

School of Engineering

First Sessional Examination, Odd Semester (AS: 2023-24)

B. Tech: AI, CCML, IOTBC

[Year: 2] [Semester : 3]

Course Title: AI in Mechanical Engineering
Course Code: BAI 3302

Max Marks: 30
Time: 1 hr

Instructions: Read the question Carefully.

SECTION 'A' Q.N.1. Attempt all parts of the following:

CO Marks

a)	What is Artificial Intelligence ?	CO1	1
b)	Define Automation.	CO2	1
c)	Name Machine learning methods.	CO1	1
d)	What do you mean by Actuators.	CO2	1
e)	Define hydraulic Actuator.	CO1	1

SECTION 'B' Q.N.2. Attempt any two parts of the following:

CO Marks

a)	Define Control System with a block diagram.	CO2	7.5
b)	What are Sensors ? Explain with a example.	CO2	7.5
c)	How Machine Learning works?	CO1	7.5
d)	What are the Levels of Automation.	CO2	7.5

SECTION 'C' Q.N.3. Attempt any One part of the following:

CO Marks

	Briefly explain Analog to Digital Conversion.	CO2	10
b	How AI is used to improve upon a Mechanical system.	CO1	10
c	What is Machine Learning? How it's benefits can be used with AI in Mechanical Engineering.	CO1	10

Table 1: Mapping between COs and questions

COs	Questions Numbers	Total Marks
CO1	1(a),1(c),1(e),2(c),3(b),3(c)	30.5
CO2	1(b),1(d),2(a),2(b),3(a)	27