

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(MID SEMESTER EXAMINATION MO/2023)

CLASS: B.TECH.
BRANCH: MECHANICAL

SEMESTER : VIIth
SESSION : MO/2023

SUBJECT: ME411 COMPUTER AIDED DESIGN

TIME: 02 Hours

FULL MARKS: 25

INSTRUCTIONS:

1. The question paper contains 5 questions each of 5 marks and total 25 marks.
 2. Attempt all questions.
 3. The missing data, if any, may be assumed suitably.
 4. Tables/Data handbook/Graph paper etc., if applicable, will be supplied to the candidates
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			CO	BL
Q.1(a)	Describe the advantages of CAD over conventional design.	[2]	CO1	L1
Q.1(b)	Explain the product life cycle with block diagram.	[3]	CO1	L1
Q.2(a)	Write in brief the aids and tools used in CAD systems.	[2]	CO1	L2
Q.2(b)	Describe with neat sketches about input and output devices?	[3]	CO1	L1
Q.3(a)	Discuss Bresenham's line drawing algorithm.	[2]	CO2	L2
Q.3(b)	Draw a line using Bresenham's line drawing algorithm having coordinates (18,14) and (28,22)	[3]	CO2	L2
Q.4(a)	Explain the properties of Bezier curve.	[2]	CO2	L2
Q.4(b)	Draw the curves for cubic B-spline blending functions.	[3]	CO2	L2
Q.5(a)	Explain the parametric continuity conditions.	[2]	CO2	L2
Q.5(b)	Compare B-Spline curve with NURBS.	[3]	CO2	L2

:::21/09/2023 M:::