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Code No. : 15147 S (F) N/O

VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS), HYDERABAD

Accredited by NAAC with A++ Grade

B.E. V-Semester Supplementary Examinations, June-2023

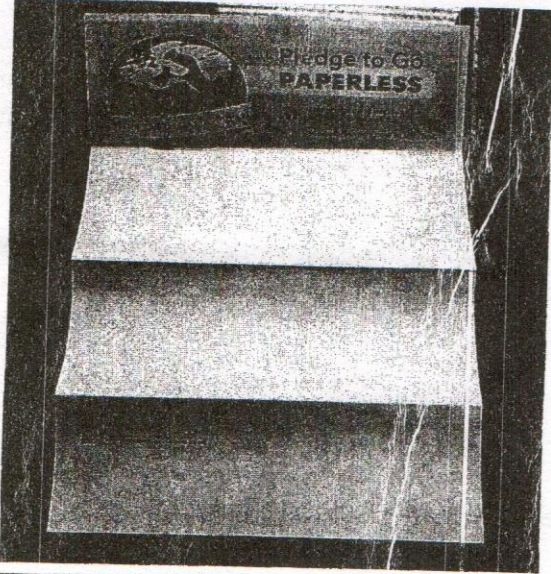
Design Thinking (OE-III)

Time: 3 hours

Max. Marks: 60

Note: Answer all questions from Part-A and any FIVE from Part-B

Part-A (10 × 2 = 20 Marks)

Q. No.	Stem of the question	M	L	CO	PO								
1.	Write two lines expressing your opinion on the picture given below. Why is it a bad design example? 	2	3	1	10								
2.	Design thinking follows a five-stage framework. What comes after the Define Phase? Why is it an important phase?	2	1	1	10								
3.	Being on the receiving end of empathy is to feel heard. To feel heard is to feel valued. An empathy interview is about active listening and active hearing. Mention 3-4 points to highlight the importance of Empathy Interviews?	2	1	2	3								
4.	Empathy Maps generally consist of four quadrants. Match the following responses	2	2	2	3								
	<table border="1"> <tr> <td>Feels</td> <td>Shops around to compare prices.</td> </tr> <tr> <td>Thinks</td> <td>"I want something reliable."</td> </tr> <tr> <td>Says</td> <td>Confused: too many contradictory prices</td> </tr> <tr> <td>Does</td> <td>"This is really annoying."</td> </tr> </table>	Feels	Shops around to compare prices.	Thinks	"I want something reliable."	Says	Confused: too many contradictory prices	Does	"This is really annoying."				
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5. The Salience Model stakeholder mapping model uses three parameters to group stakeholders. The parameters are power, urgency, and legitimacy. Match the following:

1. Power	A. the stakeholder's expectation for quick responses to their needs or requests.
2. Urgency	B. the stakeholder's right to be involved. This is also the relationship of the stakeholder to the firm.
3. Legitimacy	C. the stakeholder's ability to influence the outcome of a deliverable, project, or organization.

2 | 2 | 3 | 2

6. Tip: Remember that your "How Might We" question should not be so broad or narrow. A well-framed "HMW" question will contain the right amount of inspiration for you to quickly start brainstorming potential solutions.

PROBLEM STATEMENT: Adults need ways to rest at work because their energy fluctuates throughout the day, and they desire feeling less stressed and more energized.

Here are examples of HMW questions crafted from that problem:

A: How might we create ways to rest and feel less stressed?

Create two on your own for the given problem statement


3 | 3 | 2 | 3

7. There are several ideation techniques that you can use to help your team come up with ideas. The most common ones include:

Match the

Brainstorming	creating visual storylines of how users might go about solving the problem.
Mind mapping	coming up with the worst possible ideas to remove creative blocks.
Storyboarding	verbally sharing ideas within the group.
Worst possible idea-	visually ideating by starting with a keyword that is related to the problem and then writing all the ideas associated with it around it.

2 | 2 | 4 | 2

8.	<p>How does this tool help us in making informed decisions? Explain two benefits? What is it called?</p> <div data-bbox="406 280 1037 728" style="border: 1px solid black; padding: 10px; margin: 10px auto; width: fit-content;"> </div>	2	2	4	3
9.	<p>Why is testing important ? Mention two key points?</p>	2	2	5	5
10.	<p>What are 5 good survey questions?</p>	2	3	5	5
Part-B (5 × 8 = 40 Marks)					
11. a)	<p>Studies show that only 20% of the student population can identify a singular passion. The other 80% of the population is either passionate about many different things, or there's no one thing that rises to the level of "that's what I want to do for the rest of my life". For that 80%, passion isn't something that they have or find, but something that they work into. Can we apply design thinking to the "wicked problem" of designing your job, your career, and even your life? Write your opinion in two or three sentences.</p>	3	3	1	10
b)	<p>What are the five phases of design thinking and what are the deliverables in each phase?</p>	5	2	1	10
12. a)	<p>Look at the following persona and create one for your problem statement.</p> <div data-bbox="159 1377 1157 1892" style="border: 1px solid black; padding: 10px; margin: 10px auto;"> <div style="display: flex; align-items: center;">  <div> <h3 style="text-align: center;">Kayla the Millennial</h3> <p>Name: Kayla Age: 23 Gender: Female Travel Style: Adventure</p> <p>Location: Boulder, CO Preferred Language: English Income: \$45,000 a year Social Network: Pinterest</p> <p>Summary: Kayla, a Boulder, CO resident, is 23. She was just hired as a customer service representative after graduating from the University of Colorado last semester. She makes \$45,000 annually, much of which she saves for travel trips. Kayla is a thrill seeker and is always looking for her next adventure on sites like Pinterest. Her goal with each trip is to find the best deal on an unforgettable experience.</p> </div> </div> </div>	4	4	2	2

