Reg. No. : | | | | | | | | | | | |

Question Paper Code: U9279

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2025

Open Elective

Computer Science Engineering

21UCS979 - USABILITY ENGINEERING

(Common To All Branches)

(Regulations 2021)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1.	Define effectiveness in usability.	CO1- U
2.	State one benefit of investing in usability engineering.	CO1- U
3.	Mention two types of users in UCD	CO1- U
4.	What is task analysis?	CO2- U
5.	Define qualitative usability data.	CO1- U
6.	Mention any two metrics used in usability testing.	CO1- U
7.	Define feedback in usability	CO 1- U
8.	What is low-fidelity prototyping?	CO 1- U
9.	Give an example of a mobile-friendly design feature.	CO 1- U
10.	How would you apply universal design principles to make a university website accessible to students with disabilities?	CO2- App

PART – B (5 x 16= 80 Marks)

11. (a) Discuss the relationship between usability, user experience, and product success.   CO1 – U   (16)

Or

(b) Explain with examples how usability goals guide design decisions in real-world applications.   CO1 – U   (16)

12. (a) Discuss how user-centered design improves product usability and user satisfaction. CO2- App (16)

Or

(b) Explain contextual inquiry and its role in observing user behavior in real environments. CO2- App (16)

13. (a) Explain formative evaluation and how it helps improve prototypes during development. CO1 - App (16)

Or

(b) Apply Nielsen's heuristics to improve the navigation and layout of a news website. CO1 - App (16)

14. (a) Explain the principle of consistency in user interface design and its impact on usability. CO2- U (16)

Or

(b) Explain the roles of wireframes and mockups in the design process. CO2- U (16)

15. (a) Explain the concept of accessibility and universal design principles. Discuss their importance in software and product design. CO1- U (16)

Or

(b) Explain how AI is transforming usability engineering and personalizing user experiences. CO1- U (16)

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