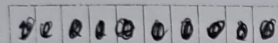


BIDTK158/258/22BD16

USN



Question Paper Version : A

First/Second Semester B.E./B.Tech/B.Design Degree Examination,
Dec.2024/Jan.2025

Innovation and Design Thinking

Time: 1 hr.]

[Max. Marks: 50

INSTRUCTIONS TO THE CANDIDATES

- Answer all the fifty questions, each question carries one mark.
 - Use only **Black ball point pen** for writing / darkening the circles.
 - For each question, after selecting your answer, darken the appropriate circle corresponding to the same question number on the OMR sheet.
 - Darkening two circles for the same question makes the answer invalid.
 - Damaging/overwriting, using whiteners** on the OMR sheets are strictly prohibited.
-
- Design thinking is a process of ____
 a) Thinking about design
 b) Designing ways in which people think
 c) Asking users to solve problems
☒ d) Defining framing and solving problems from user's perspective
 - Design thinking typically helps in ____
☒ a) Innovation
 c) Financial planning
 b) Data analytics
 d) Operation efficiency
 - Design thinking principle DO NOT include
 a) Feasibility
 b) Viability
 c) Desirability
☒ d) Credibility
 - Design thinker in an organization are
 a) People
 b) Employees
 c) Managers
☒ d) All of these
 - What are the steps of Design thinking process?
☒ a) Understand > Draw > Ideate > Create > Test
☒ b) Empathize > Define > Ideate > Prototype > Test
 c) Empathize > Design > Implement > Produce > Test
 d) Understand > Define > Ideate > Produce > Try

- Design thinking is a linear process
 a) True
☒ b) False
 c) Cannot say
 d) None of these
- Which of these is a reason that companies might implement design thinking?
☒ a) It relies on risk - taking
☒ c) It accelerates effectiveness
 b) It creates more problem
 d) It eliminates mistakes
- Tools of Design thinking are ____
 a) Visualization
 c) Rapid concept development
 b) Experience mapping
☒ d) All of these
- Collaboration in design thinking for strategic innovation includes
☒ a) Collaboration with all the members of the organization for shared solution for complex problem.
 b) Collaboration with design thinking team
 c) Collaboration with design thinking consultant
 d) Collaboration with operation team
- What does MVP stand for ____
☒ a) Most viable product
☒ c) Minimum viable product
 b) Maximum viable product
 d) None of these
- Journey Mapping is a ____
 a) Geographic research
 c) Both (a) & (b)
☒ b) Ethnographic research
 d) None of these
- Which of the following are NOT tools of Design thinking?
☒ a) Co - creation
☒ c) Online Marketing
 b) Prototyping
 d) Mind Mapping
- ____ is a way of collaboration where in participants , regardless of their location , work together to reach a certain goal
 a) Distributed work
 c) Multiple perspective
☒ b) Distributed collaboration
 d) All of these
- A Rapid concept Development can be used before the progress of ____
 a) 25%
 b) 50%
 c) 30%
 d) 35%
- Mind Maps are used to ____ ideas.
 a) Generate
 b) Visualize
 c) Organize
☒ d) All of these
- Brain storming session is ____
☒ a) There is no rule, it is UP to the brainstorming facilitator to decide
☒ c) A mix of individual and collective activities
 b) A collective activity only
 d) An individual activity only
- Preparing and representing project information in the form of stories , maps and images is ____
 a) Journey mapping
 c) Value chain analysis
☒ b) Visualization
 d) Prototyping

