



# VIT

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

## Continuous Assessment Test – I February 2024

Programme	B.Tech (CSE)	Semester	Winter Semester 2023-2024
Course	Human Computer Interaction	Code	BCSE415L
		ClassNbr	CH2023240501462 CH2023240501478
Faculty	Dr. K. Kabilan, DrV.Nivethitha	Slot(s)	B1+TB1
Time	90 minutes	Max.Marks	50

### Answer ALL the Questions

Q. No	Description	Marks
1.	<p>UI-Tech company is tasked with developing an online text editor. It should be an easy-to-use tool for online text editing that doesn't require its users to go through intricate procedures. Users don't need to learn new editing features as they are similar to ones used in text editing programs like MS Word. Users can copy-paste the text in the provided box or upload a text file by browsing from their device. They can also upload files saved in Google Drive or Dropbox directly to this tool. The tool should provide a text editing toolkit to format the file as per user requirements.</p> <p>As a UI designer of the application, evaluate various HCI interaction styles by categorizing and comparing their potential applications in designing the given online text editor to make it both appealing and interactive. Illustrate how each style contributes to enhancing user experience and engagement within the context of online text editor.</p>	[10]
2.	<p>Working as a UI designer for a startup developing an online learning platform, focused on creating a user-friendly environment for learners to access educational resources, engage with course materials, and collaborate. The platform, offering a wide range of courses across subjects, aims to cater to learners of all levels and interests. It should equip users with the tools to acquire knowledge, enhance skills, and achieve learning goals effectively.</p> <p>(a) Develop a systematic interaction model to enhance the user experience, specifically focusing on user navigation, content interaction, and collaborative engagement within the context of the online learning platform.</p>	[10]



(b) Analyze the way to align this interaction model with Norman's Execution-Evaluation model to ensure the effective execution of user goals. Describe the steps in detail, considering the platform's goal to provide a comprehensive and user-friendly environment catering to learners of various backgrounds and interests.

3. In a dynamic travel website scenario, users engage with the application to perform a range of tasks related to travel planning and booking. The website should offer a user-friendly interface that enables travelers to explore diverse destinations, conduct travel searches based on preferences, plan detailed itineraries, and seamlessly proceed through the booking process. Users should have the flexibility to browse through various travel options, including flights, accommodations, and activities, to curate personalized travel experiences. The dynamic nature of the website ensures that real-time updates, travel deals, and relevant information are readily available, enhancing the overall user experience. Through the human problem-solving model design and illustrate the hierarchical planning of the interface design for the above scenario. [10]
4. As a UI designer, you are tasked with creating a Mobile Fitness Application (My-Fit). The App is planned to have the features such as Workout-Monitor to display insights and statistics for runs, walks, and swimming, Set-Goal to set goals for Weight loss, Weight gain, Macronutrients, Calories, Water intake, Sleep time & Daily step count and Activity-Tracker to enable users to check their activity history anytime, anywhere. Design a few UIs for My-Fit considering and highlighting the design guidelines and features related to effective usability. From your design analyze the implication of Fitts' Law to improve usability and satisfaction of user. [10]
5. The city music shop is planning to install a music kiosk in the waiting hall of its shop. The UI of the music kiosk provides the users with a one-stop music streaming station for all their music needs. Music lovers can easily search for any songs, stream, and provide ratings and reviews. The user can also download the songs, set it as their caller tune to their mobile devices. The application facilitates the user to identify and network people with same musical interest by providing the logs of the users whoever searched, streamed, and reviewed the songs earlier. It provides multi-featured search options for song selection and to network people. Assume that you are the UI designer for the music kiosk application. Using the appropriate HCI design principles and guidelines, design the user interface for the music kiosk. Justify the principles and guidelines used. [10]