

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -2 EXAMINATIONS- 2026

B.Tech-II Semester (CSE/IT/BT/ECE/CE)

COURSE CODE (CREDITS): 25B11CI418 (3)

MAX MARKS: 25

COURSE NAME: Visual and Interaction Design

COURSE INSTRUCTOR: Mr. Gaurav Negi

MAX. TIME: 1 Hour 30 Min

Note: (a) All questions are compulsory.

(b) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems

(c) Use of calculator is not allowed

Q.No	Question	CO	Marks
Q1	Break down a real-world micro-interaction (e.g., "Add to Cart") into: a) Trigger b) Rules c) Feedback d) Loops/Modes Analyze how each component contributes to usability.	1	4
Q2	Analyze the differences between: a) Hover states b) Button feedback c) Loading animations Compare their roles in User perception, Feedback clarity and Interaction efficiency	1	3
Q3	Evaluate a mobile app interface (e.g., shopping or social media app). Judge its effectiveness based on: a) Micro-interactions b) Feedback c) Consistency d) Usability	2	4
Q4	Critically evaluate the design philosophies of: a) Apple Human Interface Guidelines b) Material Design Which is more effective for usability? Justify with reasoning.	2	4

Q5	Explain different types of delays in UI/UX (0.1 sec to >10 sec) and their impact on user experience.	2	3																		
Q6	<p>A system reports:</p> <p>Total users = 800 Successful task completion = 520 Errors = 200 Abandonment = 80 Avg response time = 3.5 seconds</p> <p>a) Compute Success rate, Error rate and Abandonment rate. b) Classify UX performance based on delay c) Design an improved interaction flow to optimize performance</p>	3	3																		
Q7	<p>Two UI designs are evaluated using multiple UX metrics:</p> <table border="1" data-bbox="295 795 1093 1198"> <thead> <tr> <th>Metric</th> <th>Design A</th> <th>Design B</th> </tr> </thead> <tbody> <tr> <td>Users</td> <td>300</td> <td>300</td> </tr> <tr> <td>Successful Tasks</td> <td>210</td> <td>255</td> </tr> <tr> <td>Avg Time per Task</td> <td>6 sec</td> <td>4 sec</td> </tr> <tr> <td>Errors</td> <td>60</td> <td>30</td> </tr> <tr> <td>Abandonment</td> <td>30</td> <td>15</td> </tr> </tbody> </table> <p>a) Calculate Success Rate, Error Rate and Abandonment Rate. b) Compute Task Efficiency Score using: $\text{Efficiency} = \text{Success Rate} / \text{Avg Time}$ c) Analyze both designs in terms of Efficiency, Accuracy (errors) and User retention (abandonment)</p>	Metric	Design A	Design B	Users	300	300	Successful Tasks	210	255	Avg Time per Task	6 sec	4 sec	Errors	60	30	Abandonment	30	15	3,4	4
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