

## Multiple Choice Questions

### Unit I Introduction to Design Process

**1. Which of the following is the first step in the design process?**

- A) Prototyping
- B) Ideation
- C) Problem Definition
- D) Testing

**Answer:** C) Problem Definition

**2. What is the purpose of the ideation phase in the design process?**

- A) To test prototypes
- B) To generate a wide range of ideas and solutions
- C) To define project requirements
- D) To analyze the feasibility of a design

**Answer:** B) To generate a wide range of ideas and solutions

**3. Which phase involves creating detailed drawings and specifications for a design?**

- A) Concept Development
- B) Prototyping
- C) Detailed Design
- D) Testing

**Answer:** C) Detailed Design

**4. What is a prototype used for in the design process?**

- A) To define the problem
- B) To test the feasibility of a design concept
- C) To generate ideas
- D) To gather requirements

**Answer:** B) To test the feasibility of a design concept

**5. Which of the following activities is typically part of the testing phase of the design process?**

- A) Creating initial sketches
- B) Developing a detailed design
- C) Evaluating the performance of prototypes

- D) Conducting market research

**Answer:** C) Evaluating the performance of prototypes

**6. In which phase of the design process do you usually assess the design against project requirements and constraints?**

- A) Problem Definition
- B) Concept Development
- C) Design Review
- D) Production

**Answer:** C) Design Review

**7. What is the primary goal of the iterative process in design?**

- A) To create a single, final design
- B) To refine and improve the design through repeated cycles
- C) To produce a prototype quickly
- D) To complete the design as quickly as possible

**Answer:** B) To refine and improve the design through repeated cycles

**8. Which document is crucial for communicating the design details to stakeholders and manufacturers?**

- A) Design Brief
- B) Project Plan
- C) Design Specifications
- D) Market Analysis

**Answer:** C) Design Specifications

**9. What is a design brief?**

- A) A detailed blueprint of the design
- B) A summary of the project's goals, constraints, and requirements
- C) A list of materials required for production
- D) A report on testing results

**Answer:** B) A summary of the project's goals, constraints, and requirements

**10. Which phase of the design process often involves evaluating different design alternatives and selecting the most feasible one?**

- A) Concept Development

- B) Prototyping
- C) Testing
- D) Production

**Answer:** A) Concept Development