## Paper / Subject Code: 53375 / Product Design and Development (DLOC - VI)

1T01438 - B.E.(Mechanical) Engineering)(SEM-VIII)(Choice Base Credit Grading System)

(R- 2019-20)(C Scheme) / 53375 - Product Design and Development (DLOC - VI)

QP CODE: 10037325 DATE: 14/12/2023

Time: 3 Hours Max. Marks: 80

Note:	1. Assume suitable data if necessary	3
	2. Figures to the right indicate full marks	2
	3. Question No. 1 is compulsory	K,
	4. Solve any <b>three</b> out of the remaining <b>five</b> questions	
Q1.	Write short notes on following: (Any Four)	
A	House of Quality	5
В	Design for Serviceability.	5
C	Fused Disposition Modelling.	5
D	Various phase of product development.	5
E	Gorden Technique.	5
F	Brainstorming.	5
<b>Q2.</b> A		
A	What are the Qualities of Creative Thinkers	5
В	Discuss Market Segmentation.	5
C	What is Stereo Lithography (SLA)? Explain its working in detail.	10
02		
Q3.	Which are the five stars to identify systems needs	_
A B	Which are the five steps to identify customer needs.  Discuss Product Life cycle issues in design.	5 5
C	Discuss in detail Manufacturing cost Analysis.	10
	Discuss in detail infallulacturing cost Amarysis.	10
Q4.		
A A	Explain market Research.	5
В	Which are the methods for gathering Product information.	5
C	Construct Pugh's Matrix for Mobile handset by considering four variants and five	10
	factors.	
Q5.		
A	Discuss Design for Environment	5
	E. D. R. W.	
В	Describe Product Architecture.	5
C	What is mean by Concept Embodiment. Explain with Suitable example.	10
Q 6.		_
A	Write about Design for Assembly.	5
B	Explain voice of Customer.	5
C	Discuss methods of Creative Thinking.	10