CBCS SCHEME

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Question Paper Version : C

First/Second Semester B.E./B.Tech./B.Arch./B.Planning Degree Examination, July/August 2022

Innovation and Design Thinking

(COMMON TO ALL BRANCHES)

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. Being an experimental phase, continuous iterations can take place in which phase:
   a) Define   b) Empathize   c) Prototype   d) None of these

2. Which of the following is not tools of Design thinking?
   a) Co-creation   b) Prototyping   c) Mind Mapping   d) On-Line Marketing

3. Journey mapping maps which phase of activity of service for a customer?
   a) Before a service   b) During a service   c) After a service   d) All of these.

4. Value chain analysis examines how an organization interacts with value chain partners to _____ new offerings.
   a) Produce   b) market   c) Distribute   d) All of these.

5. A prototype is simple experimental model of a proposed solution used to :
   a) Test Ideas   b) Validate Ideas   c) Both a and b   d) None of these

6. A Hypothesis is _____.
   a) statement indicating the profitability of company
   b) statement indicating the Delivery time of a product
   c) conjecture that is grounded in support background originating from secondary research
   d) None of the above

7. What is you first model/design of a product called:
   a) Draft   b) Rough draft   c) Prototype   d) Practice design

8. To Ideate is :
   a) To change rapidly   b) creating 3D model of your design
   c) Creating and sharing ideas using Images/Sketches to describe your idea
   d) Selling a product/service at huge profit

9. A case study is :
   a) Research strategy
   b) Emperical enquiry
   c) Descriptive and exploratory analysis
   d) All of these

10. At what step, POV (Point Of View) is completed :
    a) Empathy
    b) Prototype
    c) Define
    d) Ideate

11. Agile methodology involved
    a) sprints
    b) no iteration
    c) profit
    d) none of these

12. Which model provides better collaboration and communication?
    a) Waterfall model
    b) Agile model
    c) Both a and b
    d) None of these

13. Major difference between Agile model and Water fall model is
    a) Agile model includes iteration
    b) Waterfall model includes iteration
    c) BPM model include iteration
    d) None of these

14. "Invest in user research" – here word "user research" belongs to
    a) Empathize
    b) Design
    c) Ideate
    d) Testing

15. Parameters which are absolutely necessary in Agile model :
    a) Transparency
    b) Inspection
    c) Adaptation
    d) All of these

16. _____ approach is used for designing complex software systems.
    a) Scenario based prototyping
    b) BPM
    c) Both a and b
    d) None of these

17. _____ is type of collaboration where participants regardless of their location, work together to reach a certain GOAL:
    a) Cloud Computing
    b) Off-Line class
    c) Distributed Collaboration
    d) None of these

18. Digital space is also called as
    a) Cloud computing
    b) Design analysis
    c) Distributed Design
    d) None of these

19. Example for Distributed collaboration
    a) Mobile Manufacturing
    b) Machine manufacturing
    c) Both a and b
    d) None of these

20. Design thinking helps in the following :
    a) Innovation
    b) Statistics
    c) Data analysis
    d) None of these

21. Design thinking principles do not include
    a) feasibility
    b) viability
    c) desirability
    d) credibility

22. The final step in the Design thinking process is
    a) Test
    b) Define
    c) Ideate
    d) Empathize

23. The three I's of Design thinking do not include
    a) Interest
    b) Implementation
    c) Inspiration
    d) Ideation

24. Ram is creating a new food product using Design thinking approach. His first step is addressing who he is creating the product for and conducts research on understanding this target market. This step is :
    a) Define
    b) Ideate
    c) Empathize
    d) Prototype

25. Collaborative teamwork is essential in design thinking for
a) Making profit
b) Closing down the operations
c) Better failure management
d) None of these

26. The ultimate goal of design thinking is to help designing:
a) Better service
b) Better products
c) Both a and b
d) None of these

27. Design thinking is typically a
a) Non-linear process
b) Linear process
c) Both a and b
d) None of these

28. Design thinking follows
a) Waterfall model
b) Agile Methodology
c) Both a and b
d) None of these

29. _____ is an iterative and incremental method of managing development and design.
a) Waterfall model
b) Agile Methodology
c) Cyclic model
d) All of these

30. BPM stands for
a) Building Project Management
b) Basic Product Management
c) Business Process Management
d) Business Product Management

31. The Tool which uses image and allow us to think nonverbally is
a) Value chain analysis
b) Journey mapping
c) Visualization
d) Assumption testing

32. Which tool is used as an ethnographic research method that focuses on tracing customer's journey?
a) Journey mapping
b) Rapid prototyping
c) Visualization
d) Mind mapping.

33. Which tool is used in generating hypothesis about potential new business opportunities:
a) Rapid concept development
b) Mind Mapping
c) Both a and b
d) None of these

34. In value chain analysis client activity includes :
a) Order taking
b) Scheduling
c) Software development
d) All of these

35. Which tool is designed to test the value generating assumptions of a potential new growth initiative?
a) Visualization
b) Mind Mapping
c) Learning Launches
d) None of these.

36. Select odd one out:
a) Brain storming
b) Mind Mapping
c) Empathy
d) Rapid concept

37. Which of the following statement is correct :
a) Design thinking is Convergence-Divergence process
b) Design thinking is Lean start-up process
c) Design thinking is Linear process for product development
d) None of the above.

38. In Design thinking, where does the information used to put together a problem statement came from:
a) The Define stage
b) Empathize stage
c) Testing state
d) Prototype stage

39. What is the way to narrow down the thoughts to reach at the final solution:
    a) Convergent thinking
    b) Divergent thinking
    c) None of these
    d) Both a and b

40. The goal of the prototype phase is
    a) To understand what component of your idea didn't work
    b) To understand what component of your idea work
    c) Both a and b
    d) None of these

41. What are the steps in Design Thinking Process in sequence?
    a) Define – Empathize – Ideate – Prototype – Test and Implement
    b) Test and Implement – Define – Empathize – Ideate – Prototype
    c) Empathize – Define – Ideate – Prototype – Test and Implement
    d) Ideate – Define – Empathize – Test and Implement – Prototype

42. Which of the following Firm is associated most with Design Thinking?
    a) IKEA
    b) IDEO
    c) IDEA
    d) ASCI

43. In which step of Design Thinking approach, actual requirements together with un-met needs of customer/end-user is addressed:
    a) Empathize
    b) Ideate
    c) Define
    d) Prototype

44. Which of the following is best suited to produce more innovative design solutions :
    a) Monodisciplinary and untrained teams
    b) Monodisciplinary and trained teams
    c) Multidisciplinary and untrained teams
    d) Multidisciplinary and trained teams

45. MVP stands for :
    a) Minimum Value Product
    b) Moderate Value Product
    c) Minimum Viable Product
    d) Maximum Viable Production

46. POV is :
    a) Pin Of View which is 1st part of Empathizing
    b) Point Of View which is last part of Define stage
    c) Point Of View which is last part of Testing
    d) Pin Of View which is last part of Prototype.

47. During which stage would you consult experts to learn more about the areas of concern and to gain an understanding of other people's experiences?
    a) Prototype
    b) Define
    c) Ideate
    d) Empathize

48. Design thinking is :
    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 perspectives.

49. To Empathize, one has to
    a) Observe
    b) Engage
    c) Listen
    d) All of these

50. Collecting _____ is an important portion of testing a prototype in the Test Stage of design thinking.
    a) Pictures
    b) Money
    c) Feedback
    d) E-Mails

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