EAST POINT COLLEGE OF ENGINEERING & TECHNOLOGY **EPIDK108/208**

An Autonomous Institution Affiliated to Visvesvaraya Technological University (VTU) Belagavi

USN | | | | | | | | | | |

QUESTION PAPER VERSION : A

First / Second Semester B.E. Degree Examination, JULY 2025

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 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.**

1. Empathy stage in design thinking is crucial because:

A) It reduces cost
B) It ensures you understand user needs
C) It adds structure
D) It ensures profitability

2. Design Thinking supports teams by promoting:

A) Linear processes
B) Siloed thinking
C) Iterative experimentation
D) Rigid framework

3. What is the most human-centered principle in design thinking?

A) Creativity
B) Empathy
C) Planning
D) Strategy

4. Which of the following is not part of the design thinking stages?

A) Define
B) Ideate
C) Strategize
D) Prototype

5. The test phase aims to:

A) Validate solutions with users
B) Close the project
C) Increase profit
D) Launch the final product

6. In the Define stage, problems should be stated:

A) Technically
B) Vaguely
C) From the user's perspective
D) From a business-only view

7. Innovation in design thinking is often driven by:

A) Technical improvements only
B) User insights and iterative testing
C) Annual strategy meetings
D) Budget constraints

8. To empathize, one has to

A) Observe
B) Engage

C) Listen
D) All of the above

9. Which of the following are NOT tools of visualization?

A) Maps
B) Images
C) Stories
D) Videos

10. .....storytelling is the most compelling type of story

A) Aural
B) Visual
C) Textual
D) All of the above

11. What happens in the test stage of design thinking?

A) You conduct a written test of your design team.
B) You allow consumers to test a product or service.
C) You engage in internal testing with employees.
D) You test products designed by competitors

12. Collecting.....is an important portion of testing a prototype in the test stage of design thinking.

A) Pictures
B) Money
C) Feedback
D) Emails

13. Mind maps are used to.....ideas

A) Generate
B) Visualize
C) Structure
D) All of the above

14. Which of the below is incorrect?

A) PepsiCo has turned Design Thinking into its strategy
B) Air BnB avoided bankruptcy and turned profitable using Design Thinking
C) Google has a 3 step process to bring about new innovations
D) All of the above are correct

15. The final step in the Design Process is to .....

A) Test
B) Define
C) Ideate
D) Empathize

16. You would interview people to gain an understanding of how they feel during the ..... stage of Design Thinking.

A) Test
B) Define
C) Ideate
D) Empathize

17. Visualization in design thinking helps by:

A) Generating revenue
B) Minimizing cost
C) Making data human-centered and clear
D) Identifying weaknesses

18. Scenario-based prototyping is useful for:

A) Budget forecasting
B) Simplifying tasks
C) Designing complex software systems
D) Market segmentation

19. Agile virtual collaboration emphasizes:

A) Isolation
B) Waterfall development
C) Flexibility and openness
D) Fixed roles

20. A customer journey map helps identify:

A) Market trends
B) Organizational structure
C) User emotions and pain points
D) Product pricing

21. Strategic innovation is aimed at:

A) Cutting labor costs
B) Outperforming competitors with creativity
C) Copying market leaders
D) Reducing workload

22. What happens in the test stage of design thinking?

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23. Which is not an Aspect of the define step of Design Thinking

A) Create a Composite user to give Perspective to the Solution
B) Develop a point of view statement to state users need
C) Define as many Possible solutions to the problem as possible
D) Recognize a challenge with a how might we question

24. Majority of the top executives regarded..... as one of the top 3 leadership qualities?

A) Empathy
B) Creativity
C) Humility
D) Qualifications

25. What are the steps of design thinking process

A) Understand > Draw > Ideate > Create > Test
B) Empathise > Define > Ideate > Prototype > Test
C) Empathise > Design > Implement > Produce > Test
D) Understand > Define > Ideate > Produce > Try

26. Which of the below firm is associated the most with Design Thinking?

A) Ikea
B) Ideo
C) Idea
D) Ikei

27. Design thinking typically helps in.....

A) Innovation
B) Data analytics
C) Financial planning
D) Operational efficiency

28. A college is redesigning its website. Current students are the main users of the website. Which one of the below elements should definitely be on the website?

A) College rules and regulations
B) Information on faculty members
C) Information about courses
D) Alumni details

29. User persons are created during which phase of design process

A) Design stage
B) Discover stage
C) Develop stage
D) None of the above

30. What helps the design team and client to visualize and handle the design concept

A) Define
B) Ideate
C) Empathise
D) Prototype

31. The ultimate goal of design thinking is to help you design better

A) Services
B) Products
C) Experiences
D) All of above

32. .....is an analysis of persons, groups, events, decisions, periods, policies, institutions or other systems that are studied holistically by one or more methods.

A) Literature Study
B) Case Study
C) Co-creation
D) Prototyping

33. MVP stands for

A) Minimum viable product
B) Maximum viable product
C) Most viable product
D) None of above

34. At what step do you want to complete the POV - point of view?

A) empathy
B) prototype
C) define
D) ideate

35. The purpose of MVP is NOT

A) Be able to test a product hypothesis with maximum resources
B) Accelerate learning
C) Reduce wasted engineering hours
D) Get the product to early customers as soon as possible

36. The three "I"s of Design thinking DO NOT include

A) Interest
B) Implementation
C) Inspiration
D) Ideation

37. Collaborative teamwork 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

38. Design Thinking is best suited to addressing problems at the intersection of

A) business and society
B) logic and emotion
C) human needs and economic demands
D) All of the above

39. Frank Robinson defined and coined the term

A) Design Thinking
B) Mind Mapping
C) MVP
D) Hypothesis

40. Design thinking and Strategic Innovation has practices as

A) Reviewing
B) Simulating
C) Conversing and Collaborating
D) All of the above

41. Initial Design brief is provided by

A) Designer
B) User
C) both A and B
D) Client

42. Human-centric design was re-interpreted as an acronym to mean

A) Hear, Create, Deliver
B) Hear, Create, Design
C) Hold, Create, Deliver
D) Hear, Compile, Deliver

43. The design thinking workshop fosters:

A) Hierarchical decision-making
B) Passive learning
C) Active, collaborative learning
D) Financial evaluation

44. One benefit of strategic innovation is:

A) Market stagnation
B) Competitive advantage
C) Staff downsizing
D) Cost-only focus

45. Value chain analysis helps identify:

A) Legal issues
B) Team inefficiencies
C) How to create better customer value
D) Employee performance

46. Agile collaboration supports:

A) Predictable control
B) Static planning
C) Flexibility and quick iteration
D) Top-down strategy

47. Visual storytelling is helpful in:

A) HR evaluations
B) Making ideas relatable
C) Budget meetings
D) Legal decisions

48. Mind mapping supports:

A) Competitive pricing
B) Visual organization of thoughts
C) Resume building
D) Executive summaries

49. Innovation matrix combines:

A) Budget and process
B) Technology and competition
C) Radical/incremental and disruptive/sustaining innovations
D) Creativity and HR practices

50. In virtual teams, rhythm building helps in:

A) Meeting sales targets
B) Establishing clear workflows
C) Sharing profits
D) Cutting costs.