

G. S. Mandal's
 Maharashtra Institute of Technology, Aurangabad
 (An Autonomous Institute)
 END SEMESTER EXAMINATION
First Year M.Tech (ME) -April/May 2022

Course Code : MTM122

Course Name : PE-I Smart Manufacturing

Duration : 2 Hrs

Max. Marks : 50

Date : 11/04/2022

Instructions :

- i) All questions are compulsory
 ii) Assume suitable data wherever necessary and clearly state it
 iii) Figures to right indicate full marks

Q. 1	Solve/Answer Any Five (Marks : 10)			
	Questions	Marks	CO	BL
a)	What is mass customization?	2	CO1	2
b)	What is CPS?	2	CO1	2
c)	What is Artificial Intelligence? Enlist applications of AI	2	CO1	2
d)	Define Augmented reality. State its applications	2	CO1	2
e)	What is Smart Manufacturing?	2	CO1	2
f)	What is additive Manufacturing?	2	CO1	2
Q. 2	Explain the concepts of Smart Factory with its characteristics and benefits.	8	CO6	5
Q. 3	What is Sensor? Write down detailed classification of sensors.	8	CO2	2
Q. 4	What is Agile Manufacturing? Write down the 4 key elements of agile manufacturing	8	CO5	4
Q. 5	Explain the following terms briefly IoS and IoE. OR	8	CO4	3
Q. 5	Explain in brief the communication protocols of IoT: Bluetooth and Zigbee	8	CO4	3
Q. 6	How can Industry 4.0 help a company to achieve value innovation? OR	8	CO3	3
Q. 6	What is Cloud computing? Explain types of Cloud Computing models?	8	CO3	3