



Continuous Assessment Test (CAT) – II October 2025

Programme	: B.Tech	Semester	: Fall 25-26
Course Code & Course Title	: BCSE415L Human Computer Interaction	Slot	: C1+TC1
Faculty	: Dr. Brindha V Dr. Sridhar R	Class Number	: CH2025260101468 CH2025260100551
Duration	: 90 Mins	Max. Mark	: 50

General Instructions: < Use this space to provide additional information such as graph sheet, data book etc.>

- Write only your registration number on the question paper in the box provided and do not write other information
- Use statistical tables supplied from the exam cell as necessary
- Use graph sheets supplied from the exam cell as necessary
- Only non-programmable calculator without storage is permitted

Answer all questions

Q. No	Description	Marks	CO	BT Level
	Part -A Answer all questions			
1	<p>A government agency plans to digitize the post office savings bank account opening form shown below. Redesign the form's digital interface by applying the principles of visual pleasing composition in HCI.</p> <p>a. Identify at least five properties of visual pleasing composition that are most suitable for this below form. (5 Marks)</p> <p>b. Suggest and explain specific improvements in the redesign of the digital interface to enhance clarity, readability, and user experience. (5 Marks)</p>	10	CO3	K3

Form-I

POST OFFICE SAVINGS BANK

SB-3

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Application for opening of an account (Saving/RD/TD/1/2/3)
ACCOUNT NUMBER (For office)

1. Name of Post Office: LAIPAT NAGAR NEW DELHI2. Date of opening of 11-03-20183. Type of Account: SSA SB/RD/TD(1/2/3/5 year/1 M/5/SSA)4. Amount of Initial deposit (In Figures) 1000
(In words)ONE THOUSAND ONLY

5. Amount of initial deposit: (In block letters)

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Photograph
of
depositor
(Optional)

6. Date of birth of depositor:

KRTI KKUREJA OYG6. Residential address: NEW DELHI - 1100247. Date of birth of 11-01-19828. Date of birth of depositor: 9/11, DEFENCE COLONY NEW DELHI - 110024 NEW DELHI -8. Applicant's relation with minor: 15-11-2008Use Cheque book (in case of saving account only) NO

You are hired as an HCI expert to design a mobile food delivery app like Swiggy/Zomato. The app must allow users to

- Browse restaurant categories
- Search for food
- Add items to a cart
- View the cart and checkout

a. Draw a low-fidelity wireframe layout of the Home Screen and Cart Screen, clearly label all major elements and apply suitable HCI screen design principles. (5 marks)

b. During development, the company noticed a difference in cost when projects were built with and without wireframing. Based on this information, calculate the total cost for both approaches and calculate the percentage of cost saved when wireframing was used and briefly explain what this result indicates about the value of wireframing in HCI-based design. (5 marks)

10

CO2

K4

	<table><tr><th>Approach</th><th>Initial Development Cost</th><th>Redesign Cost after User Testing</th><th>Total Cost</th></tr><tr><td>Without Wireframing</td><td>Rs. 60,000</td><td>Rs. 25,000</td><td>?</td></tr><tr><td>With Wireframing</td><td>Rs. 60,000</td><td>Rs. 8,000</td><td>?</td></tr></table>	Approach	Initial Development Cost	Redesign Cost after User Testing	Total Cost	Without Wireframing	Rs. 60,000	Rs. 25,000	?	With Wireframing	Rs. 60,000	Rs. 8,000	?			
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Without Wireframing	Rs. 60,000	Rs. 25,000	?													
With Wireframing	Rs. 60,000	Rs. 8,000	?													
	Part -B Answer all questions															
3	<p>A user must rename an important report file in a file manager (graphical). The current task sequence are as follows</p> <ol style="list-style-type: none">1. Move right hand from keyboard to mouse.2. Point to the file (single click to select).3. Right-click the file to open context menu.4. Move mouse to Rename menu item and click it.5. Decide the new filename (pick wording and check for conflicts).6. Type the new filename "Final_Report_2025" (16 characters; note uppercase and underscore count as normal keystrokes).7. Press Enter to confirm.8. Decision check: If a filename conflict dialog appears (same name already exists), the user must:<ol style="list-style-type: none">8a. Mentally decide to overwrite (M), then press O (one keystroke mapped to "Overwrite") and press Enter (K).If they instead cancel and choose a different name, that branch is not considered here. <p>Assume the right-click counts as a P (pointing + click), and moving inside the context menu to Rename + click counts as a second P. Typing each character is one K. The conflict dialog (if it appears) requires one M then two keystrokes (O + Enter).</p> <p>a) Identify where the M operator(s) should be inserted in the task sequence, and briefly justify your answer. (3 marks)</p> <p>b) Compute the total estimated execution time if no filename conflict occurs during renaming. Show all calculations clearly. (9 marks)</p> <p>c) Compute the total estimated time if a filename conflict occurs and the user chooses to overwrite (use the conflict branch). Show calculations. (3 marks)</p>	15	CO3	K3												

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Welcome To L.A. Ornamental Fences

L.A. Ornamental Corp
1701 N. Main Street
Mesa, AZ 85147
Phone: 480-835-2119
L.A. Ornamental@aol.com

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Driveway Gates

Modern Driveway Gate

Custom Driveway Gate

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Privacy Garden Gate

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BETWIN Openers
PowerMaster Gate Openers

All of our Aluminum or wrought iron Gates or Fences are designed and manufactured to withstand a range of outdoor conditions. Our commitment to our customers and dedication to produce quality gates has earned us thousands of satisfied customers.

Although we offer a wide selection of Ornamental Designs or Decorative Designs, we can design and manufacture any style in aluminum wrought iron metals. L.A. Ornamental (L.A. Ornamental Fences) also offers Fences, Gardens or Walk Thru Gates to match your driveway gates. With nearly 40 years of experience in manufacturing and designing elegant, custom, or exotic Aluminum Driveway Gates and Fences, our past customers can have peace of mind that they are receiving quality workmanship. We are a Fence Company that gives our customers 100% of dedication to manufacture quality driveway gates and fences. For a quote please send an e-mail to L.A. Ornamental@aol.com

If you looking for Privacy into your Driveway Gates, Garden Gates, or Walk Thru Gates, we offer a Solid Backing with your choice of Aluminum, Steel, Plexiglas or Plastic. All Solid Backing are offered in many different colors to choose from. Privacy Gates

We offer a large selection of Gate Openers and Gate Operators for Residential Driveway Gates, Light or Heavy Commercial Gates, or for Backyards. If you not sure the style or size of the Gate opener / gate operator you need, please e-mail or contact us so we can gladly help you to the correct choice. We offer all types of Gate Openers / Gate Operator, Sliding Gate Operator / Gate Operator, Swing Gate Operator / Operator, Hydraulic Gate Operator / Gate Operator. We also have a wide selection of replacement Main Control Boards for all brands, and Remote Controls for Motor or Keychains.

Railings: L.A. Ornamental Rack Corp offers top quality Balcony Railings, Picket Fence Railings, Deck Railings in Metal, Aluminum, or W

You are hired as an HCI expert to review the design of a company's website shown above. The company aims to attract new customers, but users have reported several complaints about the site.

- Identify and explain three positive aspects of the current interface, providing justification for each. (4 marks)
- Perform a critical analysis of the interface by identifying seven poor design elements that reduce usability and user experience. For each element, propose a suitable redesign improvement based on HCI screen design principles. (7 marks)
- Create a simple sketch to visually represent your proposed improved design layout for the website. (4 marks)

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3/10/25