GALGOTIAS UNIVERSITY

ADMISSION NUMBER												

School of Engineering

B.TECH Mechanical Engineering
Semester End Examination - Nov 2023

Duration : 180 Minutes
Max Marks : 100

Sem VII - BME075 - Computer Integrated manufacturing

General Instructions
Answer to the specific question asked
Draw neat, labelled diagrams wherever necessary
Approved data hand books are allowed subject to verification by the Invigilator

1)	Explain the basic concept of automated process planning.	K1	(2)
2)	Explain the analysis step of design process	K2	(4)
3)	Explain the concept of parametric modeling in geometric modeling	K2	(6)
4)	Interpret MUDA and KAIZEN with example	K3	(9)
5)	Identify, how CAPP helps in automating the generation of manufacturing instructions and routing for a given product?	K3	(9)
6)	Interpret the role of parametric modeling in CAD and its significance in capturing design intent and facilitating design changes during the manufacturing phase.	K5	(10)
7)	Define control structures in the context of manufacturing systems in CAM. How do they facilitate the coordination and optimization of production processes?	K4	(12)
8)	How can artificial intelligence (AI) be applied to manufacturing processes? Give examples of AI methods used in manufacturing.	K5	(15)
9)	How can CAD/CAM interface programming optimize production efficiency?	K5	(15)
10)	Describe the concept of geometric dimensioning and tolerancing (GD&T) in manufacturing. How does GD&T help control the variation of dimensions and improve product quality?	K6	(18)