

**DESIGN THINKING
(CIV2105)**

Time Allotted : 2½ hrs

Full Marks : 60

Figures out of the right margin indicate full marks.

*Candidates are required to answer Group A and
any 4 (four) from Group B to E, taking one from each group.*

Candidates are required to give answer in their own words as far as practicable.

Group – A

1. Answer any twelve:

12 × 1 = 12

Choose the correct alternative for the following

- (i) During which phase do you define the core problem of the user?
(a) Empathize (b) Define
(c) Ideation (d) Testing
- (ii) What is a common tool used in the "Define" phase to outline the problem?
(a) Empathy map (b) Prototype
(c) Problem statement (d) User story
- (iii) Which of the following is NOT a characteristic of Design Thinking?
(a) User-centric (b) Iterative
(c) Linear (d) Collaborative
- (iv) In the Design Thinking process, prototyping is essential because
(a) It is the final product (b) It helps in testing ideas quickly
(c) It eliminates the need for testing (d) It is done before ideation
- (v) The iterative nature of Design Thinking allows teams to:
(a) Stick to the original plan
(b) Revisit and refine ideas based on feedback
(c) Avoid user feedback
(d) Skip certain phases
- (vi) Which phase in Design Thinking encourages teams to think outside the box?
(a) Empathize (b) Define
(c) Ideation (d) Testing
- (vii) What is the main goal of Design Thinking?
(a) To create technical solutions
(b) To understand and solve user problems
(c) To increase product features
(d) To reduce cost

- (viii) What does IPR stand for?
 (a) International Property Rights (b) Intellectual Property Rights
 (c) Internal Property Rights (d) Industrial Property Rights
- (ix) What is the purpose of a patent?
 (a) To protect artistic works
 (b) To protect inventions and processes
 (c) To protect brand names and logos
 (d) To protect trade secrets
- (x) Which of the following symbols is used to indicate a registered trademark?
 (a) ™ (b) ®
 (c) © (d) Ⓟ

Fill in the blanks with the correct word

- (xi) The first phase of Design Thinking is _____, which involves understanding the user's needs and experiences.
- (xii) During the _____ phase, teams brainstorm and generate a wide range of creative solutions.
- (xiii) The principle of _____ emphasizes keeping the user at the center of the design process.
- (xiv) A common brainstorming technique used in Design Thinking is called _____.
- (xv) _____ is a research method used during the Empathize phase where designers observe users in their natural environment.

Group - B

2. (a) Explain the terminology '**Design Thinking**'. [[CO1](Remember/LOCQ)]
 (b) Explain how the design thinking approach is changing from past to present corporate conditions. [[CO1](Understand/LOCQ)]
6 + 6 = 12
3. (a) Differentiate between '**design thinking**' and '**human-centred design**'. With the help of a self-explanatory flowchart, explain the complete '**general design**' process model. [[CO1](Understand/LOCQ)]
 (b) Explain what you understand from the word '**wicked problems**'? [[CO1](Understand/LOCQ)]
(3 + 4) + 5 = 12

Group - C

4. (a) Define '**ethics**'. Explain the ethical behaviour and its effect on self and society. [[CO3](Understand/LOCQ)]
 (b) According to Walla (1926), explain the complete creative process. [[CO4](Understand/LOCQ)]
(3 + 3) + 6 = 12

5. (a) Describe the concept of “**Brainstorming**”. Also mention the tips to brainstorm. *[(CO4)(Understand/LOCQ)]*
 (b) Define “**Prototype**”. *[(CO4)(Understand/LOCQ)]*
(4 + 4) + 4 = 12

Group - D

6. (a) Why prototyping is necessary? *[(CO4)(Understand/LOCQ)]*
 (b) Mention all the qualities of prototyping. *[(CO4)(Understand/LOCQ)]*
6 + 6 = 12
7. (a) What strategies can organizations use to foster a culture of design thinking, and how can leaders encourage a mindset that embraces experimentation, iteration, and learning from failure? *[(CO4)(Analyze/IOCQ)]*
 (b) How does the ideation phase in design thinking encourage creative thinking, and what techniques can be used to generate a wide range of potential solutions to a given problem? *[(CO4)(Analyze/IOCQ)]*
6 + 6 = 12

Group - E

8. (a) What is copyright ? Give some examples of copyright. *[(CO5)(Remember/LOCQ)]*
 (b) What can be protected using copyright? How to register copyright? *[(CO5)(Remember/LOCQ)]*
(4 + 3) + 5 = 12
9. (a) What do you mean by Industrial designs? Give few examples. *[(CO5)(Remember/LOCQ)]*
 (b) What kind of protection does an industrial design right offer? What kind of products can benefit from industrial design protection? How are industrial designs protected? *[(CO5)(Remember/LOCQ)]*
(3 + 3) + (2 + 2 + 2) = 12

Cognition Level	LOCQ	IOCQ	HOCQ
Percentage distribution	87.5	12.5	0

