GALGOTIAS UNIVERSITY

ADMISSION NUMBER												

School of Engineering

B.TECH Mechanical Engineering
Semester End Examination - Nov 2023

Duration : 180 Minutes
Max Marks : 100

Sem VII - BME079 - Flexible Manufacturing Systems

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)	Name the key components of a computer-integrated FMS.	K1	(2)
2)	Analyze the cost-benefit ratio of transitioning from a batch production system to FMS.	K2	(4)
3)	Assess the performance metrics used to measure the success of an FMS implementation.	K2	(6)
4)	Develop a comprehensive FMS implementation plan for a new manufacturing startup.	K3	(9)
5)	Propose the concept of process planning and its role in FMS design	K3	(9)
6)	Evaluate the impact of FMS on the skillset and training needs of the workforce.	K5	(10)
7)	Develop a plan to integrate Internet of Things (IoT) devices into an existing FMS to enhance data monitoring and analysis.	K4	(12)
8)	Analyze the principles of Total Productive Maintenance (TPM) to ensure optimal performance in an FMS environment.	K5	(15)
9)	Design a comprehensive training program for operators to work effectively within an FMS environment.	K5	(15)
10)	Create a blueprint for an FMS setup that maximizes resource utilization and minimizes material waste.	K6	(18)