

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
BVOC- SEMESTER- VI EXAMINATION – SUMMER 2023

Subject Code:1160301

Date:21-06-2023

Subject Name:Rapid Prototyping and Reverse Engineering

Time:10:30 AM TO 12:30 PM

Total Marks:50

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

		Marks
Q.1	(a) What is Prototype? Explain the need of rapid prototyping.	05
	(b) Explain generic rapid prototyping process.	05
Q.2	(a) Provide the classification of rapid prototyping processes.	05
	(b) Explain direct slicing and adaptive slicing.	05
	OR	
	(b) Compare STL and SLC file format.	05
Q.3	(a) Explain Fused Deposition Modeling (FDM) method with neat sketch	05
	(b) Explain Laminated Object Manufacturing (LOM) with neat sketch.	05
	OR	
Q.3	(a) Explain Laser Engineered Net Shaping (LENS) with neat sketch.	05
	(b) Explain Selective Laser Sintering with neat sketch.	05
Q.4	(a) State the difference between conventional and rapid prototyping.	05
	(b) Explain Stereo lithography method with neat sketch.	05
	OR	
Q.4	(a) Differentiate between traditional prototyping and rapid prototyping.	05
	(b) What are the applications of Rapid Prototyping?	05
Q.5	(a) What is Reverse Engineering? What are the advantages of RE.	05
	(b) What is Rapid Tooling? Provide the classification of Rapid Tooling	05
	OR	
Q.5	(a) State the difference between CNC machining and rapid prototyping.	05
	(b) What are the different Rapid Tooling techniques?	05