18. What is way to narrow down the thoughts to reach at the final solution?
☒ a) Convergent thinking b) Divergent thinking
☐ c) Linear thinking d) All of these
19. To Empathize in design thinking means
☒ a) To understand the user b) To have sympathy
☐ c) To be socially responsible d) To understand the Technology
20. _____ is used with the objective of identifying the needs of the customers which the customers themselves are unable to articulate.
☒ a) Mind mapping b) Experience mapping
☐ c) Story telling d) Rapid concept development
21. The three "I"s of design thinking DO NOT includes.
☒ a) Interest b) Implementation c) Inspiration d) Ideation
22. What is the characteristic for the location of a virtual team?
☐ a) In the same building ☒ b) Remotely
☐ c) In the same industry d) In the same country
23. Design thinking follows
☒ a) Waterfall Model b) Agile methodology
☐ c) Both of these d) None of these
24. Collaborative team work is essential in design thinking for
☐ a) Equal importance to all members b) Solving multifaceted problems
☒ c) Unbiased selection of ideas ☒ d) Better failure management
25. BPM stands for
☒ a) Building Product Management b) Business Product Management
☐ c) Business Process Management d) Basic Product Management
26. _____ is an iterative and incremental method of managing development and design
☒ a) Agile Methodology b) Waterfall Model
☐ c) Cyclic Methodology d) All of these
27. Which of the following sequences is correct for Waterfall Methodology?
☒ a) Define - Design - Develop - Test - Deploy
☐ b) Define - Develop - Design - Test - Deploy
☐ c) Define - Design - Develop - Deploy - Test
☐ d) Design - Define - Develop - Test - Deploy
28. Representation of prototypes by
☐ a) Story board b) Scenarios c) Screen shots ☒ d) All of these
29. Scope of Strategic Innovation includes
☐ a) Managed Innovation ☒ b) Strategic Alignment
☐ c) Industry Foresight ☒ d) All of these
30. What is the term for the phenomenon that a new IT system is implemented across the whole organization simultaneously?
☐ a) Immersed approach ☒ b) Parallel approach
☐ c) Plunge approach d) Instant approach
31. "Products are shaped by stories that people tell about them". The phrase indicates the importance of _____.
☒ a) Importance of product b) User experience
☐ c) Importance of stories d) Importance of Narration
32. The reconfiguration of existing product technologies is known as
☒ a) Modular Innovation b) Radical Innovation
☐ c) Architectural Innovation d) Incremental Innovation
33. What is the goal of value chain analysis?
☒ a) To create a better value for customer in the value chain
☐ b) To visualize ideas and organize them
☐ c) To develop new business opportunities
☐ d) To test prototypes of proposed solutions
34. A model of a proposed solution looks as close as possible to the final design is _____ prototype
☒ a) High fidelity b) Low fidelity c) No fidelity d) MVP
35. Which tool is used to represent how ideas are linked to main idea?
☐ a) Visualization b) Journey mapping
☒ c) Mind mapping d) Rapid concept development
36. What is the core belief behind co-creation?
☒ a) The presence of users is essential to the creative process
☐ b) Rapid development of new business ideas
☐ c) Testing assumptions about a new business idea
☐ d) Visualizing ideas and organizing them
37. What is the purpose of learning launches?
☐ a) To test prototype of proposed solutions
☒ b) To explore the fundamental assumptions of market potential for new growth
☐ c) To analyze the value chain of an organization
☐ d) To create a visual representation of a business idea
38. What is Business Process Modelling?
☐ a) A way of visualization business strategies
☐ b) A method for quality management
☐ c) A method for time and motion study
☒ d) A way of dividing business processes into basic components and functions
39. Frank Robinson defined and coined the term
☐ a) Design thinking b) Mind mapping ☒ c) MVP d) Hypothesis

40. Experience economy has resulted in
☒ a) Active participation
☐ b) Passive consumption
☐ c) Minimum consumption
☐ d) None of these
41. Outsourcing of innovation globally is more likely where :
☒ a) Innovations are autonomous
☐ b) Innovations are systematic
☐ c) Innovations are systematic or autonomous
☐ d) Innovations are made by service sector firms
42. Which of the below firm is associated the most with design thinking?
☒ a) Ikea
☐ b) Ideo
☐ c) Idea
☐ d) Ikei
43. Design thickners create low fidelity prototypes to
☐ a) Validate concepts for the market
☐ b) Build production ready products
☐ c) Estimate the price of production
☒ d) Test concepts quickly and cheaply with potential users
44. Extension of a successful brand or iteration a current period is *Sustaining innovation*
☐ a) Revolutionary Innovation
☐ b) Dynamic Innovation
☐ c) Incremental Innovation
☐ d) Evolutionary Innovation
45. Benefits of Agile in virtual collaboration are
☐ a) Allow openness
☐ b) Rhythm building
☐ c) Visualize the whole thing
☒ d) All of these
46. Which famous design school become most vital in framing design thinking as a core subject
☐ a) Trinity College
☐ b) Business School, Ahmadabad
☒ c) Massachusetts University
☐ d) Stanford d. school
47. The word design thinking is defined by
☒ a) Tim Brown
☐ b) Rober Mckin
☐ c) Peter Rowes
☐ d) Balter Moore
48. David is testing his prototype, what should his next move be?
☐ a) Ideate and come up with more idea
☐ b) Research the people he is designing for
☒ c) Collect feedback from the testers to evaluate his idea
☐ d) Change his problem statement
49. What element of user experience design would be the design strategy full under?
☐ a) Interaction design
☒ b) Experience strategy
☐ c) User Research
☐ d) Information architecture
50. What purpose does point of view (POV) serve in design thinking?
☐ a) It serves as the guide for developing the prototype
☐ b) It illustrates what your competitors are doing better
☐ c) It is used in the testing phase for receiving feedback
☒ d) It provides focus for the design team is brain storming