MAKE-UP EXAM

BIDTK158/258

USN

Question Paper Version : A

First/Second Semester B.E./B.Tech. Degree Examination, Nov./Dec. 2023
Innovation and Design Thinking

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. What is the main focus of design thinking?
   a) The designer b) The user c) The business d) The technology

2. Why is it important to create a shared model in team-based design?
   a) To ensure effective communication and collaboration.
   b) To validate assumptions about the solution.
   c) To test the final product.
   d) To create a polished final product.

3. The empathize stage in design thinking is also known as the _____ stage.
   a) Observe stage b) Ideate stage c) Understand stage d) Test stage

4. What is the primary goal of the define stage in design thinking?
   a) To understand the problem and user's needs.
   b) To generate creative solutions.
   c) To build and test prototypes.
   d) To analyze data and feedback.

5. Which of the following is not a common technique used in the define stage?
   a) Empathy maps b) Brain storming
   c) User research d) Building a prototype.

6. What is the output of the define stage in design thinking?
   a) A list of potential solutions b) A clear problem statement and user needs
   c) A working prototype d) User feedback and data analysis.

7. What is the main idea behind the ideate stage?
   a) To generate a large number of ideas to solve the problem.
   b) To validate the existing solution.
   c) To identify the problem and user needs.
   d) To test the prototypes.

8. Which of the following is not a common technique used in the test stage?
   a) User testing b) Surveys c) User observation d) Mind mapping.

9. The test stage in design thinking is also known as the _____ stage.
   a) Evaluate stage b) Prototype stage c) Understand stage d) Test stage.

10. Which of the following is an example of a project management software?
    a) Invision b) Trello c) Google meet d) Adobe XD

11. What is the main benefit of using a design thinking approach in IT?
    a) Efficiency b) Cost effectiveness
    c) Improved user satisfaction d) Innovation.

12. Which of the following is not a stage in design thinking process?
    a) Test b) Empathize c) Define d) Plan

13. What is the primary benefit of using an MVP approach in product development?
    a) It allows for rapid iteration and feedback b) It guarantees the success of final product
    c) It saves time and resources d) It ensures a high quality final product.

14. What tool is used to create a visual representation of a process or work-flow?
    a) Flow charts b) PERT diagrams c) Gantt charts d) Mind maps

15. What is an example of a method for conducting user research?
    a) Surveys b) A/B testing c) Usability testing d) Design sprints

16. What is the main objective of the empathize stage in design thinking?
    a) Understanding the problem b) Generating ideas
    c) Identifying the user needs d) Building prototypes

17. Choose the answer option that reflects a technique that is not used in the empathize stage?
    a) User interviews b) Surveys c) Brain storming d) User observation

18. During the empathize stage, what is the main focus of the designer?
    a) Identifying problems
    b) Generating ideas
    c) Understanding the users needs, wants and pain points
    d) Building prototypes.

19. What is the primary goal of the ideate stage in design thinking?
    a) To understand the problem and users needs
    b) To generate creative solutions
    c) To build and test prototypes
    d) To understand the users emotions and perspectives.

20. What is the output of the ideate stage in design thinking?
a) A list of potential solution
b) A clear problem statement and user needs
c) A working prototype
d) A deep understanding of the user's emotions and perspectives.

21. "How might we" questions are generated during which stage of design thinking process?
a) Empathize b) Define c) Ideate d) Test

22. What is the main focus of design thinking in IT?
a) Efficiency b) Cost effectiveness
c) User-centeredness d) Innovation

23. What is an example of a tool to understand users needs, wants, pain points and goals?
a) User testing b) User centred design c) Surveys d) Empathy maps

24. What is the primary goal of the test stage in design thinking?
a) To understand the problem and the users needs
b) To generate creative solutions
c) To build and test a physical or virtual representation of the solution
d) To gather feed back and data to improve the solution.

25. What is the main goal of professional presentation designers?
a) To create visually stunning and effective presentations
b) To generate revenue
c) To entertain the audience
d) To create a polished final product.

