

MGM University, Chhatrapati Sambhajnagar
Jawaharlal Nehru Engineering College

CA 1 Examination

Course: SY Chemical Engineering

Sem: IV

Subject Name: Process Instrumentation and Control

Subject Code: 20UCH405D

Max Marks: 10

Date: 02.02.2024

Duration:- 1 Hr.

N.B.: i. Question any TWO questions from following.
ii. Assume suitable data, if required and draw neat sketches whenever needed.
iii. Figure to right indicate full marks

		CO	BL	Marks
Q. 1	What is meant by measurement? State the function of measurement system	1	Understanding	5
Q. 2	State and explain functional elements of instruments with example	1	Applying	5
Q. 3	What is mean by static error and dynamic error of instrument?	1	Remembering	5

MGM University Aurangabad			
Continuous Assessment 1 – February 2024			
Course: B. Tech in Chemical Engineering IV	Semester:		
Subject Name: Chemical Engineering Thermodynamics-I			
Subject Code: 20UCH402D			
Max Marks: 10	Date:- 02-02-2024	Duration:- 1	
Hr.			
Instructions to the Students:			
1. Answer all the questions. Write down all parts of the question in same place. 2. Data book (clean copy) and calculator are allowed. Exchange of data book and calculator are not permitted. 3. Missing data may be suitably assumed, if any			
	CO	BL	Marks
Solve Any two of the following.			5x2
Q. 1	A balloon which was originally empty is being filled with hydrogen from a cylinder at constant temperature of 300 K. The atm pressure is 1.01 bar. What is the work done by balloon cylinder system when the balloon attains a spherical shape 6 m in diameter?	CO1	3 5
Q. 2	Prove that heat supplied is equal to the change in internal energy for a constant volume process and the change in enthalpy a constant pressure process?	CO1	3 5
Q. 3	What do you mean by a cycle process? State and explain the first law of cyclic process.	CO1	3 5
*** Best of Luck ***			

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15 MAR 2024/SY/CHEM/CA-1/P2/23-24

MGM University , Aurangabad		
Course : SY B.Tech	Continuous Assessment I	Sub: IPC
Time: 30 min	Date: 3-2-2024	Code: 20UCH404D
		Marks : 10

Instruction: Attempt all Questions

		CO	BL	Marks
Q1	Explain the Types of Pollution.	1	3	2
Q2	Describe the Air Pollution Sources.	1	3	2
Q3	Explain the specific categories of use of water.	1	3	2
Q4	Give the different Characteristics of Wastewater.	1	3	4

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Course : SY. B.Tech	Continuous Assessment I	Sub: CAI Code: 20UCH401D
Time: 30 min	Date: -2-2024	Marks : 10

Instruction: Attempt all Questions

		CO	BL	Marks
Q1	Explain the sources of Salts in the manufacture of Soda Ash.	1	3	2
Q2	Give the manufacturing Flow chart involved in Solvay Process.	1	3	2
Q3	What are the major Engineering Problems involved in Dual Process?	1	3	2
Q4	Describe the manufacturing process of Soda Ash by Dual Process with neat Block Diagram with Labels.	1	3	4

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