



**K. K. Wagh Institute of Engineering Education & Research, Nashik**  
(An Autonomous Institute From A.Y. 2022-23)

WINTER-2025	
Exam Seat No.:	
Academic Year:2025-2026	Semester: III
Class: PG-II	Program: MBA
Branch Code: 10	Pattern:2024
Name of Course: Design Thinking, Innovation & Entrepreneurship	Course Code:2410602
Max. Marks:60	Duration:2.30 Hrs.

**Instructions:** Candidates should read carefully the instructions printed on the Question Paper and on the cover page of the Answer Book, which is provided for their use.

1. This question paper contains 3 pages.
2. Answer to each new question is to be started on a new page.
3. Assume suitable data wherever required, but justify it.
4. Draw the neat labelled diagrams, wherever necessary.
5. The last columns indicates the Course Outcome and level of Blooms Taxonomy of the Question/sub-question.
6. Q1 and Q2 are compulsory. Solve any one of (a) or (b) and (c) or (d) for Q3, Q4, Q5.

**Marks CO**

**Question No. 1**

- 1a) A tech startup developing a smart home–automation device has completed its prototype but is struggling with funding, customer acquisition, and product refinement. (6) CO1  
Apply the concept of the Startup Life Cycle and the “Valley of Death” to explain the challenges the startup is currently facing and suggest practical steps it should take to overcome this phase and move toward growth.

**Question No. 2**

- 2a) Explain the common mid-career dilemmas faced by professionals and discuss how these challenges can act as catalysts for entrepreneurial growth. Support your answer with examples. (6) CO2

**Question No. 3**

- 3a) (i) Explain the following concepts briefly: (8) CO3

1. Importance of a Problem Statement in research or entrepreneurial projects.
2. Key characteristics of a good Problem Statement.
3. Steps involved in writing an effective Problem Statement.

(ii) Write a clear and concise Problem Statement based on the above scenario, highlighting the core issues and their impact.

**Case for Students:**

*"A community library has observed a sharp decline in membership renewals and book borrowings over the past year. Even after introducing digital catalogues and weekend workshops, participation has not improved significantly. This is impacting the library's outreach and community engagement."*

**OR**

- 3b) Briefly discuss : (8) CO3

- “Prototyping, its purpose and types”
- “Concept validation and its methods”

- 3c) “Innovate a Solution to Improve Mental Health Among Youth” (8) CO3
- Give brainstorming ideas for addressing this issue such as tools, systems or platforms that can help reduce stress, anxiety, and social pressure?

**OR**

- 3d) For Understanding Stakeholders and Users Personas : (8) CO3
- Explain why Personas are useful in app design.
  - List the key elements of a Persona with examples.

For Empathy Maps :

- Identify the main questions to ask when creating an Empathy Map.
- Explain why Empathy Maps are useful for understanding users.

For Ideation Techniques :

- List the key features of an effective brainstorming session. Explain how to conduct a brainstorming session.
- State the benefits of using brainstorming.
- Explain and state the purpose of storyboarding. State the advantages of storyboarding in the design process.

**Question No. 4**

- 4a) A start-up is developing a mobile app to help remote workers manage productivity and reduce stress. The team wants to understand user behaviors, challenges, and preferences before designing the app. (8) CO4
1. Examine Observation, Interviews, and Surveys in depth.
  2. Recommend which would provide the most actionable insights for this scenario, giving reasons.
  3. Create a set of any 2 interview questions that the team could ask to gather deep insights. (Ensure the questions are open-ended, relevant to the scenario, and aimed at uncovering users’ pain points, needs, and motivations.)

**OR**

- 4b) A café has been facing declining customer satisfaction. Customers complain about long waiting times, limited menu options, and inconsistent service quality. The management wants to address the real issue but is unsure how to define the problem clearly. (8) CO4
- i. Briefly discuss what a problem statement is. Explain why we create a problem statement before attempting to solve a problem.
  - ii. Describe what reframing problems actually mean and techniques used to reframe a problem statement.

- 4c) Evaluate different types of prototypes (such as low-fidelity, medium-fidelity, and high-fidelity prototypes). Discuss how iteration improves the effectiveness of a prototype ,i.e, why is it needed and iteration cycle. Suggest with reasons, which type of prototype is most suitable when testing early-stage ideas versus near-final solutions. (8) CO4

**OR**

- 4d) Evaluate the following: (8) CO4

1. Usability Testing:
  - Explain how usability testing is done.
  - Describe its purpose.
  - Give a simple example from the study-tracking app.
2. Feedback:
  - Explain why user feedback is important.
  - Describe different types of feedback .
3. Refinement:
  - Explain what refinement means.
  - Describe why refinement matters in improving a design.
  - Explain the refinement cycle.

**Question No. 5**

- 5a) Evaluate how Market Research and Customer Analysis help an entrepreneur: (8) CO5

1. Identify student preferences, buying behavior, and needs.
2. Assess which product features, pricing, and packaging will be most effective.
3. Reduce the risk of product failure and improve decision-making.

Based on your evaluation:

- i. Create a simple market research plan using surveys, interviews, or observation.
- ii. Design a sample customer profile or segment for the target audience.
- iii. Suggest product features, pricing, and packaging ideas that align with the customer profile.

NOTE: For answering the above question, take example of "A small bakery which is planning to launch a new range of healthy cookies for college students. The owner is unsure about which flavours, price, and packaging will appeal most to the students"

**OR**

- 5b) Using the Value Proposition Canvas (VPC), design a complete canvas for a product or service of your choice. (8) CO5

- I. Include Customer Jobs, Pains, Gains and Products/Services, Pain Relievers, Gain Creators.

Explain how your product or service addresses customer problems and provides value.

- 5c) (i) Examine the reasons for common business model failures in startups by suggesting practical remedies to overcome these challenges. (8) CO5

(ii) Define Artificial Intelligence (AI), Augmented Reality (AR), and Virtual Reality (VR).

**OR**

- 5d) (i) Evaluate the meaning of Lean Startup Methodology (aka Lean Innovation) along with its key principles? Explain with the help of an example. (8) CO5

(ii) Discuss all Key Performance Indicators (KPIs) can be used to assess whether a startup should continue, improve, or pivot its business direction.

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