

Model Question Paper-I with effect from 2021 (CBCS Scheme)

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First Semester Common to all BE, B.Tech, B.Plan, B.Arch, BSc, Degree Examination

Subject Title: Innovation and Design Thinking Subject Code : 21IDT29/19

Examination: **One Hour**

Maximum Marks:**50**

Instructions to the candidates

- i) Answer all the 50 questions, each question carries one mark.
- ii) Marking two answers for the same question makes the answer invalid.

Choose the correct option from those given in each of the sentences below.

1. Design Thinking supports in

- a. Developing the product
- b. Developing the strategy
- c. Developing the process
- d. All of the above

2. What is design considerations are not linked with?

- a. Products
- b. Services
- c. Business
- d. Computers

3. Design Thinker in an organization are

- a. People
- b. Employees
- c. Managers
- d. All of the above

4. Design thinking supports in developing product features to improve the services to the customers

- a. Yes
- b. No

5. Comprehensive Principle of Design Thinking does not include

- a. Relationship
- b. Collaboration

- c. Communication
- d. Suppliers

6. Communication Skills includes

- a. Speaking
- b. Writing
- c. Visual
- d. All of the above

7. In the stages of design thinking empathy means

- a. Identifying areas of concern in the business
- b. Identifying from the perspective of the employees
- c. Identifying from the perspective of the product
- d. All of the above

8. 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

9. Design Thinking is a Linear Process. True or False

- a. True
- b. False

10. Design Thinking typically helps in _____

- a. **Innovation**
- b. **Data Analysis**
- c. **Marketing Management**
- d. **Operation Management**

11. Which of the following well known consulting firms are offering Design Thinking as a solution?

- a. **McKinsey & Co**
- b. **BCG**
- c. **Bain & Co**
- d. **All of the above**

12. Which one of these statements is TRUE about the Prototype?
- Your prototype has to be exactly like the final product
 - You must not make it online
 - The objective is to have people interacting with your product
 - You can consider anyone as a potential user of your product
13. Which one of these statements is NOT a good interview practice for user testing in the Empathy step?
- Encourage interviewees to share personal experiences
 - Encourage interviewees to provide concise answers going straight to the point
 - Interview your target audience in their usage environment
 - Depending on interviewees, diverge from the Interview Guide to ask additional unplanned questions
14. A Brainstorming session is_____
- There is no rule, it is up to the Brainstorming facilitator to decide
 - A mix of individual & collective activities
 - A collective activity only
 - An individual activity only
15. The objective of a low-fidelity prototype is to...
- Test fast and fail cheap
 - Validate final concepts among your target audience
 - Test more concepts at an early stage
 - Assess the technical feasibility of the solution
16. You can interview your target users at any step of the Design Thinking approach.
- Yes
 - No
17. When testing a new prototype, how many people do you need to interview per Persona to detect the main usability issues?
- The more persons per Persona the better
 - 20 persons per Persona
 - 10 persons per Persona
 - Five persons per Persona
18. You are an Innovation Consultant helping a Team apply the Design Thinking approach. This team is working on the Ideation step and have produced more than 100 ideas. What would you suggest they do first?

- a. **To prototype some of these ideas**
- b. **To categorise their ideas**
- c. **To continue iterating on ideas**
- d. **To vote for their preferred ideas**

19. As an Innovation Consultant, what should you do to help a team struggling to think outside the box during a Brainstorming session?

- a. **Propose to them new brainstorming techniques (e.g. Mash-up)**
- b. **Remind the team about the Problem Statement(s) to help guide the ideation process**
- c. **Remind the team about the Brainstorming rules**
- d. **Give them feedback about the ideas like highlighting the good ones already proposed**

20. Who bought a collaborative design philosophy?

- a. Henry Ford
- b. Henry Ford and Steve Jobs
- c. Steve Jobs
- d. None of the above

21. One needs to have professional training in design to become a design thinker. True or False?

- a. **True**
- b. **False**

22. How does the Prototype stage of design thinking enable better management?

- a. **It enables designers to eliminate the user feedback portion of testing.**
- b. **It allows the design team to break testing down into smaller chunks.**
- c. **It requires the design team to tackle all portions of testing at once.**
- d. **The Prototype stage has no bearing on better test management.**

23. How does the test stage of design thinking allow you to make tweaks and refine your prototype?

- a. By observing and talking to customers, you can learn whether your product hits the mark.
- b. By learning more about your product, you can determine the best market for it.
- c. By testing employees' knowledge of the product, you can start designing packaging.
- d. By talking with other designers, you can learn ways to redesign to make more money.

24. What is characteristic for the location of a virtual team?

- a. **In the same building**
- b. **In the same industry**
- c. **In the same country**
- d. **Remotely**

25. Innovation is defined as:

- a. **the commercialization of a new product or process.**

- b. the invention of a new product or process.
- c. a new product or process idea.
- d. the implementation of a new production method.

