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Question Paper Version : A

Fourth Semester B.E./B.Tech. Degree Examination, Dec.2024/Jan.2025
UI/UX

Time: 1 hr.]

[Max. Marks: 50

INSTRUCTIONS TO THE CANDIDATES

1. Answer all the **fifty** questions, each question carries one mark.
2. Use only **Black ball point pen** for writing / darkening the circles.
3. **For each question, after selecting your answer, darken the appropriate circle corresponding to the same question number on the OMR sheet.**
4. Darkening two circles for the same question makes the answer invalid.
5. **Damaging/overwriting, using whiteners** on the **OMR** sheets are strictly prohibited.

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1. Identify which of the following statements best describes the relationship between usability and user experience (UX)?
 - a) Usability is a subset of UX, focusing primarily on how easy and efficient it is for users to achieve their goals.
 - b) UX is a subset of usability, focusing primarily on the technical performance of a product.
 - c) Usability and UX are unrelated concepts, with usability concerning functionality and UX concerning aesthetics only.
 - d) Usability solely determines the emotional impact a product has on its users, which is the essence of UX.
 2. Identify how does emotional impact play a role in user experience (UX)?
 - a) Emotional impact is irrelevant to UX as it only concerns the technical aspects of a product.
 - b) Emotional impact is the primary factor in UX, disregarding usability and functionality.
 - c) Emotional impact complements usability and functionality by enhancing user satisfaction and engagement.
 - d) Emotional impact solely defines the usability of a product.

3. Identify why is it important to build a business case for user experience (UX)?
 - a) A business case for UX is unnecessary because UX improvements do not translate into financial gains.
 - b) Building a business case for UX helps in securing funding and support from stakeholders by demonstrating potential returns on investment through improved customer satisfaction and loyalty.
 - c) A business case for UX should focus solely on the aesthetic enhancements of a product.
 - d) The business case for UX should only be considered after the product has failed in the market.
4. Identify which of the following best describes the role of emotional impact in user experience (UX)?
 - a) Emotional impact is the primary determinant of a products usability.
 - b) Emotional impact enhances the overall user experience by creating positive feelings and engagement with the product.
 - c) Emotional impact is only relevant during the initial interaction with a product.
 - d) Emotional impact is less important than technical performance and functionality in UX.
5. Identify how can emotional impact influence user behavior and perception in the context of user experience (UX)?
 - a) Emotional impact has no influence on user behavior and perception.
 - b) Positive emotional impact can increase user satisfaction, loyalty and the likelihood of recommending the product to others.
 - c) Emotional impact only affects the aesthetic appreciation of a product, not user behavior.
 - d) Negative emotional impact always leads to increased usability issues.
6. Identify what is a key consideration when aiming to create a positive emotional impact in user experience design?
 - a) Focus solely on the visual design elements.
 - b) Understand the target audience's needs, preferences and emotional triggers to design experiences that resonate with them.
 - c) Prioritize functionality over any emotional considerations.
 - d) Avoid any form of user feedback during the design process.
7. Identify what is the first step in extracting interaction design requirements for a UI/UX project?
 - a) Developing high-fidelity prototypes.
 - b) Conducting user research to understand the target audience's needs, behaviors and pain points.
 - c) Creating a detailed project timeline.
 - d) Writing code for the initial version of the product.
8. Identify which method is commonly used to gather user needs and requirements for interaction design?
 - a) A/B testing
 - b) Usability testing
 - c) User interviews and surveys
 - d) Load testing

9. Identify why is it important to involve stakeholders in the process of extracting interaction design requirements?
- a) To ensure that the design aligns with business goals and user needs.
 - b) To decrease the amount of user research needed.
 - c) To speed up the development process by reducing feedback loops.
 - d) To limit the number of design changes during development.
10. Identify what role does creating persona's play in the process of defining interaction design requirements?
- a) Personas are used to test the technical performance of a product.
 - b) Personas help designers understand and visualize the target users, characteristics, needs and goals, guiding design decisions.
 - c) Personas are primarily used to track project timelines and deadlines.
 - d) Persona's are used to develop coding standards for the development team.
11. Design concept includes _____
- a) Usability
 - b) Accessibility
 - c) Both (a) and (b)
 - d) None of these
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15. Identify how do usability tests contribute to refining interaction design requirements?
- a) They eliminate the need for user feedback in the design process.
 - b) They provide direct insights into how real users interact with the design, highlighting areas that need improvement.
 - c) They focus exclusively on the visual aspects of the design.
 - d) They are used only after the final product has been developed.

