

MID-SEMESTER EXAMINATION, September 2024

Max. Marks: 25
Duration: 1:30 Hours

Course Title: Human Computer Interface
Course Code: COCSE59/CACSE55

Note: Attempt ALL questions in the GIVEN ORDER only. Missing data/information (if any), may be suitably assumed and mentioned in the answer. Diagrams should be drawn neatly.

Q. No.	Question	Marks	CO
1a	"The remarkably rapid and widespread adoption of mobile devices supports personal communication, collaboration, and content creation." Comment on the difference between how users interact with stationary computing devices and mobile devices.	3	CO2
1b	Differentiate between effectiveness and efficiency. What usability measures can be used to determine effectiveness and what usability measures can be used to determine efficiency?	2	CO1
2a	Compare WhatsApp and MS Excel on the basis of the following usability measures: <ul style="list-style-type: none">• Time to learn• Speed of performance• Rate of errors by users• Retention over time• Subjective satisfaction	3	CO1
2b	Users with different backgrounds interact with computers differently. Provide your hypotheses for the following: <ul style="list-style-type: none">• Difference in the choice of video games among male and female users• Difference in the way an Indian person, an Arabian person and a Japanese person scan the screen of a computer	2	CO3
3a	Explain the following concepts related to interface design with suitable examples: <ul style="list-style-type: none">• Compatibility of data display with data entry• Knowledgeable intermittent users• Permit easy reversal of actions	3	CO1
3b	What techniques can be used to draw the attention of the user to a particular part of the screen?	2	CO3
4a	Provide the names of any three theories for evaluating user interfaces. Explain them in brief.	3	CO2
4b	What is direct manipulation style of interaction? Name two devices which allow such interaction. Justify your answer.	2	CO3
5a	Explain the stages-of-action theory using the concepts of gulf of execution and gulf of evaluation. How a touchpad affects gulf of evaluation?	3	CO1

5b	Suggest ways for improving the usability of the widgets given in Figures 1 to 4.	2	C03
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Figures

Enter your gender:

Figure 1

(Textbox)

Enter your date of birth:

01 ▼

Jan ▼

1900 ▼

Figure 2

(Dropdown menus)

Enter the name of your university:

☐ Netaji Subhas University of Technology

☐ DTU ☐ igdtuw ☐ IIT Delhi

Figure 3

(Checkboxes)

Do you want to save the changes before closing the file?

No

Yes

Figure 4

(Dialog box)