PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
M.Tech. Winter 2017 - 18 Examination

Semester: 2   Date: 08/01/2018
Subject Code: 03217152   Time: 02.00pm to 04.30pm
Subject Name: Computer Aided Engineering Design   Total Marks: 60

Instructions:
1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1	A) What is graphic standard? Explain any one in detail.	**(05)**
	B) Write any two 3-dimensional transformations with matrix and neat sketch.	**(05)**
	C) Describe the concept of feature based modeling with significance.	**(05)**
Q.2	**Answer the following questions**. (Attempt any three) (Each five mark)	**(15)**
	A) Write and explain area of application of CAD.	
	B) Differentiate between CSG & B-rep.	
	C) Write steps of FEA.	
	D) Explain reverse engineering.	
Q.3	A) Enlist synthetic curves. Explain any one in details.	**(07)**
	B) Consider a triangle ABC having coordinates A (2, 4), B (4, 6) and C (2, 6). Determine the new vertex positions if it mirrored about y-axis.	**(08)**

<div align="center">OR</div>

	B) Enlist various RP techniques. Explain SLS in detail with neat sketch.	**(08)**
Q.4	A) Explain Johnson's method of optimum design.	**(07)**

<div align="center">OR</div>

	A) Explain Mesh generation technique. List the elements used in Ansys & explain one.	**(07)**
	B) Enlist various types of surface modeling. Explain any two with neat sketch.	**(08)**