16. Identify which of the following is a key outcome of properly defined interaction design requirements?
 - a) A visually appealing user interface with minimal functionality.
 - b) An efficient development process with no need for revisions.
 - c) A user-centered design that effectively meets user needs and enhances the overall user experience.
 - d) A decrease in overall project costs.
17. Identify which of the following is a common method used for formal requirement extraction in UI/UX?
 - a) Random sampling
 - b) Stakeholder interviews and workshops.
 - c) Creating high-fidelity prototypes before gathering any user input.
 - d) Implementing the first idea that comes to mind.
18. Which of the following tools is often used to gather user requirements in a structured manner?
 - a) Wireframes
 - b) User personas
 - c) Requirements management software like JIRA or Trello
 - d) CSS frameworks like Bootstrap.
19. Identify what happens if the user has a different mental model than the designer?
 - a) The user will have no impact on the systems usability.
 - b) The designer must redesign the system immediately.
 - c) The system will automatically adapt to the user's mental model.
 - d) The user may misunderstand how to use the system effectively.
20. Identify what is a designer's mental model?
 - a) Physical model of the system's hardware.
 - b) Conceptualization of the envisioned system by the designer.
 - c) List of tasks the system should perform.
 - d) User's understanding of how the system works.
21. Identify what is the main role of a visual designer during the visual design and visual comps phase?
 - a) To create wireframe sequences representing key workflows.
 - b) To annotate wireframes with call-out text and data elements.
 - c) To write detailed documentation language for the design.
 - d) To produce pixel-perfect mockups of the graphical look and feel of the user interface.
22. Identify in the context of intermediate design, what are information objects primarily meant to do?
 - a) Store user interface layouts and graphics.
 - b) Provide a visual representation of system data.
 - c) Be accessed and manipulated by users in their work roles.
 - d) Define the system's color scheme.

23. Identify during intermediate design iteration, high-fidelity mockups can serve to:
 - a) Test the final design before launch.
 - b) Create visual compositions for marketing purposes.
 - c) Enhance the systems performance.
 - d) Demonstrate leading conceptual design candidates to upper management.
24. Identify what is a key advantage of using illustrated scenarios in intermediate interaction design documents?
 - a) They are suitable only for initial design stages.
 - b) They eliminate the need for textual descriptions.
 - c) They focus only on visual elements without textual support.
 - d) They combine visual and textual communication to share details.
25. Identify what is meant by 'visual comps' in the context of visual design?
 - a) Early wireframes defining user workflows.
 - b) Conceptual sketches without precise details.
 - c) Pixel-perfect mockups of the graphical interface.
 - d) Annotated wireframes for iteration and evaluation.
26. Identify what are wireframes primarily used for in the field of interaction design?
 - a) Creating high-fidelity visual representations.
 - b) Documenting, communicating and prototyping interaction designs.
 - c) Developing complex algorithms for software.
 - d) Implementing final website designs.
27. Identify which type of prototype is commonly used during the detailed design iteration?
 - a) Low-fidelity wireframes
 - b) Paper prototypes
 - c) High-fidelity interactive mockups
 - d) Conceptual sketches
28. Identify what does the term 'information object' refer to, based on the context provided?
 - a) A wireframe element used for screen layouts.
 - b) A visual representation of design concepts.
 - c) A navigation element for back and forth movements.
 - d) An internally stored work object shared by users and the system.
29. Identify what is one of the most important aspects to remember about wireframing?
 - a) Detailing
 - b) Modularity
 - c) Complexity
 - d) Consistency
30. Identify which user experience goal example is specifically mentioned for a life-critical system?
 - a) Ease-of-use
 - b) Safety
 - c) Walk-up-and-use learnability
 - d) Avoiding errors for intermittent users.
31. Identify what is the main purpose of a horizontal prototype?
 - a) To provide in-depth detail of a specific feature.
 - b) To optimize the front-end and back-end integration.
 - c) To test the physical interaction of the design.
 - d) To provide an overview of many features with limited functionality.

