

**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE****Regular End Semester Examination – Summer 2022****Course: M. Tech.****Branch : M.Tech. Mechanical Engineering****Semester : II****Subject Code & Name: ME XX 23B****CAD/CAE****Max Marks: 60****Date: 19/10/2022****Duration: 3 Hr.****Instructions to the Students:**

1. Each question carries 12 marks
2. Attempt any five questions from the following.
3. The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in ( ) in front of the question.
4. Use of non-programmable scientific calculators is allowed.
5. Illustrate your answers with neat sketches, diagrams etc. Assume suitable data wherever necessary and mention it clearly.

		(CO)	Marks
<b>Q. 1</b>	<b>Solve the following.</b>		
<b>A)</b>	Define and Explain CSG technique with neat sketch.	CO1	6
<b>B)</b>	Explain B-Spline curve with neat sketch.	CO1	6
<b>Q.2</b>	<b>Solve the following.</b>		
<b>A)</b>	Enlist and Explain any one CAD data exchange formats.	CO2	6
<b>B)</b>	Explain OpenGL graphics library with examples.	CO2	6
<b>Q. 3</b>	<b>Solve the following.</b>		
<b>A)</b>	Enlist and Explain meshing topology with neat sketch.	CO2	6
<b>B)</b>	Explain data structure for meshing.	CO2	6
<b>Q.4</b>	<b>Solve the following.</b>		
<b>A)</b>	Explain modelling simulation for fluid flow equipment.	CO3	6
<b>B)</b>	Explain Simulation case study on Thermal problem with sketch	CO3	6
<b>Q. 5</b>	<b>Solve the following.</b>		
<b>A)</b>	Explain simulation steps for fluid flow with neat sketch.	CO4	6
<b>B)</b>	Explain multiphysics simulation steps for Stress analysis in CAE with neat sketch.	CO 5	6
<b>Q. 6</b>	<b>Solve the following.</b>		
<b>A)</b>	Explain multiphysics simulation steps for flow induced vibration with neat example.	CO 6	6
<b>B)</b>	Explain case study on flow induced vibration with Sketch.	CO 6	6
	<b>*** End ***</b>		

