sub.	Description	Marks
1		VIT Chennai is developing a desktop app to support students' academic and e-learning activities. The app allows users to create notes in various forms such as text, drawings, photographs or saved web content. The app must provide an efficient and user-friendly interface for students to organize and manage their notes. Consider the task of creating a new notebook, adding a text note, tagging the note and exporting it as a PDF. Using the GOMS model, describe in detail the user's interaction steps with the UI and predict the time required for each physical action to complete this task.	10
2		Assume that you are designing the UI for a personal finance management app 'SPENDALYZER' that helps users track their expenses, set savings goals and receive insights into their spending habits. i. Design an UI for logging expenses, visualizing spending trends and generating monthly reports. [7 M] ii. What specific improvements or additions can be added	10

3		Sarah is a UI designer designing a public transportation app that dedicatedly caters for people with disabilities. The app will allow users to book tickets, check real-time schedules and receive notifications about platform changes. Consider the following tasks such as booking a ticket for a train journey using the app, receiving notifications about changes in platform/timing and navigating the app for checking train schedules. For each task mentioned above, design and explain how the UI would accommodate users with visual, hearing and motor impairments with relevant input, output devices and necessary customizations.	10
4		You are tasked with designing an automated self-checkout system for a grocery store. The system should allow customers to scan items, process payments, and print receipts without assistance from a cashier. The store management wants the system to be simple to use and accessible for customers of all age groups. i. Develop a HTA diagram to break down the task of completing a self-checkout process. [6 M] ii. Identify any potential bottlenecks or complexities and suggest design improvements to ensure that the system is user-friendly for all customer demographics. [4 M]	10
5		Consider the screenshot of the website design provided and answer the questions provided below.  i. Specify the Norman's principles of interaction design that have been violated in this website design. [7 M] ii. Examine the impact of Norman's principles on increasing the user satisfaction. [3 M]	10

**********All the best **********