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C.U.SHAH UNIVERSITY

Summer Examination-2022

Subject Name: Industrial Chemistry-I

Subject Code:4SC04IDC1 Branch: B.Sc. (Chemistry)

Semester: 4 Date: 06/05/2022 Time: 11:00 To 02:00 Marks: 70

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
- (2) Instructions written on main answer book are strictly to be obeyed.
- (3) Draw neat diagrams and figures (if necessary) at right places.
- (4) Assume suitable data if needed.

Q-1		Attempt the following questions:	(14)
	a)	Define ceramics	01
	b)	Draw the chemical structure of malathion.	01
	c)	Which oxides give the black coloration to the glass?	01
	d)	True or False: Glass is tough non crystalline solid substance.	01
	e)	Write some refractory materials for ceramics.	01
	f)	For which color tin oxide is used in the decoration of ceramics?	01
	g)	Give two examples of natural insecticides.	01
	h)	Pure malathion has mg/L water solubility at 20 ⁰ C.	01
	i)	Write some nutrients for plants growth.	01
	j)	A deficiency of causes leaves to turn white and growth to cease.	01
	k)	Discuss about the pH value of the soil.	02
	l)	Write some uses of dinitrophenols.	02
Q-2	a)b)	Attempt any four questions from Q-2 to Q-8 Attempt all questions Explain the production of ammonium sulphate from gypsum with process flow diagram. Write in detail about the plants nutrients.	(14) 07
Q-3		Attempt all questions	(14)
Q-J	a)	Describe the production of ammonium nitrate with process flow diagram.	07
	b)	What is fertilizer? Classify it with some examples.	07
Q-4		Attempt all questions	(14)
V-4	a)	Discuss about the raw materials for glass industries.	07
	b)	Explain in detail body preparation for ceramic articles.	07
	U)	Explain in detail body preparation for cerainic articles.	07
Q-5		Attempt all questions	(14)
	a)	Explain chemical changes occurring in the furnace with increase in reaction?	05



	b)	Discuss about the chemical properties of glasses.	05
	c)	Discuss about the regenerative pot furnace.	04
Q-6		Attempt all questions	(14)
_	a)	Write a short note on Dichlorodiphenyltrichloroethane.	07
	b)	Discuss about the synthesis and uses of Aldrin and Dieldrin.	07
Q-7		Attempt all questions	(14)
	a)	Write some uses of glasses and ceramics.	05
	b)	Classify the ceramic on the basis of reduction in porosity.	05
	c)	Write about fertility of the soil.	04
Q-8		Attempt all questions	(14)
-	a)	Write a brief note on Parathion.	07
	h)	What is an insecticide? Classify it with few examples	07