26. Innovation can help to provide a temporary competitive advantage when:

- a. Barriers to entry are high.
- b. Barriers to imitation are low and intellectual property rights are difficult to enforce.
- c. There are few other competitors.
- d. Barriers to entry are low.

27. Scope of Strategic Innovation includes

- a. Managed Innovation
- b. Strategic Alignment
- c. Industry Foresight
- d. All of the above

28. Integrating Design thinking in strategic innovation includes

- a. Reviewing
- b. Simulating
- c. Conversing
- d. All of the above

29. Mr. Anil is starting a clothing company. Instead of making clothing that fits models, though, Will wants to start by thinking about what non-models need. Because will is planning his designs around the end user, he is engaging in _____.

- a. Design thinking
- b. Model design
- c. End user generation
- d. Model thinking

30. Mr. Ravi wants to design a new bed that she can sell to nursing homes to use with their patients. However, Ravi doesn't want anything to do with older adults or people with disabilities. According to the design thinking process, Mr. Ravi will face problems because he is missing _____.

- a. Empathy
- b. Creativity
- c. Practicality
- d. Imagination

31. Design Thinking is sometimes visualized as a linear process, but it is actually
- Impactful**
 - Incapacitating**
 - International**
 - Iterative**
32. Which of these is a reason that companies might implement design thinking?
- It relies on risk-taking**
 - It creates more problems**
 - It eliminates mistakes**
 - It accelerates effectiveness**
33. Mr. Ram is creating a new product for university students. He takes a design-thinking approach. He's first step is addressing who she is creating the product for and conducts research on understanding this target market. What is this step in the design thinking process?
- Define**
 - Ideate**
 - Empathize**
 - Prototype**
34. Internal stakeholders are people or groups who work at your company or organization and directly or indirectly influence your task. Internal stakeholders can be
- Employees**
 - Other business units or departments**
 - Top management**
 - All of the above**
35. What is a customer journey map?
- It is a map to locate where the customer has travelled**
 - This only applies to the travel industry, since it involves maps**
 - It is a typical journey of a customer who goes through a certain experience**
 - The map that leads us to a profit-making enterprise**
36. The main uses of a customer journey map are
- This gives the design thinkers a near first-hand experience of what a customer goes through**
 - The map can give us the emotional roller coaster of the user**
 - The output of the map is a list of problems that the customer goes through**

d. **The map also serves as a visual aid to communicate the situation of the user**

37. Design thinking is often also called

- a. **Intellectual property**
- b. **Human Centered design**
- c. **Ecological sustainability**
- d. **Alien diversity**

38. For building a customer journey map, we interview only one customer

- a. **True**
- b. **False**

39. Who is the recommended group that you should test out the prototypes with?

- a. **Your target customers**
- b. **People in your team**
- c. **Professional designers**
- d. **Experts**

40. During which step do you allow an authentic audience to interact with your prototype and give feedback?

- a. **Prototype**
- b. **Ideate**
- c. **Test**
- d. **Define**

41. What is the usual order of problem-solving process?

- a. **Try, Reflect, Prepare, Define**
- b. **Prepare, Try, Define, Reflect**
- c. **Try and Reflect**
- d. **Define, Prepare, Try, Reflect**

42. During which step do you create an interactive representation or model of your idea or solution?

- a. **Prototype**
- b. **Ideate**
- c. **Test**
- d. **Define**

43. Ideate means

- a. To rapidly change.
- b. When you create a 3D model of your design.
- c. The process for creating and sharing ideas where you use images and sketches instead of words to describe your idea.
- d. When you brainstorm ideas, get feedback, create an initial design, share the design, and iterate.

44.State true or false. The various stages of design thinking are fixed and linear.

- a. True
- b. False

45. Stages of design thinking workshop are planning stage and workshop stage

- a. True
- b. False

46. Learning Goals in design thinking workshop are related to

- a. Define learning outcomes
- b. Mapping with the problem statement
- c. Understanding culture of the organization
- d. Defining learning styles

47.During the design thinking workshop, providing introduction is important to engage participants

- a. True
- b. False
- c.

48. Closing remarks of the design thinking workshop supports in motivating the participants to apply concepts of design thinking at the workplace

- a. True
- b. False

49.Collaboration in design thinking for strategic innovation includes

- a. Collaboration with design thinking team
- b. Collaboration with design thinking consultant
- c. Collaboration with operation team
- d. Collaboration with all the members of the organization for shared solution for a complex problem

50.Readiness of the organization for strategic innovation means

- a. Changing innovation process in the organization
- b. Ready for change in the organization
- c. Ready for change in the capabilities of the organization
- d. All of the above