32. Identify which of the following best describes a 'T' prototype?
- a) It offers a shallow overview with detailed development in a few areas.
 - b) It represents the full system but in a low-fidelity format.
 - c) It focuses exclusively on the depth of a single feature.
 - d) It includes a 3D physical mockup for tangible interaction.
33. Identify why might a team use a local prototype?
- a) To evaluate specific isolated design details.
 - b) To simulate the entire system workflow in high fidelity.
 - c) To provide a fully functional back-end system.
 - d) To combine physical and software elements of a design.
34. Identify what is a significant benefit of using physical prototypes over graphical representations on a screen?
- a) Users can access more detailed information.
 - b) Users experience less usage interference.
 - c) Users find it faster to visualize ideas.
 - d) Users can hold and feel the product as a real object.
35. Identify why are low-fidelity prototypes often kept private within the project team?
- a) They require too much time to update frequently.
 - b) They do not provide any useful feedback.
 - c) They can be misinterpreted by users and customers if not carefully explained.
 - d) They are too expensive to produce for public use.
36. Identify what is the main difference between horizontal and vertical prototypes?
- a) Vertical prototypes offer a shallow design overview, while horizontal prototypes provide in-depth feature details.
 - b) Horizontal prototypes cover a broad range of features with less depth, while vertical prototypes focus extensively on a narrow range of features.
 - c) Horizontal prototypes are fully functional, while vertical prototypes are not.
 - d) Horizontal prototypes are used for localized design issues, while vertical prototypes include full system functionality.
37. Identify what is the primary benefit of using a T prototype?
- a) It provides the lowest possible fidelity for initial designs.
 - b) It entirely replaces the need for horizontal and vertical prototypes.
 - c) It combines both horizontal and vertical prototyping advantages by providing a broad overview with detailed functionality in some areas.
 - d) It is only useful for isolated design issues like a local prototype.
38. Identify why might a design team choose to use a low-fidelity prototype?
- a) Low-fidelity prototypes look exactly like the final system, providing realistic evaluations.
 - b) Low-fidelity prototypes are used exclusively when producing advance sales demos.
 - c) Low-fidelity prototypes allow quick construction and iteration, making them cost-effective and fast to produce.
 - d) Low-fidelity prototypes are required whenever final implementation is imminent.

39. Identify which advantage is described for placing paper prototypes inside mobile devices?
- a) It eliminates the need for any user input.
 - b) Users can interact with the device physically.
 - c) The device will function without any power source.
 - d) It guarantees the prototype is free from any errors.
40. Identify why low-fidelity prototypes should be explained carefully to non-team members?
- a) They require special equipment to understand.
 - b) They are too advanced for the early stages of design.
 - c) They contain highly sensitive information.
 - d) They can be misinterpreted by those not familiar with their use.
41. Identify what are the UX design guidelines used for?
- a) Interpreting design guidelines
 - b) Planning
 - c) Translation
 - d) All of these
42. Identify what is a crucial factor to consider when designing a UX environment?
- a) The color of the interface
 - b) The length of the content
 - c) Human memory limitations
 - d) Who the intended audience is
43. Identify in the context of UX design, what does the term 'Physical Action' refer to?
- a) Incorporating interactive elements into the design
 - b) How the user interacts with the interface
 - c) The orientation of the device
 - d) The physical action the user needs to take to use the product.
44. Identify what comes under the assessment in UX Design Guidelines?
- a) Assessing the design guidelines
 - b) Assessing the outcomes
 - c) Assessing the plan
 - d) All of these
45. Identify what does the term 'Translation' refer to in UX Design?
- a) Translating the design into different languages.
 - b) Transferring the inputs to outputs.
 - c) The conversion of users actions and requirements into design elements.
 - d) Altering the design based on user location.
46. Identify what is the function of 'Outcomes' in UX design?
- a) To plan the next steps
 - b) To measure the success of the design
 - c) To analyze user interaction
 - d) To interpret design guidelines
47. Identify what do UX design guidelines help with?
- a) Improve usability and accessibility
 - b) Increase interface complexity
 - c) Limit design creativity
 - d) Increase the time users spend on the site
48. Identify an example of translation in UX design could be?
- a) Storyboarding
 - b) User flow diagrams
 - c) Wireframing
 - d) Prototyping

49. Identify what does planning in UX design involved?
- a) Brainstorming sessions
 - b) Scoping the project
 - c) Deciding the user interface design
 - d) All of these
50. Identify why are human memory limitations considered while designing a UX environment?
- a) To plan the spacing on the page
 - b) To limit the use of multimedia
 - c) To design the interface in a way that doesn't overload the users memory capacity.
 - d) To decide the colors used in the design.

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