Printed Page:-	Subject Code:- AMBA0107
	Roll. No:
NOIDA INSTITUTE OF ENGINEERING A	ND TECHNOLOGY, GREATER NOIDA
(An Autonomous Institute Af	filiated to AKTU, Lucknow)
MB	Α
SEM: I - CARRY OVER THEORY	EXAMINATION - AUGUST 2022
Subject: Desi	gn Thinking
Time: 3 Hours	Max. Marks: 50
General Instructions:	
	d C. Voy and appropriate data arrayon the array of directed
 The question paper comprises three sections, A, B, and Section A - Question No- 1 is 1 marker & Question No- 1 	•
3. Section B - Question No-3 is based on external choice	
4. Section C - Questions No. 4-8 are within unit choice of	• •
5. No sheet should be left blank. Any written material at	ter a blank sheet will not be evaluated/checked.
SECTION	A 15
1. Attempt all parts:-	
1-a. After you define the problem, the next step is	s to (CO1)
(a) Test	
(b) Prototype	
(c) Empathize	
(d) Ideate	
1-b. Brainstorming as a method can be used for _	(CO2)
(a) Coherent thinking	
(b) Out of the box thinking	
(c) Generating new ideas in the area of	of interest
(d) Critical thinking	
1-c. The supreme goal of design thinking is to he	lp you design better (CO3)
(a) Services	
(b) Products	
(c) Experiences	
(d) All of the above	

1-d.	User personas are created during phase. (CO4)	1
	(a) Dicover stage	
	(b) Develop stage	
	(c) Design stage	
	(d) None of the above	
1-e.	Being an experimental phase, continuous iterations can take place here. Which phase is being referred to? (CO5)	1
	(a) Define	
	(b) Prototype	
	(c) Empathize	
	(d) None of the above	
2. Atten	npt all parts:-	
2.a.	Explain briefly about Design. (CO1)	2
2.b.	Give brief explanation about analytical skill and its type. (CO2)	2
2.c.	"To start off, what exactly is design thinking in business". Explain.(CO3)	2
2.d.	Define market research with example. (CO4)	2
2.e.	Explain about reverse engineering in Automobile industry.(CO5)	2
	SECTION B 15	
3. Answ	ver any three of the following:-	
3-a.	Explain creativity and innovation with example. Differentiate creativity and innovation. (CO1)	5
3-b.	Discuss in detail about Mindmapping and Synectics. (CO2)	5
3.c.	Brifely explain all stages of design thinking in business process with example. (CO3)	5
3.d.	Elaborate the ways to collect data about consumers with suitable example. (CO4)	5
3.e.	Define prototype. Explain the types of prototype in detail with example. (CO5)	5
	SECTION C 20	
4. Answ	ver any one of the following:-	
4-a.	Discuss about the Drivers of Innovation. (CO1)	4
4-b.	Explain how the Innovative companies benefit from Innovations. (CO1)	4
5. Answ	ver any one of the following:-	
5-a.	Explain the meaning and techniques of lateral thinking with example. (CO2)	4

5-b.	Briefly discuss about brainstorming and its type. (CO2)	4	
6. Answer	any one of the following:-		
6-a.	Briefly explain any three stages of design thinking in health sector with example. (CO3)	4	
6-b.	Explain the importance of design thinking in retail sector with example. (CO3)	4	
7. Answer	any one of the following:-		
7-a.	Explain the tools used to analyse result. (CO4)	4	
7-b.	Discuss the steps of research process.(CO4)	4	
8. Answer any <u>one</u> of the following:-			
8	Discuss the evaluation matrix method and SWOT analysis to evaluate design idea.(CO5)	4	
8	Explain Minimum Viable Product with examples. (CO5)	4	