

END SEMESTER EXAMINATION(ESE), DEC. – 2022

Course Name: **Chemical Process Instrumentation**, Course Code: **201CHL304**

Day and Date: Tuesday,13/12/2022

Seat No:

Time: 10 am to 12 pm

Max. Marks- 50

BT	CO's	Q.No.			Marks
		Q.1	All Questions are compulsory		20
1,2	CO1	a	Explain construction & working of LVDT.	Unit: 1,2,3	6M
1,2	CO2	b	What is the basic principle of ultrasonic flowmeter? Explain with neat diagram construction & working with applications		7 M
1,2	CO3	c	What are different types of direct methods of liquid level measurement & explain with neat sketch any one of them		7 M
		Q.2	Attempt the following questions		10
1,2	CO4	a	State working principle of flame photometry. What are different types of burners used in flame photometry? Explain any one in detail.	Unit: 4	6
1,2	CO4	b	Write down Beer-Lamberts law & their application OR What is Electromagnetic Radiation & write its general properties ?		4
		Q.3	Attempt the following questions		10
1,2	CO5	a	Write short note on acid base type of conductometric titration.	Unit: 5	4
1,2	CO5	b	What is refractive index? How it is determined with the help of Abbe refractometer? OR What do you mean by conductometry, turbidimetry & refractometry & write application of each.		6
		Q.4	Attempt any two out of three questions		10
1,2	CO6	a	State the working principle & explain with neat diagram the instrumentation of Gas Chromatography	Unit: 6	5
1,2	CO6	b	Write short note on XRD & SEM types of analytical techniques & its application		5
1,2	CO6	c	Write the principle, working & explain with neat diagram the instrumentation of HPLC		5