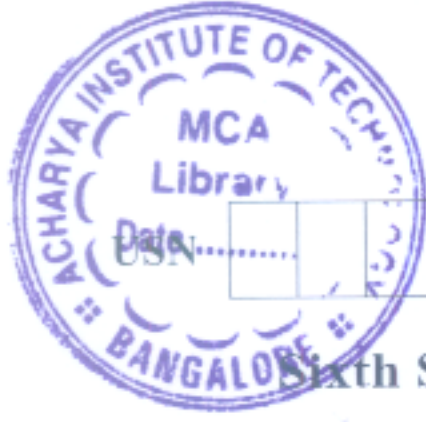




CBCS SCHEME - Make-Up Exam

BMT602

Sixth Semester B.E/B.Tech. Degree Examination, June/July 2025

Industrial Robotics

Time: 3 hrs.

Max. Marks:100

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. M : Marks , L: Bloom's level , C: Course outcomes.

Module – 1			M	L	C
1	a.	Define a Robot. Classify Robots based on their configuration.	10	L1	CO1
	b.	Explain the different Robot drive systems.	10	L2	CO1
OR					
2	a.	Illustrate the components of basic control system.	10	L2	CO1
	b.	Explain the application areas of Robot.	10	L2	CO1
Module – 2					
3	a.	With a block diagram explain the configuration of a Robot Controller.	10	L2	CO2
	b.	Discuss Denavit – Hartenberg Notations.	10	L2	CO2
OR					
4	a.	Explain the consideration in Gripper selection and design.	10	L2	CO2
	b.	Discuss the Features of sensors in Robotics.	10	L2	CO2
Module – 3					
5	a.	Explain the Methods of Robot Programming.	10	L2	CO3
	b.	Discuss the various methods of defining positions in space.	10	L2	CO3
OR					
6	a.	Explain the Goals of AI Research.	10	L2	CO3
	b.	Explain the Capabilities and Limitations of lead through programming method.	10	L2	CO3
Module – 4					
7	a.	List and explain different Robot Cell Layouts.	10	L1	CO4
	b.	Explain the various considerations in workcell design.	10	L2	CO4
OR					
8	a.	List and explain the work cell control.	10	L1	CO4
	b.	Explain Robot cycle time. Analysis.	10	L2	CO4
Module – 5					
9	a.	Explain the Features of Welding Robot.	10	L2	CO5
	b.	Discuss various sensors in Robotic arc welding process.	10	L2	CO5
OR					
10	a.	Explain the benefits of Robot Arch welding and Robot Spray Coating.	10	L1	CO5
	b.	Discuss various parts joining tasks of a robot.	10	L1	CO5