26. What is the main focus of professional presentation designers when creating presentations?
a) The designer b) The user c) The business d) The technology

27. What is the main goal of an MVP?
a) To create a fully featured product
b) To validate a product idea and gather feedback
c) To release a product to the market
d) To generate revenue.

28. Which of the following is an example of an MVP?
a) A fully-featured mobile app. b) A landing page with a sign up form
c) A wireframe of a website d) A working model of a car

29. Which of the following is an example of a prototype?
a) A wireframe of a website b) A working model of a car
c) A finished mobile app d) A product brochure.

30. What is the first step in reverse engineering process?
a) Disassembly b) Analysis c) Reconstruction d) Documentation

31. Which type of reverse engineering involves breaking down a product into its constituent parts to analyze its design?
a) Physical reverse engineering b) Functional reverse engineering
c) Software reverse engineering d) Data reverse engineering

32. Which tool is commonly used in reverse engineering to create a digital 3D model of a physical object?
a) CAD software
b) Design thinking
c) Rapid prototyping
d) Usability testing

33. What is the purpose of reverse engineering in product design?
a) To identify the design flaws
b) To improve the product functionality
c) To understand the manufacturing process
d) All of these

34. Which of the following is not a benefit of reverse engineering?
a) Improved product design
b) Reduced manufacturing cost
c) Enhanced customer satisfaction
d) Increased product development time.

35. What is the main purpose of reverse engineering in product design?
a) To copy an existing product design
b) To understand how a product works
c) To create a new product from scratch
d) To save time in design process.

36. Which of the following is not a step in the reverse engineering process?
a) Disassembly
b) Analysis
c) Redesign
d) Documentation

37. What is the benefits of using reverse engineering in product design?
a) It allows for quick and easy product development.
b) It helps to identify potential design flaws.
c) It eliminates the need for product testing.
d) It reduces the cost of production.

38. Which of the following industries commonly uses reverse engineering in their design process?
a) Automobile
b) Fashion
c) Agriculture
d) Finance

39. What is the purpose of the technical drawing in design thinking process?
a) To communicate design ideas visually
b) To test the usability of a product
c) To conduct user research
d) To analyze market trends.

40. Which of the following is an example of a technical drawing used in design thinking process?
a) A user persona
b) A flow chart
c) A wire frame
d) A customer journey map.

41. What is the benefits of creating technical drawings during the design thinking process?
a) It helps to identify user pain points
b) It allows for quick iteration and refinement of design ideas
c) It provides insight into market trends
d) It improves team collaboration.

42. What tool can be used to create technical drawing in the design thinking process?
a) Adobe photoshop
b) Invision
c) Sketch
d) Trello

43. Which stage of the design thinking process involves creating technical drawing
a) Ideate
b) Prototype
c) Test
d) Empathize

44. What is the purpose of creating technical drawings in the design process?
a) To communicate design ideas to stakeholders
b) To generate new design ideas
c) To conduct user research
d) To test prototypes.

45. Which of the following is an example of a tool for creating technical drawing?
a) Adobe photoshop b) Sketch c) Auto CAD d) Invision

46. What is the primary goal of the prototype stage in design thinking?
a) To understand the problem and the users needs.
b) To generate creative solutions.
c) To build and test a physical or virtual representation of the solution.
d) To understand the users emotions and perspectives.

47. Which of the following is not a common technique used in the prototype stage?
a) Sketching b) Surveys
c) User observation d) Rapid prototyping.

48. What is the output of the prototype stage in design thinking?
a) A list of potential solutions
b) A clear problem statement
c) A working prototype
d) A deep understanding of the user's emotions and perspectives.

49. The prototype stage in design thinking is also known as the _____ stage.
a) Converge stage b) Test stage c) Understand stage d) Prototype stage.

50. What is the primary benefit of using a prototyping approach in product development?
a) It saves time and resources
b) It allows for rapid iteration and feedback
c) It guarantees the success of the final product
d) It ensures a high-quality final product.

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