<p>b)</p>		<p>4</p>	<p>4</p>	<p>2</p>	<p>2</p>
<p>13. a)</p>	<p>Innovation, at it's core, is about solving problems. So make sure you get the problems right.</p> <p>The better you define the problem and the better you write the questions, the better the ideas that they prompt.</p> <p>Problem: Customers are struggling as first time users.</p> <p>HMW: How might we improve the onboarding experience to be simple and failure proof?</p> <p>Create three such statements for the Problem your team and you have identified?</p>	<p>3</p>	<p>5</p>	<p>3</p>	<p>2</p>
<p>b)</p>	<p>Let's say you are a small, family-owned restaurant in Chennai that wants to attract more business from tourists. Here's a possible customer journey map for your little restaurant called Gossip Bistro.</p> <p>Persona - Surabhi Sehgal</p> <p>Age - 32</p> <p>Lives in - Jakarta</p> <p>Income - 25 lacs (In Indian Rupees)</p> <p>Occupation - Senior Manager in an MNC</p> <p>Story - Surabhi is a foodie and wants to explore new cuisines. She and her family have long planned this trip to Chennai to visit the land of temples. This is her first</p>	<p>5</p>	<p>6</p>	<p>3</p>	<p>2</p>

trip to India after her wedding and she and Ashish are super excited. She wants an authentic South Indian experience. She has spent a great deal of money on this trip already and wants to avoid spending on things she doesn't need/could get in Indonesia. She is willing to pay for a unique experience, though. She also secretly cherishes the idea of being able to brag about it once she comes back home.

Likes - Good food and wine.

Leisure - Cooking, writing blogs, hanging out with friends and family. She also reads print newspapers and is relatively comfortable using Technology.

Create a Customer Journey map for Surabhi, for all the stages Awareness, Research, making a reservation, dining in, writing a review, coming back / recommending

14. a) Match the following ideation techniques;

1. Brainstorming	A. This is like brainwriting, but members walk about the room, adding to others' ideas.
2. Braindumping	B. This is like brainstorming, but everyone writes down and passes ideas for others to add to before discussing these.
3. Brainwriting	C. This is like brainstorming, but done individually.
4. Brainwalking	D. You build good ideas from each other's wild ideas.


b) The scamper method is an ideation technique. This design thinking approach helps trigger creative thinking and it was first introduced by Bob Eberle as a simple problem-solving technique. Please read the Problem Statement and the approach to solve the problem using the SCAMPER technique. Write your own problem statement and solve it using this technique

Problem: Lack of audience on Website

Context: Using LinkedIn to drive audience towards website

- Substitute: Here we need to ask if we can substitute LinkedIn with another such as Facebook or Instagram and thus experiment with different social media channels.

- Combine: Here we have the option to combine the content published on LinkedIn with the content published on another social media channel such as Facebook.

	<ul style="list-style-type: none"> • Adapt: Here we need to consider if there is another side to our problem. For example, our content might not be interesting or we might not be using the platform to its full potential. Because we are presenting LinkedIn as our main social media channel and whatever is published there constitutes our brand appearance. Thus, these factors can encourage or discourage our audience to visit our website. • Modify: We might need to change our approach towards LinkedIn and the content published on it. • Put to another use: We can consider developing LinkedIn as a learning platform for our audience rather than just a channel to promote our website. • Eliminate: We might need to eliminate linking, posting a certain type of content to stay focused on our theme. • Reverse: We should consider reversing our approach and use our website as the main media channel thus curating specific material for that approach. <p>Thus, by using this technique one will be able to experiment and consider several alternative ideas to solve the problem at hand just like we did in this example!</p>				
15. a)	<p>During those priceless, time-sensitive moments that deserve to be captured on camera so that they can be cherished forever more—like your child walking for the first time, or spotting your favourite celebrity in your local coffee shop—there’s nothing worse than being confronted with this message:</p>  <p>What would you do if you saw this in the user acceptance testing phase</p>	2	5	5	5
b)	<p>Create a prototype for your product/service. Use any one of the prototyping methods that you learnt.</p>	6	5	5	5
16. a)	<p>How can you use Design Thinking to design your Career? Write your thoughts?</p>	4	3	1	10
b)	<p>If the goal of empathy mapping is to empathize (and it is), then the goals you should really consider are those of your audience:</p> <p>What about your content will appeal to users? What is it about your product that is uniquely suited to accomplish their goals? What do they care about? Who are they?</p> <p>Give your answers to these questions keeping your problem statement in mind. Write your problem statement before you write your answers.</p>	4	2	2	3

17.	Answer any <i>two</i> of the following:				
a)	Based on the given user perception/ feedback create a design brief using the following template. User perception/feedback 1. Shyam often forgets to complete his assignments and is in need of an efficient way to track his to-do list 2. Shyam also needs a tool/planner to help him perform to his true potential in his exams Problem statement Design goal/objective	4	4	3	2
b)	Take a product of your choice and using the P in SCAMPER to modify it. Compare your drawing and explain the difference.	4	6	4	3
c)	Draw a simple sketch of your concept/idea to help your team understand your idea better	4	6	5	5

M : Marks; L: Bloom's Taxonomy Level; CO; Course Outcome; PO: Programme Outcome

i)	Blooms Taxonomy Level - 1	20%
ii)	Blooms Taxonomy Level - 2	40%
iii)	Blooms Taxonomy Level - 3 & 4	40%
