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Question Paper Code:UEG77

B.E./B.Tech. DEGREE EXAMINATION, APRIL / MAY 2025

Professional Elective

Artificial Intelligence & Data Science

21ADVG77–HUMAN COMPUTER INTERACTION

(Regulations 2021)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (5 x 20 = 100 Marks)

1. (a) Describe in detail about the direct manipulation graphical systems with command-line interfaces, highlighting their advantages and disadvantages. CO1- U (20)
Or
(b) Describe in detail about the principles of an effective web user interface (WUI) and explain how they contribute to usability. CO1- U (20)
2. (a) Apply a case study of a poorly designed business application and propose improvements based on UI design principles, usability considerations, and business requirements. CO2-App (20)
Or
(b) Apply a menu structure for a retail website, detailing its functions, contents, formatting, and phrasing to enhance user navigation and experience. CO2-App (20)
3. (a) Apply any of the UI design of a popular operating system (e.g., Windows 11) and suggest improvements based on usability principles. CO2-App (20)
Or
(b) Solve a web-based control panel for an online booking system, incorporating appropriate screen-based and device-based controls. CO2-App (20)

4. (a) Apply a popular website's approach to accessibility and internationalization, identifying strengths and areas for improvement. CO2-App (20)

Or

- (b) Implement a feedback and guidance system for an e-commerce website that ensures effective user assistance. Justify your design choices. CO2-App (20)

5. (a) Given a specific Windows application interface, analyze how visualization techniques can improve usability and suggest improvements. CO2-App (20)

Or

- (b) Implement a test plan for evaluating a prototype's layout in a Windows environment, including test-retest methods. CO2-App (20)